THE USM IN 2010

An *Update* of the USM Strategic Plan

ADOPTED BY

the University System of Maryland

Board of Regents 2.13.04

Vision

The vision of the University System of Maryland is to be a preeminent system of public higher education, admired around the world for its leadership in promoting and supporting education at all levels, fostering the discovery and dissemination of knowledge for the benefit of the state and the nation, and instilling in all members of its community a respect for learning, diversity, and service to others.

Mission

The mission of the University System of Maryland is to improve the quality of life for the people of Maryland by providing a comprehensive range of high quality, accessible, and affordable educational opportunities; engaging in research and creative scholarship that expand the boundaries of current knowledge; and providing knowledge-based programs and services that are responsive to the needs of the citizens of the state and the nation.

USM fulfills its mission through the effective and efficient management of its resources and the focused missions and activities of each of its component institutions.

Values

The core values of USM reflect its role as a leading public system of higher education. Briefly summarized, USM values the intellectual development of its students; the creation and advancement of knowledge and the use of that knowledge for the benefit of Maryland's citizens; the professional development of its faculty and staff; and respect for—and promotion of—the ideals that are the hallmark of higher education: scholarship, learning, diversity, shared governance, freedom of expression, tolerance, and service to others.

Letter from the Chairman and the Chancellor

To the Citizens of Maryland:

In order to address the significant changes that have occurred in both the state and the University System of Maryland (USM) during the past few years, the USM community significantly revised its strategic plan in 2003.

This revised plan, "The USM in 2010: An *Update* of the USM Strategic Plan," articulates a new vision for the system as well as the goals and strategies for achieving that vision. It also specifies the core values and accountability measures that will guide and measure the system's progress in the years ahead.

Why have we updated the strategic plan at this time? Economically, politically, and demographically, Maryland public higher education is operating in an environment that differs markedly from that of 2000, the year the previous plan was developed. Today, we are facing reduced state funding and an uncertain fiscal future. We are projecting a dramatic surge in student enrollment,especially in the enrollment of minority students. Our knowledge-based economy requires a greater emphasis on technology-related areas.

Also since 2000, the University System of Maryland has welcomed new leadership on the Board of Regents, a new chancellor, and a number of new presidents.

We fully understand that the environment in which the University System of Maryland exists will continue to change. Accordingly, we view this updated strategic plan as an evolving document. We will review it often to ensure that the university system is positioned to achieve its vision of national eminence and to fulfill its commitments to all members of the USM community and to the state it serves.

We are especially pleased that this update has been a collaborative effort. We value and appreciate the input of each USM constituency who assisted in this document's development. The plan respects each institution's unique role and mission and builds on the institutions' collective strength as a system.

"The USM in 2010: An *Update* of the USM Strategic Plan" focuses on the system's role in providing high quality, accessible, and affordable educational opportunities, expanding knowledge and practice through research, and offering programs and services that meet the needs of our state. We invite your support and comment (feedback@usmd.edu).

Clifford M. Kendall,Chairman, USM Board of Regents

William E. Kirwan,Chancellor, USM

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Gerald A. Heeger

University of Maryland Biotechnology Institute (1985)
Jennie C. Hunter-Cevera

University of Maryland Center for Environmental Science (1925)
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EXECUTIVE SUMMARY

Background

In 2000, the University System of Maryland (USM) released an ambitious strategic plan, "The USM in 2010," that laid out a vision for where Maryland and USM could be by the end of the next decade. We are now four years into that plan, and Maryland, like most states, has been buffeted by events and trends that have reshaped its economy, its workforce, and its educational institutions. To be an effective guide for the future, a strategic plan must be a living document that changes to reflect the challenges and expectations of the day. In recognition of this need to adapt, and in keeping with the environment in which it now operates, USM has undertaken a revision of its 2000 strategic plan. Drawing upon guidance from USM institutions and the System's faculty, staff, and student councils, the Board of Regents has approved an updated plan, summarized below, that establishes new goals, adopts new themes, and sets new performance expectations for USM for the remainder of this decade.

USM's New & Revised Strategic Goals

In line with the mission, vision, and values of the University System of Maryland, the Board of Regents establishes the following strategic goals through 2010:

I. USM academic programs will respond to meet the changing and expanding educational needs of our state and a growing and increasingly diverse undergraduate, graduate, and professional student population.

II. USM research and scholarship will position Maryland as a national leader in science and technology, the arts and humanities, and the professions; serve the public good by enhancing the quality of life of all Marylanders; and advance the state's and the nation's economic growth, sustainable development, and international competitiveness.

III. Consistent with its legislative mandate, USM will achieve national eminence in research, scholarship, teaching, and service.

IV. USM will be widely recognized for the effective and efficient stewardship of its resources to achieve its strategic goals.

USM's Strategic Themes

To achieve these broad goals, USM has chosen to focus its collective resources and activities, over the next six years, on five overarching "themes." Each of these themes is aligned with one or more of the System's strategic goals. Each theme also contains specific "responses" that outline actions the System and its institutions, considering available resources and in accordance with individual missions, will undertake to achieve the strategic goals. The five strategic themes are as follows:

Theme 1: Promoting Access and Academic Success

Managing Growth to Ensure Access and Maintain Quality

Providing Maryland students with access to a high quality postsecondary education system and promoting their success within that system are at the core of USM's mission and are directly related to the achievement of Goals I, II, and III of the updated strategic plan. To achieve these goals, USM will:

- Promote manageable growth at selected USM campuses;
- Encourage the continued development of USM's regional higher education centers and off-campus programs;
- Increase the number and quality of programs delivered through online and distributed education formats; and
- Enhance coordination and articulation between Maryland's two-year institutions and USM campuses.

Promoting a Fair, Effective, and Affordable Tuition System

USM is committed to ensuring that qualified Maryland residents have access to System institutions and quality education at affordable costs. USM has adopted a new tuition policy that seeks to:

- Provide students with a quality education that also allows the System to move toward its legislatively mandated goal of achieving and sustaining national eminence;
- Further the state's understanding and appreciation of the significant role state revenues play in supporting the goals of the System;
- Allow USM and its institutions to plan, budget, and allocate resources over the long term;

- Keep tuition increases predictable, enabling students to plan for their educational expenses;
- Provide access to System institutions for all qualified students; and
- Recognize and support the individual institutional missions.

Enhancing Undergraduate, Graduate, and Professional Education
USM will continue to enhance the opportunities for learning provided to its students through its undergraduate, graduate, and professional programs.

Improving Minority Achievement
Over the next decade, USM and its institutions will work to implement the strategies laid out in the Systemwide Plan for Minority Achievement and the institutional minority achievement plans subsequently developed by each campus.

Theme 2: Achieving National Eminence

Achieving and sustaining eminence is the overarching goal of USM and the major focus of Goals I and III of the System's strategic plan. The System and its institutions will engage in strategies designed to:

- Strengthen its faculty through focused recruitment, development, and retention programs;
- Improve its facilities, both new and renovated, through a robust Capital Improvement Program and its auxiliary counterpart, the System Funded Construction Program;
- Aggressively seek out private philanthropic support and entrepreneurial partnerships; and
- Through its authority as a public corporation, manage resources in the manner most conducive to achieving national eminence.

Theme 3: Creating Knowledge, Promoting Economic Development, and Advancing the Quality of Life of Maryland Citizens

The research and development (R&D) conducted by higher education institutions is fundamental to the creation of a new culture of learning and strengthens the economic and social well-being of the larger society. The search for new knowledge and the use of that knowledge to improve the lives of Maryland's citizens is central to the mission of USM and is the focus of Goals II and III of USM's strategic plan.

To strengthen its research capacity and to serve as a catalyst for economic development, USM will focus on six strategic research imperatives related to R&D success:

- Research facilities
- Research faculty
- Special laboratories and equipment
- Research parks
- Technology transfer
- Biosciences

Theme 4: Addressing the State's Critical Workforce and Health-Care Needs

In addition to the contributions USM and its institutions make to the health and economic vitality of the state through their core functions of teaching, research, and outreach, USM also recognizes its responsibility to address specific workforce and other needs the state has identified as critical to its development. In line with Goals I, II, and III of its strategic plan, USM will work to address the state's requirements for:

- Graduates who can fuel the state's knowledge-based economy;
- Improved health-care services; and
- Highly qualified professionals to fill shortage areas in K-12 teaching, nursing, pharmacy, and the allied health professions.

Theme 5: Identifying New Resources and Practicing Exemplary Stewardship

As a public system of higher education, USM has a responsibility to continuously seek new and innovative ways to effectively expand and leverage the resources available to it and its institutions. The present era of diminished state resources makes this even more imperative if the University System of Maryland is to achieve its mandated goal of national eminence. In support of Goals III and IV of its updated strategic plan, USM activities will include initiatives designed to:

- Promote the effectiveness and efficiency of the System's academic and business enterprises;

- Develop the System's non-public resources to ensure its fiscal stability and provide flexibility in the pursuit of academic excellence and access to higher education;
- Create improved systems of accountability;
- Develop and implement, in cooperation with USM staff, effective Systemwide priorities and policies regarding staff training, professional development, and shared governance.

Next Steps: Action and Accountability

USM and its institutions will work together to develop an integrated set of strategies and objectives that achieves, through the mission-specific activities of each institution, the overarching goals outlined in the System's strategic plan. USM's progress in this effort will be measured at the Systemwide level through a yearly report card that draws from key performance indicators identified in the strategic plan. The information in this report card, along with that produced for other System strategic accountability reports, will provide the public and System stakeholders with valuable information showing the benefits of their continued investment in the University System of Maryland.

USM's Mission

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USM's Values*

The core values of USM reflect its role as a leading public system of higher education. Briefly summarized, USM values the intellectual development of its students; the creation and advancement of knowledge and the use of that knowledge for the benefit of Maryland's citizens; the professional development of its faculty and staff; and respect for—and promotion of—the ideals that are the hallmark of higher education: scholarship, learning, diversity, shared governance, freedom of expression, tolerance, and service to others.

* *Statement is abbreviated. A full statement of USM's core values is attached in the appendix of this plan.*

THE ENVIRONMENTAL SCAN:

"Operating in a New Fiscal and Governing Environment"

To be effective, the USM strategic plan, like any long-term plan, must begin with an analysis of the current operating environment, including an assessment of the various economic, demographic, and technology-related trends that will have an impact on USM and its institutions over the next half decade. In 2004, the University System of Maryland confronts an operating environment much changed from that faced in 1999. The following analysis examines those changes through a variety of lenses—fiscal, political, demographic, technological, and philanthropic—to provide context for the goals and activities laid out in the rest of the plan.

Lens 1: Fiscal, K-12, and Political Trends Affecting Maryland

The economy, demographics, and politics combine to create a "Perfect Storm" in Maryland.

Over the past three years, Maryland's economy, like the rest of the nation's, has been buffeted by economic, military, and political events. A national recession, the events of September 11, 2001, U.S. military actions in Afghanistan and Iraq, and corporate accounting scandals have all colluded to dampen economic growth in the nation and the state. The result has been a soft economy, nationally as well as locally, that has left states' revenues and budgets reeling. According to a 2003 report by the National Association of State Budget Officers (NASBO), 30 states missed their revenue projections in FY 03, with revenue from personal income taxes falling 8.6% below original estimates, revenue from corporate income tax falling 8.3% below estimates, and revenue from sales taxes falling 2.5% below estimates. Mid-year budget cuts enacted by 37 states in FY 03 totaled almost $14.5 billion, the largest reduction in the last quarter century. Unfortunately, the outlook for most states in FY 04 appears to be little better. NASBO reported that 19 states proposed negative growth budgets for the year (an historic high), while *The Chronicle of Higher Education* reported that at least 24 states are cutting spending by 5% to 26% in FY 04.

As is frequently the case, revenue-strapped states have looked to their higher education systems for savings. According to the *Chronicle*, approximately half the states reduced spending on higher education in 2003-2004, with some cuts ranging as high as 26% (the average was 5%). The average increase for those 18 states that managed to boost higher education spending was less than 3%, with no state larger than 7%.

Maryland has not been immune to these trends. The latest projections by the state's Department of Legislative Services (DLS) indicate that state agency spending in FY 05 will come in $675 million below the spending forecast made for FY 05 last year. More worrisome are deficits the state is projected to incur beginning in FY 05. According to DLS, rapidly increasing expenditures connected primarily to Medicaid and K-12 will outpace the state's revenue by $827 million in FY 05, $1.12 billion in FY 06, $1.49 billion in FY 07, and $1.83 billion in FY 08.

Multiplying the impact of Maryland's slumping tax revenues have been a series of legislative and demographic events in the state. In 2001, the state enacted a major piece of aid-to-education legislation designed to equalize funding for the state's K-12 public school systems. This legislation, known as Thornton, will cost $1.3 billion in additional spending when it is fully implemented. Contributing to the anticipated cost of Thornton are the state's shifting school demographics, which, as a result of the baby boom echo, will see 844,000 total students enrolling in Maryland's K-12 public schools in FY 05, a gain of 27% over enrollments in 1985. Public high school enrollments—grades 9-12—in Maryland will peak in FY 06 with 269,700 students, an enrollment gain of over 48% since 1990 and 9.3% since 2001. The impact of this growth in the student population along with Thornton, which is designed to prepare more of these students for college, will have a significant impact on Maryland's higher education sector.

Consequences for USM:

For USM, the impact of these actions has been particularly dramatic. After four years (FYs 99-02) in which the annual state-operating budget for the System rose by over 28%, USM is now facing severe cuts. State support for USM dropped from $867.9 million in FY 03 to $746.2 million in FY 04 (a level equal to its 2001 funding). These cuts come on top of millions of dollars in mandatory cost increases incurred by the System and at a time when, as a result of the baby boom echo and the increased reputation of its institutions, the System is facing rising demand for access by new students. Final figures for FY 04 show that USM was cut by 14% of its general funds budget (the comparable cuts for the rest of the nation were in the 5% range). At the same time, the enrollment at USM institutions has increased by 8,000 students.

To offset the loss in state funds, USM institutions have been forced to raise tuition, on average, by approximately 13% in FY 04. The additional revenue from the recommended increase in tuition amounts to approximately $74.8 million, of which $12.5 million will be allocated to financial aid. These increases place USM institutions among the most expensive public colleges and universities in the nation.

Lens 2: Family & Personal Wealth, Workforce, and Industry Trends Affecting Maryland

Maryland's overall wealth,highly educated workforce, and diversified job base offer a tremendous platform for future growth.

Despite the downturn in the economy and the strain this has placed on state revenue, Maryland's economic health remains strong relative to much of the nation. According to the most recent data (2001), Marylanders outpaced residents from almost all U.S. states in both personal and median family income. According to the Maryland Department of Business and Economic Development (DBED), the state ranked second in median household income ($53,530) in the U.S. and fifth in per capita personal income ($35,279). In fact,the state's per capita personal income level, which increased by 50% between 1991 and 2001, outpaced the national average by 16% in 2001 (within the state, the Baltimore-DC corridor led in per capita income, with Montgomery County coming in at $50,919 in 2001, and Howard County coming in at $43,191).

Much of the state's strong showing in family and personal wealth can be credited to the strength of its job market and its workforce. Data published by the U.S. Bureau of Economic Analysis in May 2003 show that Maryland gained 27,000 jobs in 2001. While this was significantly below the 76,100 jobs the state gained in 2000, and the smallest job gain the state has experienced since 1993, it was enough to place Maryland 16th among all states in job growth, with a growth rate four times the national average.

A key to this growth is the state's highly skilled, well-educated labor force. Maryland, which has a total workforce of 2.9 million, leads the nation in the percentage of its workforce 25 years of age and older with a bachelor's degree or higher (38%), and in the percentage of its workforce employed as professional and technical workers (25%). The state also ranks second among all states in having the highest proportion of doctoral scientists and engineers in its workforce (939 per 100,000).

Both benefiting from and contributing to this highly trained labor force are Maryland's businesses and industries. Though it still retains a highly diversified manufacturing and transportation base, especially in the production of electronics and communications goods, Maryland has emerged in recent years as a major technology center. The state's economy is now dominated by service-producing industries (accounting for two-thirds of the state's employment in 2001) with key federal research and regulatory agencies in the Maryland suburbs of Washington, DC, contributing to this transformation. According to the most recent issue (2002) of the State New Economy Index, which examines how well states have adapted to the "new economy"—defined as a "knowledge

and idea-based economy where the keys to wealth and job creation are the extent to which ideas, innovation, and technology are embedded in all sectors of the economy"—Maryland ranks number two among all states in "aggregated knowledge jobs." This category includes such factors as the percentage of IT employment versus non-IT as a share of total workforce, the number of managers, professionals, and technicians as a share of total workforce, and workforce education. Maryland has risen six places (from 8th to 2nd) in this category since the first State New Economy Index was issued in 1999.

Consequences for USM:

The state's high per capita and median family income, relative to the rest of the nation, means that USM has greater elasticity in setting its tuition and fee pricing. However, with tuition and fees at some of its institutions already among the highest in the mid-Atlantic region, and the nation, USM must seek a careful balance between the ability of Maryland students to pay and the cost of providing a high quality education in setting tuition and fees.

At the same time, the realignment of the state's economy away from the production and shipping of goods toward the production of services means that the role USM institutions play in workforce education will grow even more vital to the state's economy. As the System's most recent economic impact study, commissioned in 2000, found, USM institutions supply the vast majority of college and university graduates in the state. In 2000, USM awarded 65% of all bachelor's, master's, doctoral, and professional degrees produced by Maryland colleges and universities, public or private. This total included 64% of the computer science degrees, 56% of the engineering degrees, and 58% of the health-related degrees awarded in the state in 2000. Clearly, USM is key to ensuring that Maryland's workforce remains at the top of the New Economy Index in terms of advanced training and education. At the same time, the state desperately needs more graduates in the area of K-12 education, nursing, pharmacy, and allied health. USM must be prepared to respond to the state's needs in these areas.

Lens 3: Trends in Research and Development (R&D) Funding

Maryland's geography, federal support, and innovative public-private partnerships help its R&D sector to thrive, particularly in the biosciences.

As the home to more than a dozen federal agencies carrying out research and development (R&D) work in more than 70 centers around the state, Maryland enjoys a unique relationship to the federal government and its affiliated R&D centers. The state has exploited this relationship, and its system of outstanding higher education institutions, to create an R&D enterprise that ranks second in the U.S. in federal R&D obligations (with $8.7 billion in 2001). Only California, which has almost seven times the population and six times the gross state product of Maryland, surpasses Maryland in that category.

An R&D area of particular importance to Maryland, and increasingly to the nation as a whole, is the biosciences. According to DBED, Maryland's biotechnology industry is now the third most concentrated among the states (second on a per capita basis). Over 90% of the 300 bioscience companies and federal research labs located in Maryland are located within an hour's drive of one another. This helps to diffuse innovative ideas, increase technology transfer opportunities, and attract capital. Helping to fuel this concentration of R&D resources is Maryland's highly trained workforce, which ranks first in the nation in health sciences and second in biological and agricultural sciences doctorates per capita.

Consequences for USM:

The future for USM's R&D efforts continues to be promising. According to a recent National Science Board report, federal R&D support at academic institutions grew by 42% in the 1990s, driven largely by increases in the life sciences. For FY 04, President Bush requested a 4.4% increase in the federal government's R&D spending. A major factor in this growth will be defense and security research. The Bush Administration is seeking $3.4 billion in homeland security-related R&D for FY 04, with the National Institutes of Health expected to get about half of that amount ($1.7 billion). Looking into the future, the American Association for the Advancement of Science (AAAS) has projected that the federal government's overall support for R&D will increase 14.6% (not adjusted for inflation) over the next five years, moving from $117.3 billion in FY 03 to $134.4 billion in FY 08. In addition to defense and bioscience research,AAAS predicts that nanotechnology and information technology R&D will receive high priority by federal agencies.

To help increase its ability to attract these research funds, and the concomitant employment and economic growth they bring, USM has added approximately 127,000 net assignable square feet (NASF) of teaching lab space and almost 50,000 NASF of research space since 1998-99. These facilities, in turn, have corresponded with a boost in faculty productivity. In the last five years, federally funded research and development grants coming to USM institutions have increased nearly 60%, and in 2002, over 77 new technologies were licensed by USM campuses alone, doubling the total of 1992.

At the same time, USM and Maryland cannot rest on their past R&D success. The state faces tough competition for the limited R&D funding from a growing number of technologically savvy states and institutions. Maryland's R&D is extraordinarily tied to the federal government (in Maryland, the federal government supports 74% of the R&D research done; by contrast, the U.S. average is 21%), making it more susceptible to fluctuations in the federal flow of dollars. In addition, Maryland's position as a national leader in the biosciences is particularly being challenged, as several states increase their investments, including tobacco settlement money, to build their capacity to carry out bioscience research. Finally, though USM institutions' success in promoting technology transfer has increased, especially when compared with two decades ago, the system's efforts in this area still lag behind those of the best institutions in other states.

Lens 4: Demographic Trends Affecting Maryland

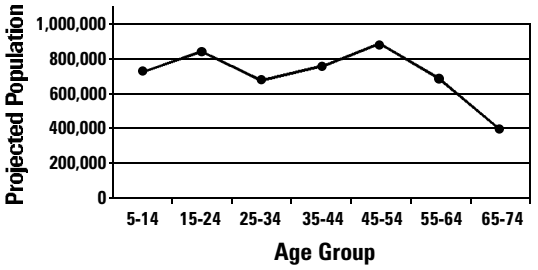
Maryland faces unique postsecondary education and workforce preparation challenges as the Baby Boom generation begins to retire and the Baby Boom Echo generation reaches college age.

Changes occurring in Maryland's population mean that USM must be prepared to meet the needs of a state population that will not only be larger in 2010, but also more diverse in terms of race, age, and national origin. In 2002, Maryland's population was 5.46 million, an increase of 14.2% over 1990 and 3.1% since 2000. By 2010, the latest projections indicate that Maryland's population will grow by an additional 5.3%, to total 5.75 million. Counties expected to see the greatest rates of growth (15% or more between 2000 and 2010) include those in the outer Baltimore/Washington suburbs (Carroll County and Frederick County), Southern Maryland (Calvert, Charles and St. Mary's Counties), and the Eastern Shore (Queen Anne's County).

In addition to absorbing nearly a half-million new residents, Maryland will continue to see significant increases in its minority population. According to the demographic projections published by the Maryland Department of Planning in 2002, non-white Maryland residents, who comprised 36% of Maryland's total population in 1990, are far and away the fastest growing segment of the population, making up 86.5% of the increase projected to occur between 2000 and 2010. In terms of population share, Maryland's non-white population is projected to make up 39.9% of Maryland's population by 2010 (and 41.3% by 2015).

With respect to age, Maryland's population will become more bi-modally distributed by 2010. As the chart below shows, the Baby Boom Echo (the 60 million citizens born in the U.S. between 1979 and 1994) and the Baby Boom (the 72 million citizens born between 1944 and 1964) will have an increased impact on the state's population over the next half decade, as the number of Maryland citizens between the ages of 15 and 24 and the number of Maryland citizens between the ages of 45 and 52 increase dramatically. These two population groups will experience gains of 15% to 30%, respectively, by 2010.

Maryland Population—Projected for 2010



Finally, a factor that is playing an increasingly important role in shaping Maryland's population is immigration. Data prepared by the Maryland Department of Planning, using the 2000 census, indicate that Maryland is home to 518,315 foreign-born residents, who make up 9.8% of the state's population. The state experienced a net gain of nearly 132,000 foreign immigrants during the 1990-1999 period, placing it 10th among the 50 states and the District of Columbia. Foreign immigration accounted for one-third of Maryland's net population change in the 1990s, the eighth highest in the U.S, with over 70% of the immigrants who establish residency in the state settling in either Prince George's County or Montgomery County.

Consequences for USM:

Based upon the projected demographics, a 2003 joint capacity study by USM and the Maryland Association of Community Colleges has indicated that statewide, college enrollment demand in Maryland could grow by as much as 31% during the next decade. Although many of these students will first enter Maryland's higher education system through the state's system of community colleges, USM must be prepared to meet the educational demands of not only more students, but also a more diverse range of students, whether that diversity plays itself out in terms of race, age, culture, educational preparation, or career interest. This growth will have implications for the number and

variety of degree programs offered by USM institutions, the location and format in which they are offered, the support services available to help students succeed, and the way USM programs and institutions are financed and supported.

Lens 5: Additional Technical, Competitive, and Financial Forces Affecting USM

The following issues, briefly listed, also are affecting—or promise to affect—USM activities over the coming five years.

- ***Development and implementation of new information management and learning technologies***

  Advances in information management technologies are continuing to drive changes in Maryland's academic landscape. These advancements are having a dramatic impact on the way USM faculty teach, the way in which USM students learn, and how USM campuses are managed. For instance, distance education—also known as distributed learning, distance learning, or online learning—is taking advantage of the Internet. According to a 2003 report by the U.S. Department of Education, the number of higher education institutions offering distance education courses has grown from 33% of the nation's two- and four-year degree-granting institutions three years ago to 56% in 2000-2001. Other sources indicate that the true number may be as high as 63%, with an additional 31% actively planning to engage in it. In Maryland, the number of credit courses offered by distance learning on Maryland campuses grew by 72%, from 1,245 to 2,135 between 1997 and 2000, while the number of students served by these courses soared by 83% (from 29,145 to 53,194), and the number of degree programs offered through distance learning increased from 33 to 50.

  In addition to reshaping what is happening in the classroom, new technologies are also affecting the way institutions are administered. The implementation of PeopleSoft, currently occurring at six USM institutions, may be the most dramatic example of the advantages new technology brings. When fully implemented, the new system will provide a common software infrastructure that links the human resource, financial, and student information systems of the institutions and allows them to create better and more reliable administrative processes and decision-making structures.

Increased competitiveness of USM institutions for top students and faculty

Perhaps the best known success story of USM over the past four years has been the steady rise of the System's institutions in various measures of national and international competitiveness. These measures include rankings of research expenditures, undergraduate and graduate program quality, institutional quality, graduates produced (particularly among key populations and areas of critical need), and campus climate. One outcome of this increased competitiveness is the ability of Maryland's public universities to attract top students—from Maryland and other states—and top faculty. According to the most recent Maryland Higher Education Commission (MHEC) data, published in March 2003, applications from Maryland high school graduates have increased by 38% since 1991 (in contrast, total public high school enrollments in Maryland have increased by only 33% since 1991) and 13% statewide since 1999. Out-of-state applications have increased statewide by 70% since 1991 and by 25% since 1999. In a competitive economy where attracting quality jobs depends on having a quality workforce, this increase in the percentage of Maryland high school graduates who are choosing to attend college in Maryland, and the number of out-of-state students who are choosing to apply to a Maryland institution, bodes well for the quality of Maryland's workforce and its economy.

At the faculty level, the success of USM institutions in attracting top quality faculty is evidenced by surges in the number of faculty awards and national memberships held by USM faculty and in terms of competitive grants awarded to them. A key to this success has been improving faculty salaries at USM institutions relative to those at peer institutions. Between 1999 and 2002, average faculty salaries at USM institutions climbed from the 66th* percentile nationally to the 85th* percentile nationally. Although USM's progress in improving faculty salaries has lost some ground since peaking in 2002 (the FY 03 average was at the 79th* percentile nationally), average faculty salaries at USM institutions, relative to those at our peers, are still significantly higher than they were in 1999. (* Faculty salary percentiles quoted above represent the Systemwide average; significant variances may exist both among System institutions and within the schools, colleges, and departments on an individual campus.)

Success in private giving

Over the past five years, USM's success in raising private funds has increased dramatically, with the largest and most successful campaign in USM's history being concluded in 2002 with over $900 million raised. This infusion of private dollars has

helped the System and its institutions to improve the infrastructure of each of their campuses, correct historic inequities at particular campuses, increase the amount of financial aid available to students, and enhance the overall quality of their faculty and programs. Although fund raising at some USM institutions has been down over the past two years (as it has at nonprofits throughout the country), the success USM has had in increasing private support over the past five years has greatly increased its capacity for fund raising. The prospect base of the System's institutions is now much larger and deeper. This capacity for growth is particularly important as USM and the nation face the start of what is projected to be the greatest generational transfer of wealth in the nation's history within the next few years.

Shared governance

Shared governance, the inclusion of faculty, staff, and students in the decision-making process, is a bedrock principle of USM, as reflected in Board of Regents' policy for the campuses, the appointment of a student regent, and the statutory councils of students, faculty, and staff that advise the Board of Regents. In 2001, the Maryland General Assembly passed legislation extending the option of collective bargaining to the staff, but not the faculty, of all Maryland's public institutions of higher education. This action has reshaped the traditional role played by shared governance bodies such as campus senates and the Council of University System Staff (CUSS). As the collective bargaining process is fully implemented, USM institutions are developing new governance models that allow the voices of all stakeholders in the System to be heard in the most effective manner possible.

Initiatives to improve minority student achievement and enhance USM's Historically Black Institutions (HBIs)

In line with the 2000 strategic plan and the state's commitments under the Maryland Office of Civil Rights Partnership Agreement, USM has moved over the past three years to increase support for its historically black institutions and improve achievement among minority students. The centerpieces of this effort have been the development and implementation of a Systemwide plan for minority achievement, the development and implementation of a strategic plan, along with funds for implementation of the plan, for Coppin State University, and enhanced capital support for the USM HBIs.

USM's Five Strategic Themes

Based upon the issues identified in the environmental scan, USM will focus its resources and activities on the following strategic themes:

Theme 1:
Promoting Access and Academic Success (aligns with Goals I, II, and III)

Theme 2:
Achieving National Eminence (aligns with Goals II and III)

Theme 3:
Creating Knowledge, Promoting Economic Development, and Advancing the Quality of Life of Maryland Citizens (aligns with Goals II and III)

Theme 4:
Addressing the State's Critical Workforce and Health-Care Needs (aligns with Goals I, II, and III)

Theme 5:
Identifying New Resources and Practicing Exemplary Stewardship (aligns with Goals III and IV)

STRATEGIC THEME 1:

Promoting Access and Academic Success

At the core of the System's strategic plan are two imperatives: providing Maryland students with access to a high quality postsecondary education system and promoting their success within that system. These are directly tied to Goals I, II, and III of the plan. To achieve its goals in this area, USM will focus its resources and activities on four key factors that affect the ability of students to attend USM institutions, as well as the quality of the education they receive and the educational success they experience once there. These factors include: 1) Managing Growth to Ensure Access and Maintain Quality; 2) Promoting a Fair, Effective, and Affordable Tuition System; 3) Enhancing Undergraduate, Graduate, and Professional Education; and 4) Improving Minority Student Achievement.

1.a. Managing Growth to Ensure Access and Maintain Quality

USM must seek to achieve and maintain a balance between enrollment and resources that allows it to meet the educational needs of the state's citizens while preserving and enhancing academic quality. To accomplish this, the System will undertake the following strategies: 1) promote manageable growth at selected USM campuses, 2) encourage the continued development of USM's regional higher education centers and off-campus programs, 3) increase the number and quality of programs delivered through online and distributed education formats, and 4) enhance coordination and articulation between Maryland's two-year institutions and USM campuses.

USM and its institutions will:

1.a.1. Encourage growth, as resources allow, at selected institutions and regional centers in order to expand access in response to Maryland's growing higher education and workforce needs.

1.a.2. Continue to work with Maryland's community colleges to improve statewide planning and program articulation, particularly in areas considered critical to the state's workforce.

1.a.3. Ensure that regional centers provide student-centered, user-friendly environments.

1.a.4. Open a USM Regional Higher Education Center in Hagerstown and explore the possibility of additional centers in underserved regions of the state, such as the Eastern Shore and other areas.

1.a.5. Continue to expand distance education offerings, particularly to underserved areas of the state.

1.a.6. Expand the breadth of online learning offerings and continue to enhance the effectiveness of the online learning environment.

1.a.7. Work with faculty and staff to find an effective and efficient way to deliver education to a larger and more diverse student base without sacrificing the quality of that education.

1.b. Promoting a Fair, Effective, and Affordable Tuition System

USM is committed to ensuring that qualified Maryland residents have access to System institutions and quality education at affordable costs. The System's tuition policy is based on the belief that the cost of providing a public higher education system should be shared by those groups that benefit from it: the students, the state, and the institutions.

In line with this belief, USM has crafted a tuition policy that seeks to: 1) provide students with a quality education and enable the System to move toward its legislatively mandated goal of achieving and sustaining national eminence; 2) further the state's understanding and appreciation of the significant role state revenues, both operating and capital, are expected to play in supporting the goals of the System; 3) allow the System and its institutions to plan, budget, and allocate resources over the long term; 4) keep tuition increases predictable, enabling students to plan for their educational expenses; 5) provide access to System institutions for all qualified students; and 6) recognize and support the individual institutional missions. In accord with the Systemwide policy, USM institutions will create and implement institution-specific policies to achieve these goals.

USM and its institutions will:

1.b.1. Work with the Governor and General Assembly to ensure that the state meets its obligation and provides its share of the cost of a high quality higher education for all qualified students.

1.b.2. Work with the Governor and General Assembly to increase significantly the amount of financial aid awarded on the basis of need.

1.b.3. Work with Maryland's Congressional delegation to increase significantly federally-financed, need-based financial aid.

1.b.4. Set tuition at a level that provides access for qualified students and that allows the institutions to offer their students a high quality education, support their institutional missions, and achieve the legislatively mandated goal of national eminence.

1.b.5. Offer commensurate increases in financial aid to qualifying students to offset increases in tuition rates.

1.b.6. Review financial aid policies and practices to ensure an appropriate balance between merit and need-based institutional financial aid.

1.b.7. Moderate tuition growth as increases in state support and improvements in efficiency allow.

1.b.8. Strive to keep tuition increases predictable, enabling students to plan for their educational expenses.

1.b.9. Provide to the public easily accessible information about their respective tuition plans on an annual basis. The information will include examples of the total cost for a typical student over a four-year period.

1.c. Enhancing Undergraduate, Graduate, and Professional Education

USM must continue to enhance the opportunities for learning provided to students through its undergraduate, graduate, and professional programs.

Undergraduate Education

Undergraduate education is a core mission of most USM institutions, and improving student achievement is vital to providing Maryland with the educated citizenry it requires for a strong economy and high quality way of life. With this objective in mind, it is incumbent upon USM and its institutions to find new ways to enrich the educational experiences of USM students and to assist them in staying in school and earning a diploma in a timely manner.

USM and its institutions will:

1.c.1. Identify specific plans to enhance the quality of undergraduate education on USM campuses using strategies appropriate for their unique missions and student needs.

1.c.2. Continue to support the development, as appropriate, of specific means to recognize and reward faculty who make significant contributions to the enhancement of undergraduate education.

1.c.3. Analyze the effectiveness of current initiatives to improve retention, graduation, and student satisfaction rates, and improve or replace ineffective academic support programs.

1.c.4. Develop and implement strategies to decrease "time to degree."

1.c.5. Continue to expand the use of information technology and online course offerings as means of enriching the quality of education.

1.c.6. Ensure that undergraduate students develop the international perspectives necessary for success in a global economy.

1.c.7. Develop collaborative programs between institutions so that students throughout the state will have access to a greater range of degree programs than otherwise would be available to them.

1.c.8. Continue to enhance the quality of articulation services and coordination between education segments to better support transfer students. Since the majority of transfer students come from Maryland community colleges, implement as appropriate, the USM/Maryland Association of Community Colleges (MACC) task force recommendations.

1.c.9. Continue to pursue efforts to strengthen student ties to the campus community by renovating or constructing student activities facilities and expanding campus housing opportunities.

1.c.10. Ensure that student services are provided in a prompt, respectful, and efficient manner.

Graduate and Professional Education

USM's graduate and professional programs have made significant gains in both quality and reputation over the past decade. The result is a wide array of graduate and professional programs at USM institutions now ranked among the best in the nation. These programs help to produce the state's next generation of scholars, researchers, doctors, engineers, pharmacists, nurses, teachers, and lawyers. The ability of USM institutions to maintain the reputation and quality of their graduate and professional programs is intrinsically linked to their ability to attract and retain highly qualified graduate students. USM and its institutions will work to increase support systems (whether financial, academic, or career development) available to attract and retain top quality graduate students.

USM and its institutions will:*

1.c.11. Increase funding for graduate fellowships and assistantships to nationally competitive levels, as appropriate, through new targeted fund-raising efforts or the reallocation of existing resources.

1.c.12. Provide graduate students with access to professional mentoring and support services to help them improve their academic, research, and teaching skills.

1.c.13. Where appropriate, encourage the integration of graduate and professional students into campus life by recruiting them to serve as advisors, mentors, and role models for undergraduate academic, residence, and service programs.

* *Responses related to enhancing the quality of faculty and research facilities are included in Theme 2 of the strategic plan.*

1.c.14. Work through their respective graduate schools, colleges, and programs to determine how graduate student needs and issues can be addressed effectively, fully, and efficiently.

1.c.15. Work to provide an environment that supports the recruitment and retention of faculty who are essential to the quality and success of these programs.

1.d. Improving Minority Student Achievement

In FY 2001, minority students composed 34% of the total USM student population and accounted for 31% of the baccalaureate degrees awarded by all USM institutions. However, that same year USM institutions reported that just under half (49%) of the minority students who had entered as freshmen six years earlier had graduated (compared with a 58% graduation rate for all USM students). For African-American students who had entered a USM institution as freshmen six years earlier, the rate was even lower, just 44%. Given the changing demographics of the state's workforce and population, it is imperative that the academic success of USM's minority students be improved not only for their own social and economic progress, but also for that of the state as a whole. Over the next decade, USM and its institutions will work to implement the strategies laid out in the Systemwide Plan for Minority Achievement and the institutional minority achievement plans subsequently developed by each campus.

USM and its institutions will:

1.d.1. Fully implement the Systemwide Plan for Minority Achievement.

1.d.2. Through Maryland's K-16 Partnership and other cooperative ventures, continue to increase programs for minorities that facilitate transitions between high school and college, and between baccalaureate programs and graduate/professional programs.

1.d.3. Continue to increase articulated programs that link USM campuses to community colleges with high minority enrollments. Dual admissions, aligned majors, faculty collaboration, and joint support services will characterize these programs.

1.d.4. Continue to increase academic programs, academic and student support services, and facilities at USM's historically black institutions.

1.d.5. Develop institutionally appropriate diversity education programs.

1.d.6. Strengthen existing and develop new programs at USM graduate- and professional-degree granting institutions that increase minority participation.

1.d.7. Include participation in minority-achievement initiatives in faculty and staff rewards programs.

1.d.8. Continue to hold themselves accountable for minority achievement through annual reports that will be prepared for discussion before the Board of Regents.

Accountability Indicators for Theme 1:

- Total undergraduate enrollment at USM institutions
- Total number of bachelor's degree recipients produced by USM institutions
- Undergraduate day-time enrollment at the Shady Grove and other USM Education Centers
- Number of students transferring from community colleges to USM institutions
- Number of USM students enrolled in distance education courses
- Number of courses delivered via Interactive Video Network
- Percentage of economically disadvantaged students attending USM institutions (undergraduate only)
- Second-year retention rate for USM undergraduate students (first-time, full-time only)
- Four- and six-year graduation rates for USM undergraduate students (first-time, full-time only)
- Percentage of USM undergraduate students satisfied with education received for employment

- Percentage of undergraduate USM students satisfied with education received for graduate/professional school
- Number of graduate level USM colleges, schools, programs, or specialty areas ranked among top 25 in the nation
- Pass rates on professional licensure exams and performance on graduate and professional school entrance exams
- Number of prestigious graduate and professional fellowship awards received
- Percentage of minority undergraduate students enrolled in USM institutions
- Percentage of African-American undergraduate students enrolled in USM institutions
- Second-year retention rate of USM minority students
- Second-year retention rate of USM African-American students
- Four- and six-year graduation rates of USM minority students
- Four- and six-year graduation rates of USM African-American students
- SAT score 25th/75th percentile

STRATEGIC THEME 2:

Achieving National Eminence

Achieving and sustaining national eminence is the overarching goal for USM, as established by its authorizing legislation, and the major focus of Goals II and III of the System's strategic plan. To achieve these goals, the System will engage in a range of strategies designed to strengthen its faculty, improve its facilities, encourage public and private partnerships, and manage its resources in the manner most conducive to achieving national eminence.

2.a. Faculty Recruitment and Retention

To achieve eminence, USM must recruit and retain a high quality and diverse faculty. Improved compensation and benefits are key to this effort.

USM and its institutions will:

2.a.1. Develop strategies for achieving and maintaining the 85th percentile for mean faculty salaries at all ranks.

2.a.2. Continue to develop and implement hiring and retention practices and procedures that lead to enhanced faculty diversity.

2.a.3. Continue to provide ongoing development programs for department chairs that include a focus on faculty recruitment and retention strategies and skills.

2.a.4. Develop competitive benefits programs for faculty and staff.

2.a.5. Maintain effective faculty orientation and development programs.

2.a.6. Increase the number of endowed chairs to recruit and retain distinguished faculty.

2.b. Faculty Development

Well-conceived faculty development programs enable professors to realize their full potential in teaching, scholarship, and service. In the current environment of fast-paced technological changes, opportunities for faculty to update their skills become even more imperative than in the past. Strategically planned and sustained faculty development programs contribute to increased professional satisfaction and enable institutions to better address societal needs and enhance student learning.

USM and its institutions will:

2.b.1. Include faculty development programs in their long- and short-term institutional plans (and accompanying annual budgets derived from general funds).

2.b.2. Provide development funds and opportunities to all categories of faculty.

2.b.3. Provide opportunities for faculty to develop the skills necessary to integrate modern information technology tools into classroom teaching.

2.b.4. Ensure that new tenure-track faculty benefit from mentoring and support programs to enhance their research, teaching, and service potential.

2.b.5. Develop programs that recognize the universities' most distinguished teachers and enable them to share their expertise with other faculty.

2.b.6. Encourage and support effective faculty participation in shared governance and service.

2.c. Capital Investments

New and renovated facilities are essential to supporting instruction, research, faculty recruitment, and increased student enrollments. A robust Capital Improvement Program (CIP) and its auxiliary facility counterpart, the System Funded Construction Program (SFCP), are necessary to ensure adequate facilities to support the unique role and mission of each institution.

USM and its institutions will:

2.c.1. Develop and update regularly facilities master plans that are integrated with institutional strategic plans.

2.c.2. Significantly enhance capital funding directed to building renovation, infrastructure, and facilities renewal to protect the state's investment in physical assets.

2.c.3. Continue to expand the funding capacity of the SFCP by maximizing the use of "off balance sheet" or non-university/system debt. In assessing each potential project, approval will depend on financial viability and impact on bond rating.

2.c.4. Continue the successful focus on building student communities at all institutions through public/private partnerships. Where traditional auxiliary funding methods are not viable, seek state funds for critical auxiliary needs.

2.c.5. Maintain focus on effective project management. Ensure that USM service centers continue to engage architects and contractors in a timely manner, and encourage contractors to complete construction work on time and within allotted budgets.

2.c.6. Coordinate capital planning and programming with System-wide strategies for the use of technology in education. Distance education, particularly online learning, presents both opportunities and challenges with regard to capital facilities. Most USM institutions will have to support continued growth in both classroom-based enrollments and online off-campus enrollments. In either case, the technology infrastructure must be carefully planned and implemented.

2.d. Philanthropy and Entrepreneurial Partnerships

The importance of private support for public institutions of higher education has grown to the point where it blurs the distinction between these institutions and their private counterparts. While private funds should not be used to replace state support (i.e., a state institution should receive the amount of state funds necessary to accomplish its mission), private support can mean the difference between a good university and a great one. USM institutions must become more aggressive in seeking private support and flexible in meeting the expectations of donors.

USM and its institutions will:

2.d.1. Prepare to launch major fund-raising campaigns.

2.d.2. Work to create state programs to match private gifts and to provide donor tax incentives.

2.d.3. Develop adequate budgets to strengthen fund-raising and other advancement efforts.

2.d.4. Expand their fund-raising workforces and reduce turnover.

2.d.5. Seek or further develop expertise in the area of planned giving.

2.d.6. Create an IT infrastructure to support online giving.

2.d.7. Create incentives for presidents and other institutional leaders to raise private funds.

2.d.8. Place greater emphasis on technology transfer, enterprise development, and partnerships with the private sector.

2.d.9. Develop initiatives to implement recommendations of the Governor's Commission on Development of Advanced Technology Business (the Pappas Commission).

2.e. Public Corporation Authority

USM was granted "public corporation" status in 1999. This action by the General Assembly has enabled USM to become much more entrepreneurial. For example, through the creation of business partnerships, such as those responsible for the new student housing collaboratives, university corporate entities, and the development of capital approval, leasing, and procurement processes, USM has developed tens of millions of dollars of new facilities and facilitated the acquisition of new research equipment without utilizing state debt or burdening state procurement processes. However, USM can and must do more if it is to gain the autonomy and flexibility characteristic of top tier systems of higher education in the nation. Over the next five years, USM will seek to fully exploit the status granted to it by the state in 1999 by aggressively defining and expanding its authority as a public corporation.

USM and its institutions will:

2.e.1. Work in concert to gain executive and legislative approval of flexibility measures developed by the Regents' Public Corporation Work Group and approved by the Board of Regents.

2.e.2. Implement, as appropriate, the recommendations that emerge from the Regents' Public Corporation Work Group.

Accountability Indicators for Theme 2:

- Average USM faculty salary as percentile of national average
- Number of endowed chairs held by USM faculty
- Annual capital budget for renovation and facilities renewal
- Rate of operating budget savings achieved through efficiency and cost containment measures
- Amount of private funds raised by USM (annual)
- Number of USM colleges, schools, programs, or specialty areas ranked among the top 25 in the nation
- Number of prestigious awards and national academy memberships held by USM faculty

STRATEGIC THEME 3:

Creating Knowledge, Promoting Economic Development, and Advancing the Quality of Life of Maryland Citizens

The research and development (R&D) conducted by higher education institutions is fundamental to the creation of a culture of learning and strengthens the economic and social well-being of the larger society. The search for new knowledge and the use of that knowledge to improve the lives of Maryland's citizens is central to the mission of USM and is the focus of Goals II and III of USM's strategic plan.

3.a. The Importance of Research

Research and other creative activity are a core purpose of American universities. The advancement of knowledge is fundamental to advanced learning, and the quality of universities is largely determined by their intellectual vigor, reflected in part by the scholarly reputation of their faculty and by their success in securing competitive research grants. High quality faculty, in turn, attract and develop highly talented graduate and undergraduate students.

Furthermore, the creation and application of knowledge at universities are primary reasons why the regions in which the universities are located prosper. Particularly important have been the new businesses, even whole new industries, that have sprung up in the vicinity of major research universities as a result of university-based technology transfer.

But the benefits of university research are even broader, helping existing industries adapt to changing markets, expand our food supply and improve its safety, provide superior health care, address social welfare, and help protect the environment. Moreover, while some of these benefits are the direct product of university research, others accrue because highly capable graduates are produced to fill the demand for a skilled workforce. For all of these reasons, research within USM is critical to achieving a prosperous future for Maryland in the 21st century.

Six Strategic Imperatives

To strengthen its research capacity and to serve as a catalyst for economic development, USM will focus on six strategic imperatives related to R&D success:

- Research facilities
- Research faculty
- Special laboratories and equipment
- Research parks
- Technology transfer
- Biosciences

USM and its institutions will:

3.a.1. Encourage and nurture fundamental research and other forms of creative activity in all of their academic programs as an essential aspect of institutional quality.

3.a.2. Continue to work with state economic development leaders on the creation and implementation of a statewide research and development strategic plan that aligns USM capabilities with state economic development needs.

3.a.3. Secure additional investment sources for research that will supplement state and federal funding.

3.a.4. Continue to develop strategies for recruiting and retaining faculty in areas that require substantial investment in research laboratories and equipment.

3.a.5. Continue to conduct periodic economic impact studies that will be distributed to state business and political leaders.

3.a.6. Continue to encourage greater entrepreneurship at USM institutions in activities that impact economic development, especially in developing research parks and partnerships with the private sector.

3.a.7. Continue to work with the Maryland Technology, Engineering, and Development Corporation (TEDCO) to leverage promising USM research technologies and realize their full market potential.

3.a.8. Examine all research-related policies, identify and modify all of those that inhibit the development of partnerships, and seek more active, supportive roles for the Board of Regents in establishing research and business partnerships.

3.a.9. Continue to maximize USM cooperative agreements and research partnerships with federal research laboratories and other federal agencies to capitalize on their presence in the state.

3.a.10. Contribute to the state's bioscience initiatives through implementation of the recommendations contained in the 2001 USM Biosciences Work Group Report.

Accountability Indicators for Theme 3:

- Total USM federal R&D expenditures as reported by the National Science Foundation
- Total USM R&D expenditures in the biosciences
- Number of companies graduating from USM institutional incubator programs
- Number of prestigious awards and national academy memberships held by USM faculty
- Amount of private funds raised by USM (annual)
- Annual number of invention disclosures filed
- Total income from technology transfer

R&D

STRATEGIC THEME 4:

Addressing the State's Critical Workforce and Health-Care Needs

USM institutions contribute to the health and economic vitality of the state through their core functions of teaching, research, and outreach. However, as the state's primary provider of postsecondary education and research, and its public educator of health-care professionals, USM also recognizes its responsibility to address specific workforce and other needs the state has identified as critical to its development. In line with Goals I, II, and III of its strategic plan, USM will work to address the state's requirements for graduates to fuel a knowledge-based economy, improved health-care services, and larger numbers of more highly qualified K-12 teachers, nurses, pharmacists, and allied health professionals.

4.a. Fueling a Knowledge-Based Economy

A knowledge-based economy uses the dynamic integration of ideas, innovation, and technology to drive wealth and job creation across all sectors of the economy —from traditional industries, such as agriculture and shipping, to those on the leading edge of technology, such as communications and the biosciences. For Maryland, as for any state, a key to competing successfully in such an economy is the level of knowledge, education, and skills possessed by its workforce.

Currently Maryland ranks first in the nation in the educational attainment of its workforce and, not coincidentally, second in the nation in the development of "knowledge jobs" (managerial, professional, and technical jobs, in both IT and non-IT industries). As the state's public leader in higher education, USM is committed to ensuring that Maryland's workforce maintains and expands its competitive advantage in these areas. For USM, this will mean increasing the production of graduates in high-growth, technology-intensive professions, such as engineering, information technology, and the biosciences, to meet projected statewide needs. It also will mean that USM must adopt policies and programs that instill in all of its graduates, and not just those in technology-oriented fields, fluency in the adoption and use of new technologies that will help them to improve their lives and empower their careers.

USM and its institutions will:

4.a.1. Continue to implement the Board of Regents resolution regarding the technology fluency of graduates. In line with the resolution, USM institutions will provide instructional contexts that bring students into contact with IT in meaningful ways and provide core understanding of how technology works, thus allowing students to adapt to future IT tools. As appropriate, campuses will engage the faculty in the use of IT in the curriculum.

4.a.2. Expand the capacity of engineering, science, and other programs as necessary to ensure Maryland has the workforce required to remain a leader in the knowledge-based economy.

4.a.3. Continue to pursue innovative and entrepreneurial methods to respond to the impact of advanced technology on society and the economy. These responses may range from forming entirely new colleges and departments that respond to specific demands to creating "virtual colleges" that cut across other, more traditional, disciplines.

4.a.4. Continue to encourage both cooperation and competition among USM campuses as each seeks to respond to market needs and opportunities in high-demand, technology-intensive fields.

4.a.5. Provide contemporary technological services and infrastructure to ensure an appropriate learning environment. To meet this goal, institutions must also develop funding models for maintaining the currency of their IT infrastructure, which, as a continually changing and costly investment, does not correlate well with public higher education models, which must be prepared two years in advance. Both available technologies and service expectations increase at far faster rates than traditional budget models allow.

4.a.6. To ensure that public high school graduates have the knowledge and technological fluency necessary for postsecondary education, produce highly qualified teachers in the core disciplines of science, mathematics, history, and English who are capable of integrating technology into the K-12 curriculum.

4.a.7. Develop recruitment, retention, and training programs directed at institutional staff with critical technology skills.

4.a.8. Continue to explore avenues to realize the economies of scale afforded by USM's size and the capabilities inherent in IT.

4.b. Academic Health Centers

The training of physicians, dentists, and other health-care professionals in the U.S. is largely carried out in academic health centers that align education and research in the professional schools with patient care delivered in clinics, both on and off campus, and in affiliated hospitals. Over the past five years, changes in health-care delivery and in certain federal health insurance programs have had significant negative implications for the training of physicians and other health-care professionals, both in Maryland and across the country.

The state's only public academic health center (AHC), the University of Maryland, Baltimore, must function in a highly competitive atmosphere for faculty researchers and clinicians while simultaneously dealing with the serious issues affecting the U.S. health-care industry. In addition, the campus faces internal challenges from the close relationships it must maintain with its affiliated private hospital system and practice plans, and with the Veteran's Administration Medical Center, all of which share campus facilities and personnel. If it is to thrive in this atmosphere; meet the needs of Maryland's citizens for health-care education, research, and patient care; and ensure access for Maryland's citizens to quality health-care services now and in the future; it needs special attention within USM and by the state.

The University of Maryland, Baltimore (UMB), the USM Office, and the Board of Regents will:

4.b.1. Work to establish UMB-specific policies and procedures for personnel, budget development and review, and performance accountability that are responsive to the special circumstances facing the AHC.

4.b.2. Develop board oversight mechanisms to ensure that the Board of Regents is adequately apprised of issues that impact the AHC.

4.b.3. Continue to monitor federal, state, and local policies affecting education, research, and patient care delivery at AHCs.

4.b.4. Continue to explicitly recognize via funding guidelines and other budgetary mechanisms the contribution of clinical revenue to UMB's academic program and the threats to this revenue.

4.b.5. Support Mission-Based Budgeting in the UM School of Medicine and the other schools and programs at UMB.

4.c. Nurse Shortages

Maryland, like the rest of the nation, faces a severe shortage of both clinical nurses and nurse faculty. According to the Maryland Hospital Association, the nurse vacancy rate in Maryland hospitals in 2002 was 12.6%. Without significant changes, including critical attention to the nursing faculty shortage, it is estimated that Maryland will be short at least 17,000 nurses by the year 2012. According to the Southern Regional Education Board, there is currently a 12% shortfall in the number of nurse educators needed. Between 2004 and 2010, the five USM institutions that provide nurse education will promote a number of new or continuing initiatives aimed at producing more nurses and nurse educators.

USM and its institutions will:

4.c.1. Intensify recruitment initiatives within USM to attract more MS/PhD nurses to academic careers.

4.c.2. Strengthen nursing programs to attract more students to the field. In particular, these programs will work to increase awareness among middle and high school students of the myriad career opportunities for both men and women in nursing.

4.c.3. Enhance interdisciplinary health programs through area health education centers and elsewhere to foster a spirit of partnership between and among health professionals.

4.c.4. Implement new articulation agreements within their institutions and with the community colleges to facilitate a seamless transition from lower-division to upper-division study in nursing.

4.c.5. Continue to expand access to nursing education across the state through innovative modalities of education and distance learning technology.

4.d. Pharmacist Shortages

Maryland is also facing a significant shortage of pharmacists, particularly in rural areas. Despite a 20% increase in enrollment at the University of Maryland School of Pharmacy in Baltimore over the past three years, the demand for new graduates exceeds supply. Our society's greatly increased use of medication requires increases in the number of pharmacists needed to manage the distribution and proper use of prescription and non-prescription pharmaceuticals in community pharmacies, nursing homes, hospitals, and managed care organizations. To address this need, the University of Maryland, Baltimore, will expand the impact of its programs through the following initiatives.

The University of Maryland, Baltimore, will:

4.d.1. Maintain the 20% enrollment increase begun in 2001 and recruit additional faculty to support this growth.

4.d.2. Prepare for a larger enrollment increase, pending required increases in operating funding and facility expansion.

4.d.3. Incorporate state-of-the-art technology and automation within the curriculum to improve workforce productivity.

4.d.4. Encourage practitioners to increase the use of pharmacy technicians and automation and support community colleges and other organizations in the development of pharmacy technician training programs.

4.d.5. Increase recruitment initiatives across the state with special emphasis on geographically underserved areas.

4.e. Shortages in Other Health Professions

In addition to nurses and pharmacists, the state is also facing a profound shortage of health-care professionals who focus on meeting such specific health-care needs as the identification, evaluation, and prevention of diseases; dietary and nutrition services; rehabilitation services; and health-care management. Known collectively as "allied health," these disciplines include audiology, speech-language pathology, occupational therapy, medical technology, the imaging sciences, respiratory therapy, health information management, and physician assistant studies.

They are projected to be among Maryland's fastest growing occupations over the next seven years, with demand for graduates in these professions expected to increase from 30% for occupational therapists to over 50% for physician assistants and audiologists.

As with nursing, however, while the demand for allied health professionals is growing, the number of faculty available to help respond to this demand is falling. A 2003 report by the Association of Academic Health Centers noted that faculty shortages in allied health disciplines are among the highest of all health professions and are expected to increase. USM will work to address the needs for allied health professionals through expanded programs and innovative partnerships.

USM and its institutions will:

4.e.1. Expand enrollments in health professions training programs as resources allow in order to meet the public need for high quality health professionals who effectively address needs for services to enhance optimal function and quality of life for Maryland citizens, as well as address prevention and health promotion needs.

4.e.2. Add additional programs in allied health/health professions areas as appropriate to address Maryland workforce needs.

4.e.3. Expand partnerships with community colleges throughout Maryland to support the education of allied health professionals in a seamless transition from the Associate in Applied Sciences (AAS) degree through the baccalaureate level and beyond. This will include expansion of agreements with community colleges for the Bachelor of Professional-Technical Studies (BPTS) program in Allied Health and other innovative partnerships to recruit, prepare, and retain allied health professionals. Such partnerships will include distance learning and other innovative models.

4.e.4. Assume a leadership role in addressing the profound faculty shortages through development of graduate level education to prepare clinical and academic faculty for these disciplines.

4.e.5. Enhance recruitment initiatives to yield student enrollments appropriate to meet the needs for health profession workers in these disciplines.

4.f. K-12 Teacher Shortages

Maryland faces a shortage of certified teachers. Teacher shortages now exist in each of the 24 Maryland counties plus Baltimore City, and acute shortages now exist in many subject areas. They include: career and technology education, computer science, English for speakers of other languages (ESOL), mathematics, chemistry, physics, and special education. These shortages will only grow worse as 2010 approaches and a record number of elementary and secondary students enroll in Maryland schools at the same time that half of the state's K-12 teachers become eligible for retirement.

In addition to the problem of teacher supply, the recently enacted federal No Child Left Behind (NCLB) Act established a high bar for newly hired and continuing teachers in all states. NCLB requires that all teachers be "highly qualified" by 2005-2006 (that is, with a content major in their field of teaching, having passed a rigorous examination in their content area, or having certification through traditional or alternative pathways). To address these issues, USM will continue working to increase the number of highly qualified teacher candidates who graduate from accredited programs, particularly in shortage areas.

USM and its institutions will:

4.f.1. Continue to work to increase the number of highly qualified teacher candidates who graduate from accredited programs, particularly in shortage areas.

4.f.2. Demonstrate their commitment to educating, preparing, and retaining high quality teachers by ensuring that all faculty are supported and rewarded for work with K-12 schools and that arts and sciences faculty are rewarded for participation in high quality teacher education programs.

4.f.3. Continue to establish partnerships with K-12 schools and community colleges to recruit more high quality teacher candidates, to provide in-service opportunities, to assist local school systems with serious teacher shortages, and to help teachers gain certification in subject areas that are experiencing shortages through traditional and alternative pathways to certification.

4.f.4. Promote the Associate of Arts in Teaching (AAT) degree program to align teacher education programs with community college programs, ensuring seamless transition for teacher candidates. Historically, about half of USM teacher candidates, and close to 70% of minority candidates, enter our programs through community colleges.

4.f.5. Continue to support local school systems in the retention and professional development of current teachers.

4.f.6. Continue to design, develop, and support alternative pathways to bringing non-traditional candidates into teaching through programs designed to actively recruit liberal arts graduates and put them through school-based programs in collaboration with universities.

Accountability Indicators for Theme 4:

- Number of graduates in engineering, information technology, biosciences, and other programs necessary for a robust knowledge-based economy in Maryland
- Increased resource base and management flexibility of the Academic Health Center
- Number of undergraduates in teacher training programs
- Number of post-bachelor's students in teacher training programs
- Number of undergraduates completing teacher training programs
- Number of post-bachelor's students completing teacher training programs
- Percent of undergraduate students who completed teacher training programs and passed PRAXIS II
- Percent of post-bachelor's students who completed teacher training programs and passed PRAXIS II
- Number of USM students who completed all teacher education requirements and who are employed in Maryland public schools
- Number of undergraduates enrolled in nursing programs
- Number of graduates of nursing programs (graduated within the past academic year)
- Percent of nursing program graduates passing the licensure examination (based upon survey of recent graduates one year after graduation)
- Number of graduates of nursing programs employed as nurses in Maryland
- Number of students enrolled in pharmacy
- Number of graduates in pharmacy
- Number of pharmacy graduates employed in Maryland

STRATEGIC THEME 5:

Identifying New Resources and Practicing Exemplary Stewardship

As a public system of higher education, USM has a responsibility to continuously seek new and innovative ways to effectively expand and leverage the resources available to it and its institutions. The present era of diminished state resources makes this even more imperative if the University System is to achieve its mandated goal of national eminence. USM activities under this theme are directly tied to Goals III and IV of the strategic plan, and include initiatives aimed at achieving greater efficiency and effectiveness, expanding access to resources, improving accountability processes, and enhancing staff development.

5.a. Regents' Work Group on Efficiency and Effectiveness

In an era of scarce resources, USM must continually examine and assess strategies for increasing operational efficiencies and effectiveness. To accomplish this, a Systemwide Work Group on Efficiency and Effectiveness (E&E) has been created and charged by the Chancellor and the Board of Regents with reviewing all aspects of the System's academic and business enterprises. This includes, but is not limited to, privatization and/or consolidation of operations, collaboration among institutions in academic offerings, greater utilization of online educational opportunities, the sale of redundant assets, maximization of federal and other grant cost recoveries, and removal of regulatory impediments.

USM and its institutions will:

5.a.1. Implement the recommendations of the E&E Work Group.

5.a.2. Work with the E&E Work Group to develop a set of benchmarks that measure USM effectiveness and efficiency against peer institutions.

5.b. Regents' Work Group on Resource Development

One of the Board of Regents' most important responsibilities is to ensure that USM institutions have the resources necessary to carry out their missions and achieve their goals. In recognition of this responsibility and because of the decline in the state's investment in higher education, the Board has formed a work group to explore the development of nonpublic resources to ensure fiscal stability for the System and to provide flexibility in the pursuit of academic excellence and access to higher education. This work group will seek to maintain or enhance the academic quality of USM institutions by identifying new sources of revenue and increased revenue from existing non-state sources. It will seek diverse sources of support to reduce reliance on public funds. Finally, it will work to build greater advocacy support for higher education and to better educate the public about the System's importance as a source of economic innovation and development.

USM and its institutions will:

5.b.1. Examine all resource development entities within the System, including development and advancement, technology transfer and licensing, grants, and entrepreneurial activities.

5.b.2. Determine "best practices" in these areas at comparable universities and university systems, implement strategies to increase non-state resources, and develop benchmarks to measure progress.

5.b.3. Prepare for a major Systemwide capital campaign.

5.b.4. Identify areas where shared or central resources may produce stronger resource development results and encourage a culture among System institutions of sharing resources when appropriate.

5.b.5. Articulate the importance of this initiative, including its purpose, goals, and expectations.

5.b.6. Develop a process of continual review of resource development activities.

5.c. Improved Accountability

As both tuition rates and public investments in higher education rise across the country, public colleges and universities are increasingly being held accountable for results. Like most of their counterparts across the country, USM and its institutions are committed to creating effective and efficient systems of performance reporting that demonstrate to USM stakeholders what they are getting for their significant investment in public higher education.

USM and its institutions will:

5.c.1. Work with the Maryland Higher Education Commission and the Department of Budget Management to streamline the nature and range of accountability reports.

5.c.2. Continue to include, as a key component of annual USM presidential evaluations, institutional progress toward goals adopted through the Management for Results (MFR) and other accountability processes. This will place the locus of accountability at the highest level at each institution.

5.c.3. Continue to submit annual efficiency reports that demonstrate how they are making prudent and effective use of state resources.

5.c.4. Develop a USM data warehouse that will allow the System and its institutions to create transparent report mechanisms that can be more efficiently and effectively accessed and utilized by the institutions, oversight agencies, and the general public.

5.d. Enhanced Staff Development

With approximately 19,000 non-teaching staff and administrators, USM is one of the largest employers in the state of Maryland. USM relies on its employees to accomplish the complex missions that are endemic to a higher education system. The 1999 Collective Bargaining Act redefined the relationship between USM institutions and their employees. In line with the provisions contained in the Act, the subsequent collective bargaining process, and the state's fiscal situation, USM must re-examine its staff-related policies and priorities in such areas as governance, staff training, and professional development. Priorities will be included in the USM strategic plan as they emerge from the review process.

USM and its institutions will:

5.d.1. Work with the Council of University System Staff to review and develop Systemwide priorities and policies related to staff training, professional development, and campus governance.

Accountability Indicators for Theme 5:

- Amount of operating budget savings reprogrammed to support USM priorities
- Ranking of USM against peers in effectiveness and efficiency benchmarks
- USM bond rating
- Satisfaction with USM Office's and institutions' internal interactions
- Satisfaction with USM Office's and institutions' processes

APPENDIX

USM's core values are as follows:

1. We value the intellectual development of our students, and we are dedicated to providing them with an education that is of the highest quality and that fully meets their professional and personal needs.

2. We value the creation and dissemination of knowledge, and we are dedicated to using the knowledge developed in our institutions to advance the state's economy and to improve the quality of life for Maryland's citizens.

3. We value integrity, and we are dedicated to the highest ethical standards in all our endeavors and to creating a culture that promotes civility and probity in the daily conduct of all faculty, staff, and students.

4. We value the free and open exchange of ideas, and we are dedicated to producing graduates who are well prepared to be contributing members of a democratic, pluralistic society and the larger global community.

5. We value diversity and are dedicated to creating an environment that both celebrates and is enriched by the multiple perspectives, cultures, and traditions reflected in humankind.

6. We value the talents and contributions of our faculty and staff, as well as their participation in the shared governance of our institutions and the System, and we are dedicated to recruiting and retaining exceptional people and providing them with the resources and professional development opportunities to ensure their success.

7. We value the natural and cultural resources of Maryland, and we are dedicated to using our knowledge and talent to preserve, protect, and promote these irreplaceable assets.

8. We value our historic role of serving the public good and we are dedicated to using our considerable human and physical resources for the benefit of our state and nation.

9. We value our role as the state's leader in higher education and we are dedicated to serving as an exemplar of academic quality and of principled, effective, and efficient use of resources.