

UMES Implementation Plan

First Five Years of the USM 2020 Strategic Plan

This Implementation Plan describes UMES' action plan to support the themes and goals of the 2020 USM Strategic Plan. This Implementation Plan covers the first five years of the strategic plan (FY12- FY16) and assumes an annual 7% increase in general funds and an annual 6% increase in tuition during the period. Of these enhancements, it is assumed that the campus' Current Services will be maintained by a 4% increase in general funds and 4% increase in tuition annually; and the Strategic Enhancements will be funded by a 3% annual increase in general funds and a 2% annual increase in tuition. This plan is based on a "best case scenario" and will be adjusted as needed to meet economic realities and to meet legislative and executive priorities. This plan does not include a treatment of the Bohanan Commission recommendations or related OCR recommendations. Funding under those initiatives would accelerate proposed research and graduate program development and allow UMES to provide additional support services that have been identified as HBI best practices and/or the campus Closing the Achievement Gap report but could not be fully covered as part of this Strategic Enhancement plan.

UMES serves as a conduit for a large percentage of first-generation college students (~51%) and has historically provided access to higher education for low-income learners (~57% Pell recipients) seeking opportunities that are afforded through college education. To this end, UMES is not in the position to request a tuition market adjustment or to propose a more substantial annual tuition rate increase. The campus understands that even the modest tuition increase that has been proposed will translate directly into additional personal debt (and increased attrition rates) for our student population (since many are already maxed out on available financial aid) and that these cost increases must produce an increased likelihood of student graduation, an improved marketability of their degrees to increase job placement options, and/or an enhanced undergraduate experience that serves as a strong foundation leading to successful completion of graduate research or professional degree programs in high demand fields of study.

The vast majority of the Strategic Enhancement funds during the first five-year period will target specific initiatives that increase retention and graduation rates, stabilize and enhance key undergraduate academic programs, increase community college transfer rates, and build on the university's track record of catalyzing regional economic development – particularly for high technology manufacturing businesses.

It is part of UMES's Land Grant mission to drive technology transfer and to grow businesses. UMES values strong relationships with the corporate sector and will leverage the State's investment in this Implementation and Strategic Enhancement Plan to create jobs, attract new businesses to the area, help existing local businesses spin off new ventures, and take a proactive approach to establishing new industries in the region. Through these corporate relationships, UMES will expand its undergraduate and graduate research opportunities and become the regional powerhouse for stimulating the creation and expansion of technology-based business enterprises, producing high quality graduates in STEM disciplines, and cultivating aspiring entrepreneurs without losing the appreciation for the development of character afforded by the arts.

Theme 1: College Completion – A 55% degree attainment level for Maryland

In order to contribute to Maryland achieving a 55% degree attainment level by 2020, UMES will implement a two-pronged approach that will (1) increase total capacity, enrollment, and the number of graduates in critical academic programs, and (2) increase campus graduation rates above 60% over the same period.

Over the next five years, enrollment growth at UMES will result primarily from three related efforts:

- Increasing retention rates through improved recruitment strategies and sustained support services,
- Increasing enrollment of nontraditional students and community college transfers, and,

- Expanding the capacity of critical academic programs (undergraduate and graduate).

In the past two years, UMES has demonstrated a 40-point increase in average SAT scores for entering first-time/fulltime freshmen and improvements in the 2nd and 3rd year retention rates as a result of providing an atmosphere of accountability and arming student service providers with real time data generated by HawkEye - an internally developed dashboard indicator and analytics toolset. The university will continue to improve on these recruitment and retention gains by engaging an external consultant to assist in developing a 5-year Enrollment Management Plan that will guide the necessary business process re-engineering for achieving widespread adoption and functional expansion of this accountability toolset into daily operating procedures.

In addition to the strategies outlined in its “Closing the Achievement Gap Report,” UMES will enhance retention rates by continuing to increase the enrollment of the “best and brightest” students while maintaining a mission of access for first generation and low-income college learners. Recent experiences indicate that the campus will achieve significant gains by expanding the capacity of the Admissions team to provide more timely and targeted responses through more varied means of communication. This expansion would include reestablishing the “HawkStart” program that allowed high-achieving students to pre-register for classes up to eight months before their upcoming freshman year – thus solidifying their relationship with UMES much earlier in the process.

During the next five years, UMES will take steps to significantly increase the enrollment of transfer students and non-traditional students. These strategic steps will help restore balance to upper class student enrollments that have suffered due to historically large attrition rates during the freshman and sophomore years. During this period, the Henson Entrepreneurs and Scholars Fund and the Hazel Scholars Fund will be fully funded and will generate substantial endowment revenue to provide scholarships for transfer students in STEM disciplines and teacher education programs (a State workforce priority), respectively. Strategic enhancement funds will supplement these existing endowment funds, as well as establish a RecruitBack Program to help reenroll seniors within 20 credit hours of graduation who have stalled out due to financial reasons.

UMES will make early investments to increase capacity in academic programs that are currently positioned to quickly absorb increases in transfer student enrollments (e.g., business, construction management, hotel and restaurant management, engineering technology, teacher education). For example, the hotel and restaurant management program and construction management program are already providing services at off campus sites such as the Universities at Shady Grove, Montgomery College, and the Baltimore Museum of Industry and with minor investments can expand quickly to accommodate larger enrollments. Even though an increase in transfer students will help relieve pressure on the number of entry level courses that are currently offered, UMES must still invest in additional Mathematics and English faculty to address the sheer volume of courses offered in these areas.

Theme 2: Research Excellence, Economic Competitiveness, and Job Creation

For the past two decades, UMES has been a driving force for the creation and expansion of regional technology-based manufacturing companies (to include Hardwire, MaTech, AviHome, and Harvard Custom Manufacturing) and is uniquely positioned to support renewed growth at the Wallops Flight Facility (including the Mid Atlantic Regional Spaceport). As the university expands capacity into recently approved Doctorate of Pharmacy and four-year engineering programs, the campus’ role in this regard will become even more pronounced and UMES has committed to creating or attracting a minimum of ten new businesses to the region as part of its endorsement of the “Mote Task Force” report.

With respect to this theme, initial Strategic Enhancement funds will be directed toward expanding capacity within the Engineering Technology and Aviation Sciences programs. Engineering Technology is a critical degree program that will be needed to support continued growth of technology manufacturing firms in the

region. This expansion will allow the university to increase the number of transfer students into these academic programs in order to support local community college graduates seeking additional learning, as well as filling critical workforce demands in regional technology manufacturing firms – many of which have been supported by UMES’ Rural Development Center or the campus’ affiliated research and economic development foundation, the Maryland Hawk Corporation.

As the Engineering & Aviation Sciences building (currently in the CIP) nears completion, UMES will ramp up its STEM investment by making additional faculty hires in physics, electrical engineering, aerospace engineering, aviation sciences, mechanical engineering, computer engineering, and computer science (graduate and undergraduate), toxicology, food science and biotechnology. Many of these hires will be targeted to help support regional workforce and research demands such as commercial/research use of unmanned aerial systems, small satellite development, low-cost access to space, pharmaceutical/space research collaborative, data visualization, climate change, and next generation technical advances in production agriculture. Further, the new facility and faculty hires will allow UMES to actively pursue community college transfers that have completed their Associate Degrees in Engineering.

As these investments are made in new faculty, the university will continue to pursue federal support and philanthropic contributions to establish related research centers. Examples of targeted activities include: Small Unmanned Aerial Systems Research Center, Small Satellite/Low-Cost Access to Space Research Center, UMES Technology Innovation Center, an Entrepreneurial Institute, and a Biotechnology Research Center.

New faculty hires for expanding engineering, computer science, and aviation science must be timed to coincide with completion of the Engineering & Aviation Sciences Facility; however, they must occur as quickly as possible to include Maryland in the strategic growth that is occurring at the Wallops Flight Facility and the Mid Atlantic Regional Spaceport.

Theme 3: Academic Transformation

UMES has been a USM leader in the efforts pursuing academic transformation and has demonstrated effectiveness in redesigning introductory courses to improve student learning outcomes. The institution is committed to investing in the infrastructure and resources that will establish systematic support for updating content delivery methods and has recently conducted internal and external assessments of its information technology infrastructure and online instructional capabilities as part of the process for renewing its Five-Year Information Technology Plan.

While the technology plan has not been finalized, early responses have made it clear that to sustain further academic transformation efforts and to provide capacity for offering online courses and programs, the campus must invest in faculty training, instructional technology, classroom technology, and core infrastructure for teaching. To this end, UMES will establish a formal Department of Instructional Technology that will provide training and support for faculty members to make it easier to adopt and implement technology as part of their course offerings (where appropriate). This will include support for online courses, web-assisted courses, course-capture technology and pedagogy – all of which have been expressed as desired features by student interest groups that were interviewed as a part of the technology planning process.

In addition, UMES will further support the needs of faculty and students by establishing a Department of Classroom Technology with the expressed role of guiding the transformation of UMES classrooms from simple “chalk and talk” rooms to current facilities that include smart board technologies, seating accommodations for students using laptops and netbooks, and sufficient support staff to provide routine classroom maintenance and real time in-class support for faculty seeking to implement new technologies and tools. As the classrooms and academic environment are being enhanced, UMES will give serious

consideration to significant institutional cost savings that may be attained by requiring student computer/laptop ownership.

Following the successful changes to its Introduction to Chemistry course, UMES currently has five courses in the pipeline for similar redesign efforts. In addition, UMES is committed to making its recently approved Professional Science Master's degree as a fully online program and faculty are currently developing a proposal for an M.S. in Emergency Management that is also being designed as a fully online program.

Theme 4: Stewardship

UMES has made significant investments in its Division of Institutional Advancement. In return, the campus has made considerable strides in achieving record-setting fundraising goals, improving alumni giving rates, and receiving positive exposure in media outlets. Some of the strategic enhancement request will be dedicated to improving public awareness of the significant contributions that the campus makes supporting workforce and economic development in the region. It is anticipated that improving community awareness of the university's prominent role in regional successes will assist in the process for obtaining additional philanthropic, governmental and private support. To this end, UMES will develop and implement a comprehensive marketing plan that will redefine the campus' image on the web, social media outlets, and other electronic and print distributions. A team will be established that will be responsible for creating a common look-and-feel for print collateral, web and electronic material, and hold the responsibility for branding UMES as a regional powerhouse for creating and expanding technology-based business enterprises, producing high quality graduates in STEM disciplines, and cultivating aspiring entrepreneurs.

In addition, UMES will hire an annual fund director to help secure regular streams of donations to help offset university operating costs. UMES will continue to implement cost saving and cost avoidance measures, eliminate low producing degree programs, strive to be a leader in adopting renewable energy technologies, and continue efforts to reduce the campus' carbon footprint.

Theme 5: Quality and National Eminence

UMES is committed to recruiting the "best and brightest" students and attracting and retaining quality faculty and staff. Efforts associated with increasing student enrollment and enhancing academic quality of the student body while maintaining a commitment to access have been included in Theme 1. Investments in faculty development initiatives that support course redesign and academic transformation and efforts to recruit teaching faculty to expand existing capacity and teaching/research faculty in critical workforce areas have been included in Themes 1- 3. In addition to these efforts, specific funding will be provided under Theme 5 to support faculty development initiatives such as participation in conference in emerging areas, specialty training, and pursuing certifications that have not been previously described.

In order to maintain its regional role as a leader in supporting economic development in STEM and health care disciplines, UMES is requesting that investments in the Engineering and Aviation Sciences Facility, Farm Support Buildings, and the replacement of the Early Childhood Education Building are completed. In addition, success in the strategies described above also requires that UMES will need additional residence halls to meet its enrollment and retention rate goals (the campus is already renting 400 spaces at off campus locations to relieve current housing pressures), and a Pharmacy building to accommodate its rapidly growing Pharmacy program and faculty. This is especially critical as other competitive countries are rapidly investing in research infrastructure. By not doing so, Maryland stands to lose out on a competitive advantage that has been created by the national investment in infrastructure such as the Mid Atlantic Regional Spaceport and Unmanned Aerial Vehicle infrastructure that has been proposed at NASA's Wallops Flight Facility.

UMES Implementation Plan

Supplement for FY 2012 Allowance

This Supplement describes the impact that the FY12 Allowance will have on UMES' Five-Year Implementation Plan. This Supplement assumes a 3% tuition increase that will partially offset mandatory costs. The tuition and general fund increase will only cover \$1,010,142 of the funds required to maintain current services. Additional improvements in stewardship of \$287,555 are needed to provide the necessary cost savings and/or increase external revenue generation to balance the budget. This supplement does not include a treatment of the Bohanan recommendations or related OCR recommendations. Funding under those initiatives would accelerate proposed research and graduate program development and allow UMES to provide additional support services that have been identified as HBI best practices and/or the campus Closing the Achievement Gap report.

At UMES, the FY12 Allowance will lead to reduced retention and graduation rates as a result of the campus' high population of first-generation students and low-income learners. In order for UMES to maintain recent gains in academic program quality (as evidenced by program-specific accreditations), the institution will not be able to adequately address the significant institutional financial aid requirements of this student profile. This funding reduction will result in lower retention and graduation rates, despite demonstrated efforts to increase the quality of entering students and to improve the academic support services that are provided for the campus' historic student profile.

Increasing the number of transfer students is a critical component in UMES' long-term enrollment strategy. To this end, the institution will take appropriate steps to improve fiscal stewardship such that it can fund an effort to build improved relationships with prospective community college transfers. UMES has sufficient capacity in some programs that can currently absorb modest increases in transfer student enrollments. It is hoped that when additional capacity is needed, the State will be in a better economic position to resume plans to expand capacity in its critical academic programs – particularly for STEM majors. However, continued delays in Strategic Enhancement funding will limit the institution's expansion of its STEM programs (e.g., engineering, engineering technology, aviation sciences, computer science) and will compromise its ability to provide the students and researchers that are necessary to meet regional workforce and economic development needs – particularly as Maryland's Eastern Shore strives to increase its competitive advantages in technology manufacturing and aerospace support services.

Delayed funding will also slow UMES' efforts to spur academic transformation. Basic initiatives to transform introductory and barrier courses will continue since the campus plans to use matching external funds for these efforts. However, the ability to fully implement these transformations will be severely hampered since the Strategic Enhancement Plan includes funds that are needed to provide resources to develop online courses, create online graduate programs, support faculty adoption of technology, upgrade campus classroom technology, and provide core infrastructure upgrades that will accommodate an increase in technology-savvy faculty and students. Without these basic upgrades in the very near future, UMES will suffer tremendous setbacks in its ability to attract high quality students, faculty, and staff – particularly in STEM disciplines and other areas that are critical to addressing regional economic and workforce development needs.

With respect to capital projects, UMES reiterates the flaw of basing the funding of its Engineering & Aviation Sciences Building solely on current enrollment figures. Given the importance of increasing STEM graduates in State and national priorities, the benefits of a minor investment to accommodate the planned growth at UMES will become quickly apparent once the building is complete and able to accommodate the growth in STEM majors, faculty and research that has been projected as part of the Strategic Enhancement Plan. In addition, UMES currently leases over 400 spaces for student housing from off campus locations. UMES again requests access to auxiliary bonds or suffer additional decreases in retention and graduation rates because it is not able to provide appropriate accommodations and related support systems for existing students.