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TO: The UMBC Community

FR: President Freeman Hrabowski

Provost Designate Philip Rous

RE: Focusing Our Resources for Results: Mid-Year Update on University Priorities

UMBC's foundation planning document, *Strategic Framework for 2016*, begins with two broad goals: ***provide a distinctive undergraduate education*** and ***continue to build research and graduate education***. Since our strategic plan was created in 2003, the campus has made substantial progress toward each goal by establishing clear priorities, encouraging innovation, assessing results, and building on successes. UMBC is receiving national attention for our effectiveness in linking teaching, learning, research, and technology development to advance student outcomes and the economic, social, and cultural vitality of the State and nation. While much work remains to be done, enrollment growth, student retention, Ph.D. production, new facilities, and research seed funding signal we are on the right track.

Consistent, collaborative focus on priorities has fueled this progress. Over the past two years, the Council of Vice Presidents and Deans, in consultation with the campus, has provided financial resources and leadership to support four broad University priorities, including student retention and graduation rates, infrastructure for research and creative activity, environment and sustainability (both academic programs and practices), and campus safety and security. This work has also been guided by three overarching themes reflecting feedback from the UMBC community and the strong commitment of campus leaders. These include increasing faculty hiring, increasing staff hiring, and building on the campus's historical commitment to diversity. Continued progress on strategic priorities and the supporting thematic objectives in a difficult budget environment has happened because of the dedicated efforts of faculty, staff, and students. We deeply appreciate the ways in which the campus has worked together to address challenges and opportunities, carefully manage costs, and develop new revenues through increased enrollment, grants, and fundraising.

Nearly 200 faculty, staff, and students gathered prior to the fall semester at the 2011 University Retreat to discuss campus initiatives and progress in the areas of student success, research and creative achievement, and diversity. Small group discussions reflected a sense of progress in most areas. The conversations were also forward-looking – exploring ways the work of the campus should be different in the next five years than in the past five years. Ideas frequently mentioned across the conversations included continuing to invest in people; raising the trajectory of faculty research, scholarship, and creative achievement; and advancing interdisciplinary research and program development. The Council of Vice Presidents and Deans will consider these themes as initiatives and investments are proposed in the FY 2013 budget process.

The following updates provide more detail on progress made toward University priorities through past investments and the entrepreneurial efforts of faculty and staff throughout the campus.

Student Retention and Graduation Rates

This priority speaks to the campus's commitment to continue to improve student retention, graduation rates, and Ph.D. completion. Examples of short-term objectives supporting this priority include creating the College of Natural and Mathematical Sciences Active Science Teaching and Learning Environment (CASTLE), converting part-time faculty funding to funding for full-time lecturer positions, allocating base funding for programs supporting Ph.D. student progress toward degree, and expanding and continuing proven student-success initiatives.

Continued strong enrollments reflect, in large measure, greater success in retaining our students through degree completion. Our current six-year graduation rate – 66.8 percent—represents an increase of eight percentage points over 10 years. The campus has also doubled the number of graduate degrees awarded, from 332 in 2001 to nearly 679 in 2011, and is on track to achieve the milestone of 100 Ph.D.s conferred this year.

These increases have been achieved through a variety of curricular and co-curricular initiatives reflecting progressive pedagogy and course redesign by faculty and staff, as well as administrative innovations designed to support student success. Some examples include:

- Eighteen First Year Seminars offered in 2010-11 enrolled 360 freshmen and new transfer students in small, discussion-intensive courses.
- Thirty-six sections of Introduction to an Honors University (IHU) enrolled 900 new freshmen and transfer students in academic development related to their class assignments as well as co-curricular activities.
- The IHU model was redesigned as a Transfer Student Seminar to provide more specific support for this group beginning in fall 2011.
- The CNMS Active Science Teaching and Learning Environment has supported innovative pedagogy in ten introductory science and math courses – including physics, calculus, and biology – reaching 1,454 distinct students in the 2011-12 academic year. In addition, the 93-seat, active-learning classroom has hosted discussion sessions for chemistry and hybrid statistics courses and walk-in tutorial sessions for calculus and 200-level math courses. A \$300,000 corporate gift from SAIC and alumni annual giving provided support to advance this effort.
- Course redesign grants have been awarded by USM to 35 faculty across the departments of English, Sociology/Anthropology, Psychology, and Chemistry.
- Grants to continue expansion of Writing in the Disciplines (WID) courses were awarded in 2010-11 to the Health Administration and Policy program and the Social Work; Modern Languages, Linguistics and Intercultural Communications; and Education departments. Since the WID initiative began in 2006, 93 courses have been approved in 34 majors.

- Introduction of a matriculation fee has established base budget support of the PROMISE Program and the Ph.D. Completion Project, graduate student success initiatives formerly funded by external grants.
- In the 2010-11 academic year, UMBC awarded 97 Ph.D. degrees – a record high –and 582 master’s degrees, also a record.
- The College of Natural and Mathematical Sciences has received more than \$2 million in new grant and foundation support for research studies on improving the academic success of freshmen and transfer students. These awards include the first NSF Innovation through Institutional Integration (I-cubed) grant to be awarded to test and compare different intervention techniques targeting freshmen success and retention; NEXUS, an HHMI-funded collaborative experiment to develop inquiry-based learning modules centered on the application of mathematical and statistical modeling in introductory biology courses; and the STEM Transfer Student Initiative, funded with a planning grant from the Bill and Melinda Gates Foundation.
- The College of Arts, Humanities and Social Sciences (CAHSS) has established new undergraduate programs and tracks to meet student demand in Asian Studies (31 enrollments), Gender and Women’s Studies (50), Public Health (137), and Media and Communications Studies (262). The College is also developing a Global Studies program.
- CAHSS has also replaced many part-time faculty with full-time lecturer positions, and reduced the percentage of student credit hours taught by part-time faculty from 47 percent to 38 percent in all lower level courses taught in the College and 77 percent to 58 percent in lower level English courses.
- The Retriever Learning Center, a collaboration between the Administration and the SGA, has opened in the Library, providing expanded, enhanced 24/7 group study space.
- The OIT Help Desk, redesigned as the Technology Support Center adjacent to the new Retriever Learning Center, provides face-to-face support for students in a more accessible location.
- Lecture hall and classroom renovations have enhanced the teaching and learning environments in Lecture Halls II, III, IV, V, the Math Psychology Building, and the University Center.
- The expansion of Patapsco Hall and planned renovations of existing residence halls will accommodate nearly 200 additional students living on campus, enhancing retention and maintaining our highly residential Carnegie classification.

Infrastructure for Research and Creative Achievement

The purpose of this priority is to enhance UMBC’s reputation as a national research university by facilitating research, scholarship, and creative activity.

During this uncertain period for Federal budget policy, a major campus priority is continuing to build the capacity for faculty to compete for contract and grant awards from diverse sources. In FY 2011, faculty contract and grant awards totaled \$82 million (including \$61 million in Federal awards), compared to \$95 million in FY 2010. (The one-year decline is largely attributable to the conclusion

of a 10-year cooperative agreement with NASA for GEST - the Goddard Earth Sciences and Technology Center.)

Establishing a research initiative venture fund, developing core research facilities supporting a wide range of faculty, and developing new research centers that leverage State or federal funding are the primary strategies underpinning this priority. Some examples include:

- New \$10-million cooperative agreement with Goddard Space Flight Center to create the Goddard Planetary Heliophysics Institute.
- Venture Fund investments by the Vice President of Research (VPR) totaling \$125,000 to support Academic Year Faculty Research Fellowships in all colleges, and Summer Research Fellowships in the humanities, the arts, the Imaging Research Center, the Maryland Institute for Policy Analysis and Research, and Physics.
- Core facility enhancements through the VPR and external awards supporting the Aquaculture Research Center (part of the Institute of Marine and Environmental Technology), Proteomics Center, High Performance Computing Center, 950 MHz NMR shared resource with UMB, and fMRI shared resource with UMB.
- \$100,000 seed funding investment by VPR for a Translational Nanobioscience interdisciplinary center engaging faculty from CNMS and COEIT.
- Funding and facilitation through VPR to support interdisciplinary research collaborations, including design for a nursing home of the future (Erickson School, Information Systems, Mechanical Engineering, Visual Arts), an Ipad app to enhance the experience of concert-goers (Music, Visual Arts, Imaging Research Center), and novel computational tools for geospatial research (Geography and Environmental Systems, Information Systems, Computer Science and Electrical Engineering).
- Continuing work to solidify the transition of the new Department of Marine Biotechnology and the Institute of Fluorescence within CNMS.
- Increased partnership development with research institutions, Federal agencies, and companies, including UMB, APL, NSA, NIST, Northrop Grumman, BAE, and Mantech.
- New hires and positions to provide additional research administration support include the Associate Vice President for Research, the Assistant Vice President for Research, an additional OSP staff member, an additional Intellectual Property Coordinator, two new full-time contracts and grants accounting staff, and six replacement hires in contract and grants accounting.
- The Post-Award Enhancement Initiative to provide enhanced staffing and services to principal investigators.
- CAHSS research infrastructure initiatives, including a post-contract-renewal course release program for untenured faculty, Summer Research Fellowships, a digital humanities initiative, Dresner Center programming and research support, concept development for an Arts Research Center, and development of an English MA proposal. In addition, business manager capacity is expanding in the Dean's office and in MIPAR to support growing research activity in the College.

- CNMS research infrastructure initiatives, including design and establishment of a chemical instrumentation core laboratory, a materials imaging facility, a biological imaging facility, and consideration of a campus instrumentation clearinghouse.
- COEIT research infrastructure initiatives, including increasing indirect cost recovery from 24 percent to 26 percent, yielding funds to reinvest in new campus research initiatives.
- Phase One Construction of Performing Arts and Humanities Building for a fall 2012 opening.
- Completion of Part One Program Planning for an Interdisciplinary Life Sciences Building.
- Completion of facilities upgrades to Sondheim Hall Animal Lab and Schwartz Hall.

Environment and Sustainability

The aim of this priority is raising UMBC's profile nationally in academic and administrative areas related to the environment and engaging the campus fully in efforts to move toward climate neutrality. Within the academic enterprise, the short term objectives supporting this priority include continuing to develop the Ph.D. program in Geography and Environmental Systems and developing a track in Chemical, Biochemical and Environmental Engineering focused on environmental engineering. Administrative objectives supporting this priority include beginning to implement a campus Climate Action Plan; establishing an energy performance contract to finance and complete energy conservation initiatives; identifying and pursuing strategies to improve public transportation and car/van pool options for students, faculty, and staff; and attracting new companies with a focus on environment and sustainability to bwtech@UMBC.

Our research profile in the environmental field continues to grow through the efforts of our faculty and students in departments with sustainability-related majors and courses. The work of research organizations such as the Center for Urban Environmental Research and Education (CUERE) and the U.S. Geological Survey Regional Water Science Center at bwtech@UMBC North also continues to build our academic achievements and reputation. Some examples of recent developments include:

- Support and expansion of the Geography and Environmental Systems program in CAHSS, where undergraduate majors have grown from 168 to 291 in six years, a new graduate program enrolls 13 Ph.D. and 40 master's students, tenure-track faculty positions have increased from eight to 12, and external funding is growing.
- Merger of two COEIT departments to form the Chemical, Biochemical and Environmental Engineering Department (CBEE) in FY 11, and filling new positions for an assistant professor and a lecturer. The Department is currently recruiting a second tenure-track position as a part of this initiative.
- Approval of a 24-credit track in sustainability and environmental engineering.

Recent administrative contributions to the environment and sustainability priority include:

- Consistent decline in total campus carbon emissions resulting from implementation of the Campus Climate Action Plan.

- Supporting LEED certification for the new Performing Arts and Humanities Building and Patapsco Hall addition.
- Recruiting two LEED-accredited staff members to the Facilities Management department.
- Finalizing an energy performance contract with the State that will finance \$13 million in major energy conservation projects on campus, with the debt to be repaid through energy cost savings over ten years.
- Completion of transportation initiatives including a campus carpool policy, Zipcar program, and electric vehicle charging stations.
- Pilot composting project at True Grit's dining hall.
- Establishing the Clean Energy Incubator at bwtech@UMBC South.

Campus Safety and Security

Awareness of increasing stress experienced by students in challenging times and increasing instances of natural disasters raised safety and security to a University priority. The purpose of this priority is to implement best policies and practices related to safety and security, and to foster a campus culture of safety through training and resources provided to leadership, faculty, students, and staff. Some examples of this work include:

- Participating in a national Learning Collaborative on High-Risk Drinking which aims to increase retention by reducing the number of students who drop-out due to binge-drinking behaviors.
- Collaborating with the Maryland Department of Health and Mental Hygiene to develop a training program preparing campus community members to provide first-line response to a person with a mental health problem or crisis.
- Establishing the Behavioral Risk Assessment and Consultation Team (BRAC), an interdisciplinary group of UMBC personnel trained in behavioral risk and threat assessment. Team members consulted on approximately 30 reports in the 2010-11 academic year.
- Establishing the Sexual Assault and Relationship Violence Response Team (SARVRT) to ensure that a coordinated effort is made to support prevention and victim service response. In the 2010-11 academic year, this team was engaged with 53 reports of sexual assault and relationship violence, up from 25 in the prior reporting year.
- Using complementary Relationship Violence Prevention Program to reach 6,000 community members in the past academic year with educational messages and training to encourage positive relationship behaviors.
- Finalizing content for an online emergency preparedness training for faculty and staff.
- Adding one full-time psychologist and two part-time interns to University Counseling services to support increasing critical safety/mental health needs and address normal developmental and academic concerns in support of retention.

Hiring and Diversity

Actions supporting the four University priorities have led, in many cases, to new or reallocated faculty and staff positions to build capacity in areas supporting student retention and graduation, infrastructure

for research and creative achievement, environment and sustainability objectives, and campus safety and security needs. Over the past four years, 58 new tenure-track and tenured positions have been filled. In addition, 20 new lecturer positions were established from 2008 to 2011 using funds reallocated from part-time faculty budgets. While a staff hiring freeze remains in effect, a hiring exception process has allowed 354 positions serving vital needs or generating revenues to be filled in the past three years. For example, the Office of Sponsored Programs filled two vacancies and established two new positions to provide support to faculty researchers. In addition, graduate assistant positions have been utilized to accelerate innovative teaching models, such as CASTLE, and student support initiatives, such as the Behavioral Risk Assessment and Consultation Team.

Diversity is defined at UMBC in its fullest scope, addressing not only racial and ethnic groups and individuals who have been underrepresented in higher education, but also religious affiliation, sexual orientation and gender identity, disability, foreign nationality, non-traditional student status, and other characteristics. A UMBC Diversity Plan, adopted in 2009, advanced four recommendations: 1) Establish a Diversity Council to review and shape inclusion initiatives on campus; 2) Address the Minority Achievement Gap through increased support for transfer students; 3) Continue to increase the diversity of UMBC's faculty and staff; and 4) Enhance support for faculty and staff recruited to UMBC under various diversity initiatives.

A number of important actions and milestones toward these objectives took place in the past year:

- The Diversity Council has focused on inclusion and physical and psychological safety for all members of the UMBC community, with particular attention this year to the climate for GLBTQ and Muslim students.
- Many of the initiatives established through the University's student retention and graduation priority focus particularly on transfer student success – from the modification of the Introduction to an Honors University seminar to address transfer student needs and interests to expanding Supplemental Instruction for courses that have historically been difficult for transfer students. In addition, an expanded Transfer Student Alliance provides special connections to concurrent enrollment, housing, and registration for community college students planning to transfer to UMBC, and new student organizations designed for transfer students provide social connections and career development support.
- In the 2011-12 academic year, members of underrepresented minority groups made up 18 percent of all new full-time instructional faculty (5 of 28) and 17 percent of all new tenure-track or tenured faculty (4 of 23). Practices including incentive hires, a Postdoctoral Fellows for Faculty Diversity program, and marketing outreach contributed to these results.
- In addition, building on the success of the UMBC ADVANCE program, another woman was hired in Geography and Environmental Systems, bringing the proportion of female STEM faculty campuswide to 23 percent (43 of 183).
- The representation of female faculty in the College of Engineering and Information Technology is even greater – 27 percent. According to a 2010 report by the American Society of Engineering

Education, the College ranks 15th nationally in the percentage of female faculty in tenured or tenure-track positions.

- UMBC continues to place high priority on continuing to raise the proportion of underrepresented minority faculty – particularly those of African American and Latino/Hispanic background– across all disciplines. An Executive Committee on Recruitment and Retention of Underrepresented Minority Faculty provides advice and counsel to the Provost regarding the hiring, retention, and advancement of minority faculty, and the ADVANCE Executive Committee provides advice and counsel to the Provost regarding initiatives designed to advance the success of women faculty in STEM areas.