



UNIVERSITY SYSTEM  
*of* MARYLAND

# LEADING MARYLAND

2020 ANNUAL REPORT

WWW.USMD.EDU



# LEADING MARYLAND TO EXCELLENCE

## A LETTER FROM THE CHANCELLOR

The 2019–20 academic year ended as no other year before it had ended. The COVID-19 pandemic forced the University System of Maryland to adjust every facet of its instructional delivery and administrative operations.

Nevertheless, there are constants that remain. The USM continues to touch nearly every single Marylander, through the education that prepares students for productive careers and engaged citizenship; through the research that creates knowledge and drives discovery; through the service that improves the human condition and advances the public good; through the daily work that enriches Maryland and fuels its economic growth.

This report details the USM's progress in areas important to us and to the state: providing Maryland students a high-quality, affordable education and enabling their success; producing graduates who meet Maryland's key workforce needs; achieving racial equity and advancing issues of social justice; expanding a research enterprise that addresses the greatest challenges of our age, including pandemics present and future; and engaging with our neighbors to invigorate the communities our campuses call home.

In these pages, you'll see what makes the USM so strong and so very valuable to Maryland—now and always.

Jay A. Perman  
Chancellor



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The University System of Maryland is the state's public higher education system, consisting of 12 universities and three regional higher education centers. Through their exceptional academic programs, groundbreaking research, and economic partnerships, the institutions of the USM are leading Maryland toward new opportunities and a bright future.



# CONNECTING MARYLAND TO OPPORTUNITY

The USM connects the people of Maryland with opportunities to learn, discover, and succeed—and connects the world to Maryland excellence.

Across our system of 12 institutions and three regional higher education centers, more than 200,000 USM students, faculty, and staff are engaged in innovative scholarship, teaching, and research that drives economic growth and strengthens communities throughout the state. USM universities are making an impact in every corner of our state but also enroll students from all 50 states and dozens of countries worldwide, creating an impressive network of more than 1,150,000 alumni who are building the global reputation of the USM.



- 1 Bowie State University
- 2 Coppin State University
- 3 Frostburg State University
- 4 Salisbury University
- 5 Towson University
- 6 University of Baltimore
- 7 University of Maryland, Baltimore
- 8 University of Maryland, Baltimore County
- 9 University of Maryland Center for Environmental Science
- 10 University of Maryland, College Park
- 11 University of Maryland Eastern Shore
- 12 University of Maryland Global Campus

#### Regional Higher Education Centers

- 13 Universities at Shady Grove
- 14 University System of Maryland at Hagerstown
- 15 University System of Maryland at Southern Maryland



**170,180**

Total enrolled students across all 12 institutions for Fall 2020.

**12%**

Increase in enrollment at USM institutions from 2010 to 2020.

**38%**

Increase in the number of bachelor's degrees awarded by USM institutions since 2010.

**42,654**

Degrees awarded by USM institutions in the 2019-2020 academic year.

**29,825** Undergraduate Degrees

**11,662** Graduate Degrees

**1,167** Professional Degrees

**79%**

Of all bachelor's degrees awarded in Maryland last year were from USM institutions.

# EXPANDING ACCESS TO HIGHER EDUCATION

As the state's public higher education system, the USM focuses on creating education opportunities that empower individuals to realize their potential and achieve their goals. This comprehensive system of 12 universities includes major research institutions, Historically Black Colleges and Universities (HBCUs), regional higher education centers, and the nation's largest public online university, which collectively offer hundreds of undergraduate, graduate, professional, and certificate programs. The USM is committed to providing Marylanders with a world-class education in their home state, while also attracting talented students and faculty from across the nation and around the globe. Although 2020 was a year of challenges for higher education, the USM looks forward to a bright future, as it builds on its reputation for outstanding teaching, scholarship, and research.



USM institutions have been ranked among the nation's best by publications such as *U.S. News and World Report*, *Kiplinger's*, *Money*, *The Princeton Review*, and *Washington Monthly*. The USM includes universities recognized in rankings of:

- National Public Universities
- Best Value Universities
- Historically Black Colleges and Universities
- Most Innovative Schools
- Undergraduate Teaching
- Social Mobility
- Best Colleges for Student Voting
- Best Colleges for LGBTQ+ Students
- Best Colleges for Veterans
- Best College Libraries



**50%**

Of undergraduate students attending USM institutions graduate without debt.

**\$174M**

Awarded in institutional financial aid to undergraduate students in FY 2020.

**\$64M**

Awarded in need-based institutional financial aid to undergraduate students in FY 2020.

**62%**

Increase in need-based financial aid to undergraduate students since 2010.

**\$26M+**

Additional financial support distributed to USM students in the form of emergency aid grants from federal Coronavirus Aid, Relief, and Economic Security (CARES) Act funding in FY 2020.

# KEEPING THE COMMITMENT TO AFFORDABILITY

The USM is holding fast to its promise to make higher education affordable for all. With continued support from the governor and the Maryland General Assembly, average in-state tuition and fees for Maryland's public, four-year institutions remain below the national average<sup>1</sup>. Debt levels for in-state students completing undergraduate degrees at USM institutions also fall below the national average<sup>2</sup>, and nearly half of these students graduate with no debt at all. Responding to the financial burdens faced by students and families due to the COVID-19 pandemic, the USM Board of Regents voted to freeze tuition, room and board, and fees for the 2020-2021 academic year, and the USM increased institutional financial aid by \$12 million.



Since the early days of the COVID-19 pandemic, USM institutions have taken action to augment their student emergency funds, raising nearly \$2.4 million in donations, which included a \$150,000 contribution from the USM Foundation. Donations to these crisis funds support students who are experiencing financial hardships as a result of COVID-19. The emergency funds have helped students pay for necessities like food and prescriptions, cover unexpected travel expenses, and acquire tools needed for virtual learning.

<sup>1</sup> Trends in College Pricing and Student Aid 2020, The College Board  
<sup>2</sup> Project on Student Debt, The Institute for College Access & Success.



49%

USM students who are from minority populations in Fall 2020.

36%

Increase in enrollment by minority populations since 2010.

12,702

Bachelor's degrees awarded to minority students in FY 2020.

46%

Of undergraduate STEM degrees were earned by minority students in FY 2020.

65%

Increase in the number of faculty positions held by minority populations since 2010.

7

out of the 12 USM institutions are led by Black presidents.

# SUPPORTING DIVERSE AND INCLUSIVE COMMUNITIES

With the nation's attention focused on racial justice and equity in 2020, the USM reaffirmed its commitment to increasing diversity within our system and fostering a culture of inclusion at each USM institution. The USM continues to increase both enrollment and degree attainment by underrepresented (defined as Black, Hispanic, American Indian, and Native American) or other (defined as Asian and multiple races) minority populations. The USM is also strengthening programs to recruit, retain, and advance faculty and staff from diverse backgrounds. Through this progress, USM institutions are encouraging diverse learning communities where each person is welcomed, valued, and offered equitable opportunities to succeed.



In 2020, the USM Board of Regents developed and adopted *Toward Racial Justice and Equity: A Plan for the USM*. This new framework is designed to guide efforts to dismantle structural racism within the USM; elevate issues of race and racism in our teaching, research, and scholarship; and redress racial inequities and advance social justice in our own communities.



750

Hours of instructional design support to help institutions adapt classroom-based courses for effective online delivery.

1,428

Faculty registrations in professional development seminars to strengthen online teaching strategies and skills.

400

Faculty members explored the use of adaptive courseware for course instruction to improve content delivery and student-faculty interaction.

2,983

Students across the USM took lab-based courses supported by virtual reality lab simulations.

# TRANSFORMING TEACHING AND LEARNING

The USM stands as a national leader in the academic innovation movement, with systemwide efforts championed by the William E. Kirwan Center for Academic Innovation. Since 2013, the Kirwan Center has helped USM institutions enhance student access, affordability, and achievement by leveraging innovations such as online learning technologies, open educational resources, and alternative credentials. When the COVID-19 pandemic required USM institutions to rapidly transition to online course delivery, the Kirwan Center was uniquely positioned to help USM institutions create effective online learning environments. The Kirwan Center partnered with University of Maryland Global Campus (UMGC), a global leader in online education, to launch the USM *OnTrack* initiative to provide institutions with a variety of resources, including “ready-to-adopt” online courses, adaptive courseware, instructional design support, professional development workshops, and virtual reality technologies for lab courses.



Even prior to the COVID-related transition to online education, the Kirwan Center for Academic Innovation was advancing the adoption of online learning technologies across the system. Through the USMx online learning initiative, a partnership with edX, USM institutions offered 39 different programs, 6 online MicroMasters programs, and more than 75 massive open online courses (MOOCs). The Kirwan Center also coordinates the USM’s Maryland Open Source Textbook (M.O.S.T.) initiative, which promotes the replacement of traditional textbooks with freely available open education resources (OERs) to reduce students’ costs. Through this initiative, more than 159 courses have adopted OERs, impacting over 65,000 students and resulting in \$10.4 million in textbook savings.



11,929

STEM degrees awarded by USM institutions in FY 2020.

8,518 undergraduate degrees

3,411 graduate degrees.

350+

Nursing students who graduated in 2020 under a special early-exit option that allowed them to begin work immediately in hospitals caring for COVID-19 patients.

7,436

Cyber degrees awarded by USM institutions in FY 2020.

3,903

Health care profession degrees awarded by USM institutions in FY 2020.

1,496

USM students graduated from Maryland-approved educator programs in FY 2020.

# BUILDING TOMORROW'S WORKFORCE

Across the USM, students are preparing for today's most in-demand jobs and tomorrow's emerging career fields through outstanding scholarship, research, and internship experiences. Working closely with employers throughout the state and region, USM institutions develop programs that provide graduates with the knowledge and skills required to obtain competitive jobs, as well as fill critical workforce shortages in the high-demand fields of health care, education, and STEM (science, technology, engineering, and mathematics). The close collaboration between USM institutions and employers enhances Maryland's ability to compete for skilled workers and excel in high-growth business sectors.



In 2020, the Board of Regents approved 14 new degree programs proposed by USM universities to address emerging workforce trends and needs in communities throughout the state. These new programs included degrees in: Applied Molecular Biology and Biochemistry, Applied Political Analytics, Athletic Training, Biocomputational Engineering, Culturally-Responsive Teacher Leadership, Cyber Forensics, Digital Media Studies, Global Health, Integrated Science, International Relations, Life-Cycle Facilities Management, Polymers and Materials Science, Real Estate and the Built Environment, and Vulnerability and Violence Reduction.



**\$1.54B**

in externally-sponsored funding received by USM institutions in support of research, education, and service in FY 2020.

**418**

New patents issued to USM institutions over the past five years.

**\$16.2M**

Licensing income generated by commercializing USM-patented technologies over the past five years.

Across the 12 USM institutions, faculty and staff conduct research that advances discovery, promotes understanding, fuels innovation, and supports economic growth in Maryland and beyond. Each USM institution is a research powerhouse with distinctive areas of expertise in cutting-edge fields, such as artificial intelligence, bioinformatics, cybersecurity, environmental science, public health, and more. When USM universities collaborate to exchange ideas and maximize resources, they create a dynamic environment where discovery and innovation thrive. Through the MPower initiative, a structured collaboration between the system's two largest research institutions, the University of Maryland, Baltimore and the University of Maryland, College Park shared a top ten placement in the national ranking for external research funding.

# ADVANCING RESEARCH AND INNOVATION



## USM Responds to the Challenge of Our Time: COVID-19

Since the emergence of COVID-19, USM institutions have been at the forefront of efforts to reduce virus transmission and improve treatment, including research to develop new vaccines, therapeutics, and diagnostic tests. State and federal agencies have relied on guidance from USM faculty and centers of expertise, including the Center for Vaccine Development and Global Health and the Institute of Human Virology at the University of Maryland School of Medicine, and the School of Public Health at the University of Maryland, College Park. Research teams across the system have received National Science Foundation Rapid Response Research funding and other grants to advance understanding of the virus and its global impact.

In April 2020, the USM established the COVID-19 Research and Innovation Task Force to accelerate and scale USM solutions to the current crisis and future pandemics. The Task Force leverages the expertise and assets of each institution, promotes cross-institutional collaborations, and engages with the business community to put the USM's COVID-related research and innovations into practice. The Task Force website at [www.usmd.edu/covid-taskforce](http://www.usmd.edu/covid-taskforce) provides a centralized hub of information about the USM's COVID research initiatives.





**40,867**

Employees of USM institutions, including faculty, staff, and graduate assistants.

**360**

Companies located in USM research parks, employing nearly 11,500 people.

**996**

Startup companies supported by USM institutions since 2012.

**\$2.35M**

Investments made by the USM Maryland Momentum Fund in eight USM-affiliated companies in 2020.



# DRIVING ECONOMIC GROWTH

The USM is a powerful catalyst for economic growth throughout Maryland, the Mid-Atlantic region, and beyond. In classrooms, laboratories, and incubators across the system, new ideas, technologies, and products are emerging and driving the creation of new businesses and jobs. USM institutions collaborate with Maryland businesses and help them grow by providing them with access to research expertise, state-of-the-art facilities, skilled employees and interns, funding, and other resources. Nearly every part of the state is touched by the work of USM institutions, which employ tens of thousands of people statewide and support additional jobs in the companies that serve USM campuses.



The USM Maryland Momentum Fund is the system's venture capital fund, which invests in Maryland-based companies connected to USM people and institutions in order to support entrepreneurship and foster economic development. Since inception, the fund has invested more than \$5.9 million in 18 companies across a wide range of industries, including aerospace, artificial intelligence, biotechnology, cybersecurity, food safety, and information technology. To learn more about the Maryland Momentum Fund and its portfolio companies, visit [momentum.usmd.edu](https://momentum.usmd.edu).



2M+

Volunteer hours contributed to Maryland communities through USM medical and legal clinics, partnerships with schools and community organizations, and other service initiatives.

785

Hours of free professional development training provided by the Maryland Center for Computing Education to Maryland PreK-12 teachers to help them transition to teaching in a virtual environment.

81%

of eligible USM students were registered to vote in the 2018 elections.

64,000

USM students voted in the 2018 mid-term elections, nearly double the amount who voted in 2014.

# ENCOURAGING STRONG AND ENGAGED COMMUNITIES

USM institutions are inspiring the next generation of leaders to become engaged in their communities and change them for the better. Through community partnerships and service initiatives, USM institutions are providing students and faculty with opportunities to be part of the solution to challenging societal issues and provide aid to neighbors in need. USM students are involved in a multitude of volunteer projects throughout the state, including tutoring K-12 students, providing legal aid to immigrants, running food pantries, cleaning up the Chesapeake Bay, and more.

To encourage students to become informed citizens and participate in our democracy, USM institutions collaborate on civic education and engagement initiatives, including the 2020 USM Votes project. USM Votes involved university leaders and student organizations in an effort to promote voter registration and participation in the 2020 elections.



Several USM institutions have received national recognition for their success in encouraging participation in the democratic process. Four USM institutions—Frostburg State University; Towson University, The University of Baltimore, and the University of Maryland, College Park—were listed in the top 20 of *Washington Monthly's* America's Best Colleges for Student Voting 2020. In prior years, the ALL IN Campus Democracy Challenge presented a Gold Award to the University of Maryland, Baltimore County for increasing student voter turnout in 2018, and the Gold Seal Award to The University of Baltimore for having a voter participation rate of greater than 70% in 2016.



77

Green buildings constructed or in design on USM campuses with LEED certification ratings of Silver or higher.

42%

Average recycling rate across all 12 institutions in 2019, which exceeds the statewide goal of 30%.

34%

Reduction in carbon dioxide emissions across all 12 institutions since 2006 (nearly 300,000 metric tons).

AA+

Bond rating affirmed by S & P Global Ratings and Fitch Ratings (and Aa1 from Moody's Investor Services) in 2020.

\$675M

Saved through USM's Effectiveness and Efficiency Initiative since 2004.

# OPTIMIZING MARYLAND'S RESOURCES

The USM takes seriously its stewardship responsibility to ensure the careful management of Maryland's valuable resources, including student and taxpayer dollars, as well as the lands and other natural resources of USM campuses. The USM's Effectiveness and Efficiency Initiative, launched in 2004, optimizes USM resources to yield savings and avoid excessive costs, saving the state hundreds of millions of dollars. The USM has continued the prudent stewardship of resources throughout the pandemic, resulting in favorable credit ratings from the major rating agencies and low borrowing costs for the system's facilities needs.

Through its Environmental Sustainability and Climate Change Initiative, the USM serves as a statewide leader in environmental sustainability and climate change mitigation. USM institutions are actively engaged in reducing the environmental impact of campus operations and have achieved significant progress in waste reduction and resource conservation. The USM is proud that all 12 institutions are original signatories of the College and University Presidents' Climate Commitment.







# UNIVERSITY SYSTEM *of* MARYLAND

1

Public Higher  
Education System

3

Convenient Regional  
Education Centers

12

Nationally and World-  
Renowned Universities

## INFINITE OPPORTUNITIES TO LEARN, DISCOVER, AND SUCCEED

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

### REGIONAL HIGHER EDUCATION CENTERS

Universities at Shady Grove

University System of Maryland at Hagerstown

University System of Maryland at Southern Maryland