



University Senate TRANSMITTAL FORM

Senate Document #:	15-16-26
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Title:	Update to the Strategic Plan for the University of Maryland
Presenter:	Mary Ann Rankin, Senior Vice President and Provost
Date of SEC Review:	March 21, 2016
Date of Senate Review:	April 7, 2016
Voting (highlight one):	<ol style="list-style-type: none"> 1. On resolutions or recommendations one by one, or 2. In a single vote 3. To endorse entire report
Statement of Issue:	As part of the Flagship 2020 initiative, President Loh charged a Work Group with updating the University's 2008 Strategic Plan. It is the practice of the university to develop a new plan approximately every decade, with updates in intervals in between. With input from the campus community, the Work Group created a document that highlights progress made towards realizing the goals set forth in the 2008 plan, and identifies new opportunities in education, research, scholarship, and creative endeavors, and community engagement.
Relevant Policy # & URL:	http://www.provost.umd.edu/sp15/public
Recommendation:	To accept the Strategic Plan Update.

<p>Committee Work:</p>	<p>The process of creating this document began with a series of Community Vision sessions in March 2015, led by the Center for Leadership and Organizational Change (CLOC). Several key stakeholder groups were also interviewed. The steering committee met several times in the period of March through August to identify the essential elements of the document, including mission and vision, accomplishments, and opportunities moving forward. The community vision sessions were followed by a call for additional input from the campus community, beginning in September 2015, with about 350 responses received. Provost Rankin then addressed the University Senate on Sept 10, 2015, to describe the work of the Flagship 2020 workgroup and the key elements of the update. An initial draft of the document was posted on December 17, 2015, along with a call for feedback throughout January and February 2016, with about 300 responses over eight categories. A collective summary of that feedback was presented to the University Senate on Feb 11, 2016, along with an opportunity for additional comments from the Senate floor. An open forum was held on Feb 18, 2016. The current update document reflects the collective feedback and suggestions received from all sources.</p>
<p>Alternatives:</p>	<p>The Senate may choose not to endorse the Strategic Plan Update.</p>
<p>Risks:</p>	<p>While the core principles outlined in the 2008 Strategic Plan still apply, significant new opportunities have arisen that were not envisioned in 2008. If the Senate declines to endorse this update, the university will be required to move forward without a public, contemporary framework for continued improvement.</p>
<p>Financial Implications:</p>	<p>Full implementation of the goals outlined in the plan will require a combination of new resources to the campus, efficiencies and improvements in university operations to put existing resources towards the goals outlined. A key component of the plan's implementation is the development of an improved budget model.</p>
<p>Further Approvals Required:</p>	<p>If the Senate endorses the document, it will require approval of the President.</p>

**EQUAL TO THE BEST:
2016 STRATEGIC PLAN UPDATE
of the
UNIVERSITY OF MARYLAND**

Introduction

In 2008, the University of Maryland (UMD) developed a comprehensive and bold 10-year strategic plan, “Transforming Maryland: Higher Expectations.” In the years since, UMD has achieved a number of these goals, experiencing a remarkable rise in accomplishment and reputation. By any measure, UMD is now one of the nation’s most highly ranked public research universities.

New opportunities now promise even greater attainments. “Equal to the Best: 2016 Strategic Plan Update” capitalizes on this momentum and builds on the 10-year plan (2008-2018) that was adopted by the University Senate in May 2008.

Many elements of that plan remain relevant. The **mission** of the University as stated in the 2008 plan—to foster the education, critical thinking, and intellectual growth of students; create and apply new knowledge via research, scholarship and the creative arts; enhance the economic development of the state; and improve the surrounding world—has not changed. More than ever, as the Flagship of the University System of Maryland, UMD directly and indirectly contributes to the health of the entire fleet—a role that is fully embraced by this campus.

The **action principles** identified in 2008 still apply: to build an inclusive community; embrace the power of technology; act with entrepreneurial spirit; partner with others locally and globally; foster transformational change; enhance contributions to society; elevate our rank among world-class universities; attract the best faculty, staff, and students; become an international center of excellence; create a vibrant surrounding community; sustain and strengthen the state’s competitive capacity; and serve Maryland as its flagship institution with worldwide reach.

The **strengths and opportunities** identified in 2008—UMD’s location; flagship status; high quality and breadth of academic programs; diversity; increasing excellence; and its culture of innovation, collaboration, and partnership—are even more relevant today than 8 years ago. UMD’s 2012 strategic partnership with the University of Maryland, Baltimore (UMB) and the 2013 affiliation with the Big Ten Conference and its academic consortium, the Committee on Institutional Cooperation (CIC), have created greatly expanded opportunities for collaborations in education, research, innovation, and administration. Membership in the CIC allows us to share best practices, engage in joint initiatives, and collaborate to achieve efficiencies in a wide range of activities, such as recruitment and professional development. The CIC also provides a new set of peers against which the University can benchmark its performance as a public flagship university. In collaboration with UMB, the University has dramatically increased joint research and educational programs of great value through the MPower program. Similarly, UMD’s 2015 partnership with the Phillips Collection creates new opportunities to enhance excellence in the arts.

Some of the **weaknesses and threats** identified in 2008 remain, such as chronically unstable and unpredictable state funding and a flawed budget allocation process. Deferred maintenance of UMD’s physical and virtual campuses has grown to exceed \$1 billion and is a significant impediment to progress.

The University community can take pride in **the progress toward realizing the goals set in 2008**. Core initiatives in the general education curriculum, graduate studies, and the international program have been addressed. Undergraduate and graduate programs have become more rigorous and selective, attracting an increasingly talented and diverse student body. Retention and graduation rates continue to improve. The student achievement gap has declined. Experiential and blended learning environments have become a major focus of educational improvements campus-wide. Expanded active learning, international study, and interdisciplinary opportunities now enhance our students' education and success.

The University's research portfolio has grown and diversified through the efforts of UMD's outstanding faculty and through major new relationships with corporate, federal, and international partners. These partnerships allow us to leverage our location and extend the reach and impact of our programs. UMD has achieved world leadership in fields such as quantum computing, language science, health disparities, digital humanities, traffic control, and climate modeling, to name only a few. Research expenditures and grants reached an all-time high in FY 2015, despite U.S. budget constraints and increased national competition for limited funding.

In cooperation with local, county, and state officials, UMD has made significant advances in the revitalization of the College Park community with respect to public safety, public education, and public transportation. Private investment is transforming housing, shopping, and dining options. The University is creating a new innovation ecosystem to support startups and mature businesses interested in partnering with faculty and students. The futures of UMD and its surrounding community are deeply intertwined. Around the state, new initiatives have expanded UMD's role in economic development, pursuant to its land-grant mission.

The updated strategic goals for 2022 outlined in this plan are grounded on those of 2008 and the University's progress over the past eight years. The University has gained upward momentum, and some weaknesses have become strengths.

In designating UMD Maryland's flagship institution, the state charged UMD to be "equal to the best." The updated goals in the following areas provide a plan to achieve this ongoing pursuit of excellence and top-ten-quality:

- I. **Education**
 - II. **Research and scholarship**
 - III. **Strategic partnership with University of Maryland, Baltimore (MPower)**
 - IV. **Arts and humanities**
 - V. **Athletics**
 - VI. **Greater College Park**
 - VII. **Equity, diversity, inclusion**
 - VIII. **Modernizing administrative procedures**
 - IX. **Implementation**
 - X. **Summary**
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I. EDUCATION

Undergraduate Education

The University of Maryland provides a world-class education that emphasizes academic excellence, student engagement, and innovative teaching. Across 12 colleges, it provides 90 undergraduate majors, numerous minors and certificate offerings, as well as living and learning communities that cover a great variety of disciplines. High-quality academic programs lead UMD graduates to successful careers and productive lives. Enhancing these programs will, in the words of the 2008 plan, make UMD a “magnet for the most promising students of the next generation.”

Progress Since 2008

A major initiative of the 2008 strategic plan was to reimagine UMD’s **general education program**—the common curriculum for all majors that provides the defining intellectual elements of a University of Maryland education. The new general education curriculum called for two categories of classes unique to UMD. The **i-Series** courses aimed at engaging students with big questions that matter to society. **Scholarship in Practice** courses sought to engage students more fully in the learning process through collaboration, innovation, risk taking, communication, and creation of original work. In addition, the **diversity requirement** was broadened to help prepare students for living and working in a multicultural society.

The new general education program is now fully implemented. Faculty-generated learning outcomes define each general education category, and nine active faculty boards have reviewed and approved nearly 1,300 courses. These include “Fearless Ideas” courses, led by the Academy for Innovation and Entrepreneurship. They embed “design thinking” and “lean startup” methodologies into a wide array of courses. Through the academy, begun in 2012, enrollments in **innovation and entrepreneurship (I&E)** courses have tripled to 7,000; student participation in I&E co-curricular activities has risen 40 percent to 8,000; and I&E courses have increased to 141 in 34 departments. Also, the Academy has launched a minor in I&E with an initial enrollment of 110 students and has embedded I&E modules in the majority of living and learning programs.

The new **First Year Innovation and Research Experience (FIRE)** provides a multi-semester, inquiry-based research experience and mentorship to first-year students through faculty-led discovery and scholarship projects. In 2009, the University Honors Program, which included Gemstone and Honors Humanities, was converted to an **Honors College**. Under the new College structure, University Honors became its own living and learning program. New interdisciplinary living and learning programs followed: Design, Cultures & Creativity; Entrepreneurship and Innovation; and Integrated Life Sciences. In 2013, the Advanced Cybersecurity Experience for Students (ACES) program was added with the help of a generous gift from Northrop Grumman. **College Park Scholars** has been revised and enhanced. Many of its 12 living and learning programs now include an international experience. The newest Scholars program, *Justice and Legal Thought*, is a successful collaboration with UMB’s Francis King Carey School of Law.

More than a third of incoming students are **transfers**. Strategies to enhance their experience and further their success include development of new majors and minors, enhanced advising resources for transfer students, and expanded enrollment in high-demand programs at the Universities at Shady Grove.

Outside of the classroom, students benefit from a wide range of **support and success programs**. Many complement and affirm the university’s commitment to diversity and inclusion and to cross-cultural learning.

Others maintain daily living, such as transportation, housing, and dining, as well as those required for student health and well-being. Programs to support leadership and community development are offered by the departments of Resident Life, Fraternity and Sorority Life, and the Stamp Student Union Center for Campus Life. The University Libraries provide a wealth of services and instruction in information retrieval and management at all levels and across all disciplines. They also provide individual and group study spaces, “maker” facilities, IT support, and equipment loans. The support structures offered across the campus round out students’ academic and professional development and help create a sense of community and a shared sense of the Maryland experience.

Updated 2022 Goals

In addition to mastery of discipline-specific knowledge, an education at the University of Maryland engages students in social, ethical, and cultural concerns; stimulates their intellectual curiosity; prepares them for civic responsibility; and develops creative and critical reasoning skills that will serve them through a lifetime of inquiry, productivity and leadership. As a land-grant institution, UMD is committed to putting knowledge into action for social and economic benefit, as well as preparing workforce-ready graduates.

UMD will continue to transform the educational experience through new approaches to teaching, course design, learning environment, career preparation, and by introducing new experiential opportunities.

Transforming Teaching to Enhance Learning: It is crucial that UMD goes beyond simple “content delivery” in courses and takes advantage of the best available research in pedagogy. Structuring classes to bring students more directly into the learning process improves outcomes, and does so in a way that reduces the achievement gap. Project-based and “flipped” classrooms reduce in-class lecture time, increase opportunities for collaborative learning and discovery, and result in deeper, long-term learning. These methods also integrate learning across fields and develop analytical and creative skills. Blended learning structures can provide accommodations not available in traditional classrooms, including personalized support, mastery- or competency-based structures, and greater comfort in discussions of difficult topics. Nevertheless, implementation details can significantly affect outcomes, and we will monitor learning and student success to gauge the impact of these changes on our campus.

Learning spaces can facilitate or inhibit active learning. UMD will continue to invest in updated classrooms that are designed to accommodate a variety of teaching approaches, including project-based and blended learning systems.



The **Edward St. John Learning and Teaching Center** will be an academic building focused on innovation in learning environments. The center will feature collaborative spaces to support a variety of teaching and learning styles, with capacities ranging from 80 to 320 seats. It will meet the needs of the new general education curriculum, STEM programs and the Teaching and Learning Transformation Center. An estimated 10,000 students will attend classes there daily.

A Maryland “career-ready plan” will be developed to prepare students for success beyond graduation, whether in graduate school or in professional life. New students will explore their skills, interests, and goals, with **professional development advisors** to help guide them earlier into appropriate majors that match their skills and aspirations, reducing time to graduation. The University will further expand programs that develop **innovation, inquiry, collaboration and real world experience**.¹ **Peer mentors**—trained upper-level students—will be part of the delivery of these programs. Their use improves outcomes while providing valuable leadership and team building skills and financial aid to the mentors themselves. Students will have expanded opportunities to engage in **paid internships** or projects with partner companies or agencies; community-based organizations; undergraduate research opportunities with faculty; or other training arrangements with alumni and other professionals. As students approach graduation, they will be offered workshops identifying **employment opportunities**, application and interviewing skills, business etiquette, financial planning, and graduate and professional education options.

Graduate Education

A defining aspect of the University as the state’s flagship is the strength and breadth of doctoral programs and the important role they play in the dual mission of education and scholarship.

Progress Since 2008

The “**Excellence in Doctoral Education**” initiative advanced several goals specified in the 2008 strategic plan. Each of the 83 doctoral programs was individually reviewed to determine appropriate program size based on 1) capacity for funding and mentoring students and 2) student success based on quantitative and qualitative measures. Providing a basis on which to match program size to capacity and success, this initiative was designed to increase full-time enrollment and full funding for students, and thus to increase

¹ For example: *Academy for Innovation and Entrepreneurship initiatives*; the *First-Year Innovation and Research Experience*, which engages entering students in faculty scholarship and research; *Federal Semester*, which takes advantage of UMD’s location near Washington, D.C., and integrates academic learning with professional development; living and learning programs such as *the Honors College*, *College Park Scholars*, *CIVICUS*, *Global Communities*, *Beyond the Classroom* and *Carillon Communities*; and international programs such as *Global Semester*, *Global Classrooms*, *Global Entrepreneurship Semester*, *Maryland Social Entrepreneur Corps*, and the *Global Certification Program*.

graduation rates, decrease time-to-degree, and improve placement upon graduation. It achieved a 10 percent strategic reduction in the number of doctoral students, increased the 10-year completion rate (to 62.9 percent from 57 percent) and reduced the median time to degree to 5.3 years.

The 2008 strategic plan also called for an increase in **graduate student financial support**. In addition to increases in graduate assistantship stipends, the Graduate School replaced the Block Grant Fellowship program with University, Dean's and Merit Fellowships. These awards come in variable amounts with specified minimum values, carry incentives for combining with other resources, and enable tracking of student outcomes. New funds (\$2.5 million) were appropriated for additional fellowship programs targeted to recruiting, advancing, and graduating exceptional students and underrepresented minorities.

Professional graduate degree and certificate programs have grown substantially in number and revenue generated. The Task Force on Professional/Executive Graduate Programs reviewed policies and practices to ensure that programs maintain the highest levels of academic standards, integrity, and oversight, while remaining responsive, agile, flexible, and competitive in the marketplace. A subsequent working group researched the advisability of creating professional doctoral programs and developed guidelines. It has drafted a Doctorate of Professional Studies proposal for consideration.

Updated 2022 Goals

A **comprehensive strategic plan** for graduate education will guide actions going forward. The plan envisions two parallel missions—*research* and *professional training*—that include graduate certificates, master's, and doctoral degrees. **Graduate Student Success Programs** in writing, teaching and learning, as well as preparation of doctoral students for multiple career paths will be advanced using "train-the-trainer" models aimed at both students and the faculty who mentor them.

A comprehensive review of the allocation of graduate **fellowship funding** will be undertaken to ensure that resources are used to attract top students. The upcoming capital campaign will seek to increase the endowment base for this vital purpose. Our competitors typically offer multiyear support packages, first-year fellowships and lab rotation options, reduced teaching loads, opportunities for international research projects, bi- and multi-university graduate seminars, and student exchanges to attract the best students. UMD must establish a larger endowment base to support these opportunities for more of our students.

II. RESEARCH AND SCHOLARSHIP

Research and scholarship are core University missions. Extending UMD's preeminence in these pursuits requires, above all, attracting and retaining the best, most productive faculty. Accomplishments are measured by faculty recognition, research funding, collaborations and partnerships, and the impact of the work: how it pushes the boundaries of knowledge, experience and technology, and how it informs academic and public conversations on societal issues and cultural heritage. Evaluations are made with respect to peer institutions.

Progress Since 2008

Recognition of faculty excellence continues to rise. During this period, for example, eight faculty members have been elected to the National Academies and five to the American Academy of Arts and

Sciences, while 10 have received Guggenheim Fellowships. Another fourteen faculty members have been supported by year-long grants from the National Endowment for the Humanities. Recent recognition includes awards of the National Medal of Science and the National Medal of Technology and Innovation.

Despite a prolonged period of constrained federal funding, **faculty research productivity** has continued to increase. Research awards in FY15 hit an all-time record of \$550 million—up 15 percent over \$479 million in FY14 and up 18 percent over \$466 million in FY13. UMD is currently No. 1 among all U.S. universities in active Advanced Research Projects Agency-Energy (ARPA-E) awards, both as lead organization and for total active awards. The *Nature Index of Academic Productivity* ranks UMD 15th among all universities, sixth among U.S. public universities, second in the Big Ten and fourth in research productivity among all universities without a medical school. UMD's federally funded research expenditures ranked fourth in 2013, up from sixth in 2006, among universities without a medical school.

While the total number of tenured and tenure-track faculty has essentially remained unchanged since 2008, the number of faculty with research titles has grown by 50 percent. Much of the increase in UMD's research portfolio is a direct result of a targeted effort to develop a network of research partnerships with federal agencies, government labs and the private sector.

In addition to its well-recognized scholarly impact, the University's world-class research and entrepreneurship has provided a major **economic benefit to the state**. According to the University System of Maryland's Committee on Economic Development and Technology Commercialization, UMD's economic impact on the state was valued at \$2.4 billion in 2007, increasing to \$3.1 billion in 2014. In recognition of its role as an economic engine, UMD was named to the 2015 class of Innovation & Economic Prosperity Universities by the Association of Public and Land-grant Universities (APLU), which honors 18 universities annually with that designation. UMD joins seven Big Ten institutions that are certified Innovation & Economic Prosperity Universities. Subsequently, UMD received top honors among the schools in this group, earning the 2015 Connections Award. Clearly, investments in UMD return great value to the state.

New buildings completed since 2008 that strengthen UMD's research infrastructure include phase I of the Physical Sciences Complex—unquestionably a superb new research facility—Knight Hall, and two new residence facilities, Oakland and Prince Frederick Halls.

Updated 2022 Goals

As one of the nation's great research universities, UMD will attract and retain the best faculty—established leaders as well as rising stars—students, postdocs, research scientists and staff. This requires continued enhancement of the environment of achievement and success that supports faculty research and scholarship, as well as a vigorous pursuit of excellence in promotion, tenure and hiring.

UMD has strengthened the **promotion and tenure** process in a number of respects, improving recognition of entrepreneurial activity and teaching excellence, and striving to increase faculty diversity. The appointment and promotion process for teaching and research professionals has also been upgraded. But several years of budget constraints have resulted in serious issues of **salary compression** and a general need for cost-of-living and merit raises at all levels. Addressing these issues must be a major part of the updated 2022 funding goals, along with efforts to recruit, promote and retain the nation's most outstanding faculty.

Top talent demands an **environment** that supports world-class research. This includes state-of-the-art

research buildings, outstanding libraries, and core facilities, as well as opportunities for research funding, partnerships, new program development, technology transfer, and collaboration with distant colleagues. Also, resources are required to attract outstanding graduate students, including competitive fellowships and support for interdisciplinary programs. It is important, too, to have a local environment that provides safe, attractive, dynamic living conditions. Staff members, both centrally and within academic units, are an essential component of the infrastructure, supporting grants administration, oversight and reporting, information management and library resources, and compliance with federal and agency requirements. Successfully achieving top-10 research status requires this multidimensional approach.

UMD will identify several key areas in which to **invest in funding faculty and staff** positions in the next five years. These areas of emphasis will be chosen with input from all the key stakeholders. Considerations for deciding where to make future investments include:

- **Areas in which UMD is already preeminent.** UMD leads the nation, for example, in quantum computing, digital humanities, alternative energy sources, advanced geolocation, linguistics, climate change, and health disparities. The University needs to maintain and build on such strengths.
- **Areas of national or global need and emergent opportunities.** Fields such as cybersecurity, environmental security and policy, competencies in critical languages and cultures, data analytics, and high-performance computing are areas of almost desperate national need. For example: the amount of information in our world has been exploding; analyzing and using large data sets—so-called big data—has become a key basis for progress in research, commercial endeavors, public health, politics, and national security. The increasing volume and detail of information captured by agencies, commercial enterprises and scholars, and the rise of multimedia, social media, and the *Internet of Things* increasingly drive exponential growth in the need for data acquisition, analysis and security. Traditional data processing software and computer systems are inadequate. Leaders in virtually every field now need to use, manage and secure data sets that are so large or complex and vital that issues of analysis, storage, curation, visualization, transfer, interpretation, privacy, and security can overwhelm.

The flip side of big data power is the need to keep data and the cyber infrastructure secure. The growing reliance on digital infrastructure creates increased vulnerability to cyber disruption. To combat cyber attackers at all levels the country and the state need a premier, highly respected, non-partisan organization committed to promoting data analytics and data security that will support economic prosperity and global peace. An underlying secure and capable framework, one robust enough for the *Information Age*, must be created with all deliberate speed. As the only Research I university inside the Washington, D.C. Beltway, UMD is well positioned to lead the nation in these areas. Recent investments and gifts have created new opportunities in many such fields, including virtual reality, robotics, biomedical devices and neuroscience. These can leverage additional research growth and impact.

- **Areas where collaboration will enhance visibility and impact.** For example, breakthroughs in the quantitative life sciences will require the effective integration of knowledge and expertise drawn from multiple traditional disciplines. UMD has great strength in the life sciences across many schools and colleges. The University will stimulate and support collaborations to address fundamental life science questions, using expertise from the biological, chemical, physical, computational and mathematical sciences. Such research can be translated into solutions using the applied expertise of engineering, agricultural science and public health, and implemented using the tools of policy, social science, business, humanities, and the arts. Priorities include invigoration and increased visibility of interdisciplinary graduate research programs, as well as consolidation and coordination of core research facilities to maximize their potential. Similarly, existing strengths in neuroscience, environmental science, and African-

American history and culture will be leveraged to enhance their national and international prominence. The University will support convocations, awards, and working groups that seek to explore or promote new interdisciplinary collaborations. In addition to other benefits, these connections will enhance the national visibility of our life science programs, which tend to be under-rated because they are highly dispersed.

- **Areas that benefit the state or leverage UMD's location.** The State of Maryland is home to many potential partners and investors in a variety of fields, and UMD will make the most of its proximity to these opportunities. They include great strength in biotechnology and drug development, as well as opportunities to work with venture capitalists and defense contractors. The proximity of federal labs and agencies provides extraordinary potential for partnerships, including the departments of Homeland Security, Defense, and Agriculture; Food and Drug Administration; NASA; National Institutes of Health; National Institute of Standards and Technology; National Oceanic and Atmospheric Administration; National Security Agency; National Archives and Records Administration; and the Smithsonian Institution. Collaborations with partners like these help UMD build programmatic strength in many areas of research, including biomedicine; climate change and weather; cybersecurity; food safety and food security; national security; quantum computing; remote sensing and space science. The state and federal governments have an abiding interest in the health of the Chesapeake Bay, and UMD can provide essential expertise. The economic impact of the arts in the state is over \$1 billion, and UMD's exceptional facilities, faculty, and programming in the performing and visual arts will be leveraged to enhance the state's creative economy.

To maximize the impact of resources, UMD will put in place a regular **review of investments** in research with the expectation that less productive ones will be reduced or eliminated as new opportunities and needs are identified.

Several **new facilities** are underway or in design that will help address research infrastructure needs and provide opportunities for program growth in important areas. The A. James Clark Hall and the Brendan Iribe Center for Computer Science and Innovation are wonderful, transformative examples of buildings that will support the world's most advanced research and help recruit the world's best faculty, staff, and students in these fields.

Now under construction, Clark Hall will meet the need for new bioengineering and bioscience facilities, including animal labs for research on vertebrates, as well as imaging and behavioral analysis facilities essential for work in neuroscience and the study of brain function.

Similar **infrastructure needs** exist in many other areas of the University, and will require aggressive capital improvement investments. For example, the geographical sciences need on-campus space. The Colleges of Agriculture and Natural Resources, Information Studies, and the Schools of Public Policy, Public Health, and the Robert H. Smith School of Business all need more space. Language researchers and scholars need improved facilities. In addition, there is a very great need for additional improved physical science, chemistry, and biological research space.

Also, UMD must begin to retire its huge maintenance backlog, which totals over \$900 million. The average age among the 253 campus buildings is 43 years. A continued and sustained effort will be required to improve the campus infrastructure sufficiently to compete at the highest levels. These basic infrastructure needs **must** be a high priority for the campus and the state.



*The **Brendan Iribe Center for Computer Science and Innovation** will provide world-class space for the highly ranked Department of Computer Science and the University of Maryland Institute for Advanced Computer Studies (UMI-ACS). It will help keep Maryland at the forefront of technology and innovation in this critically important field, attracting top faculty and students. Featuring state-of-the-art virtual reality and robotics labs, hacker- and makerspaces, classrooms and informal learning areas and faculty offices and labs, it will serve thousands of students each week and be a community resource for technology leaders everywhere.*



***A. James Clark Hall** will provide state of the art space for teaching and research in bioengineering as well as a sorely needed vivarium for the care and treatment of experimental animals. Located next to the Jeong H. Kim Engineering Building, its 184,000 ft² will house research labs, core facilities, classrooms, meeting and maker spaces that will bring together students, faculty, medical practitioners, entrepreneurs and regulators to design and build the next generation of health-care technologies.*

III. STRATEGIC PARTNERSHIP WITH UMB (MPOWER)

Unlike most of the goals and initiatives described in this update, the strategic partnership of UMD with the University of Maryland, Baltimore (UMB), MPower, was not envisioned in 2008. It represents one of the most transformational changes of recent years. It has greatly expanded UMD's horizons and opportunities. The collaborative possibilities span the breadth of programs on both campuses.

Progress

Since its inauguration in FY 2012, this collaboration has exploited the remarkably complementary expertise at both campuses. It has produced powerful research and educational partnerships with rapidly growing benefits. The partnership encompasses fields as diverse as bioscience, engineering, social science, computer and mathematical science, law, public health and agriculture. There are now some 70 joint faculty appointments, compared to only a handful a few years ago. As a result, joint research has increased dramatically, producing more than 220 proposals to federal agencies and nearly 60 awards with anticipated funding of \$79 million. In addition, more than \$180 million in proposed funding is now in the federal review pipeline in fields ranging from child development to robotics to nanomedicine.

The partnership has launched two major cross-university research initiatives. **The Center for Health-Related Informatics and Bioimaging** combines advanced computer expertise and resources at College Park with clinical data and biomedical expertise in Baltimore. New leadership and resources have energized the **Institute for Bioscience and Biotechnology Research**. It combines expertise in engineering, medicine, quantitative sciences, bioscience, and technology in pursuit of advanced research and commercial-governmental partnerships.

UM Ventures, MPower's joint technology commercialization effort, is accelerating the speed that inventions move to market, from labs into the lives of people who need them. Invention disclosures, license agreements, and startup companies using the universities' intellectual property have all increased. The Collaboration is directly responsible for partnerships with companies such as MedImmune and Keygene.

MPower has also created new educational opportunities, including the undergraduate **MLaw Program** with Baltimore's Francis King Carey School of Law in collaboration with UMD's College of Behavioral and Social Sciences and College of Arts and Humanities. Summer research opportunities for talented undergraduates; a chance to work side by side in the lab with UMB scientists; and a new 2 + 2 program in nursing and a 3 + 3 program in law will help students complete their undergraduate and graduate training more quickly and more economically. **The Agriculture Law Education Initiative**, through the University of Maryland Extension, combines the expertise of the School of Law with UMD's College of Agriculture and Natural Resources to serve communities across the state of Maryland, with myriad publications and training programs.

2022 Goals

This successful strategic partnership will deepen and broaden as it matures, expanding the opportunities and impact on both campuses. UMD is on the verge of fully realizing the potential of the **Institute for Bioscience and Biotechnology Research** (IBBR) at Shady Grove. After an initial startup phase that brought stability and established the basic research infrastructure, an IBBR director was appointed in FY14 following a national search. Charged with leveraging the research assets of UMD, UMB and the National Institute of Standards and Technology, the new director is focusing primarily on biotechnology relevant to companies in the I-270 corridor and across the state. This includes the recruitment of outstanding bioscience and biotechnology researchers to conduct translational research that quickly turns groundbreaking science into business ventures. IBBR will focus on measurement sciences, biomolecular engineering, disease models and biomolecular pathways. Its research will also strengthen the Maryland economy and create jobs. As these initiatives develop, UMD can anticipate increased opportunities for students to engage with this growing industry in the Shady Grove area.

UM Ventures will continue to accelerate commercialization of University discoveries and to create economic impact by engaging partners in industry and social ventures. By encouraging students and faculty and by providing expert advice and business services, more discoveries will reach the market. Continuing to engage directly with external partners will attract new investments and create more startup ventures.

The Center for Sports Medicine, Health and Human Performance, the newest initiative of the collaboration, will be housed in a new addition to the remodeled Cole Field House. It will support a vigorous clinical research program in areas such as traumatic brain injury, physical training, preventive and rehabilitative sports medicine, obesity, and nutrition.

Several other new collaborations between the two campuses have been suggested, including a medical geolocation collaborative, a journalism and law connection, a brain and behavior initiative, development and testing of new biomedical devices, the use of augmented reality visualization tools in clinical situations, and efforts to deliver social services and education to low-income families in Baltimore.

IV. ARTS AND HUMANITIES

The arts and humanities are core components of a quality education, essential to a great university's identity and excellence. The humanities provide the critical tools and analyses that document what it means to be human; the arts provide channels through which we deliver the stories and ideas that express our humanity. UMD has long had a distinctive and productive relationship between these two areas of scholarship through their placement within a single college. This proximity has allowed for collaboration and synergies that have brought distinction to the University. Increasingly the arts and humanities are being asked to enhance and provide insight into the natural and social sciences. It is at such intersections that paradigms are changed, new knowledge is created and new opportunities realized. Strategic investment in the arts and humanities will enhance UMD's national profile and attract top faculty, students, and interested donors.

Progress Since 2008

The 2008 Strategic Plan called for the establishment of a humanities center as one strategy by which UMD would become more "widely known and respected nationally and internationally for its suite of outstanding interdisciplinary research efforts, many focused on major societal issues." In the fall of 2013, the Arts and Humanities Center for Synergy was established to stimulate transdisciplinary humanities scholarship and activities. UMD was recently recognized by the American Academy of Arts and Sciences as one of three national leaders advancing the conversation about the importance of the arts and humanities to the future of the nation.

Updated 2022 Goals

UMD will develop major projects to enhance our arts and humanities programs, including:

- **A major fundraising initiative to enhance the humanities.** Despite their importance to an outstanding liberal arts education, the humanities face special challenges. Enrollments in these fields are declining nationally, and institutions struggle to recruit and maintain outstanding faculty. UMD will **increase undergraduate enrollments in the arts and humanities** and enhance **student and faculty** support through fundraising initiatives such as endowed professorships and graduate fellowships. This will help retain and recruit outstanding humanities faculty and develop interdisciplinary programs, such as a recently proposed initiative on the history and culture of African-American life that would engage faculty and students across multiple academic units.
- **Leveraging UMD strength in the digital humanities to attract new funding and programs.** The Maryland Institute for Technology in the Humanities (MITH)—an internationally recognized leader in research and development in the field—recently received more than \$1 million from the Mellon Foundation to develop digital capacity in the field of African American literature and history. Already, this grant has proven a model for other fields, such as a Persian Digital Library project and a Kress Foundation planning grant to examine the digital dimension of Art History.

- **A proposed initiative for Art and Design** will foster project- and research-based practice that integrates the arts and humanities with the sciences, and critical and contextual studies with studio practice and community engagement. This work will bring together faculty and students from the schools of Architecture, Engineering, and Business and the Colleges of Computer, Mathematical, and Natural Sciences and Arts and Humanities. This initiative will include a **Digital Media Studies** program focused on the creation of stories and creative products through a variety of new media formats, including virtual and augmented reality.
- **A new partnership with the Phillips Collection (TPC)**, launched in October 2015, will greatly augment UMD's profile in the arts. The Phillips—America's first museum of modern art and home to one of the most distinguished collections of impressionist, modern and contemporary art in the world—maintains a rich schedule of special and traveling exhibitions, contemporary art commissions, public programs, and new acquisitions. The partnership will involve collaboration with existing galleries on campus and will include a University of Maryland Center for Art and Knowledge, physically located at the Phillips Collection Annex in Washington, D.C; collaborative graduate and postdoctoral fellowships; and UMD will co-host a number of events and special traveling exhibitions with TPC. Maryland will be a permanent presenter of Intersections (contemporary art exhibitions) and will have opportunities to use the museum's excellent venues to host UMD events. The University will also host lectures and symposia on campus by Phillips' visiting scholars and artists, and UMD students will gain opportunities for museum internships and performances in the Phillips' music series.
- **A dynamic, innovative arts and culture community in College Park.** To showcase the next generation of arts scholars, performers, educators, and cultural administrators, UMD is working to develop new performance venues, as well as a new facility in College Park to display and store Phillips and UMD works.
- **Arts management programs.** In fall 2014, Michael Kaiser, who served as president of the Kennedy Center for 14 years, joined UMD as a professor of the practice and relocated the esteemed DeVos Institute for Arts Management to the University. Its strategic, analytical and hands-on approach has helped arts organizations around the world face existential challenges. Drawing on Kaiser's expertise and success, the University plans to develop an interdisciplinary master's degree in arts management that will position UMD as a national leader in this field.
- **New partnerships.** The University will pursue opportunities to build new partnerships in support of the humanities. UMD's location in the Baltimore-Washington, D.C. region provides unique opportunities for educational and research partnerships with area and national cultural heritage institutions.

V. ATHLETICS

Though formally outside the academic enterprise, athletics plays a serious role in the life of the University, collaborating with faculty and encouraging student growth. This collaboration has greatly expanded in ways not envisioned in 2008 as a result of UMD's entrance into the Big Ten Conference and its academic affiliate, the Committee on Institutional Cooperation (CIC). This change has thrust UMD into productive academic collaborations with key flagship peers and significantly increased our national visibility. Already we have seen an increase in recruitment of students with a record number of 30,000 applications for freshman admission this year.

The Big Ten leads all other athletic conferences in the number of alumni (5.7 million) and students (nearly 580,000). The Big Ten Network (BTN) reaches more than 60 million homes across the United States and

Canada. In addition to athletic events, the *BTNLiveBig* network airs segments about its members' students, faculty, staff and alumni who are making an impact with their research, education and community service. This highlights UMD as a world-class academic institution.

2022 Goals

Maryland's membership in the CIC provides a wide array of opportunities for students, faculty, staff, and the institution as a whole. The CIC actively promotes collaboration among member institutions and forms the strongest multi-university academic consortium in the world.

Going forward to 2022, UMD will take the greatest possible advantage of this extraordinary partnership. Already, numerous collaborative activities are underway, including joint theater productions, a symposium on disaster resilience, and joint research on concussions and health disparities. UMD faculty, staff and administrators have participated extensively in CIC-sponsored professional and leadership development programs. UMD student government leaders meet regularly with their CIC counterparts. A CIC large-scale purchase program provides significant discounts on items such as library materials. UMD also conducts some of its student recruitment in conjunction with Big Ten/CIC institutions, and this has greatly extended our reach. Coordinated federal lobbying efforts extend our collective voice. UMD students are participating in CIC study abroad, summer research and language programs with member schools, and about 1,150 students from other CIC institutions applied for summer study/research at UMD in 2015.

The connection between academics and athletics is also reflected in the renovation of Cole Field House—a project that combines new training facilities with MPower research and education on human health and sports medicine. As noted above, the **Center for Sports Medicine and Human Performance** will promote the development of new educational offerings in the field of sports medicine; provide experiential learning opportunities for current UMD students in a variety of disciplines, including public health science, engineering, nutrition, psychology, and dance; and expand residencies, fellowships, and assistantships for students in medical and graduate education programs within UMB's School of Medicine and College Park's School of Public Health and A. James Clark School of Engineering. Further, there are plans to develop a new major in **sports management** to prepare students to serve in management positions in all segments of the sport industry, currently estimated to involve \$400 billion annually in economic activity across all sectors (youth sports, intercollegiate, professional and recreational pursuits).

For UMD athletes, the Center will provide medical and scientific support, helping them perform at the highest levels of sport and to recover from injuries.

The **Big Ten Network** (BTN) has invested in student production crews at each of the Big Ten journalism schools. "Student U" crews produce their own sports broadcasts that stream live on the BTN digital extension, which reaches over 90 million homes. Life-long learning that enriches self-awareness, professional advancement and civic engagement is achieved through Brand U, an innovative world-readiness program for the 21st century student-athlete. This industry-leading Terps-On-the-Go mobile application program helps student athletes develop personal and leadership skills to prepare them for successful lives.

These programs are examples of new research and educational opportunities made possible through strategic partnerships. UMD will pursue additional synergistic opportunities as they develop.

VI. GREATER COLLEGE PARK

A core mission of Maryland's flagship institution is to support economic development in the state. UMD's research and innovation plays a major role in fulfilling this mission, made possible by faculty excellence and a uniquely supportive location.

The state of Maryland is home to the Food and Drug Administration, National Institutes of Health, National Institute of Standards and Technology, U.S. Army Research Laboratory, Center for Medicare and Medicaid Services, NASA, National Oceanic and Atmospheric Administration, as well as many other health- and science-related institutions and agencies. Together, they form a unique hub of physical science and health-related activity—one of the largest and most vibrant in the world. The state is also home to one of the nation's leading industry clusters in biotechnology and a vast industry focused on system integration, defense, and information technology.

Hence, the 2008 strategic plan sought to develop the campus as a major hub for innovation and creativity. At the same time, the plan called for a revitalization of the City of College Park to help attract the best students, faculty and staff to the University, and attract businesses to partner with UMD and enhance the community.

Progress since 2008

UMD has made substantial progress toward these goals through a shift in strategy that helped attract private investment, aided by state incentives and a vibrant partnership with local authorities. The shift involved an effort to encourage development throughout downtown College Park, rather than at a single campus site. The advent of the collaboration between UMD and UMB has also furthered these goals.

In 2012, a "University District 2020 Vision" was created, through the College Park City-University Partnership (CPCUP), to establish a shared set of ideas and values for the campus and local residents to improve the quality of life for all who live and work in the community. The collaboration has rapidly begun to revitalize downtown College Park, and the goal of creating a vibrant, walkable, mixed-use hub of activity with new retail, office and housing options is clearly within reach. These changes promise significant benefits for UMD, including better faculty and student recruitment and new research partnerships. Development projects already under way include:

- **New education options**—in 2013, CPCUP launched the College Park Academy, a public charter school serving grades 6-12 in an innovative and rigorous blended-learning environment.
- **Improved public safety**—the jurisdiction of UMD's police force has expanded to cover a number of city neighborhoods, and the University hired additional officers. The campus expanded its code of conduct to apply throughout College Park, promoting family-friendly behavior in neighborhoods.
- **A four-star hotel** on the east side of Baltimore Avenue across from the main entrance to campus, to be completed in December 2016. This hotel will include four restaurants, convention space and 10,000 square feet for innovation incubators to serve UMD startup companies.
- **The light rail Purple Line** will traverse the campus, better connect UMD with the Washington, D.C. metropolitan area, and will also catalyze transit-oriented economic and real-estate development. It is expected to be operational by 2021.
- **Facilitated a bridge** that will connect the UMD Research Park with a new Whole Foods Market and

plaza in Riverdale Park.

In 2015, UMD was designated by the Association of Public and Land-grant Universities (APLU) as one of 18 public institutions recognized for its strong commitment to economic engagement in the state and region. This designation came about through a year-long self-study, with input from faculty, businesses, trade associations, and other internal and external stakeholders, including feedback collected through the planning process for this Update. Later in 2015, UMD was given the top national award for its economic engagement programs, representing the first BIG Ten institution to win the APLU top 'connections' award.

Updated 2022 plan

Anchored by the new hotel, the **Innovation District** is expected to include 2.7 million gross square feet of new or renovated facilities for research and startup companies; housing and hospitality space; public space; a food hall offering a variety of cuisines, sustainably grown food, and culinary incubators; and ample parking.

It will include 100,000 square feet of adaptable space for startups and research partners. Thus, the Innovation District will provide a physical and functional connection between campus academic buildings and the **UMD Research Park**. Also, UMD will work with developers to create additional incubator and collaborative space for businesses and federal agencies in and around College Park to make this area an augmented, thriving hub of economic development and creativity, as well as a highly attractive place to live and work.

UMD is working with the City of College Park to develop a vibrant local arts and entertainment district. Projects under development include renovation to create a new "art house" performance space on Baltimore Avenue—a collaboration between an entertainment/dining entrepreneur and the Clarice Smith Performing Arts Center. Additionally, UMD and the Phillips Collection are beginning to explore development of an open storage facility/modern art museum. To stimulate community and campus projects, the Arts and Humanities Center for Synergy has made engaged scholarship a key area of focus.

UMD will take maximum advantage of **state matching funds** for endowed chairs in STEM fields and work with industry, government, and academic partners to attract and retain businesses and major programs in this area. UMD is working with College Park to secure designation as a RISE Zone, which will confer state tax benefits to businesses locating there.

Additionally, UMD will continue—and through MPower expand—its deep **engagement with communities** throughout Prince George's County. As good neighbors and **as part of the land-grant mission**, University faculty and researchers provide a wealth of expertise to address health, family, and social needs. Coordinated through the colleges and UMD's Office of Community Engagement, these activities represent a major investment in a better Maryland and a better County. Some examples include:

- College of Agriculture and Natural Resources/UMD Extension: a wide range of personalized services to help urban, rural, and farming communities. These include youth programming, counseling services, health information, job development, and consumer information.
- College of Education: training for Prince George's administrators and teachers to develop future principals; specialized programs for future STEM teachers; Chinese language instruction; and model schools.
- School of Public Health: Prince George's County is one of the most medically underserved areas in the state. Through a series of federally funded initiatives, UMD faculty help fill in the gaps, as in the

community of Point Pleasant. The Maryland Center for Health Equity is deeply involved in delivering health information in communities where significant numbers of people lack primary care physicians. Its health-screening outreach, for example, brings information to barbershops and hair salons—significant social and community centers.

- Office of Community Engagement: In addition to enlisting university volunteers to work in College Park and neighboring communities, the office runs programs that bring university services to youth and challenged families. The Center for Educational Partnership fosters academic enrichment, parenting support, adult education, recreational, and cultural programs to benefit nearby Riverdale Park. The Northwestern High School Partnership works at this neighboring public school to cut drop-out rates and prepare students for higher education success.

By 2022, College Park will be well on its way to becoming a **top college town**, with Baltimore Avenue a vibrant, walkable thoroughfare offering excellent food, art, entertainment, and retail venues. **The city will be an asset in our efforts to attract and retain the best faculty, staff, and students.**

VII. EQUITY, DIVERSITY AND INCLUSION

A core belief and operating principle of the University is that excellence requires diversity at all levels. UMD is fully committed to the highest standards of equity, diversity and inclusion in higher education. *Insight into Diversity* recognized UMD with its 2015 Higher Education Excellence in Diversity Award. UMD has been named a Top LGBT-Friendly University by Campus Pride and the Huffington Post for four years in a row. This is reflected in the rising success and diversity of undergraduate and graduate students, faculty, and staff; the focus and impact of our educational initiatives, research, scholarship, and creative activities; our community engagement and service; and efforts to maintain an inclusive campus climate.

A separate 2010 diversity plan—*Transforming Maryland: Expectations for Excellence in Diversity and Inclusion*—has reached its midpoint and is now under review by a task force to assess progress to date and future challenges. The goals of equity, diversity and inclusion remain pre-eminent for this institution and a key to its success.

The ADVANCE program, in partnership with the Office of Diversity and Inclusion and the Provost's Office of Faculty Affairs, has launched several new initiatives to help recruit, retain, and advance a greater number of underrepresented-minority faculty. The efforts include training for search and launch committees, as well as seed grants, peer networks, and a new allies program.

Updated 2022 plans

The University will continue to vigorously recruit, enroll, retain, and graduate low-income and underrepresented ethnic minority students (African-American/black, Latino/a, Native American), both undergraduate and graduate, in all disciplines, as well as women students in STEM disciplines (where they are underrepresented).

By 2022, the University will increase need-based **financial aid** resources to support the matriculation and retention of low-income students from urban, rural, and suburban communities. A major initiative for the upcoming capital campaign will be an effort to raise a significant endowment for need-based scholarships to

assist students from low-income Maryland families. Modern project-based learning environments, peer mentoring and other support initiatives will further increase the retention and graduation rates of low-income, African-American/black, Latino/a undergraduate students and continue the decrease in achievement gaps for these groups.

The University will vigorously recruit, hire, tenure, and promote **underrepresented-minority faculty** in all disciplines, as well as women faculty in disciplines where they are underrepresented. A major new initiative, setting aside resources for target-of-opportunity hires, postdoctoral opportunities and additional funds for minority hires will build on our ADVANCE efforts and systematically increase the number and success of underrepresented-minority faculty at UMD.

The University will assess the efficacy and increase the number of **Cultural Competence courses** in the general education curriculum, to foster effective communication with people from diverse backgrounds. The University will continue to update, as appropriate, all courses to include material that reflects diverse cultural and social perspectives and to support the preferred learning styles of diverse learners. The University will continue the **Maryland Dialogues on Diversity and Community**—a series of events, lectures, symposia, discussions and listening sessions for faculty, staff, students, and alumni to help advance discussions of identity, difference, and commonality. Meaningful dialogue and critical thinking can change culture. This ongoing initiative will highlight one of the intersecting qualities of diversity at a time; 2016 will emphasize race and racism in relation to issues of gender, sexuality, class, ethnicity, language, religion and disability. Each of these, in turn, will be the focus of future dialogues.

The University will foster an **inclusive climate**, where there is a strong sense of community and where students, staff, and faculty from all cultural and socioeconomic backgrounds feel welcomed, valued and actively engaged. In all University programs, initiatives, and decision-making, the value and impact on equity, diversity, and inclusion will be actively and routinely considered, so as to fully embed these principles in all aspects of the University.

VIII. MODERNIZING ADMINISTRATIVE PROCEDURES

The University is a large and complex organization, with a wide range of administrative and information management processes to support its missions. These include recruiting, admitting, matriculating, housing and advising students; recruiting and supporting faculty and staff; supporting the research infrastructure; managing parking; procuring supplies; catering; building and grounds maintenance; operating a fleet of vehicles; marketing; and safety and security operations.

Keeping all these services aligned and integrated as efficiently and effectively as possible is a challenge in any environment, but especially so since higher education is facing significant transformation. When these services are efficient and effective, the core work of learning, discovery, scholarship and creative arts receive the necessary support. When they are not, the whole University suffers.

Progress Since 2008

While significant progress has been made on many of the goals of the 2008 plan, UMD continues to struggle with outdated processes, systems and software that challenge its ability to minimize overhead, optimize performance, and direct resources toward primary missions.

Just as there is a large amount of deferred maintenance with the physical campus, there is also a significant backlog in the administrative, business and academic processes that comprise the virtual campus. Continuing state budget shortfalls have heightened awareness of the need for a better budget model, increased efficiency and improved business practices. These will allow the campus to make better long-term strategic investments, better resource utilization, and more strategic prioritization.

Updated 2022 Goals

In FY 2015, President Loh convened a suite of work groups—one to create this update to the University's strategic plan, a second to recommend a new budget model, and three others to recommend efficiencies and improvements in virtually every aspect of University operations. In addition, a group of distinguished faculty, the 2020 Commission, was convened to vet the work groups' recommendations.

The 2020 work groups' recommendations aim to resolve structural issues with the campus budgeting process and to suggest broad-based efficiencies and enhancements that will generate savings and revenues, and increase transparency. Over the course of the next two to three years UMD will develop implementation plans for some of the 2020 recommendations. This effort is expected to generate resources to help support the goals of this strategic plan update.

New strategies to increase revenue are being developed, such as differential pricing for specific high-demand, high-cost programs; targeted fees for new initiatives in select programs; gradual movement toward a peer-median pricing and/or peer-median financial aid model; gradual increase in the out-of-state/international student population, within prescribed legislative limits; and increased opportunities for non-degree tuition sources (e.g., development of new MOOC specializations and other online course revenue and new 2+2-style programs for international students). Additionally, UMD will investigate specific strategic sourcing options for non-mission-critical services, increased research-related revenue through new corporate and government research partnerships (e.g., co-locating corporate and new government entities on or near campus and starting a research foundation for nontraditional research grants), and efforts to significantly increase private fundraising during a new capital campaign.

Because faculty and staff are the heart and soul of this institution, UMD will invest in them through the **Thriving Workplace Initiative**. This comprehensive and institution-wide endeavor will support and harness the energy and commitment of the people who do the work of the University. The initial phase will focus on assessing and improving employee engagement and inclusion. Extensive research links engagement to positive outcomes for both the organization (e.g., higher productivity, successful graduates) and its people (e.g., increases in overall health and well-being with multiplier effects to colleagues, families, and communities). The University is partnering with Gallup, the premier organization in the employee engagement field, to conduct a robust assessment of workplace attitudes and conditions. Then, it will provide support for individual units to make improvements based on the results. Gallup is also at the forefront of efforts to assess the long-term impacts of higher education on graduates. They are increasingly finding links between the engagement of faculty and staff and the experience and outcomes of students.

Building on the insights gained from the 2020 groups, UMD will work with the University System of Maryland to identify strategic investments of fund balance dollars that will enhance efficiency, build additional revenue, and support strategic priorities. Efforts will be directed toward investments that support institutional priorities, such as enhancing the number of STEM graduates, improving graduation rates, decreasing

the achievement gap, enhancing partnerships to build economic growth in Maryland, increasing the research achievements of faculty and students, and reducing the deferred maintenance of the physical plant.

IX. IMPLEMENTATION

The 2008 strategic plan identified the need for an additional \$100M per year in operating funds and a one-time investment of \$1.2B (in 2008 dollars) to accomplish its goals. The increase in operating funds (over cost-of-living and new mandated expenses) has not been realized, and the deferred maintenance burden on the campus has increased substantially since 2008. On the other hand, thanks to major gifts from generous donors, the campus is being transformed by several new building projects that will offset some of the one-time costs for new initiatives.

Generally speaking, these 2008 estimates of new funds required—for increased annual operating expenses and one-time costs for renovation and the like—remain applicable today. Funding the goals outlined in this update will depend on many initiatives, including:

- An ambitious capital campaign;
- The work currently underway to modernize administrative procedures and implement a new budget model;
- New sources of revenue such as additional tuition, fees, entrepreneurial programs, state appropriations, and special initiatives and partnerships.

A number of the goals of this update will involve **investments in new faculty and staff** (See Sections II, IV, and VI). At a minimum, an estimated 100 additional tenured and tenure-track faculty will be necessary to achieve these goals, which involve new academic programs and research, and efforts to increase faculty diversity. These new hires are also needed to improve the student-to-faculty ratio, reduce average class size, and increase opportunities for student interactions with and mentoring by tenured and tenure-track faculty. Additionally, these new faculty members will allow us to expand enrollment in high-demand majors and address future demand. Most importantly, adding outstanding faculty will increase scholarly productivity and excellence, build current and new research programs and increase the reputation, ranking and impact of our graduate programs. Finally, it will expand our contribution to the economic growth of State.

Further, UMD needs to address **salary compression for faculty and staff** and develop aggressive efforts to recruit and retain faculty from underrepresented groups. Also, additional funds will be needed to regularize appointments of **instructional faculty** and address their salary issues.

To address issues of faculty support, a **major goal of the upcoming capital campaign should be to raise a substantial new endowment for professorships and chairs**. UMD's competitors are much better able to offer such enhancements to outstanding faculty, and the lack of such support is a major handicap in our efforts to recruit and retain the best people. UMD also needs **to build a major endowment for graduate student support** if UMD is to attract the best doctoral candidates—a key to achieving the highest levels of research and academic excellence.

Affordable access coupled with academic excellence is a major goal for this University. In order to attract and retain a diverse and talented student body and ensure that all qualified Maryland students can attend, regardless of income, **UMD must also raise a substantial endowment to support need-based aid and merit-based scholarships**. A total of \$300 million will be needed to launch these various endowments—to be raised as part of the new capital campaign.

Transforming the Student Experience will include many different initiatives and will require funding over and above the cost of adding the faculty and staff needed to deliver new programs. These include:

1. **Renovating Classrooms**—The University is fortunate to have a state-of-the-art classroom building under construction. The St. John Learning and Teaching Center will have modern, collaborative classrooms. However, UMD relies on some 350 general-purpose classrooms and another 100 specialized learning environments to provide the required 150,000 seats per semester. Many of these have poor lighting, poor seating, unacceptably noisy air handling, or other problems. To transform the student experience, UMD needs to accelerate renovations and create modern, flexible, and collaborative environments throughout campus in support of high-quality student-faculty interactions.
2. **Support Teaching and Learning Transformation** through class redesign, the use of peer mentors and other support for students, the use of mastery-based and on-line course structures, online adaptive tutorials, and the use of open-source textbooks to reduce student costs.
3. **Provide every University of Maryland student with a cost-free, action-learning, international or entrepreneurial experience**—UMD will achieve this by integrating these concepts into the core curriculum, bringing real-world, experiential learning into the classroom. This will provide transdisciplinary opportunities to creatively solve problems, and increase global opportunities that impart a distinct professional advantage upon graduation. These will be accessible to everyone, regardless of financial background.
4. **Expand and Enhance Living-Learning Communities** and add at least 10-12 additional programs.
5. **Increase funding to enhance the Honors College and College Park Scholars**—The University needs to add additional enrichment activities and to expand departmental honors programs.
6. **Adding new Majors and Minors** to reflect modern workplace demands, emerging student interest, and new interdisciplinary opportunities. Already, several new majors are under development, such as public health sciences, information science, digital media, neuroscience, and public policy, to name a few. These programs typically require new faculty and staff, additional space, funds for student support and curriculum development.
7. **Expand advising, career services, and alumni mentoring.**
8. **Expand Peer Mentoring**—In addition to helping improve student outcomes in the classroom, the peer mentors gain valuable skills in teamwork, leadership, and collaboration.

Private fundraising through the capital campaign, new tuition and fee revenue, and/or additional state enhancement funding will be needed to implement these initiatives.

Capital Projects and Deferred Maintenance—Last year UMD completed a facilities audit and updated the estimated deferred maintenance backlog: \$738 million for state-supported buildings and \$169 million for exterior infrastructure, such as roads, sidewalks, exterior lighting and underground utilities. One-sixth of the space in the major state-supported buildings is in poor condition, one-half is in fair condition and one-third is in good condition. The institution is addressing the space in poor condition through the ten-year Capital Improvement Plan and institutional facilities renewal plans. Beyond the buildings currently under construction or in design, UMD has about \$450 million in immediate new building needs and many more in the queue. Together, these represent a huge capital improvement need that cannot realistically be met by 2022, but will be addressed as UMD plans for the future and enters the next capital campaign.

To summarize, the 2008 target of \$100 million annually in new funds and approximately \$1 billion for capital projects, deferred maintenance, and other one-time costs remains applicable to the goals outlined in this update. Additionally, it will be necessary to raise \$300 million in new endowments for professorships,

chairs, fellowships, and scholarships. It will take an aggressive, multi-pronged approach to secure these new funds. The outcome is essential if UMD is to fulfill its mandate of being “equal to the best.”

X. SUMMARY

The University of Maryland’s horizon is changing dramatically. New buildings rise and, more importantly, so do measures of academic success. Students come with more impressive credentials, the campus grows more diverse, and graduation rates are rising. Teaching is more hands on and experiential. Faculty research and scholarship advances beyond the envelope. New partners strengthen the institution in unimaginable ways.

Since 2008, many of the University’s 10-year strategic plan goals have been achieved. Others remain elusive. The opportunities and challenges have changed, but not the fundamental direction of the institution. We still strive to be “equal to the best,” an ever-moving target.

As in 2008, the goals outlined in this updated strategic plan still seek to transform the student experience, expand educational quality and access, grow the faculty, create new comprehensive excellence, intensify research and innovation, while providing an intellectual environment primed for discovery and creativity.

Diversity and inclusion—so essential in 2008—has taken on even greater importance today. Even the roots of wage compression go back to 2008. The Great Recession exacerbated the situation.

Pursuing these newly extended goals will bring this University that much closer to becoming “Equal to the Best”—a top-ten-quality institution—an irresistible force that beckons to the best faculty, students, staff, and research partners. The City of College Park will gain a new allure.

We are limited only by our imagination, commitment, and most significantly, resources—as we were in 2008. Yet, we have made important progress in the past eight years. Please join together to help make these updated goals into new horizons for the University of Maryland.
