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# I.    Executive Summary

*An Honors University in Maryland, UMBC seeks to become the best public research university of our size by combining the traditions of the liberal arts academy, the creative intensity of the research university, and the social responsibility of the public university. We will be known for integrating research, teaching and learning, and civic engagement so that each advances the other for the benefit of society.*

Implementing UMBC s Vision  is the overarching theme for the 2001 *Middle States Periodic Review Report* (PRR) of the University of Maryland, Baltimore County (UMBC). We chose this theme to guide our work as we addressed the report s four goals: (1) to provide evidence of UMBC s progress in administering its mission; (2) to articulate UMBC s vision, values, and priorities; (3) to discuss UMBC s achievements; and (4) to respond to the areas of concern expressed by the Middle States Evaluation Team in its 1996 report. Like the activities of the institution itself, this PRR is focused on continual articulation and implementation of our vision. The vision statement cited above was adopted in August 1999. The statement expresses UMBC s desire to continue the visioning process in the day-to-day realization of its mission through a vital strategic planning process, the aim of which is to set priorities, both long- and short-term, and to link planning and budget.

UMBC was established in 1966 and is one of thirteen institutions and research centers that together constitute the University System of Maryland (USM). A rapidly developing public research and doctoral-level university, UMBC is recognized particularly for the strength of our focused graduate research programs in science, engineering, human services, and public policy. UMBC is also known for offering a variety of undergraduate programs supported by a strong liberal arts and sciences core. The Carnegie Foundation s classification of American higher education institutions, released in August 2000, ranks UMBC among Doctoral/Research Universities-Extensive. UMBC is one of only 151 universities nationwide included in this category and one of only five institutions to move from Doctoral II status (our 1994 classification) to the new designation.

UMBC enrolls 10,759 students in 33 undergraduate majors leading to the B.A., B.S., and B.F.A. degrees, 38 minors, 30 master s programs, and 21 doctoral programs through its four major units: Arts and Sciences, Engineering, Social Work, and the Graduate School. In fall 2000, the incoming freshmen had average SAT scores of 1186; the average SAT score of the upper quartile of that class was 1348. UMBC students come from 45 states and 81 other nations, creating a richly diverse student body and an exciting atmosphere for learning and teaching.

Described by *Newsweek s* 1999 *How to Get Into College Guide* as a  powerhouse in Baltimore offering a topnotch, rigorous education,  UMBC is maturing as a research university, developing as an Honors University, and transforming into a residential campus. In the area of research alone, UMBC s dynamic faculty have attained grants and contracts that have grown from less than $10 million eight years ago to more than $33.8 million in 2001. Grants and

contracts overall, including training grants and funding for non-research-sponsored activities, grew from $31.5 million in 1995 to more than $64 million in July 2000. UMBC is also home to a wide range of research centers, including the only Howard Hughes Medical Institute laboratory at a public university in Maryland. Additionally, in 1999, the campus was named the lead institution in a $75 million, five-year cooperative agreement with NASA Goddard Space Flight Center to study the earth s surface, atmosphere, and oceans.

The number of faculty awards has more than doubled since the last report, increasing from 0.6 awards per 100 UMBC faculty in 1995-1996 to 1.2 awards per 100 faculty in 1998-1999. In recent years, members of the UMBC faculty have been named National Science Foundation (NSF) Young Investigators, DuPont Young Professors, Fulbright Scholars, and Fellows with NASA, Congress, the National Endowment for the Humanities, and the Robert Wood Johnson, Mellon-Pew, Rockefeller, and Getty Foundations. Four of our faculty in Engineering received prestigious NSF Career Awards since the last report, and this past year, three of our six faculty in Chemistry and Biochemistry were also given NSF Career Awards, plus one received an NSF Information Technology Research Award. Additionally, Professor Michael Summers received one of only 10 U.S. Presidential Awards for Excellence in Science, Mathematics, and Engineering Mentoring given to individuals who excel at encouraging minorities, women, and persons with disabilities to pursue careers in scientific, engineering, and technical fields.

Graduate students at UMBC have also been competitive in earning national awards for their research. Since 1996, these awards have included an NSF Fellowship, a grant from the National Oceanographic and Atmospheric Administration, a Mandela Economics Scholars Award, a National Flight Paramedic of the Year Award, and a Bunting Fellowship at the Radcliffe Institute for Advanced Study. Graduate students have also received grants and predoctoral fellowships from the National Institutes of Health, the National Institute of Mental Health, the Office of Child Abuse and Neglect of the U.S. Department of Health and Human Services, and the Social Sciences and Humanities Research Council of Canada.

The achievements of our undergraduate students have been recognized in a variety of ways. In 1998, UMBC became one of only 255 colleges and universities in the United States to have a Phi Beta Kappa chapter, reflecting the academic excellence of our students, faculty, and staff in the liberal arts and sciences. The Model United Nations (U.N.) team ranked in the top 10% of 150 colleges and universities competing in the national Model U.N. Conference in New York City in 1998-1999, where UMBC earned  Distinguished Delegation  honors. UMBC s Debate Team was one of only five U.S. university teams challenged by Oxford University s Debate Society in 1997; UMBC sided with the American team and won decisively. UMBC s Chess Team is exceptional, having claimed its third championship in four years by winning the 1999 Pan-American Intercollegiate Team Chess Championship  the  World Series  of college chess  defeating or placing ahead of teams from Stanford University, Harvard University, and the University of California at Berkeley. In 2000, UMBC again captured the championship, this time sharing the title with the University of Texas, Dallas.

Also prominent on campus is an array of innovative scholarship programs. The Honors College is a special option for academically talented students seeking a community of like-minded scholars. The UMBC Humanities Scholars Program, the Linehan Artist Scholars Program, and the UMBC Public Affairs Scholars Program offer students unique, intensive opportunities to explore and excel in their areas of interest. UMBC s McNair Scholars Program, funded through the U.S. Department of Education and UMBC, provides one-on-one student-faculty mentor experiences that prepare primarily low-income, first-generation college students for graduate education. Most recently, UMBC established a Teacher Scholars Program, designed to recruit, train, and mentor students who agree to teach in high-need urban schools in Maryland for at least two years following graduation. The Meyerhoff Scholars Program, our best-known scholars program, is open to high-achieving high school seniors who have an interest in pursuing doctoral study in the sciences, mathematics, computer science, and engineering, and who are dedicated to the advancement of minorities in the sciences and related fields. The program has received national recognition as one of the leading producers of African Americans who go on to science and engineering Ph.D. programs and M.D./Ph.D. programs. Last year, UMBC produced one-third of all African American biochemistry bachelor s degrees in the nation. Based on the success of the undergraduate Meyerhoff Scholars Program, UMBC created the Meyerhoff Graduate Fellows Program in 1997. Since the launching of the Meyerhoff Graduate Fellows Program, made possible by a grant from the National Institutes of Health (NIH), minority graduate enrollment in the five participating departments has nearly tripled.

UMBC continues to move forward in implementing its vision as an Honors University in Maryland, providing every student, not only those in special honors programs, with an honors education. UMBC researchers and faculty actively seek collaborative research opportunities and encourage students to obtain  real-world  experiences via research, internships, co-op experiences, and service-learning. UMBC s Shriver Center continues to garner national recognition for facilitating many of these experiences. Undergraduates are encouraged to pursue their own research questions with the support of faculty mentors. Stipends to defray the cost of their study are available on a competitive basis, as are opportunities to present completed research and to publish research papers. Additionally, the annual Undergraduate Research and Creative Achievement Day was initiated in 1997, and the *UMBC Review: A Journal of Undergraduate Research and Creative Efforts*, also an annual effort, was first published in 2000.

UMBC has maintained and enhanced its commitment to diversity since the 1996 *Self-Study*. Minority students increased from 31.0% to 36.8% of the total undergraduate enrollment between 1996 and 2000, and in fall 2000, 20.0% of the graduate students were minorities. The most striking increase by far has been in the number of African American graduate students, who grew in number from 101 students in 1996 to 211 in 2000, reflecting a 108.9% increase. As a result, African American students now constitute 12.7% of all graduate students, in contrast to 6.9% in 1996.

In 1996, graduate students accounted for 14.7% of UMBC s total enrollment, and this figure grew to 15.4% in 2000. While this percentage increase is seemingly small, it is important,

the product of a new, systematic, and energetic recruitment effort on the part of the Graduate School. The addition of new post-baccalaureate certificates and master s and doctoral programs is expected to enhance the graduate population at UMBC. Particularly notable in this percentage increase is the growing number of graduate students from areas outside Maryland. Comprising a rising percentage (up by 29.8% since 1996) of the total graduate student body, non-Maryland students accounted for 32.9% of the graduate student body in 2000, compared to 28.8% in 1996. This indicates that UMBC s reputation is spreading beyond Maryland s borders to attract both out-of-state and international students.

Many of our graduate students, like many of our undergraduates, are seeking a sense of community, requiring the transformation of UMBC from a commuter campus to a residential campus. We have been addressing this challenge through vigorous construction projects. Two new residence halls opened in 1999 and 2000, and two more are under construction for 2001 and 2002. The number of students who can be accommodated on campus is now 2,617 and will reach 3,200 by 2003. Presently, 67.5% of the freshman class lives on campus. Additionally,  The Commons,  our new university center, is scheduled to open early 2002. The Commons will provide a centrally located site where members of the UMBC community can gather for formal and informal interaction at a new restaurant and food court, purchase books and equipment at a new bookstore, and meet with a wide range of student groups that will be housed there.

The physical campus at UMBC is being transformed further by the construction of other new facilities, the renovation of older ones, and improvements to campus infrastructure totaling over $138.2 million since 1996. A new Physics Building, opened in 1999, and the UMBC telescope, which became operational in August 2000, have greatly enhanced undergraduate instruction in Astronomy. The University s severe shortage of classroom and meeting space will be further alleviated by a greatly accelerated timetable for construction of two buildings, a Public Policy Building and an Information Technology/Engineering Building, to be opened by Spring 2003. Interior renovations to the Biological Sciences Building, the oldest building on campus, were completed in fall 2000. An Olympic-size outdoor pool was opened since our last report, as was a major expansion of the field house (now the Retriever Activities Center), which offers not only a state-of-the-art recreational facility, but also additional classrooms, offices, and meeting rooms. Other capital projects finished since 1996 include a new Physical Plant Building, the expansion of the Central Power Plant, the first of two planned parking structures, and the infrastructure for UMBC s research and technology park, bwtech@UMBC. The University also opened the UMBC Technology Center in a five-building facility vacated by Lockheed Martin, which is located a short distance from the main campus. Finally, the expansion of the building that houses the Department of Theatre was completed, providing UMBC s award-winning department with one of the best costume/design facilities in the University System.

Within the USM, UMBC has been lauded for its commitment to and successful practice of shared governance. Although campus leaders retain ultimate authority and responsibility for the University s operation, they are guided by the formal recommendations of representative bodies on the campus and by the advice of senior faculty, staff, administrative personnel, and

students, as appropriate. The process of linking planning to budget at UMBC is an example of shared governance in action. To carry out this process, Provost Arthur Johnson convened a Planning Leadership Team (PLT) in 1999. The PLT is composed of the President of the Faculty Senate, the Chair of the Senate s Academic Planning and Budget Committee, the Co-chairs of the 2001 Middle States Periodic Review, Vice Presidents, Deans, University Counsel, and the chairs of three recent task forces, which explored aspects of UMBC s research culture and environment, student life, and the meaning of being an  Honors University.  The primary task of the PLT was to establish priorities, align those priorities with our vision, and estimate implementation costs. In spring 2001, the PLT presented a slate of prioritized recommendations to the campus Budget Committee, which has had the responsibility of reviewing and, when possible and timely, moving the recommendations forward. Strategic planning at UMBC is a fundamentally dynamic process, involving the coordinated talents of faculty, staff, and students in setting our course and inspiring participation as we implement our vision.

In response to UMBC s 1996 *Self-Study*, the Evaluation Team identified and this report addresses six areas of concern: faculty, graduate education, academic program review, library, funding parity, and external support. Given the growth in the campus s resources over the past five years, UMBC has been able to provide an optimistic response to many of these concerns. The PLT recently released a report outlining dual strategic directions for UMBC s future  to continue to rank in the top tier of research universities and to continue to build the quality and size of the undergraduate and graduate student bodies. Using these strategic directions as guidelines for recommending resource allocation priorities, the PLT identified two investments. These investments include the following: (1) the enhancement of UMBC s technology infrastructure through the implementation of the recently acquired PeopleSoft integrated suite of administrative systems, which will improve the information systems and business processes that support faculty and staff involved in grants management, expand student access to services and advising, and provide faster and more efficient access to reference and research materials at our own Library and others; and (2) salary increases for existing faculty, plus new faculty hires and start-up funds to attract highly productive research faculty. Designated department chairs are working closely with the administration to plan for immediate and long-term hiring and to develop retention strategies that will uphold UMBC s distinction as an Honors University in Maryland.

As an Honors University, UMBC is known for academic excellence, high standards, and leadership informed by moral courage and deep commitment to the common good. This context promotes personal accountability, dedication to work that is meaningful and worthwhile, and respect for persons, knowledge, and inquiry. Ethical principles mold our community. Integrity, fairness, and compassion hold us together. We preserve our core values while remaining open to reinventing ourselves to meet the challenges of a changing world. Thus, the values we have adopted define how we are known and chart our course toward our envisioned future.

## II.    Preface:  Preparation of the Periodic Review Report

The preparation of the 2001 *Middle States Periodic Review Report* for the University of Maryland, Baltimore County (UMBC) was guided by four goals: (1) to provide evidence of UMBC s progress in administering its mission as articulated in our *Middle States Self-Study* of 1996; (2) to articulate UMBC s vision, values, and priorities as they have been drafted and refined since the last report; (3) to discuss UMBC s achievements as the institution continues on its trajectory toward full implementation of its vision, values, and priorities; and (4) to respond to the areas of concern expressed by the Middle States Evaluation Team in its 1996 report (see *Report to the Faculty, Administration, Regents, and Students of University of Maryland Baltimore County* [hereafter, *Report*], Appendix A). These four goals are encapsulated in the theme we have adopted for the 2001 Periodic Review Report (PRR):  Implementing UMBC s Vision.

As of August 1999, UMBC s Vision Statement read as follows:

*An Honors University in Maryland, UMBC seeks to become the best public research university of our size by combining the traditions of the liberal arts academy, the creative intensity of the research university, and the social responsibility of the public university. We will be known for integrating research, teaching and learning, and civic engagement so that each advances the other for the benefit of society.*

As a theme,  Implementing UMBC s Vision  expresses UMBC s desire to continue the visioning process in the day-to-day realization of its mission. This theme also underscores our commitment to action, giving life and breath to the words we embrace as characterizing UMBC. It also represents the institution s strong commitment to a vital strategic planning process, the aim of which is to set priorities, both long- and short-term, and to link planning and budget. Crucial to this process has been the formation of several campus task forces since the 1996 *Self-Study*. Three of the task forces were formed to study and make recommendations regarding Enrollment Management, Continuing Education, and Advisement. They were established in 1998 and submitted their findings to the campus in 1999. Three additional task forces related to Student Life, UMBC s Research Culture and Environment, and UMBC as an Honors University were established in 1999. After studying the status of each of their appointed areas on campus, visiting peer institutions in order to study comparisons, and drafting detailed reports with substantive short-term and long-term recommendations, these three task forces submitted their findings to units on campus in fall 2000. The unifying goal of these task forces was to relate their recommendations to fiscal priorities within the context of UMBC s vision, values, and priorities. In addition, an Ad Hoc Committee on Gender Equity in Science, Mathematics, Information Technology, and Engineering was formed in 1999 by the Provost and presented its recommendations in 2000.

It cannot be stressed too strongly that key to the process of linking planning to budget at UMBC is the active participation of faculty, staff, and administration. Toward this end of shared

governance, a Planning Leadership Team (PLT) was convened by the Provost, Arthur Johnson, in August 1999. The PLT is composed of the three most recent Task Force chairs, the President of the Faculty Senate, the Chair of the Senate s Academic Planning and Budget Committee, the Co-chairs of the Middle States Periodic Review, Vice Presidents, Deans, and University Counsel. This team started meeting monthly in 1999-2000 and completed its first year by presenting a slate of prioritized recommendations to the campus Budget Committee, which had the responsibility of reviewing and, when appropriate, implementing the recommendations within existing resource constraints.

In summer 1999, Provost Johnson created a Middle States Periodic Review Core Committee, which had the primary responsibility for overseeing the preparation of the PRR for submission on June 1, 2001. Members of this committee included the following: Diane M. Lee, Vice Provost for Student Academic Affairs and Associate Professor of Education (Co-chair); Kathy O Dell, Associate Professor of Visual Arts (Co-chair); Marilyn E. Demorest, Vice Provost for Faculty Affairs and Professor of Psychology; Nancy Ochsner, Director, Office of Institutional Research; Constance Krach, Senior Research Analyst, Office of Institutional Research; and Robin R. Sabatini (until October 2000), Assistant Provost for Academic Affairs. In keeping with shared governance, the Core Committee gathered and interpreted data in the context of UMBC s mission, vision, values, and priorities, based upon its interactions with various offices and constituencies across campus. Its task was to provide a current general overview of the campus, to articulate significant developments and changes since the 1996 Middle States *Self-Study*, and to document responses made and actions taken with respect to the specific concerns articulated by the Middle States Evaluation Team in 1996. Once drafted, the report was vetted through the Faculty Senate, the Graduate Student Association, the Student Government Association, the Professional Associate Staff Senate, the Classified Staff Senate, the Planning Leadership Team, the Steering Committee, Department Chairs, and the Provost s and President s Councils. Feedback was again solicited from the campus as a whole by posting the PRR draft on the Provost s website. In response to these interactions, the Core Committee revised the PRR for submission on June 1, 2001.

## III. Introduction: A Snapshot of UMBC

The abbreviated Mission Statement for UMBC: An Honors University in Maryland reads as follows:

> *UMBC is a dynamic public research university integrating teaching, research, and service to benefit the citizens of Maryland. As an Honors University, the campus offers academically talented students a strong undergraduate liberal arts foundation that prepares them for graduate and professional study, entry into the workforce, and community service and leadership. Known for its outstanding faculty and cutting-edge research, UMBC emphasizes science, engineering, information technology, human services, and public policy at the graduate level. UMBC contributes to the economic*

*development of the State and the region through entrepreneurial initiatives, workforce training, K-16 partnerships, and technology commercialization in collaboration with public agencies and the corporate community. UMBC is dedicated to cultural and ethnic diversity, social responsibility, and lifelong learning.*

There are many indices documenting UMBC s success in realizing the vision, values, and priorities inherent in the abbreviated Mission Statement cited above (see Appendix B for the full *UMBC Mission Statement 2000*). In this introduction, we will provide a  snapshot  of those indices and an overview of the values and priorities that are reflected in the theme of our 2001 PRR,  Implementing UMBC s Vision.  We will delve more deeply into this theme in Section IV, where we will consider each area of the institution s operations, discussing significant changes and developments from 1996 to the present, the current status of each area, and its projected achievements beyond 2001, all in the context of UMBC s institutional vision. In Section V, we will summarize many of the points addressed in Section IV and discuss them more specifically in terms of the concerns raised by the Middle States Evaluation Team in 1996. Finally, in Section VI, we will address issues of self-study and planning at UMBC in the context of outcomes assessment activities.

Established in 1966, UMBC is a rapidly developing public research and doctoral-level university, emphasizing high quality graduate and undergraduate instruction. The Carnegie Foundation s classification of American higher education institutions, released in August 2000, ranks UMBC among Doctoral/Research Universities-Extensive. UMBC is one of only 151 universities nationwide included in this category and one of only five institutions to move from Doctoral II status (our 1994 classification) to the new designation. Recognized particularly for the strength of our focused graduate research programs in science, engineering, human services, and public policy, UMBC is also known for offering a variety of undergraduate programs supported by a strong liberal arts and sciences core. Students are encouraged, no matter what their chosen program, to learn for learning s sake, to take joy in discovery, and to develop the art of questioning.

Described in *Newsweek* s 1999 *How to Get Into College Guide* as a  powerhouse in Baltimore offering a topnotch, rigorous education,  UMBC enrolls 10,759 students. In 2000, the incoming freshmen had average SAT scores of 1186; the average SAT score of the upper quartile of that class was 1348. UMBC students come from 45 states and 81 other nations, creating a richly diverse student body and an exciting atmosphere for learning and teaching. Minorities comprise 34.2% of the total student population, with African Americans constituting 15.5%,

Asian Americans 15.6%, and Hispanic and Native Americans 3.2%. Minorities comprise 15.8% of the full-time faculty and 30.4% of the staff.[1]

Inquiry is central to UMBC s curriculum. UMBC faculty and researchers actively seek collaborative research opportunities and consistently encourage students to obtain  real-world experiences via research, internships, co-op experiences, and service-learning. Undergraduates are encouraged to pursue their own research questions with the support of faculty mentors. Stipends to defray the cost of their study are available on a competitive basis, as are opportunities to present completed research and to publish research papers. The annual Undergraduate Research and Creative Achievement Day was initiated in 1997, and the *UMBC Review: A Journal of Undergraduate Research and Creative Efforts*, also an annual effort, was first published in 2000 (see Appendix Items 1A and 1B). We see the confluence of these real-world and research opportunities for all students at UMBC as critical to the educational and research mission of our university.

UMBC s commitment to the success of its students has been recognized in many ways. In 1998, UMBC became one of only 255 colleges and universities in the United States to have a Phi Beta Kappa chapter, reflecting the academic excellence of our students, faculty, and staff in the liberal arts and sciences. In 1999, the Shriver Center, created to link the intellectual capacity of the University to urgent social problems of urban centers, was recognized by the *Templeton Guide: Colleges that Encourage Character Development* as  the prototype for urban education in the 21st century,  a tribute to our strong commitment to service-learning and community-based social care.

In intercollegiate athletics, more than 450 student-athletes compete in 22 NCAA Division I sports at UMBC. In 1998-1999, UMBC became a member of the Northeast Conference (NEC), and UMBC Athletics ended both its first and second years in this Conference by winning the Commissioner s Cup, awarded annually to the school that performs best in the league s 21 championship sports. UMBC also earned first-place honors in women s tennis, swimming, and lacrosse, and in men s golf and basketball. Additionally, four coaches were named NEC Coaches of the Year in 1999-2000. Equally impressive, a record number (47%) of UMBC s student-athletes earned Dean s List honors in the same year, with grade point averages of 3.0 or higher. Four also earned NEC Scholar-Athlete honors for outstanding academic and athletic achievements. In addition to varsity athletics, 3,178 students participate in 26 intramural sports, and over 650 students participate in 26 club sports, covering a broad range of activities, including aikido, crew, cricket, sailing, and women s and men s rugby.[2]

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[1] Please note that our use of the term  minority  and other descriptors throughout this document conforms to the guidelines set by the agencies to whom we report.

[2] Awards for AY 2000-2001 were not yet announced at the time of this report.

Intellectual sports  are especially notable at UMBC. The Model United Nations (U.N.) team ranked in the top 10% of 150 colleges and universities competing in the national Model U.N. Conference in New York City in 1998-1999, where UMBC earned  Distinguished Delegation  honors. UMBC s Debate Team was one of only five U.S. university teams challenged by Oxford University s Debate Society in 1997; UMBC sided with the American team and won decisively. UMBC s Chess Team is exceptional, having claimed its third championship in four years by winning the 1999 Pan-American Intercollegiate Team Chess Championship  the  World Series  of college chess  defeating or placing ahead of teams from Stanford University, Harvard University, and the University of California at Berkeley. In 2000, UMBC again captured the championship, this time sharing the title with the University of Texas, Dallas.

Also prominent on campus is a wide variety of innovative scholarship programs. The Honors College is a special option for academically talented students seeking a community of like-minded scholars. Their shared quest for knowledge through the liberal arts is the central path from which the rest of their intellectual lives will be led. The current membership is 435 students, 115 of whom entered the program in fall 2000 with an average SAT score of 1364. The UMBC Humanities Scholars Program is targeted to high-achieving students with interests in the Humanities; a study abroad semester is a distinguishing feature of this program. The Linehan Artist Scholars Program, initiated in 1995, supports talented students in the visual and performing arts. The UMBC Public Affairs Scholars Program, entering its third year, targets students from any discipline who express a career interest in public service and public policy; an internship experience and a community service project are featured in this program s curriculum. UMBC s McNair Scholars Program, funded through the U.S. Department of Education and UMBC, provides one-on-one student-faculty mentor experiences that prepare primarily low-income, first-generation college students for graduate education. Most recently, UMBC established a Teacher Scholars Program, designed to recruit, train, and mentor students who agree to teach in high-need urban schools in Maryland for at least two years following graduation.

The best-known scholarship program at UMBC is the Meyerhoff Scholars Program. This competitive program is open to high-achieving high school seniors who have an interest in pursuing doctoral study in the sciences, mathematics, computer science, and engineering, and who are dedicated to the advancement of minorities in the sciences and related fields. The program s initial mission  to address the shortage of African Americans, especially males, in these fields  has become more inclusive of other minorities, as well as whites interested in working with minorities. The program has received national recognition as one of the leading producers of African Americans who go on to science and engineering Ph.D. programs and M.D./Ph.D. programs. Last year, UMBC produced one-third of all African American biochemistry bachelor s degrees in the nation.

The success of the Meyerhoff Scholars Program for undergraduates is reflected in the large number of student acceptances into graduate and professional programs, the vast array of

national awards conferred on Meyerhoff students, and the extensive coverage of the program in the national press. Since its inception in 1988, the Meyerhoff Program has had more than 200 graduates, almost all of whom are currently enrolled in or have recently graduated from Ph.D., M.D., or M.D./Ph.D. programs across the country (for example, Harvard, Johns Hopkins University, Massachusetts Institute of Technology, Rice University, Stanford, University of Pennsylvania, and Yale University). In large part due to the Meyerhoff Program, UMBC was among the first six recipients of the prestigious United States Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring, presented in 1996 by the White House Office of Science & Technology Policy and the National Science Foundation. This award is presented to groups and individuals who have been leaders in encouraging minorities, women, and persons with disabilities to pursue careers in scientific, engineering, and technical fields. UMBC won the award again in September 2000. This time, the award was conferred upon UMBC faculty member Michael Summers, Professor of Chemistry and Biochemistry and Howard Hughes Medical Institute Investigator, for mentoring a large number of minority students conducting research in his laboratory on the protein structure of the HIV virus. The Meyerhoff Program has been noted as a success story in a variety of publications, including *The Shape of the River* (1998), in which the former Presidents of Harvard and of Princeton Universities cited UMBC for its success in educating minorities and for focusing on the positive influence and outcomes of diversity in higher education. *Reaching the Top*, a report issued in 1999 by the College Board s 31-member national task force on minority achievement, called the Meyerhoff Program a success story, and *The New York Times* published an editorial piece and a full feature article on the Meyerhoff Program in June 2000 and October 2000, respectively.

Based on the success of the undergraduate Meyerhoff Scholars Program, UMBC created the Meyerhoff Graduate Fellows Program in 1997. The Meyerhoff Graduate Fellows Program, made possible by a grant from the National Institutes of Health (NIH), supports a model graduate program with objectives, experiences, and opportunities complementary to the undergraduate counterpart. Since this graduate program was launched, minority graduate enrollment in the five participating departments has nearly tripled.

It is important to note that UMBC s decades-long attention to its undergraduate program in the context of quality, relevance, research, service-learning, interdisciplinarity, and diversity is reflected in our core curriculum. One of UMBC s ongoing goals is to provide every student, not only those in special honors programs, with an honors education. The 1999-2000 Task Force on UMBC as an Honors University was convened specifically with this goal in mind, and was charged with suggesting curricular, structural, and pedagogical methods that would help UMBC meet this challenge more fully. Implementation of its recommendations will begin in fall 2001.

UMBC is known for its strong, energetic, and effective leadership in higher education. The national role that our President, Freeman A. Hrabowski III, plays on education issues contributes significantly to our recognition as an exemplary institution. Dr. Hrabowski received the *Baltimore Sun* s Marylander of the Year Award in 1999, and in April 2001 he was elected as a Fellow of the American Academy of Arts & Sciences. He consults with the National Science

Foundation, the NIH, and the U.S. Department of Education. He serves on the boards of the American Council on Education, the Education Commission of the States, and the Association of American Colleges and Universities, and is also a faculty member of the Harvard Institutes for Higher Education (HIHE). Most recently, Dr. Hrabowski was selected to chair the annual conference for university presidents for the American Council on Education. In January 2001, Dr. Hrabowski participated in the HIHE s program, *Presidential Seminar: Leading Institutional Advancement*. HIHE collaborated with the Council for Advancement and Support of Education (CASE) to offer this first-time program, in which UMBC was selected as the focus of an intensive and interactive case study presented to 70 college and university presidents on key issues regarding institutional advancement planning. Finally, Dr. Hrabowski regularly addresses students, school boards, and other universities across the country on a variety of educational topics.

UMBC has a dynamic faculty committed to research, a commitment borne out in professors  successes in competing for research funding and external support. Grants and contracts overall, including training grants and funding for non-research-related sponsored activities, grew from $31.5 million in 1995 to more than $64 million in July 2000. Grants and contracts in the area of research alone have also grown dramatically, from less than $10 million eight years ago to more than $33.8 million in 2001. Furthermore, UMBC is home to a wide range of research centers and initiatives created to ensure that the campus is meeting the needs of a changing world. For instance, UMBC hosts the only Howard Hughes Medical Institute laboratory at a public university in Maryland, and in 1999, the campus was named the lead institution in a $75 million, five-year cooperative agreement with NASA Goddard Space Flight Center to study the earth s surface, atmosphere, and oceans.

UMBC s programs are uniformly of high quality, its curriculum carefully focused to reflect its mission and the programmatic policies of the University System of Maryland (USM) and the Maryland Higher Education Commission (MHEC). The campus offers 33 undergraduate majors leading to the B.A., B.S., and B.F.A. degrees, 38 minors, 30 master s programs, and 21 doctoral programs through its four major units: Arts and Sciences, Engineering, Social Work, and the Graduate School. Nursing, one of the major units, was moved to another USM institution in fall 1996.

Undergraduate enrollments are concentrated in the College of Arts and Sciences, followed by Engineering and Social Work, with the largest numbers of undergraduate majors enrolled in Information Systems Management and Computer Science, followed by Visual and Performing Arts, Biological Sciences, and Psychology. Undergraduates are also given the opportunity to create interdisciplinary programs under the guidance and supervision of faculty advisors. Instructional Systems Development, Policy Sciences, Computer Science, Engineering, Psychology, and Information Systems dominate graduate enrollments. Several graduate programs provide specific courses through distance education, with two certificate programs (in Distance Education and Instructional Systems Development/Education) and one Master of Science Program (in Emergency Health Services Management Studies) offered entirely online. Plans for

another online graduate program (a Flexible Master s Program in Information Systems) are well underway. It is expected that using technology to deliver courses worldwide will increase the number of graduate students by providing increased access and a contemporary model of instruction.

The 1999 Enrollment Management Task Force reported that in comparison to its peers, UMBC has had a relatively small number of academic programs, both at the undergraduate and the graduate level. The limited number of academic programs has been commensurate, however, with the size of the faculty and has been within the constraints posed by the bodies that govern the balance of programs among Maryland higher education institutions  as noted, the USM and MHEC. Nonetheless, to provide more options for students, particularly in its areas of strength, UMBC has recently diversified its academic portfolio with the addition of three upper-division certificates, eight academic majors, eight post-baccalaureate certificates, two master s programs, and three Ph.D. programs. Another 15 certificate and degree programs are currently under development.

The University s academic programs are also complemented by institutes and centers on campus, by symposia, conferences, and lecture series, and by special student-professor collaborative activities. Although too numerous to list in full, a few examples of institutes and centers, established since 1996, include the Goddard Earth Sciences and Technology Center (GEST), the Center for Women and Information Technology (CWIT), the Center for History Education (CHE), the Institute for Global Electronic Commerce (IGEC), the Joint Center for Astrophysics (JCA), and the Center for Urban Environmental Research and Education (CUERE). Also, the Shriver Center continues to add to its array of programs, notably with the creation of the Peaceworker Program, which helps former Peace Corps volunteers earn graduate degrees as they prepare for continued careers in national service.

Additional co-curricular activities include vibrant lecture programs such as the Humanities Forum, which presents public lectures throughout the academic year by nationally known scholars, and the Visiting Artist Lecture Series, which sponsors lectures by nationally known artists. In each of these cases, the visiting scholars and artists also meet with students individually or in small groups to talk about the students  scholarly pursuits and creative works-in-progress. Also, professors at UMBC often organize and sponsor international symposia, conferences, exhibitions, and performances that are open to the community. For example, English Professor Jessica Berman organized the  Tenth Annual Conference on Virigina Woolf Out of Bounds  at UMBC in June 2000. The conference, which offered over 130 presentations, featured a lecture/exhibition of original art by Woolf, a lecture/concert of original music based on Woolf s *A Room of One s Own*, a lecture/reading by the author of *The Hours*, Michael Cunningham, winner of a Pulitzer Prize and a PEN/Faulkner Award, and a UMBC student performance of a stage adaptation of Woolf s *The Waves*. The conference brought numerous secondary school and community college teachers to UMBC for interaction with Woolf scholars from around the world.

The most recent example of a special student-professor collaboration is the Imaging Research Center s (IRC s) creation of a  Virtual Tour of the Cone Sisters  Apartments  for the April 2001 reopening of the Cone Collection at the Baltimore Museum of Art (BMA), one of the largest collections of works by Henri Matisse and Pablo Picasso in North America. Professor of Visual Arts Dan Bailey (Director of the IRC) and Alan Price (Associate Director) co-directed the project, working with three graduate students and fifteen undergraduates to produce two virtual reconstructions of the art-filled apartments in which the Cone Sisters lived in Baltimore during the early twentieth century. One of the IRC s reconstructions was a six-foot-by-seventeen-foot  immersive environment  with surround sound. By wearing 3-D glasses, BMA visitors could imagine themselves immersed in the Cone Sisters  apartments, and by manipulating a joystick, could  move  through the rooms of the apartments. This virtual reconstruction was on view for two weeks during the reopening festivities. The other reconstruction, a 42-inch touch-screen version of the immersive environment, remains on permanent view at the BMA. The IRC s project took six months to complete and received critical acclaim from local, regional, and national media.

The physical campus at UMBC is currently being transformed by the construction of new facilities, the renovation of older ones, and improvements to campus infrastructure totaling over $138.2 million since 1996. A new Physics Building, opened in 1999, and the UMBC telescope, which became operational in August 2000, have greatly enhanced undergraduate instruction in Astronomy. Interior renovations to the Biological Sciences Building and Phase I renovation of the UMBC Theatre have been completed. The construction of residence halls has been accelerated to keep pace with growth in undergraduate enrollment and the increasing number of requests for housing. Two phases of Erickson Hall (487 beds) have been completed since fall 1998, thanks to John and Nancy Erickson, whose foundation financed and constructed UMBC s new residential facilities, valued at over $20 million. Another two-phase project of similar size is under construction. An Olympic-size outdoor pool was opened since our last report, as was a major expansion of the field house (now the Retriever Activities Center), which offers not only a state-of-the-art recreational facility, but also additional classrooms, offices, and meeting rooms. Other capital projects finished since 1996 include a new Physical Plant Building, the expansion of the Central Power Plant, the first of two planned parking structures, and the infrastructure for UMBC s research and technology park, bwtech@UMBC. Groundbreaking for the research and technology park s first building, the Latitude360 Applied Technology Laboratory (ATL), took place in October 2000. ATL is the main research and development facility for Latitude360, a division of the professional service company RWD Technologies, and is headed by UMBC Professor of Visual Arts and former Director of the IRC, David Yager. Professor Yager s new position highlights the fact that ATL is only the first of many opportunities for faculty and student collaboration at bwtech@UMBC through internships and research. The University also opened the UMBC Technology Center in a five-building facility vacated by Lockheed Martin, which is located a short distance from the main campus.

Nearing completion and scheduled to open in January 2002, The Commons will provide a centrally located site where members of the UMBC community can gather for formal and

informal interaction at a new restaurant and food court, purchase books and equipment at a new bookstore, and meet with a wide range of student groups that will be housed there. The University s severe shortage of classroom and meeting space will be further alleviated by a greatly accelerated timetable for construction of two buildings, an Information Technology/Engineering Building and a Public Policy Building, to be opened by Spring 2003. The total allocation for these two buildings is $54 million.

UMBC continues to be an exciting university known for providing an exemplary liberal arts education for undergraduate and graduate students alike. The University s unofficial motto is Success is never final. This philosophy speaks to the celebration of our achievements and to our acknowledgment of the challenges we face as we continue to refine the Honors University experience for the entire UMBC community its students, its faculty, and its staff.

## IV.  Implementing the Vision:  Changes and Developments, 1996-2001

Undergirding the Vision Statement, which appeared at the beginning of this report, is a set of values and priorities that were identified by the Planning Leadership Team (PLT) in 1999-2000 as prominent and recurring in UMBC s planning and discussions over the years. These values and priorities were encapsulated in the following excerpt from materials considered at the 2000 President s Retreat, an annual two-day planning session typically attended by approximately 80 invited administrators, faculty, students, and staff from across the campus. The University Retreat provides an opportunity to conduct in-depth examinations of such concepts as values and priorities. Participants are charged with promoting further discussion of the retreat s proceedings in their home units, offices, and departments. The excerpt reads as follows:

> *A research university built on a strong undergraduate liberal arts and sciences core, UMBC is large enough to be a dynamic center of scholarship and small enough to emphasize teaching and foster a sense of community. We are motivated and guided by a collective commitment to:*
>
> " *Be the university of choice for talented students and among the best in our class in research productivity, student outcomes, and performance in extracurricular competitions.*
> " *Create a welcoming and respectful atmosphere for all.*
> " *Produce graduates in all disciplines who think critically, communicate effectively, and demonstrate technology literacy.*
> " *Provide students with hands-on, problem-based learning experiences and undergraduate research, internship, and cooperative learning opportunities.*
> " *Apply knowledge to real-world problems.*
> " *Bridge traditional boundaries among disciplines, faculty, staff, students, and external partners.*

*"*     *Engage and celebrate the contributions of the entire UMBC family  faculty,*
       *students, staff, and alumni.*
*"*     *Continuously seek new approaches to teaching and learning, research, and*
       *service delivery.*
*"*     *Integrate ethics and values of citizenship in our work and in each student s*
       *experience.*
*"*     *Manage our physical development, infrastructure, and fiscal resources with a*
       *sense of responsibility for the future of the campus, its surrounding community,*
       *and the environment.*
*"*     *Encourage broad dialogue and participation in decision-making on campus*
       *issues and plans.*

       *Several operational priorities identified at past planning retreats and campus*
       *meetings continue to guide our efforts to fully achieve our vision and values:*

*"*     *Each student should have the opportunity to have an   honors university*
       *experience.*
*"*     *The quality of student life and students  experiences on campus should be*
       *strengthened.*
*"*     *Technology literacy should be infused through the curriculum and students who*
       *major in technology-intensive programs should receive a thorough grounding in*
       *the liberal arts.*
*"*     *UMBC s aspirations to become a Research II institution must be supported by*
       *appropriate staffing and infrastructure.*
*"*     *New program development must be balanced with strengthening of existing*
       *programs.*
*"*     *Continuing Education programs should be developed to help the University meet*
       *local and regional workforce needs.*
*"*     *Faculty and staff diversity, development, and retention should be strengthened.*
*"*     *The University s service and systems infrastructure must be improved.*

UMBC is known for academic excellence, high standards, and leadership informed by moral courage and deep commitment to the common good. This context promotes personal accountability, dedication to work that is meaningful and worthwhile, and respect for persons, knowledge, and inquiry. Ethical principles mold our community. Integrity, fairness, and compassion hold us together. We preserve our core values while remaining open to reinventing ourselves to meet the challenges of a changing world. Thus, the values we have adopted define how we are known and chart our course toward our envisioned future.

In this section of the PRR, we will examine each area of operation at UMBC, survey accomplishments in those areas since 1996, report on their current status, and look into the future, with an eye on the ways in which faculty, staff, and students continue to contribute to  Implementing UMBC s Vision,  its supporting values, and its priorities.

## IV.A.      Students

UMBC s enrollment plan projects an overall enrollment of 12,000 students, including 10,000 undergraduates and 2,000 graduate students. In fall 2000, we enrolled a total of 10,759 students (9,101 undergraduate and 1,658 graduate). The Graduate School has been targeted as the primary focus of our growth strategies, and we are meeting with success in that area both quantitatively and qualitatively, as we will discuss below. Similar successes are notable in terms of our undergraduate population, as well. There have been significant increases, for example, in SAT and GRE scores, and both areas have experienced substantial expansions in the enrollment of minorities. Nevertheless, certain challenges continue to command UMBC s focused attention, as outlined in this section.

### IV.A.1.      Undergraduate Student Profile

Since 1996, there has been an increase (19.3%) in the number of applicants to UMBC and an accompanying increase (27.2%) in the number of applicants accepted. These data suggest that recruitment efforts have been appropriately targeted to the students who will succeed in gaining entrance to UMBC (Table UG1). UMBC s success in enrolling accepted students, however, has been variable. This may reflect the increase in applications from out-of-state and international students, most of whom seek on-campus housing. Although new residence halls are being built at a rapid rate, adding about 250 beds per year between 1999 and 2002, more than 150 accepted students enrolled elsewhere in fall 2000 because they could not reside on the UMBC campus. Having said this, there has been a remarkable increase in enrollments since 1996, when 1,023 freshmen enrolled; in contrast, the number has ranged from 1,176 in 1997 to 1,423 in 1999.

As noted, UMBC has maintained and enhanced its commitment to diversity since the 1996 *Self-Study*. Minority students increased from 31.0% to 36.8% of the total undergraduate enrollment between 1996 and 2000 (Table UG5). As this table also reflects, percentages of Native American, African American, Asian, and Hispanic students increased over this period, with the greatest increases in Native American and Asian students. Additionally, first-time, full-time minority freshmen (including international students) increased from 35.4% to 37.5% of the freshman class (Table UG2). Regarding gender composition, there has been only minor variation in the undergraduate student population, with females constituting approximately 51% of the undergraduates (Table UG13). Although males tend to outnumber females among freshmen, this pattern is not apparent in subsequent years.

UMBC s role as a regional, national, and international university is expanding. While the number of students from Maryland has risen 2.6%, the number of out-of-state and international undergraduate students increased from 651 in 1996 to 1,070 in 2000, a 64.4% increase (Table UG6). Of that total, the number of foreign students increased by 77.7% (from 215 to 382), whereas the number of U.S. students from outside Maryland increased by 57.8% (from 436 to 688). To meet the needs generated by the increased presence of international students on our

campus, as well as the increased number of UMBC students studying abroad, UMBC has recently hired a Study Abroad Coordinator and an Immigration and Visa Specialist. In addition, the English Language Center (ELC) at UMBC has experienced tremendous growth in the number of prospective and matriculated students in the past two years. All these examples of growth confirm that UMBC is making progress in its goal of becoming better known nationally and internationally.

SAT scores for first-time, full-time freshmen at UMBC continue to be impressive (Tables UG3 and UG4). Combined scores were higher than state and national scores at the beginning of this five-year period, and they remain so in 2000. In 1996, average UMBC scores were 165 points higher than average national scores; in 2000, average UMBC scores were 167 points higher than the national average. The scores of African American and Asian freshmen have remained well above national averages for the past five years. For example, in fall 2000, the average African American SAT score at UMBC was 1161, while the national average, including all racial groups, was 1019.

In regard to transfer students, there has been only a 2.3% increase in the size of this group since 1996 (Table UG8). However, of those transferring, a greater percentage is now full-time (75.2% vs. 71.1%). Additionally, the number of minority students transferring to UMBC has grown 31.7%, while the number of whites has declined by 16.4% (Table UG9). Programs benefitting most from transfer enrollment are Information Systems and Computer Science (Table UG10).

Of particular noteworthiness, UMBC s past profile as a  commuter campus  is undergoing rapid transformation. With the opening of two new residence halls in 1999 and 2000, and with two more under construction for 2001 and 2002, the number of students who can be accommodated on campus is now 2,617 and will reach 3,200 by 2003 (Table UG14). Currently, 67.5% of the freshman class lives on campus.

In summary, UMBC s undergraduate population is increasingly diverse, an outgrowth of both targeted recruiting and a growing national and international reputation. Most important, there is a concomitant increase in SAT scores among entering freshmen holding steady at a level of 165-167 points higher than national averages. These trends reflect UMBC s twin commitments to diversity and to academic excellence. (Retention and graduation rates for different groups will be discussed shortly, in Section IV.A.3.)

Challenges exist, however, particularly in creating sufficient residential opportunities for the growing number of students who desire to live on campus. Similarly, the increased number of transfer students and the extraordinary rise in the number of students in such programs as Information Systems and Computer Science have created an urgent need to offer more courses and hire more full- and part-time faculty to teach courses in those areas. The lack of classrooms and office space remains an ongoing problem as we see our needs outpacing construction and hiring.

IV.A.2.        Graduate Student Profile

UMBC has made considerable progress in the past five years toward our goal of increasing graduate enrollments, both in the overall number of students and in the percentage of total enrollment. As noted, UMBC has set a goal of 12,000 students total, with graduate enrollment projected at 2,000. Compared to 1996, graduate enrollments have increased by 13.8%, with a large portion of that increase occurring in fall 2000 (Table ALL1). The greatest change has occurred in the number of special advanced students, that is, non-degree-seeking students (26.3%), followed by master s (13.0%) and doctoral students (10.5%) (Table GRAD 10). Part of this spurt in enrollments is attributable to recruitment initiatives and new programs, especially post-baccalaureate certificates, but part is also a result of an improved administrative mechanism for tracking graduate students, which was implemented in 2000.

In 1996, graduate students accounted for 14.7% of UMBC s total enrollment, and this figure grew to 15.4% in 2000 (Table ALL1). While this percentage increase is seemingly small, it is important, the product of a new, systematic, and vigorous recruitment effort on the part of the Graduate School. The addition of new post-baccalaureate certificates and master s and doctoral programs, particularly the online Flexible Master s Program in Information Systems, is expected to enhance the graduate population at UMBC.

Particularly notable in this increase is the growing number of graduate students from areas outside Maryland. Comprising a rising percentage (up by 29.8% since 1996) of the total graduate student body (Table GRAD4), non-Maryland students accounted for 32.9% of the graduate student body in 2000, compared to 28.8% in 1996. Again, this indicates that UMBC s reputation is spreading beyond Maryland s borders to attract both out-of-state and international students.

The most sizable and consistent increase in graduate program enrollment over the past five years has been in Computer Science, which has increased every year since 1996, resulting in a net increase of 39 students (37.1%). Enrollments in Historical Studies and Instructional Systems Development/Education increased 25.9% and 29.0%, respectively, but the greatest increases occurred in fall 2000, after fairly stable enrollments previously (Table GRAD5). Similarly, Human Service Psychology increased its enrollments 17.4%, mostly in fall 2000. The interdisciplinary doctoral program in Language, Literacy, and Culture has grown to its current maximum capacity in its first three years. The enrollment profile for Information Systems shows a 27.4% drop from 1996 to 1999, but an increase in fall 2000; as Information Systems implements more of its master s program online, it is anticipated that enrollments will increase substantially. And although Policy Sciences and Imaging and Digital Arts show net declines over this period, both programs have experienced year-to-year fluctuations that preclude judgments about long-term trends.

UMBC has focused on increasing the diversity of its graduate student population, and current enrollments reflect the success of these recruitment initiatives. In fall 2000, 20.0% of

graduate students were minorities, and another 21.8% were international students. The most striking increase by far is in the number of African American graduate students, who grew in number from 101 students in 1996 to 211 in 2000, reflecting a 108.9% increase, a growth rate exceeding that of the Graduate School overall (Table GRAD1). As a result, African American students now constitute 12.7% of all graduate students, in contrast to 6.9% in 1996. Although the number of Hispanic students is still quite small (36), this number nonetheless represents a 38.5% increase since 1996. The average number of Asian American students in this time period was 85, with the largest enrollment of 97 students occurring in 1996.

In 2000, 1,792 students applied to UMBC s Graduate School, compared to 1,548 in 1996, an increase of 15.8% (Table GRAD3). The percentage of accepted applicants decreased from 49.0% in 1996 to 40.3% in 1998, then rebounded to 48.6% in 2000. There has also been an increase in the percentage of accepted students who enrolled, from 50.5% in 1996 to 68.5% in 2000. These trends together have brought the Graduate School to the point where one-third of its applicants enroll.

The Graduate School s successes in attracting and enrolling new students have been accompanied by an increase in the average GRE scores for new graduate students (Table GRAD2). Within each of the three domains (Verbal, Quantitative, and Analytical), there has been some fluctuation from year to year, but in each area the average score for 2000 was the highest in this five-year period. Mean combined scores ranged from 1722 to 1816 during this period. These data clearly indicate that UMBC has achieved growth in graduate student numbers without lowering graduate admission standards.

Since 1996, there has been a 30.3% increase in the number of full-time graduate students, but only a 2.6% increase in the number who are part-time. In fall 1996, the percentage of full-time students was 40.3%; this rose to 46.1% in 2000 (Table GRAD8). Doctoral enrollments have increased 10.5%, and master s enrollments have increased 13.0%. These increases may be due in part to increased support for graduate students. In FY 2001, 418 students received full-time graduate assistantships, and 141 received half-time support, with the source of support about equally divided between State funds and externally funded grants and contracts.

To summarize, recruitment has been successful in admitting more students and more diverse students to UMBC s Graduate School, while maintaining high standards. We strive, however, for even more substantial growth in the number of students and graduate programs. In particular, we hope to develop more certificate programs to meet the needs of full-time employed professionals; this would necessarily increase the number of part-time graduate students. Distance education also offers new opportunities for increasing enrollment. We have begun developing online courses, and currently there is an online program in Emergency Health Services and, as mentioned previously, a Flexible Master s Program in Information Systems. Ongoing growth in the number of doctoral programs and students is also critical if UMBC is to maintain its Carnegie designation as a Doctoral/Research Universities-Extensive institution. Overall, UMBC recognizes a profound need for graduate housing, increased financial support,

and sufficient library subscriptions in order to meet our ultimate goal of being a top tier institution. Each of these challenges will be addressed in upcoming sections of the report.


IV.A.3.        Undergraduate Student Learning

Degrees Awarded. The number of bachelor s degrees awarded annually has remained fairly consistent since the last report. As indicated in Table ALL2, UMBC awarded 1,571 bachelor s degrees in 1996 and 1,465 in 2000, with variable numbers in the years between. The highest concentration of degrees since 1998 has been in Information Systems, Psychology, Visual and Performing Arts, Computer Science, and Biological Sciences, each of which has graduated more than 100 students annually (Table UG11). The vast majority of students in Visual and Performing Arts has been concentrated in Visual Arts, which earned approval in fall 2000 to offer a freestanding major.

Retention and Graduation Rates. Despite the number of undergraduate degrees awarded, time to degree is an area we continue to examine. A number of analyses related to this issue have been conducted, and we have found several explanations, including the number of hours our students are employed while they are enrolled at UMBC and how often students change majors. Findings from the National Survey of Student Engagement, administered to a sample of seniors and freshmen in spring 2000, found that 44% of the seniors sampled worked more than 20 hours per week off campus. Nationally, of the 276 institutions participating, only 31% of the comparison group carried a similar workload. These findings suggest that employment among our students may be a primary factor in delaying time to degree. We are also studying the effects of course requirements and high-credit-hour majors, such as those in Science and Engineering, on time to degree. Our goal is to increase graduation rates.

Over the course of the past decade, there has been little change in the first-year retention rates of first-time, full-time freshmen at UMBC. Following an increase in 1989, the retention rate fluctuated between approximately 81% and 83% for the 1990-1992 cohorts. Similar fluctuations, according to Table UG7, occurred for the 1993-1999 cohorts, with 82%-84% of these students staying at UMBC. Second-year retention rates have also varied only slightly (67%-71%), as have third-year averages (about 63%), while the six-year graduation rate was virtually the same for the 1989 and 1994 cohorts (about 50%). For purposes of performance accountability, MHEC calculates graduation rates based on retention and graduation from any of Maryland s public four-year institutions, not simply the campus where the student initially enrolled as a freshman. This results in a six-year graduation rate of 60% for UMBC s 1993 cohort. By either method of calculation, however, the graduation rate is lower at UMBC than at many other institutions in the USM and has been the subject of considerable discussion and study. In 1998, the Maryland Institute for Policy Analysis and Research (MIPAR) conducted a survey of current and former UMBC undergraduate students from the College of Arts and Sciences to ascertain why some students stay at UMBC and why some leave. The survey results showed several plausible factors affecting UMBC s graduation rate, including the following: (1) the financial concerns and job-

related pressures mentioned above; (2) the lack of such popular professional programs as Business, Accounting, or Physical Therapy, to which a substantial number of students transfer from UMBC; and (3) competition from a job market that currently offers extremely lucrative alternatives for students, especially in the fields of Computer Science, Information Technology, and Engineering, which are among UMBC s largest programs.

Graduate/Professional School Going Rate. It is gratifying and notable that over one-third of all students graduating from UMBC pursue graduate degrees soon after receiving their bachelor s degrees. As Table UG12 indicates, 30.2% of those graduating in 1993, 38.0% in 1996, and 35.2% in 1999 sought a graduate program within one year of receiving their bachelor s degrees. These figures do not take into account the large numbers of students in Computer Science and in Education, who in recent years have reportedly taken jobs following graduation and delayed entry into graduate school, a trend which no doubt contributed to the slight drop in the above figures between 1996 and 1999. It is also interesting to note that three-quarters or more of the graduating classes of 1993, 1996, 1997, and 1999 rated their UMBC preparation for graduate school as good/excellent in their responses to UMBC s one-year follow-up survey of bachelor s degree recipients.

Performance on Certification Examinations. The pass-rate on certification examinations among UMBC students is impressive. As part of MHEC s performance accountability process, UMBC tracks the pass-rate for its students on national licensure examinations in three professional disciplines: Social Work, Education, and the National Registry of Emergency Medical Technicians (NREMT). Social Work pass-rates have fluctuated between 90% and 100% for the 1995-1998 cohorts, and, for the same period, performance on the various sections of the National Teacher Examination has ranged from 96% to 100%, among the highest in the U.S. Similar success has been achieved on the NREMT, with pass-rates ranging from 85% to 100% across both the Practical and Written subsections.[3]

Employment. The percentage of UMBC alumni employed full-time one year after graduation remained relatively stable, at 75%, between 1993 and 1999. A drop in part-time employment (from 13.7% to 10.0%) took place during those same years (Table UG12). This slight decline in employment rates most likely reflects the slight rise in the percentage of students seeking graduate degrees noted in Section IV.A.3. above. Based on these data and those reported in Section IV.A.3., as well as anecdotal feedback from employers, graduate schools, and professional schools, one may conclude that UMBC graduates are well prepared for both further study and employment.

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[3]Source: UMBC *2000 Institutional Performance Accountability Report*, June 2000, Office of the Provost.

IV.A.4.    Graduate Student Learning

One of the primary challenges facing UMBC, as mentioned, is in the area of graduate enrollments and degrees awarded on the master s level. On the doctoral level, we consistently enroll the third largest number of students in the State next to the University of Maryland, College Park (UMCP) and Johns Hopkins University (JHU). From 1996 to 2000, we awarded between 47 and 58 Ph.D.s annually, which was sufficient to have UMBC included in the Doctoral/Research Universities-Extensive category of the latest Carnegie classification. It is particularly striking, then, that we enroll such a relatively small number of students pursuing their master s degrees (Table ALL2). In fact, of the 11 USM campuses, only Coppin State College, the University of Maryland Eastern Shore, and Salisbury State University enroll fewer master s students. The number of master s degrees awarded, according to Table GRAD9, was approximately the same in 1996, 1997, and 1999 (between 269 and 270), with a dip in 1998 (217), and a rise in 2000 (288). Increasing the number of master s programs and certificates is a high priority at UMBC. We are challenged to meet the market demands of business, industry, government, and education in particular.

Retention and Graduation Rates. Despite the challenge cited above, the recent trend in retention and graduation rates among new master s degree students is promising. In terms of graduation rates, 20.5% of the 1993 cohort graduated after two years and 35.2% after three. In the 1997 cohort, 28.4% graduated in two years and 41.6% graduated in three (Table GRAD6B). The increases in both retention and graduation rates combined for these same cohorts have been more impressive, with 51.3% of the 1993 cohort still enrolled or having graduated after two years, as compared to 62.9% of the 1997 cohort in the same category (Table GRAD6A). Table GRAD7 presents graduation rates for doctoral students. The available data indicate that about 14% of doctoral students graduate within five years and about 20% graduate within six years.

National Awards. Graduate students at UMBC are competitive in earning national awards for their research. Following is a small sampling from the past five years. Two students in Biology received National Institutes of Health (NIH) Postdoctoral Fellowships, one a National Science Foundation (NSF) Fellowship, and one an NSF Postdoctoral Fellowship. A current doctoral student in Biology was awarded a one-year grant from the National Oceanographic and Atmospheric Administration. In Chemical and Biochemical Engineering, one graduate earned an NSF Fellowship, and another received the Oxygen Society Young Investigator Award. An Economic Policy Analysis Program graduate student won a Mandela Economics Scholars Award. Various students in Emergency Health Services have received the EMS Star of Life Award, the EMS Research of the Year Award (twice), the Volunteer Achievement Medal awarded by the U.S. Marine Corps, the Navy Achievement Medal, the Joint Achievement Medal (Department of Defense), and the National Flight Paramedic of the Year Award (twice).

In addition, one student in the Policy Sciences Graduate Program received a best Dissertation Award from the National Association of Schools of Public Affairs and Administration, and two won Maryland Governor s Policy Fellowships. A recent master s

student, who is now enrolled in the Policy Sciences Doctoral Program, received the Retirement Foundation Student Research Award given by the Gerontological Health Section of the American Public Health Association. In Imaging and Digital Arts, an M.F.A. graduate was awarded a Bunting Fellowship at the Radcliffe Institute for Advanced Study. Several graduate students in the Department of Psychology received grants and predoctoral fellowships from the National Institute of Mental Health, the NIH, the Office of Child Abuse and Neglect of the U.S. Department of Health and Human Services, and the Social Sciences and Humanities Research Council of Canada. This list is representative, but far from exhaustive. Our Alumni Association recently began efforts to track such awards more diligently.

The foregoing profiles of undergraduate and graduate students at UMBC and the brief overviews of student learning outcomes on both undergraduate and graduate levels suggest that we are meeting our goal to attract and enroll academically talented and diverse students. UMBC graduates are successful in their pursuit of opportunities both to continue their academic journeys in prestigious institutions and to obtain employment. These successes nevertheless create challenges, some of which have been discussed above; others will be addressed in upcoming sections. Chief among them are the need for additional housing, library holdings, competitive financial aid, faculty, and a broader range of programs. Greater space for instruction and leisure activities is also required as we enroll more students, especially as more of those students demand housing. The Commons will address some of the graduate students needs starting in the spring 2002 semester by offering a graduate student lounge, new restaurants with a greater variety of dining options geared to an older adult population, and extended hours to accommodate graduate students working late into the evenings and on weekends. The broader array of challenges listed will continue to capture UMBC s attention as we move forward in our process of linking planning and budget.

## IV.B.      Faculty

UMBC engages leading research faculty in the liberal arts education of its undergraduates and in the teaching and mentoring of its graduate students. Members of the faculty are selected and promoted on the basis of their scholarly and creative productivity, teaching strengths, and service to the profession and the public. Additionally, UMBC faculty, at the forefront of their fields, often apply their knowledge and scholarship in advancing institutional partnerships with government, non-profit organizations, K-12 education, and industry.

### IV.B.1.      Faculty Profile

Over the past five years, the number of core faculty (tenured and tenure-track faculty, as defined by MHEC) has grown only slightly. One of the top two priorities to come out of UMBC s recent strategic planning activities is the recruitment of new faculty. Although 48 new faculty

lines have been authorized, and outstanding new faculty members have been recruited, promoted, and tenured, other core faculty have retired or resigned from the University.

A recent intensive review of 69 core (i.e., tenured and tenure-track) faculty who left the institution between 1997 and 2000 revealed several reasons for departure, distributed as follows:

|  | Number | % |
|---|---|---|
| Resignation | 29 | 42.0 |
| Retirement | 28 | 40.6 |
| Death | 6 | 8.7 |
| Denial of tenure/renewal | 4 | 5.8 |
| Relocation | 2 | 2.9 |

Although the category of resignations includes primarily voluntary departures from UMBC, this number may also include a few individuals who resigned from the University before receiving an unfavorable tenure review or prior to the completion of a terminal year contract. The small number of faculty whose departure is formally attributed to denial of tenure or contract renewal therefore may underestimate the number who left for this reason. Among those individuals who have resigned for attractive positions elsewhere, about 50% are known to have accepted positions at other universities, including such flagship campuses as the University of Connecticut, the University of California at Los Angeles, and such private colleges and universities as Johns Hopkins University (JHU), George Washington University (GWU), and Rice University. A small number of faculty have resigned from the University for personal reasons.

Increasing numbers of retirements are to be expected in the near future. According to a 2000 study, 24.4% of tenured faculty at UMBC were 60 years of age or older in that year.[4] However, the large number of recent retirements reflects not only the graying of the UMBC faculty, but also a retirement incentive offered in 1998-1999 that led a large number of faculty to accelerate their retirement plans. Nonetheless, UMBC must begin to take anticipated retirements into account in planning for the recruitment of faculty across all disciplines, not just those where current enrollment pressures are greatest. Finally, UMBC has also begun to experience, sadly, the loss of active faculty members due to death and disability.

To meet the University s instructional needs during this period of rapidly growing enrollments, it has been necessary to supplement the core faculty with full- and part-time non-tenure-track faculty. Faculty in these two categories have increased both in numbers and as a percentage of the total faculty (Tables FAC3 and FAC5). This trend is mirrored nationally. The challenge at UMBC is not only to increase the number of core faculty, but to be proactive in integrating full- and part-time non-tenure-track faculty into the campus community. Toward this end, representatives among the non-tenure-track faculty currently serve on the Faculty Senate and

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[4]Source: *The Graying of UMBC Faculty*, UMBC Office of Institutional Research, April 2000.

the Faculty Affairs Committee. Such service is important, as this is where the issues of integration, accountability, benefits, and academic freedom among non-tenure-track faculty will be studied and recommendations made.

The total number of faculty, including full- and part-time research and instructional faculty, has increased from 664 (in 1996) to 949 (in 2000), representing a 42.9% change (Table FAC5). The number of full-time instructional faculty grew from 384 to 437 (13.8%; Table FAC3). The program with the greatest net increase among full-time instructional faculty, reflecting the pressure of enrollments, is Information Systems, with an increase of 14 faculty (Table FAC6). The number of Assistant, Associate, and full Professors increased by 22 (6.4%; Table FAC7), whereas Instructors, Lecturers, and other faculty increased by 31 (73.8%). The number of research faculty increased more dramatically, from 47 to 113 (140.4%). Most of this growth is attributable to the Joint Center for Earth Systems Technology (JCET), the new Goddard Earth Sciences and Technology Center (GEST), and the recent conversion of librarians  appointments from staff to faculty status (see Table FAC6).

Among all faculty, the percentage of women has been fairly constant, increasing just slightly from 33.3% in 1996 to 35.3% in 2000 (Table FAC4). Among the full-time instructional faculty, however, there has been a small but steady increase in the percentage of female faculty, from 27.9% in 1996 to 34.3% in fall 2000 (Table FAC1). Among the Assistant, Associate, and full Professors, the percentage of females rose from 24.6% to 29.7%, with the greatest increase among the Assistant Professor rank. There has been a slight decrease in the number of females at the rank of full Professor. The hiring and retention of senior women faculty remain a challenge for UMBC, as do the hiring and promotion of junior women faculty.

The percentage of part-time faculty rose steadily from 35.1% in the fall of 1996 to 42.0% in fall 2000 (Table FAC5). However, it should be noted that the 1996 percentage reflected a decrease from two years earlier, when part-time faculty accounted for 41.5% of total faculty. The increase from 1996 to 2000 is concentrated in departments with high enrollments (Table FAC8).

As noted, UMBC, like most other higher education institutions, has sought to meet students  instructional needs through hiring non-tenure-track faculty. We are currently striving both to convert part-time lines to full-time and to hire more full-time individuals in an attempt to reduce the part-time numbers. We recognize that full-time professionals can be more fully integrated into the departments they are serving at UMBC, and departments have been asked to develop focused plans for a more active and comprehensive integration of non-tenure-track faculty.

It should be noted that UMBC is optimally located for hiring non-tenure-track faculty. Our central location in the Baltimore-Washington corridor has made it possible to attract individuals of very high caliber, including those who recently earned their doctoral degrees, as well as those who have an interest in education but previously worked in government, business, industry, or other public- or private-sector agencies and organizations. UMBC also has a cadre of outstanding

adjunct faculty who teach part-time, often on highly specialized topics or in professional areas, who are not targeted for tenure-track faculty appointments.


IV.B.2.         Research and Scholarly/Creative Productivity

UMBC s faculty is highly productive in the area of scholarly and creative research. This is especially notable given the USM-mandated teaching load of five courses per year and given the strong commitment to service exercised by faculty members who are fully involved in UMBC s dynamic growth and its strong system of shared governance.

Books, Refereed Articles, Creative Activities, Paper Presentations. Table FAC9 summarizes faculty scholarly activities as self-reported in each faculty member s *Annual Report*. There is considerable year-to-year variability in all categories, and the percentage change across the five-year period is therefore a questionable indicator of long-term trends. On average, however, faculty published 80 books per year, 631 refereed works, and 162 non-refereed works and engaged in 221 creative activities. Faculty also averaged 794 professional presentations, received 277 grants and contracts, and spent 2,810 days in public service.

Awards. One indicator of the quality of UMBC faculty is their increasingly impressive per capita number of major awards. Since the last report, this number has more than doubled, increasing from 0.6 awards per 100 UMBC faculty in 1995-1996 to 1.2 awards per 100 faculty in 1998-1999, comparing favorably with larger, well-established institutions, such as the University of Delaware and the University of North Carolina, Chapel Hill.

In recent years, members of the UMBC faculty have been named National Science Foundation Young Investigators, DuPont Young Professors, Fulbright Scholars, and Fellows with NASA, Congress, the National Endowment for the Humanities, and the Robert Wood Johnson, Mellon-Pew, Rockefeller, and Getty Foundations. Four of our faculty in Engineering received prestigious NSF Career Awards since the last report, and this past year, three of our six faculty in Chemistry and Biochemistry were also given NSF Career Awards, and one received an NSF Information Technology Research Award. Additionally, as mentioned earlier, Professor Michael Summers received one of only 10 U.S. Presidential Awards for Excellence in Science, Mathematics, and Engineering Mentoring given to individuals who excel at encouraging minorities, women, and persons with disabilities to pursue careers in scientific, engineering, and technical fields. Most recently, Professor Joan Korenman, Director of the Center for Women and Information Technology (CWIT), was cited as one of the  Top 25 Women on the Web,  an annual award given by the San Francisco Women on the Web. Professor Korenman was the only university professor among the 25 recipients to receive this distinction this year.

UMBC has identified retention of outstanding faculty as one of our most important priorities. This goal is supported by the establishment of recently endowed chairs, including the Willard and Lillian Hackerman Chair in Engineering and the Robert and Jane Meyerhoff Chair in

Biochemistry, and new research fellowship awards, including the Becton Dickinson Fellows awards in life sciences and the RWD (Robert W. Deutsch) Fellowships in Computer Science and Information Systems.

Grants and Contracts. The number of externally funded grants and contracts procured by faculty members for research and training is impressive. Table FAC9 indicates a sharp increase between 1996 and 2000, with totals growing from 228 grants and contracts in 1996, to 282 in 2000, and reaching a high of 340 in 1998. Grants and contracts have substantially increased since 1995. In that year, awards totaled $31.5 million, while by July 2000, the amount had risen to $64.0 million. This does not include the Howard Hughes Medical Institute Award to Professor Michael Summers in the amount of $679,818 for FY 2000 (as noted previously, UMBC hosts the only Howard Hughes Medical Institute at a public institution in Maryland). Projected revenues associated with this long-term grant total $40 million and support research facilities, equipment, and associated researchers, who include graduate students as well as undergraduates.

Both Federal and non-Federal research awards have more than doubled in dollar amounts since 1996. In 1996, UMBC was awarded $10 million in Federal research awards and was awarded $22.9 million in 2000, as of July (the amount will have likely increased by the time this PRR is submitted). Additionally, the University received $3.3 million and $7.5 million in Federal non-research awards in 1996 and 2000, respectively. In FY 2000, the majority of the Federal awards were granted by NASA (22%), the NIH (19%) and the NSF (15%). Training monies have also grown significantly, from $36 million in 1996 to $63.6 million in July 2000.

While this growth in awards, grants, and contracts is substantial, it raises new challenges for the campus. The institution must meet increasing demands for laboratory space, computing resources, research assistants, technical personnel, and accounting and management systems. In fact, the single most consistent concern among researchers at UMBC has been the lack of an adequate system for tracking grant expenditures. The University s acquisition of PeopleSoft s integrated suite of administrative systems in fall 2000 will help substantially in beginning to address this issue. Researchers with external funds are also more likely to need release time from teaching, thereby reducing the presence of core faculty in the classroom and raising the need for replacement instructors. Increases in research dollars alone do not meet these needs, and the University will continue to advocate for a State-supported funding level that takes into account our research mission, growth, and core values.

Technology Transfer. Over the past five years, UMBC has recognized the value of dedicating staff to the technology transfer area, resulting in the creation of a new position (Assistant Vice Provost for Research), the appointment of a new Director of the Office of Technology Development, and the hiring of an Administrative Assistant. These changes, along with the continued support of the Marketing Coordinator, have contributed to the noteworthy improvement in the productivity of the Office of Technology Development (OTD). The number of patent applications filed since 1996 has more than tripled, increasing from nine applications in 1996 to 33 in 2000. The number of disclosures filed increased from 18 to 25 during the same

period.[5] There were other resourceful, creative catalysts for this success: the use of legal interns to reduce outside loads; a more active pursuit of disclosures through personal faculty contact in their labs; the training of an employee to become a Patent Agent to reduce patenting costs; the creation of an operational database; a review of office procedures by an outside consultant; and the hiring of consultants in specific areas to review disclosures where the unit lacked experience. Two additional developments of note in the past five years include OTD s expansion beyond patents to software copyrights and the sponsorship of educational seminars for staff and community concerning small businesses and technology transfer. The recently hired Assistant Vice Provost for Research, along with a newly formed committee to develop policy in the technology transfer area, will oversee these new initiatives.

IV.B.3.        Salaries

Recruitment and retention of outstanding faculty are essential to achieving both the instructional and research missions of UMBC. Therefore, the enhancement of faculty salaries has been, and continues to be, an important institutional priority. Although cost-of-living and merit increases were quite small from FY 1997 to FY 2000, funds specifically targeted for faculty salaries in FY 1998 and FY 1999 were used to increase selectively the salaries of the most outstanding faculty members, as mandated by the USM.

The cumulative impact of these efforts is shown in Table FAC2, which presents mean salaries of full-time instructional faculty by gender and rank. The mean salaries in fall 2000 increased for Professors, Associate Professors, Assistant Professors, Instructors, and Lecturers by 24.2%, 22.5%, 19.8%, 23.1%, and 23.9%, respectively, relative to fall 1996. Although salaries for females are still lower than those for males at all ranks, the gap is narrowing, with the percentage increase in mean salaries being greater for female than male full Professors (29.0% vs. 22.8%), Associate Professors (26.9% vs. 21.7%), and Lecturers (31.2% vs. 15.6%). The Provost s Faculty Salary Equity Committee continues to make recommendations regarding salary adjustments for purposes of equity.

Another perspective on faculty salaries can be obtained from data reported to MHEC as part of the University s performance accountability. One performance indicator is UMBC s percentile ranking for average faculty salaries among peer institutions (public Research II). Between fall 1996 and fall 1999, the ranking for full Professors rose at UMBC from the 69th to the 80th percentile. For Associate Professors, the increase was from the 58th to the 76th percentile. The percentile ranks for Assistant Professors fluctuated between the 76th and 80th percentile over this period. UMBC s goal is for all faculty to be at or above the 85th percentile. Two cost-of-living adjustments, to be implemented in FY 2001 and FY 2002, will move us toward this goal.

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[5]Source: Office of Technology Development.

To reiterate, faculty recruitment and retention continue to be top priorities at UMBC if we are to maintain the high quality of our faculty and continue to increase our student enrollments. Our recent planning strategies have been mobilized toward those ends. While acknowledging the need to increase the total number of core faculty overall, departments with the greatest need (for example, those with the largest enrollments and those with the greatest potential for growth) will be targeted for new (and replacement) lines first. At the same time, however, the call for new programs, especially at the doctoral level, is also a priority. The challenge, then, will be to balance hiring faculty for new programs with meeting the needs of existing programs.

Despite our desirable location and exciting student body, we recognize that recruitment and retention of the nation s best faculty are a challenge. Competitive salaries and start-up packages will quickly exhaust State monies for new lines. Ample lab space, convenient parking, and adequate offices also present challenges for our campus.

With all of this in mind and staying strongly committed to diversifying UMBC s faculty, we are resolutely moving forward in our process of rigorous planning. Raising the salaries of existing faculty and hiring new faculty together constitute one of the two priorities identified through the recent strategic planning process (improving UMBC s technology infrastructure is the other priority). Designated department chairs are also working closely with the administration to plan for immediate and long-term hiring and to develop retention strategies that will uphold UMBC s distinction as an Honors University in Maryland.

IV.B.4.        Faculty Development

Faculty development is an ongoing process that addresses the professional needs of the faculty in their multiple roles as instructors, scholars, and contributors of service to their disciplines, the University, and the community. The University has several programs that provide support to the faculty in this process.

Sabbaticals. Sabbatical leave enables faculty to increase their professional standing and their value to the institution. To be eligible for sabbatical, faculty must have attained tenure in professorial rank and must have been in active, full-time service with the University for a period of at least six years, subsequent to any previously granted sabbatical leave.  Sabbatical leave is granted for projects that promise to be beneficial to both the individual and the University. Although most projects advance a faculty member s research agenda, sabbatical leave is also granted for curriculum development and innovation.

UMBC Faculty Research Fellowship. The Office of the Provost sponsors the UMBC Faculty Research Fellows Program. The purpose of this program is to encourage outstanding scholarship and research at UMBC by awarding merit-based grants of up to $30,000 in salary support to faculty members for one semester. Fellows are relieved of teaching duties during that semester in order to pursue a proposed research program. All tenure-track faculty, regardless of

rank, are eligible to apply. Awards are based on the recommendations of a faculty committee which evaluates the likelihood that the award will have a significant impact on the faculty member s scholarship or research and whether the work proposed for the fellowship period can be completed. Preference is given to the following: (1) faculty who need support to complete an important project, especially junior faculty whose likelihood of achieving tenure would be significantly enhanced by the fellowship; (2) faculty who are shifting directions in their scholarship or research and for whom the fellowship could provide seed money; and (3) faculty with a history of extramural funding for whom the fellowship could provide support to seek additional outside funding.

Travel Fund. The Dean of Arts and Sciences maintains a Faculty Development fund that provides supplementary support for faculty travel related to research. Awards are generally limited to full-time tenure-track faculty and to one award per year per faculty member. Similar support is provided by the Dean of Engineering on a less formal basis.

DRIF, SRIS. The State of Maryland created the Designated Research Initiative Fund (DRIF) over 25 years ago to provide opportunities for strengthening scholarly and research endeavors at State universities, to assist faculty in competing more effectively for external support, and to enhance the economic development of our region. The Dean of the Graduate School/Vice Provost for Research administers three funding programs through the DRIF initiative  Special Research Initiative Support (SRIS), Research Assistantship Support (RAS), and Summer Faculty Fellowships.

The Special Research Initiative Support (SRIS) is a competitive program for new research initiatives and is open to all faculty who hold academic appointments at UMBC and who are eligible to submit applications for external support. This program awards a maximum of $20,000 for an individual proposal and $40,000 for a research team or collaborative proposal. Funds may be used for nonrecurring research enhancements, including seed monies, research supplies, purchase or rental of equipment for new research (including software), travel for research purposes, matching funds, special short-term support for renovations, and undergraduate (hourly) research support. A faculty member may, in addition, include a request for funding Research Assistantship Support (RAS), which includes tuition remission for 10 credits and health benefits.

Summer Faculty Fellowships support research or scholarly projects, including projects in the creative and performing arts, during the summer months. Fellowships are available on a competitive basis to UMBC faculty members who hold tenure-track appointments. Priority is given to assistant professors possessing the terminal degree in their field who are in their first three years at that rank and who have not previously received a Summer Fellowship. In addition, the Deans of the Colleges of Arts and Sciences and of Engineering routinely make similar funds available to first-year faculty whose proposals have not been funded through the Summer Faculty Fellowship program.

Faculty Development Center. In 1999, following a recommendation from the Faculty Senate, a Faculty Development Center was established at UMBC, and a Faculty Development Steering Committee, consisting of elected faculty members and faculty administrators, was appointed by the Provost and Deans. In July 2000, after a national search, a full-time Director was appointed to staff the Center. The mission of the Faculty Development Center is to create and support a comprehensive program of faculty development that integrates teaching and learning, research, and service and that reflects faculty requests, institutional mission, and best professional practices. The Center systematically expands upon existing department-based programs that already provide faculty support. Examples are the newly developed mentor programs aimed at easing the transition of new faculty to UMBC by actively acquainting them with the University s policies, procedures, and resources.

Also under the rubric of faculty development, most departments at UMBC take advantage of the numerous programs designed since the last report to provide computer training and assistance with new software programs. The Faculty Empowerment through Common Tools (FaCT) initiative, launched in 2000, is one such program. Offered through the Office of Information Technology (OIT), FaCT provides training and technological infrastructure to all faculty (see Section IV.G.2. for more details regarding FaCT).

## IV.C.      Staff

The value UMBC places on its staff members is reflected in a variety of ways that revolve around our dedication to inclusiveness. This commitment is reflected in the University s consistent implementation of shared governance and in its diversity-focused hiring practices at all levels.

From 1996 to 2000, the total number of full- and part-time staff members increased from 970 to 1,184, accounting for a 22.1% increase (Table STF2). Growth occurred in every Equal Employment Opportunity (EEO) category, with the exception of a slight decrease in the number of skilled crafts persons (from 44 in 1996 to 41 in 2000). Most of the increases between 1996 and 2000 were significant: executive/administrative/managerial staff grew from 71 in 1996 to 111 in 2000; professional staff from 505 to 603; secretarial/clerical staff from 260 to 305; technical/paraprofessional staff from 62 to 86; and service/maintenance staff from 28 to 38.

Of the 1,112 full-time staff members employed at UMBC in 2000, 675 were female and 324 were minorities. Among minorities, 266 staff members were African American (Table STF1). Among female staff, 7.1% were in executive/administrative positions and 50.2% in professional roles; among African American staff members, 16.1% were in executive/administrative positions and 20.8% were in professional roles.[6]

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[6]Source: Office of Institutional Research.

The educational achievements of classified and associate staff persons are impressive. For example, in FY 2000, of the 107 full-time executive/administrative/managerial staff, 25 had doctoral degrees, 46 master s degrees, and one had achieved first professional status (Table STF3). Similarly, among the full-time professional staff, 21 had doctoral degrees, 128 had master s degrees, and five had achieved first professional status. Among secretarial/clerical staff, four had master s degrees, 20 had bachelor s degrees, and one had achieved first professional status. These numbers have remained fairly consistent since 1996. While the numbers are impressive, they are incomplete; the highest degrees earned by 500 of the full-time staff members are unknown. These data will be important to gather systematically in the future.

Since the 1996 *Self-Study*, UMBC has begun to address concerns raised by staff members in that report  specifically, concerns regarding contractual employment, the new staff pay program that was about to be instituted in July 1996, and staff professional development. For example, UMBC is moving toward providing all contractual employees a living wage. The new pay program, which was instituted in 1996 to comply with Federal Labor Board standards, converted the employment categories of Classified and Associate Staff to Exempt and Non-Exempt, respectively. Despite these changes in nomenclature, which were externally mandated, Classified Staff and Associate Staff have maintained strong identities at UMBC. Classified and Associate Staff members represent their constituencies on virtually all University committees and operate their own respective Senates. The Classified Staff Senate and the Professional Associate Staff Senate are encouraged to communicate staff concerns to the administration, and their Senate leaders play a pivotal role on the University Steering Committee.

In response to concerns regarding staff professional development, UMBC established the Professional Associate Staff Fund and Classified Staff Development Fund in 1998. Administered by the Provost s Office, each fund is given an annual budget of $10,000 from which awards are granted to staff applicants for training and related travel. Units are expected to contribute to the cost, as well. The first awards were granted in spring 1999, and at that time, sixteen Associate Staff members received funds totaling $6,401, and eight Classified Staff members received funds totaling $1,770. The number of awards granted grew in the second year of the program (FY 2000), with 28 Associate and 13 Classified Staff members receiving awards totaling $10,492 and $2,935, respectively. As of January 2001, 12 Associate and 2 Classified Staff members received awards totaling $5,409 and $1,000, respectively. To date, the Professional Associate Staff Fund and Classified Staff Development Fund have been used to support travel to professional conferences so that staff may share and learn best practices, keep abreast of the most current trends in their areas, and establish important professional connections.

Also noteworthy, staff in University Health Services were granted support last year from the U.S. Department of Justice to initiate a Violence Against Women Project on campus. This grant, totaling almost $400,000, will be used to develop a comprehensive program to teach about and help prevent domestic violence, sexual assault (including date rape), and stalking. The Project is collaborative and involves the joint efforts of University Health Services, the Women s Center,

Counseling Center, Student Judicial Board, and Campus Police. This kind of partnering is not unusual at UMBC and illustrates how, collectively, we seek to meet the needs of students, as well as faculty and staff.

Additional contributions to staff recognition include the creation in 1999 of the Presidential Distinguished Professional Associate Staff Award and, in 2000, the Presidential Classified Employee of the Year Award. Both are presented at the annual Convocation. A further sign of the staff s identification with the UMBC community is the possibility, granted recently upon the request of both staff Senates, of a staff member s being awarded emeritus status upon retirement. Finally, tuition remission is extended to all staff members who wish to enroll in classes on campus.

## IV.D. Student Life

IV.D.1. Academic and Intellectual Contexts

IV.D.1.a. The Undergraduate Experience

Number of Majors, Minors, Upper Division Certificates, Degree Options. At the undergraduate level, UMBC offers 33 major programs and 38 minor programs, along with nine upper-division certificates. Degrees awarded include the B.A., B.S., and B.F.A. The University has expanded its program offerings in recent years, but the number of academic programs is still considerably lower than is found at peer institutions.

Enrollment and Degrees by Major. The number of undergraduate degrees awarded in 2000, as reflected in Table UG11, totaled 1,465 across 29 programs.[7] UMBC prides itself on supporting small and large programs alike. In 2000, six programs awarded 10 degrees or fewer, and five programs awarded 100 degrees or more. The total number of bachelor s degrees awarded has fluctuated between 1996 and 2000, ending with a net decrease of 6.7%. Elimination of the Nursing program at the beginning of this period accounts for a substantial portion of this decline, although there have been some decreases in specific disciplines. These have been offset, however, by substantial increases in other disciplines. Programs awarding at least 25% more degrees in 2000 than in 1996 include Chemistry, Geography, Information Systems, Modern Languages and Linguistics, Theatre, and Visual and Performing Arts.

General Education Requirements/General Foundation Requirements. General education, as defined by the Maryland Higher Education Commission (MHEC), is  the foundation of the higher education curriculum providing a coherent intellectual experience for all students.  MHEC

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[7]New programs, such as the B.A. programs in Visual Arts, Financial Economics, and Statistics, have not yet conferred degrees. Additionally, students do not major or minor in Education at UMBC, but earn a teaching certificate through the Maryland State Department of Education.

also delineates the design of a general education program to which all public institutions of higher education must conform. The programs outlined below not only meet MHEC s requirements, but surpass the minimum course requirements, while remaining within the maximum number of 46 semester hours of required core courses.

As part of the foundation of a liberal arts education at UMBC, a set of general education courses is aimed at facilitating breadth, as well as depth, within the baccalaureate degree. All students who began higher education (following high school graduation) by attempting college credits, either at UMBC or at an institution from which UMBC accepts transfer credit, in summer 1996 or thereafter, are bound by General Foundation Requirements (GFRs). Students who, following high school graduation, began higher education during the summer of 1989 through spring 1996 and maintained continuous enrollment since that period may choose to satisfy General Education Requirements (GERs) in effect during that time. Students who began their higher education prior to summer 1989 and maintained continuous enrollment may choose to satisfy UMBC s General Distribution Requirements (GDRs). (Continuous enrollment is defined by MHEC as less than a two-year break in enrollment. Students who have more than a two-year break must complete the requirements in effect at UMBC at the time of their readmission.)

Completing the GFRs requires that a student pass the following courses with a  C  or better: one course in writing (English 100 or its equivalent); three courses with an Arts and Humanities designation (two of which must be from one academic discipline and one from another); three courses with a Social Science designation (two from one discipline, one from another); one course in Mathematics; two courses with a Biological/Physical Science designation (one of which must include a laboratory component) other than Mathematics, Statistics or Computer Science; courses in a foreign language through the 201 level (or demonstrated proficiency at that level), plus one or two additional courses with Language or Culture designation. Notably, UMBC is the only USM institution with such a foreign language requirement.

Credits earned by completing the GFRs contribute to the minimum requirement of 120 total academic credits. Part of this total includes 45 credits of upper-level courses (numbered at the 300- or 400-level) and an academic major, all to be completed with a minimum cumulative grade point average of 2.0. Students must also complete two courses in physical education.

The Task Force on UMBC as an Honors University, created by the Provost in 1999, recommended in its May 2000 report that the present  Areas of Knowledge  component of the GFRs be redefined and coordinated with a number  encounters  in functional learning focused on critical and analytic thinking, writing and information technology, experiential learning (research/performance, internships, service-learning, study abroad), and inquiries in cross-cultural studies; science, technology, and society; history and ethics. Also recommended was linking general education to majors and minors through the  encounters,  so that proficiencies and knowledge be developed and deepened in tandem. The proposal also includes recommendations on improving the first-year experience for new students (including transfer students), writing in

the disciplines, the possible addition of a required secondary area of concentration (that is, a minor or a certificate), and the establishment of an office or division of undergraduate studies.

Members of the Honors Task Force, whose goal was to provide an integrative model for a core curriculum, continue to revise their initial proposal as they solicit feedback from constituencies across the campus, consistent with UMBC s goal of shared governance, during the 2000-2001 academic year.

Research/Field Experience (Undergraduate Research and Creative Achievement Day). UMBC has a strong tradition of supporting and encouraging the involvement of undergraduates in the scholarly and creative work of the University. In laboratories, studios, and classrooms across the campus, undergraduates work with their faculty advisors on a variety of projects that add to the students academic experience and knowledge. With that contact come opportunities for research experiences, instruction in state-of-the-art techniques, and introductions to prospective employers who partner with UMBC in research. Each year, UMBC undergraduates participate in research and creative productions with faculty mentors, in internships, and in service-learning projects that provide opportunities to engage in original scholarly or creative work.

Many of these undergraduate research opportunities are generously funded by outside sources. For example, most recently, the Department of Defense (DOD) Breast Cancer Program has funded the Breast Cancer Undergraduate Research Experience (BCURE) at UMBC, which will be launched in summer 2001. A full-time, ten-week summer program, BCURE will provide stipends of $4,000 to each of eight successful applicants, who will work under the direction of an experienced breast cancer researcher/mentor in a laboratory at UMBC or the University of Maryland, Baltimore (UMB). This rich research experience will extend on a part-time basis through the next academic year, at the conclusion of which BCURE students will present and discuss their research results with senior breast cancer researchers at a one-day Breast Cancer Research Day.

In the Undergraduate Research Awards (URA) program, established in 1995, stipends totaling nearly $40,000 are competitively awarded annually to undergraduates to support their research projects. This research initiative is distinctive because it involves student-directed research in which undergraduates participate as scholars: they draft proposals, compete for funding, present at conferences, and are encouraged to seek publication of their work in a scholarly journal. Initial proposals are reviewed by a faculty committee, simulating the competitive process of funding agencies. Selected proposals have resulted in numerous impressive projects in areas ranging from pediatric cancer treatments, Lyme disease, and geriatric social work, to originally choreographed dance works and a permanent mural in the Women s Center. Since its inception, 108 students have been granted Undergraduate Research Awards totaling $136,650. Each spring, the Office of the Provost sponsors the Undergraduate Research and Creative Achievement Day, featuring oral presentations, poster sessions, artistic exhibits, and performances by over 50 students. All UMBC students are eligible to apply for participation in the event. In addition, several participants have been selected to present at the National Conference

for Undergraduate Research (this year, the Provost offered stipends for up to 20 students to travel to the national conference at the University of Kentucky, Lexington). In spring 2000, the inaugural issue of the *UMBC Review: Journal of Undergraduate Research and Creative Works*, edited by undergraduate students, was published (see Appendix Item 1A). Contributions to the journal included research reports from the sciences, social sciences, humanities, and interdisciplinary studies, as well as personal essays. Submissions from all of the disciplines were encouraged and received a rigorous review by UMBC faculty and student editors. A similar process was followed for the second annual *UMBC Review*, published in spring 2001 (see Appendix Item 1B).

  Scholars Programs. Founded in 1988 with a $522,000 grant from philanthropists Robert and Jane Meyerhoff, the nationally recognized Meyerhoff Scholars Program addresses the underrepresentation of minorities in science and engineering. Students accepted into the program (which is open to all students) maintain exceptional retention rates (97%) and GPAs (3.4) and are broadly distributed across scientific and technical fields. Meyerhoff students participate in impressive research-related internships each year in laboratories throughout the U.S. and abroad, many have presented research at professional conferences, and a number of the students have published in scientific journals. Each year, new Meyerhoff students are selected from over 1,400 nominations and applications nationwide. Currently, the Meyerhoff Program has an enrollment of more than 200 undergraduates, and more than 200 have already graduated, most of whom have gone on to Ph.D., M.D., or M.D./Ph.D. programs at a variety of institutions nationwide (see Section III).

  The Minority Access to Research Careers (MARC) Program at UMBC, launched in fall 1997, provides annual academic and financial support to undergraduates interested in pursuing doctoral degrees and research careers in the biomedical sciences and mathematics. Part of a national program supported by the Minority Opportunities in Research (MORE) Division of the National Institute of General Medical Sciences of the NIH, UMBC was among the first non-historically black colleges or universities to have been awarded a MARC grant, which represents more than $800,000 in funding per year. MARC Trainees are paired with research faculty from UMBC and nearby institutions to work on research projects, travel to scientific conferences, present their research, and sometimes publish with their mentors. All MARC Trainees receive instruction in research conduct and ethics and receive comprehensive support to prepare for graduate school. Students who have demonstrated high academic performance and interest in the advancement in underrepresented groups in the sciences and mathematics are recruited to participate in the UMBC program in their junior and senior years. More than 75 MARC Trainees have been supported by NIH funding to date and 13 MARC Trainees have received support provided by UMBC. The UMBC program evaluation conducted in April 2001 reported that 67% of NIH-supported MARC graduates have entered Ph.D. or combined M.D./Ph.D. programs, a rate more than two times as great as students in a comparison sample.

  Additionally, UMBC s growing Pre-MARC Program helps identify talented students for the MARC Program while providing academic and research support to sophomores conducting

research in the laboratories of UMBC faculty. The NIH annually supports up to $1,500 per year for research supplies for ten Pre-MARC students.

Another innovative program at UMBC, the Humanities Scholars Program, is targeted at high-ability students with interests in the Humanities. One of the program s key features is a four-credit seminar offered each semester of the freshman year that is intended to provide students with broad perspectives on the Humanities across time and cultures. The course is team-taught by two faculty members from different disciplines, including those outside the Humanities per se. The faculty teams are provided funds to support collaborative course development. As a result of these collaborations, the program, which is entering its tenth year, has become an incubator for curricular innovation across campus. The freshman seminars, in addition to broadening the students  sense of the Humanities, provide an interdisciplinary cohort experience for these students. The other distinguishing feature of the program is a required semester of study abroad, funded through the scholarship.

The Linehan Artist Scholars Program, which began in fall 1995, supports talented students in the fine and performing arts. Here, too, cohort experiences encourage interdisciplinary exchanges among students. Each semester, the Artist Scholars attend an arts event (theater performance, museum exhibit, concert, or dance performance at venues ranging from Washington, D.C. to New York) selected by an interdisciplinary faculty group. After the event, participating faculty members lead the scholars in a discussion, relating the event to the students  own works.

UMBC s McNair Scholars Program, funded through a partnership with the U.S. Department of Education, provides experiences that prepare primarily low-income, first-generation college students for graduate education. The goal of the program, which was launched in spring 1993, is to increase the number of students from historically underrepresented groups who earn doctoral degrees and go on to careers in academia. McNair Scholars participate in counseling sessions, weekly seminars on negotiating the graduate school application process, a credit course in research proposal writing, orientation visits to graduate schools and research facilities, mentoring by UMBC faculty members, and opportunities to interact with role models who have earned a doctorate. In addition, McNair Scholars compete for positions as McNair Fellows, an eight-week, residential Summer Research Institute, by preparing research proposals that are evaluated by UMBC faculty. Upon selection and under the direction of a faculty mentor, each Fellow spends the summer completing a research project, preparing a research paper, and presenting his/her findings at the annual UMBC McNair Research Conference. Some Fellows have also presented their research at regional and national conferences. The Summer Research Institute provides McNair Scholars with the opportunity to experience the life of a scholar, encouraging and preparing them to pursue graduate education and a career in academia.

One of the two newest scholars program at UMBC is the two-year-old Public Affairs Scholars Program, which is open to exceptional students from any discipline who express an interest in public service and public policy and are considering careers in public affairs, government service, or the non-profit sector. The freshman year features two cohort seminars. A

writing course with a service-learning focus is offered in the fall, and an interdisciplinary seminar in public policy is offered in the spring. The students  perspectives are broadened by interactions with faculty and policy experts from the Baltimore-Washington area who present lectures sponsored by the Public Affairs Program and the Social Sciences Forum, and through a sophomore course in leadership and public service. The Program also features an internship in the student s field of study, the opportunity to study abroad for a semester, and a senior research project with a faculty mentor on a policy issue.

Finally, the new Teacher Scholars Program funds graduate students committed to teaching in high-needs schools in Baltimore City and surrounding suburbs. Teacher trainees (former Choice Middle School Caseworkers and former Peace Corps workers) who have demonstrated their willingness and ability to work with children at risk receive tuition support for their master s-level studies and apprentice with veteran teachers in the schools. Through the dynamic of school-university partnership, this program aims at breaking the pattern of under-staffing at high-needs schools by recruiting, preparing, mentoring, and retaining academically talented teacher candidates. The ultimate goal is to place high quality teachers in every classroom, placements we know are necessary to improve student learning and achievement. The first group of Teacher Scholars will enter UMBC in fall 2001.

Honors College. The Honors College, founded in 1988, seeks to create a community of learning that is characteristic of small liberal arts colleges. Academic camaraderie is fostered by small classes that feature collaborative pedagogy. Enrollment in Honors courses is limited to 25 students (average enrollment is about 16), allowing for a particularly strong emphasis on written and oral communication. A further sense of community is fostered by the requirement of Honors 100: Honors Forum in which all first-semester freshmen share a two-hour weekly class meeting and participate in a service-learning project. A preview of this community-of-learning atmosphere is offered during the distinctive Honors Freshman Orientation program. All students are sent a copy of a text (for example, Mary Shelley's *Frankenstein*, Elie Wiesel's *Night*, or Friedrich Dürrenmatt's *The Physicists)*, which they read in preparation for discussion in groups of 12 to 15 with UMBC faculty from a variety of disciplines during Orientation.

The campus administration has made a commitment to strengthen the Honors College. Toward that end, a line has been created for a joint appointment within the Honors College and an academic department. This past fiscal year, the Honors College budget was increased by $75,000 to provide additional support and to accommodate increases in membership.

Scholarly Societies. In 1997, UMBC s Phi Beta Kappa faculty and staff received a charter to establish a chapter of this prestigious organization. The chapter was installed in 1998 when the campus was only 32 years old. This event was the culmination of an intensive three-year examination of the campus and its programs. Of the 262 chapters of Phi Beta Kappa currently housed on campuses in the United States, only 42 were younger than UMBC when their chapters were founded. Eta of Maryland, UMBC's chapter of Phi Beta Kappa, holds elections of  Members

in Course in the spring and fall of each year. Since its inception, 292 UMBC students have been elected.

The Honor Society of Phi Kappa Phi, founded in 1897, is the oldest and largest national honor society whose primary objective has been recognizing and promoting superior scholarship in all academic fields. UMBC has participated in the University of Maryland Chapter since 1970, the year it graduated its first students. Since fall 1997, 393 UMBC students have been inducted into Phi Kappa Phi.

Additionally, the UMBC Chapter of the Golden Key National Honor Society was granted its charter in 1995 and inducted 400 members and 5 honorary members that year. The chapter has grown steadily each year, inducting almost 2,300 members to date. In 1997, at the International Convention in Atlanta, the UMBC chapter received a Key Chapter Award, one of the most prestigious awards given by Golden Key for excellence in service, leadership, and overall activity. The chapter was recognized again, in 1999, when it received Honorable Mention-Key Chapter Award. The chapter has also been honored many times at regional conventions, receiving awards for the following: (1) best community service project; (2) outstanding academic student organization (1998, 1999, 2000); and (3) Mid-Atlantic Advisor of the Year (to Professor Lynn Zimmerman). Also, in 2000, Professor Zimmerman received the USM Board of Regents Faculty Award for Excellence in Mentoring for her work with Golden Key.


IV.D.1.b.        The Graduate Experience

Number of Post-Baccalaureate Certificates, Master s, Doctoral Programs. Over the past two years, UMBC has diversified its offerings at the graduate level and now has approval to offer eight post-baccalaureate certificates, 30 master s programs, and 21 doctoral programs. Unlike its peer institutions, UMBC offers relatively few master s programs, as discussed earlier (see Section IV.A.4.). Doctoral degree production is strong, however, and UMBC was classified in 2000 as a Doctoral/Research Universities-Extensive institution by the Carnegie Foundation, having been moved up from Doctoral II status in the 1994 classification system.

Enrollment and Degrees by Program. Since the 1996 *Self-Study*, the number of full-time doctoral students grew from 310 in the fall of 1996 to 331 in the fall of 2000 (Table GRAD8). We recognize that we must continue to increase both the number and value of assistantships if we are to remain competitive in recruiting the brightest and best graduate students to UMBC.

While there was an overall decline between fall 1996 and fall 1999 in the number of master s students enrolled at UMBC (748 students in 1996; 706 in 1999), there was a sharp increase in fall 2000, when total master s program enrollments rose to 845 students (Table GRAD 10). The difference in full-time enrollments is also striking, with 265 students enrolled full-time in fall 1996, and 407 in fall 2000. Putting these increases together with the increase in retention and graduation rates among master s students (as reported in Section IV.A.4), one may conclude that

UMBC s campaign to increase graduate enrollments is beginning to have impact. But given our extremely low ranking among USM campuses in the awarding of master s degrees, we must view the growing of our master s enrollments as a continuing priority.

Meanwhile, part-time enrollment figures in fall 1996 and fall 2000 declined from 483 to 438 students, respectively. The growth in the number of full-time students does not account for the decreasing number of part-time students, however. The development of certificate programs in fields where such a credential is more relevant than a master s degree is a priority. Toward that end, UMBC expects to increase opportunities for experienced teachers to earn certificates as we build our K-16 partnerships. The Center for History Education at UMBC provides a model for such efforts. The Center is a partnership through which our faculty assist area secondary school teachers in developing statewide standards in the field of history by which high school students will ultimately be tested. The Center also offers professional development opportunities for practicing teachers, as well as for those seeking initial certification. (For more information on the Center for History Education, see Section IV.G.6.) Another area conducive to the development of certificate programs is technology. There has been significant growth in the number of students majoring in Information Systems and steady numbers in Computer Science. UMBC s business partners are asking for additional concentrations not requiring as many courses as a full master s degree.

UMBC is committed to increasing graduate enrollments while maintaining the quality of students and programs we offer. Past efforts specifically designed to affect enrollment patterns have been successful and offer strategies for the present. We sought, for example, to increase the presence of African American graduate students and have witnessed more than a 100% increase in enrollment for the period beginning in 1996 and ending in 2000 (Table GRAD1). Several initiatives have contributed to this increase. For example, the Meyerhoff Graduate Fellows Program, funded by an NIH Minority Biochemical Research Support-Initiative for Minority Student Development (MBRS-IMSD) grant, currently has an enrollment of 16 minority students in five participating departments (Biology, Biochemistry, Chemistry, Psychology, and Engineering). This initiative has tripled the total number of minority graduate students previously enrolled in these departments. The first Fellow to graduate from the Meyerhoff Graduate Program earned her degree in May 2001, and an enrollment of 20 Fellows is projected for fall 2001. Interest in this program is growing at a rapid rate, and increased enrollment and high retention rates are expected. Additionally, we have had a 42.7% gain in our foreign student enrollment since the last report, suggesting that UMBC is beginning to gain international recognition.

University of Maryland Graduate School, Baltimore. In 1985, the USM Board of Regents sought to create and link two principal centers for graduate education and research in the Baltimore region. The result was the formation of the University of Maryland Graduate School, Baltimore (UMGSB), in which UMBC and the UMB are partners. The UMGSB serves as the administrative arm of the combined graduate and research programs of UMBC and UMB and is governed by a Graduate Council comprised of eight faculty and one student from each campus, and the Deans and Associate Deans from both campuses. The UMGSB sets policy for graduate

studies and research at the two campuses and promotes cooperative research and programmatic efforts.

Several standing committees of the UMGSB consider and approve the following graduate activities: (1) the Long Range Planning and New Programs Committee makes recommendations to the Council concerning any new program proposed for the UMGSB; (2) the Program Review Committee conducts the periodic self-study and site visitation for graduate programs on both campuses; (3) the Graduate Faculty Membership Committee reviews graduate faculty applications and makes recommendations to the Council for admission to graduate faculty status; and (4) the New Courses Committee reviews new graduate proposals, changes, and eliminations, and makes recommendations to the Graduate Council. In addition, the Council designates a group of graduate faculty to serve on an ad hoc grievance committee to review student grievances or misconduct.

Beginning in 1995, the UMGSB initiated greater autonomy for the two campuses. It was decided that the graduate schools would maintain the combined Graduate Council and that graduate students would operate under the same administrative policies, but that there would be a Dean of the Graduate School and support staff on each campus to manage increased workloads. This model has proven most efficient. UMBC s Graduate Dean, Scott Bass, and his staff have supported program development and review. A separate spring commencement ceremony for graduate students was implemented at UMBC in 1998, further evidence of the prominence of the Graduate School on our campus.

IV.D.2.     Professional Education and Training, Off-Campus Sites, and Other Alternative Offerings

Perhaps the most fertile ground, as well as the most challenging, for the Division of Professional Education and Training (DPET) today is distance education. UMBC is meeting this challenge by exploring the possibility of establishing an Office/Center for Distance Learning. The Office/Center would provide leadership, coordination, and support for the University s distance education initiatives, which are currently serviced by the DPET program development staff. Possible services would include the following: faculty training and support services; instructional design and technology; marketing and recruitment; data management and reporting; a distance learning resources library; project management; administrative coordination; and long-range planning. Convenient access to many of these services and resources would be provided via a website.

Among the distance education programs already in place at UMBC is a master s program in Management Studies in Emergency Health Services, offered online since fall 1998. Enrollment in this program totals 28 students. Additionally, a post-baccalaureate certificate program in Distance Education was launched in spring 2000. The enrollment in this four-course graduate program averages 20 students per course. In these distance learning scenarios, students enroll and access courses via the internet. All courses are asynchronous, thus providing maximum flexibility

to attend class at times most convenient for the individual student. Faculty engage students in online discussion topics, demonstrate various technologies, examine the nuances of teaching and learning online, and assess learning outcomes through online observation of student performance. In addition, a Flexible Master s Program in Information Systems is scheduled to be launched in spring 2001. Moreover, UMBC signed a memorandum of understanding in October 2000 to collaborate in distance education endeavors with the U.S. Open University. Offering the Flexible Master s in Information Systems not only locally and within the region, but nationally and internationally, may be one of the first outcomes of this collaboration. UMBC initiated plans for this far-reaching program in direct response to the State of Maryland s workforce demands in the information technology arena.

In the future, DPET staff will continue to work closely with UMBC departments and individual faculty to integrate technology more fully into the classroom to enhance teaching and learning. The Office of Information Technology will collaborate with distance education staff in implementing such improvements.

Oversight and accountability are crucial in meeting the challenges of distance education in general and in deciding where future development of specific online courses or programs will be needed at UMBC. Should a program be nominated or identified as a candidate for online delivery, DPET will first be asked to research the market viability of the program and then assess UMBC s ability to support such a project. (Currently, applied graduate programs in Education, Information Systems, and Computer Science appear to be particularly appropriate for online program expansion.) Regarding individual courses, faculty will work with the Office of Information Technology, the newly established Faculty Development Center, and the proposed Office/Center for Distance Learning a tripartite foundation of resources in developing courses. The Office/Center for Distance Learning may also assist faculty in marketing online courses through UMBC s collaborations with MarylandOnline (www.marylandonline.org) and the Southern Regional Electronic Campus (www.electroniccampus.org). Other consortia groups are being investigated.

UMBC s off-campus sites include the University System of Maryland s Shady Grove Center in Montgomery County, where UMBC will begin offering undergraduate programs in Information Systems and in Social Work in the fall 2001 semester. This initiative was undertaken in direct response to requests from the USM, Montgomery County business and political leaders, and Montgomery College to help address higher education needs in the county.

UMBC provides other educational opportunities off-site, including customized development and delivery of credit and non-credit courses and programs on contract for various companies and organizations (for example, a certificate in Electronic Commerce was recently offered to employees of Freddie Mac Corporation in McLean, Virginia). Finally, but as important as all the foregoing, UMBC partners with elementary schools, middle schools, high schools, and entire school systems to bring graduate-level courses to their practicing teachers on site.

IV.D.3.        Student Co-Curricular Learning, Development, and Support Services

The 1996 Middle States Evaluation Team lauded the efforts of both staff and students to develop day, evening, and weekend programs and to create a milieu to make campus life more attractive to all students. Such efforts remain both a priority and a challenge at UMBC.

The Division of Student Affairs is committed to fostering student success through the development and implementation of co-curricular programs and services that prepare UMBC graduates to  lead examined, ethical, caring, and fulfilling personal, professional, and domestic lives; contribute dynamic and responsible service to their communities; and provide effective leadership in business, government, education, and the myriad settings in which they will be engaged.  This division includes Career Development & Placement, the Counseling Center, Office of Multicultural Affairs, Residential Life, Student Judicial Programs, Office of Student Life, Transportation Services, the University Center, and University Health Services.

The Career Development & Placement Center s mission is to enhance the skills and talents of our students, while encouraging their professional development and optimizing future educational and employment options. Special events, such as the Corporate Visibility Days and Liberal Arts and Sciences Week, have proven effective in fostering relationships between UMBC students and potential employers. The Career Development & Placement Center has successfully provided these services despite a tight operating budget. In 1999-2000, the Center held 155 workshops and seminars, conducted numerous job fairs, and counseled thousands of students, thus earning an impressive evaluation from the Outreach Coordination Assessment Group (OCAG). The OCAG was a 1999-2000 campus committee charged with the following: (1) developing recommendations for maximizing UMBC s external partnerships in order to serve better the needs of UMBC students; and (2) assessing UMBC s capabilities to respond to the needs of those external constituencies who recruit our students as employees, and to offer use of UMBC s services and programs. The committee included representatives from the Career Development & Placement Center, Shriver Center, Office of Institutional Advancement, DPET, and Research Park (now bwtech@UMBC).

The Counseling Center seeks to provide high quality professional psychological services to students. There has been increased use of the Counseling Center since the 1996 *Middle States Self-Study*. In 1999-2000, for example, there were approximately 2,786 individual direct service sessions, compared to only 1,705 sessions in 1997-1998.  Possible reasons for this increase include implementation of a modified walk-in intake system and elimination of the 12-session limit on individual counseling sessions per academic year. This need for on-site counseling and for more extensive services mirrors national trends and is heightened at UMBC as our student population continues to grow. The Center faces the ongoing challenge of filling counseling positions, increasing group counseling services, and promoting the visibility of the Center on campus.

The Women s Center at UMBC, though not part of the Division of Student Affairs, complements the efforts of student support services and academic programs. The Women s Center does not offer professional counseling, per se, but it does serve as an advocacy unit and as a resource for referral to services available on campus and in the wider community. The Women s Center presents over 80 programs and activities per year, including Women s History Month, Women 2 Women Career Counseling Program, Take Your Daughter and Son to Work Days, International Women s Discussion Group, Mothers  Discussion Group, yoga and tai chi classes, and support for gay and lesbian communities. The Women s Center also has a meditation room, one of the few spaces on campus dedicated to quiet reflection. Most important, the Women s Center provides a safe and respectful space for all members of the community. From July 2000 to March 2001, the Center served 2,242 students, staff, and faculty.

The mission of the Office of Multicultural Affairs (OMA) is to enhance multiculturalism on campus by cultivating an appreciation of the rich cultural heritage of diverse populations and through educating, recognizing, and supporting the student body. It works to promote a campus environment that celebrates diversity. Toward this end, OMA sponsors or co-sponsors a wide variety of programs and events that focus on various aspects of culture and/or diversity (over 20 programs in 1999-2000). In addition, staff members serve as facilitators in conflict resolution and negotiation sessions between groups when intervention is needed, work to educate the campus on the need for tolerance, and serve on university-wide committees that deal with issues of diversity.

Residential Life seeks to provide facilities, services, and programs that support the academic honors mission of the institution and enhance the quality of life for students who live on campus. Highlights for this office since 1996 include the creation of the Living Learning Centers Program and the Residential Life Faculty Mentor Program. Living learning facilities are being designed to allow for and encourage increased student-faculty and student-student interaction within residential spaces organized around specific academic endeavors. Design plans include smaller living units with no more than 32 residents per unit, classrooms in the units, and faculty apartments and studios for live-in mentors. The first facility, the Shriver Living Learning Center, which focuses on service-learning, opened in fall 2000, and the second, the Modern Languages Intercultural Communication Floor, will open in 2001-2002. Plans are underway to expand involvement in the Living Learning Centers Program to other academic departments. Complementing these efforts is the Residential Life Faculty Mentor Program, which began in 1999 with four faculty mentors and expanded to six mentors in 2000-2001. Faculty mentors  adopt  a residential community, spending time each week in their respective residence halls getting to know students. Together, the resident students and full-time faculty mentors engage in out-of-class interactions, discussing research, career interests, and professional opportunities and concerns. Mentors also attend residential programs and facilitate informal discussion. The Office of the Provost and the Division of Student Affairs established the Residential Life Faculty Mentor Program in response to research indicating that students who have contact with faculty outside the classroom are more likely to graduate, are more likely to exhibit higher levels of achievement, and

are generally more satisfied with their college experience.[8] The program will grow to seven faculty mentor participants in 2001-2002.

Also since the last report, Phases I and II of Erickson Hall have been completed, resulting in an additional 487 new beds. In spite of these increased numbers, the waiting list for beds had grown from 500 to 650 by mid-July 2000. In addition to meeting the increased demand for housing, the Residential Life office is also responsible for the continued maintenance and renovation of existing facilities and training of Resident Assistants (RAs). RA training is augmented by a credit-bearing course offered by the Department of Psychology. There have been minimal increases in staff and other resources to meet these demands, however, despite the increase in capacity from 1,800 to 2,750 residents.

To promote an atmosphere conducive to intellectual development, personal growth, community association, and regard for all students rights, standards and guidelines on student behavior are necessary. The Code of Student Conduct is intended to outline certain responsibilities and expectations of UMBC students, to assist the students in understanding and appreciating their roles in the academic community, and to establish procedures that ensure due process in the adjudication of complaints concerning students. The Student Judicial Programs Office, responsible for the Code of Student Conduct, promotes the principles of fairness and due process in judicial settings throughout the University community, while working to achieve a balance between community standards and individual behavior through the educational development of students. In 1999-2000, the Student Judicial caseload was 334, representing an 86% increase over 1998-1999. This unprecedented increase is due, in part, to the increased number of residential students, particularly freshmen, who are learning to adjust to the rules related to living in the University community. It also likely reflects efforts by the Judicial Programs Office to respond more vigorously to violations of the Code of Student Conduct.

The Office of Student Life provides learning and development opportunities through student organizations, student involvement in governance, civic and community service options, and social/recreational activities and programs. Respect, responsibility, and integrity are key components in the development of such offerings and in the delivery of services to the campus community. The number of student organizations rose to over 170 in 2001, up from 120 in 1997-1998. The Student Events Board (SEB) also exhibited a steady increase in participation and involvement; nevertheless, only a small percentage of students are involved. At the same time, Greek Life demonstrated success in its service recruitment. For example, the Blood Drive and the Into the Streets programs sponsored by Greek Life exceeded expectations as participation doubled in 1999-2000. The Blood Drive grew from 50 to 100 donors. Into the Streets grew from 150 to 350 participants. Also in 1999-2000, the Office of Student Life developed an evaluation form for participants in SEB events, and found that among those participating, 90% were highly satisfied. Finally, in 2000-2001, UMBC focused on developing a major social event each semester. In the

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[8]Charles Schroeder and Phyllis Mable, *Realizing the Potential of Residence Halls* (San Francisco, CA.: Jossey Bass, 1994).

fall semester, UMBC initiated its first Homecoming Week, and in the spring, presented a much-expanded Quadmania, an annual event that includes a carnival, food festival, and nationally recognized bands. Despite these successes, the Office of Student Life recognizes the need for better marketing of student events and programs, especially on the weekends. The need to reach out and involve more students in campus life, and to offer convenient and compelling events, remains a priority.

Transportation Services provides shuttle and charter bus services within a range of service times and locations. At present, the shuttle and charter bus service is provided to members of the UMBC, and, by contract, to the UMB communities. Limited shuttle routes extend from downtown Baltimore to the Baltimore-Washington International (BWI) Airport and the BWI Rail Station. More frequent service is provided to residential and shopping areas surrounding UMBC. In spring 2001, the Wave n Ride Hospitality Van was added to existing transportation services. The van, which operates from 8:30 A.M. to 2:00 P.M. to transport students from remote parking lots to the interior of campus, runs every ten minutes, and since its inception has served over 1,000 students. Charter buses are also available to Washington, D.C., southeastern Pennsylvania, northern Virginia, and parts of Delaware and West Virginia. Upgrading the fleet of vehicles, a priority for the department in 1999, did not occur due to underestimated staffing costs and significantly increasing fuel costs. To meet the need posed by increased numbers of students living off campus, the office has expanded the number of runs, extended runs later into the evening, and improved the efficiency of driver scheduling, although attaining full student satisfaction remains a challenge. For the first time in the history of the department, the staff now includes full-time permanent drivers. Total system ridership increased this year by nearly 6.5%, representing an additional 9,300 riders. It is expected that the demands for transportation will continue to grow, along with the need for more off-campus housing, as UMBC more aggressively carries out its desire to provide students with broad co-curricular experiences and fuller access to the extraordinary resources Baltimore City and Washington, D.C. have to offer.

The Commons, which will soon replace the current University Center, will provide a comfortable and aesthetically pleasing environment that encourages and promotes continuous student self-development and social interaction. The new, 143,000-square-foot facility will offer eight meeting spaces, a restaurant and food court, bookstore, a 5,000-square-foot game room, student organization offices, cabaret, coffee house, and a sports grille. The 2000-2001 academic year marked the third year of the University Center s new administration and re-organization into three components: Services, Commuting Student Services, and Operations. This reorganization was in anticipation of the move to The Commons, with operational readiness as the goal for January 2002. Development of a Visitors Center for the new building is also underway.

This year also saw the creation of the Intercultural Entertainment Center/Game Room program, as well as the expansion of Commuting Student Services office space. The second annual Commuter Retreat also took place in August 1999 with over 2,000 participants, and the Commuter Block Party/Info Fair was attended by 500 participants. Off-Campus Housing services

were also augmented to provide off-campus locator services, an expanded housing fair, and information resource contacts and roommate referrals.

University Health Services (UHS) is committed to providing UMBC students with outstanding health care and health education programs that, in turn, contribute directly to a healthy campus environment. UHS works with students toward wellness, thus enabling them to attain their academic goals, to participate fully in the UMBC campus community, and to gain the knowledge they need to obtain beneficial health care throughout their lives. UHS seeks to provide students with high-quality, low-cost, and convenient primary and urgent health care services and health education. In 1999-2000, UHS moved to a new space in Erickson Hall, extended its hours, and installed a new appointments, registration, and billing system (PyraMED). As a result, the number of clinical visits rose from 4,190 patients in AY 1999-2000 to 9,201 patients in AY 2000-2001, a 119% increase. In addition, UHS introduced a prescription drug program allowing for the distribution of the most common medications to patients, and also became a State of Maryland anonymous HIV pre- and post-test counseling test site. Programs related to alcohol and other drugs, sexuality, sexual assault, domestic violence, smoking cessation, relationships, body image/eating disorders, and stress were also introduced.

To assess the use of student services and satisfaction with such services, as well as other aspects of student life at UMBC, the Office of Institutional Research (OIR) implemented the *Student Satisfaction Survey* in spring 2000 (see Appendix Items 2 and 3). Two surveys were administered: the Undergraduate Survey was completed by 750 respondents (30% response rate), the Graduate Survey by 372 (37% response rate). In general, both groups of students were satisfied with their UMBC experiences (73.4% and 76.9% of undergraduates and graduates, respectively). Most students reported that they would recommend UMBC to a friend or relative. For the most part, students were satisfied with the services offered to them at UMBC, especially such technology-related services as online registration and computer access. The majority of students reported using, and being satisfied with, services provided by the library, bookstore, computing services, recreational facilities, and residential life. It is hoped that the response rate of future surveys will improve and that these surveys can be used in planning related services.

Campus climate continues to be an area of concern specifically, the desire to enhance further a sense of community at UMBC. While the majority of students surveyed agreed that interactions among staff and students are positive, and that there is a high degree of sensitivity and respect for diversity on campus, only one-quarter of the surveyed graduate and undergraduate students agreed that UMBC has a strong sense of community. Close to the same number indicated that they felt as if they are an important part of the campus community. Among undergraduates, only 7.3% reported involvement with student government organizations. Twenty-one percent reported attending campus cultural events, and 27% reported attending campus social events. The observations by the 1996 Evaluation Team are supported here: only 48% of undergraduates reported wanting to be part of the campus community, suggesting that one roadblock to a strong sense of community at UMBC may be inherent to the students themselves. Students non-academic responsibilities and other demands on their time offer a partial explanation. It is

important to note that 60% of undergraduates reported working off campus, at least part-time, while 14% reported working 40 or more hours per week. Findings from the National Survey of Student Engagement, administered to a sample of seniors and freshmen in spring 2000, found that more than two-fifths (44%) of the seniors work more than 20 hours per week off campus, compared with 31% of the national comparison group compiled from 276 participating institutions. Work responsibilities do appear to occupy a significant amount of UMBC students time. Nonetheless, increasing student involvement in campus-sponsored activities and events will continue to be a major focus of those responsible for student life at UMBC.

Many of these concerns coincide with and, in fact, constituted the stimulus for the creation of the 1999-2000 Task Force on Student Life. The general conclusion of that task force, which submitted its findings in May 2000, was that student, faculty, and staff concerns about student life could be addressed with modest effort and financial support. With the interconnected goals in mind of creating a more vital living and learning environment at UMBC and of strengthening student recruitment and retention, the task force suggested that the most pressing concerns were those that matched desires already expressed in Middle States reports and/or evaluations over the past 25 years. They included the following: weekend and evening events and services for commuter and evening students (expressed in the Middle States reports of 1976 and 1996); lounges for study, meeting, and socializing (1976, 1996); information kiosks and other campus advertising improvements (1976); expanded opportunities for faculty-staff-student exchange (1976); cultural and social events attractive to the University community (1986, 1996); increased library holdings, staff and services (1986, 1996); additional housing on campus (1976, 1986); enhanced community spirit/campus life (1976, 1986, 1996); increased satellite services surrounding the campus (1996); better food service, parking facilities, financial aid, and programs for residential students (1996); more sufficient communication between various units and departments of the University providing services to students (1996).

Though some of these concerns have been at least partially addressed (increased parking space, expanded shuttle service, and other improvements described previously), the Task Force on Student Life continued discussion of its recommendations with various constituencies in 2000-2001 in order to prioritize the many remaining items and to help the Planning Leadership Team (PLT) and Budget Committee create an implementation plan. The highly anticipated Commons, the first Homecoming Week in fall 2000, the addition of new dormitories, and the new Retriever Activities Center are steps toward our goal of enhancing support services and the social climate at UMBC. To ensure ongoing attention to these concerns, President Hrabowski convened the Student Involvement Council in spring 2001, the purpose of which is to stimulate student involvement and engagement in campus life at UMBC. The charge to this group is to identify impediments to involvement, propose solutions to problems, and build collaborative relationships that support development of programs, activities, venues, and traditions that enhance student and campus life. To underscore the importance of this committee and the concerns it is addressing, President Hrabowski remains the Chair of the Student Involvement Council, whose membership includes a broad range of students, faculty, staff, and administrators. Key to the process of furthering student involvement at UMBC is implementation of the Council s recommendations.

With this in mind, the Student Involvement Council Implementation Team has been formed and will be responsible for carrying out the core Council s recommendations, after those recommendations have been thoroughly vetted on campus.


## IV.E.    Shared Governance

Within the University System of Maryland, UMBC has been lauded for its commitment to and successful practice of shared governance. Although the President retains ultimate authority and responsibility for the University s operation, he is guided by the formal recommendations of representative bodies on the campus and by the advice of senior faculty, staff, and administrative personnel.

There are five representative bodies at UMBC: the Faculty Senate, the Student Government Association, the Graduate Student Association, the Professional Associate Staff Senate, and the Classified Staff Senate. Each Senate operates under its own bylaws and has authority to make recommendations to the other Senates and to engage in actions assigned to it by the UMBC Plan of Organization or by the Steering Committee. Each body is consulted by the administration on major policies, procedures, and guidelines affecting the UMBC community, and each also initiates ideas for consideration by the other Senates and approval by the administration.

The Steering Committee consists of the President and Vice President of each Senate.  The duties of the Steering Committee include coordinating the actions of the five Senates and making recommendations for consideration by each Senate. The Facilities Planning and Scheduling Committee, the Athletics Committee, the Library Policy Committee, and the Committee for Racial and Ethnic Justice consist of members elected from each Senate, and these committees report to the Steering Committee as well.

The President s Council advises the President on major matters of University policy and planning. It also serves as a forum for communication among senior administrators and faculty. The Council, which meets weekly with President Hrabowski, comprises the four Vice Presidents (Academic Affairs, Administrative Affairs, Student Affairs, and Institutional Advancement), three Deans (Arts and Sciences, Engineering, and Graduate School), five Vice Provosts, the Faculty Senate President, the Chair of the Senate s Academic Planning and Budget Committee, University Counsel, Chief Information Officer, and the Assistant to the President.

The Provost s Council serves as a forum for debate and discussion of policy, planning, and University procedures. Its membership includes all those attending President s Council (with the exception of the President himself) and other administrators in support positions. In addition to regular members, persons from the campus community are frequently invited to present relevant information or to answer questions pertaining to the agenda.

In previous years, the Budget Committee comprised the President, Provost, Vice President for Administrative Affairs, Vice President for Institutional Advancement, Vice President for Student Affairs, the Dean of the Graduate School, the Dean of Arts and Sciences, the Dean of Engineering, and the Budget Officer. In the spirit of shared governance, the committee was expanded in 1999 to include two faculty members: the President of Faculty Senate and the Chair of the Senate s Academic Planning and Budget Committee. Also added were the University Counsel and Associate Vice President for Marketing and Public Relations.

UMBC s current approach to planning is to focus at the institutional level on broad issues of strategic importance to the University s future. The strategic planning process is guided by a Planning Leadership Team (PLT), which is appointed by President Hrabowski and Provost Johnson. Members of the PLT currently include the following individuals: the Provost; the Vice President for Administration and Finance; the Vice President for Institutional Advancement; the Vice President for Student Affairs; the Dean of the Graduate School and Vice Provost for Research; the Dean of the College of Engineering; the Dean of the College of Arts and Sciences; University Counsel; the Faculty Senate s President, Vice President, and Chair of the Academic Planning and Budget Committee; the Chair of the Student Life Task Force; the Chair of the Research Culture and Environment Task Force; the Chair of the Honors University Task Force; and the Co-chairs of the Middle States Periodic Review. (For a list of names of the individuals currently serving in these positions, see Appendix C.)

Prior to the appointment of the 1999-2000 Task Force chairs, the PLT defined the overarching vision to guide the planning effort and articulate values important to UMBC. The PLT also reaffirmed several priorities identified through past University planning discussions. These vision, values, and priorities statements informed the selection of the three broad areas for the strategic planning focus in 1999-2000: UMBC as an Honors University, the Research Environment and Culture at UMBC, and Student Life at UMBC (see Sections II and IV for the vision, values, and priorities statements). The Planning Leadership Team advised the Provost on task force leadership and membership and developed the task force charges (see Appendix D).

In addition to the Senates, Councils, and Committees that have formal responsibility for University governance, there are other groups of campus leaders who are kept informed of current issues and whose input on those issues is regularly sought. The Deans of Arts and Sciences and Engineering meet regularly with their Department Chairs and academic program directors; the Dean of the Graduate School meets with the Graduate Program Directors; and the Directors of campus administrative units also convene on a regular basis. The Provost meets with all Department Chairs twice a semester, and both the President and the Provost meet with the Faculty Senate at its monthly meeting. The Faculty Senate Executive Committee also has a monthly  working dinner  with the President, Provost, and other administrators. Finally, the campus community is also informed of emerging policies and priorities through the posting of drafts of task force reports and reports of other committees on the Provost s website.

## IV.F.        Organization and Administration

IV.F.1.        External Context

     <u>University System of Maryland and Board of Regents</u>. UMBC is one of thirteen institutions and research centers that together constitute the University System of Maryland (USM). The seventeen-member University System of Maryland Board of Regents governs the USM and is responsible for setting broad system-wide policy. The Chancellor serves as Chief of Staff of the Board and Chief Executive Officer of the System.

     <u>Maryland Higher Education Commission</u>. A statewide coordinating agency, the Maryland Higher Education Commission (MHEC), is responsible for statewide planning and policy issues, the approval of postsecondary institutions, campus mission statements, academic programs, administration of State financial aid programs, and accountability matters.

     <u>Larson Task Force and Senate Bill 682</u>. In 1998, the Task Force to Study the Governance, Coordination, and Funding of the USM was established to review the status of the USM and its constituent institutions 10 years after enactment of legislation that reorganized Maryland higher education and created the System. The Task Force found that the intent of the 1988 legislation to create a decentralized system in which management authority was delegated to the campus Presidents had not been fully realized and that State regulations, administrative procedures, and reporting requirements posed undue burdens on the institutions. In response to the Task Force report, the leadership of the Maryland General Assembly submitted legislation, Senate Bill 682 (SB 682), to address governance, funding, and State planning issues. As enacted, SB 682 required the Board of Regents to delegate authority for developing and implementing policies that promote the mission of the institution to the campus presidents, limited the scope of MHEC and Board of Regents review of new academic programs funded within existing resources, required MHEC to coordinate the development of a new State Plan for Higher Education, focused MHEC review of mission statements for their consistency with that Plan, renewed MHEC s responsibility for developing funding guidelines based on peer comparisons, and requested that a review of reporting requirements be undertaken.

     As mandated by SB 682, MHEC adopted a new Maryland State Plan for Postsecondary Education in June 2000. The Plan sets forth eight major statewide goals and a number of related strategies and objectives to guide institutional and statewide planning. Campus mission statements and new academic programs, for example, must be responsive to the goals and objectives identified in The Plan. In addition, the USM has issued a strategic plan, *The USM in 2010: Responding to the Challenges that Lie Ahead* (see Appendix E), adopted in 2000, which identifies goals for System institutions and includes specific institutional strategies for achieving them. UMBC s institutional strategies are included in *The USM in 2010*.

     In addition, MHEC coordinated the development of new funding guidelines for USM institutions, which were adopted in late 1999. The guidelines establish a methodology for

benchmarking funding and performance at System institutions relative to peer institutions nationwide, and established a goal to fund the institutions at the upper quartile of their peers. Significantly, the land grant college at College Park and the two research universities, UMB and UMBC, are at the top of the priority list in the new funding guidelines. Specifically, the combined total of State appropriations, tuition, and fees per full-time equivalent student is set equal to the $75^{th}$ percentile of UMBC s peers. Projected enrollments, tuition, and fees are then used to set the budgeted State appropriation. Since tuition increases are offset by a reduction in the State appropriation, and vice versa, there is no incentive to raise tuition and fees or to target recruitment of out-of-state students who pay higher tuition. The funding guidelines have resulted in a relatively larger percentage budget increase for UMBC than for other USM institutions, because, as noted in the 1996 *Self-Study*, UMBC s level of funding has historically been extremely low within the USM. As we have matured to a Doctoral/Research Universities-Extensive institution with an expensive mission and growing student population, additional resources are warranted and necessary. There are provisions in the guidelines to phase in aspirational peers for current peers over time, so as to move the USM institutions into the top tier of universities nationwide. Most important, UMBC, the UMB professional schools, and UMCP have been ranked at the highest priority levels for future funding.

IV.F.2.        Internal Context

Organizational Structure. At the same time that UMBC is strongly committed to shared governance, an organizational structure is in place that facilitates the efficient, effective, and responsible delegation of tasks, oversight, and accountability. As the Organizational Chart in Appendix F indicates, the senior administration includes the President, with whom overall responsibility resides, and who is supported most directly by the Provost and Vice President for Academic Affairs, the Assistant to the President, and University Counsel. Also reporting to the President are the three Vice Presidents who oversee Administration and Finance, Student Affairs, and Institutional Advancement. Working closely with these individuals and also reporting to the Provost is a group of four Deans: the Dean of the Graduate School and Vice Provost for Research; the Dean of Art and Sciences; the Dean of Engineering; and the Associate Dean of Social Work. Four Vice Provosts oversee Academic Affairs, Faculty Affairs, Student Academic Affairs, and Community Partnerships. Another Vice Provost, who serves also as Executive Assistant to the President, reports to both the Provost and the President.

Financial Operations. UMBC has made considerable progress toward strengthening administrative operations in the past five years. The Department of Management Advisory Services was created to focus on addressing deficiencies identified in audits and improving departmental business practices and controls through on-site reviews, advising, and training. The most recent legislative audit report, begun in 1999 and completed in 2000 (see Appendix G), showed significant improvement, with the number of audit report findings cut in half since the previous audit cycle (1996-1997).

Numerous staff positions in our Comptroller s Office have been added or upgraded since the last report. This included creation of a General Accounting section and increased staffing in the Grant Accounting section. These improvements will strengthen the infrastructure needed to support the campus s efforts to continue substantially increasing grants and contracts.

UMBC implemented the State s purchasing card program and has steadily increased the use of the card for small-dollar purchases campus-wide. In fiscal year 2000, over $7 million of purchasing was completed using the card. This is a 140% increase over the previous year. Also, consistent with our commitment to use technological innovations to improve efficiency and effectiveness whenever possible, we implemented an online, web-based purchasing card transaction reallocation system. The P-Card Web system will greatly reduce the volume of paper flowing between campus departments and the Comptroller s Office and will provide departments with more control over how and when their charges are allocated to the appropriate budgetary accounts and subcodes.

Training continues to be a high priority at UMBC to ensure that our employees are provided with the information they need to perform their job duties in the most effective and efficient way possible. Some recent training initiatives include the following: refresher training on usage, record keeping, and supervision for the purchasing card offered to all cardholders and supervisors; training on the purchasing card transaction reallocation system; internal controls training for university departments; and training in financial system inquiry and review of reports.

Finally, UMBC has recently implemented  The Campus Card  program, which allows students and employees to use their ID card as a debit card. The program, originally available only for food purchases on campus, has been expanded to include purchases made at the bookstore, vending machines, library copiers, and laundry facilities. Limited building access and payment of student fees are also covered by the card.

UMBC remains committed to improving its administrative operations campus-wide with an ever-watchful eye on our audit compliance. We plan to continue improvement of the operations highlighted here and will be bringing new and improved services to other administrative operations. In this regard, UMBC will be implementing not only a new financial accounting system but a new human resources system as well. We will also be focusing efforts on providing appropriate training to the campus community in areas ranging from internal controls to managing grant and sponsored research activity.

Institutional Research. UMBC s Office of Institutional Research (OIR) functions as the primary source of official campus statistics, collecting, synthesizing, interpreting, and disseminating both internal and external data relevant to UMBC. OIR responds to Federal, State, and USM reporting requirements, conducts surveys (of students, alumni, faculty/staff, and employers), and responds to requests for information about the University from higher education associations, accreditation teams, admissions guidebook publishers, other colleges and universities, and UMBC s departments, faculty, staff, and students. In addition to serving these

core functions, OIR has recently undertaken a number of special research studies to assist in campus policy development, planning, and decision-making.

These undertakings were stimulated in part by the 1996 Middle States Evaluation Team s observation that the Office of Institutional Research could play a more central role in [UMBC s] new planning effort by providing a menu of increasingly sophisticated decision support and policy analysis capability (Middle States Evaluation Team *Report*, p. 13). OIR has made a concerted effort in the past five years to focus more on analytical studies, while continuing to meet the increased demands for mandated and ad hoc reporting. In 1999-2000, for example, analytical staff members (OIR s Director, Assistant Director, Senior Research Analyst, and part-time Research Analyst) conducted or participated in five surveys (Alumni Satisfaction, Undergraduate and Graduate Student Satisfaction, National Survey of Student Engagement, and Employer Satisfaction), as well as five special studies: (1) *New Freshmen and New Transfers at UMBC: A Comparison of Academic Performance*; (2) *Enrollment Switching Patterns of New Freshmen*; (3) *Revenue Generation of Various Types of Students*; (4) *Quantitative Analysis Differentiating Carnegie Classifications and* U.S. News & World Report *Tiers*; and (5) *Tracking Transfers via the NSLC [National Student Loan Clearinghouse]*.

Additionally, OIR has been active in the campus s Information Technology (IT) efforts, particularly as they relate to administrative systems and reporting issues. The Director of OIR serves on the IT Steering Committee, the Financial Resources System Committee, and the Administrative Applications Panel, has led the recent campus effort to establish a Data Administration team, and is a member of the Provost s Council. OIR was also instrumental in exploring UMBC s best options for developing a decision support system (data warehouse) as the University s legacy systems grew more and more outdated and ineffective in facilitating data access and decision support. OIR s need for a data warehousing system is beginning to be met with UMBC s fall 2000 acquisition of PeopleSoft s integrated suite of administrative systems, the installation of which is currently being planned (see Section IV.G.2. below).

This last initiative will help UMBC respond more extensively to the 1996 Evaluation Team s challenge regarding OIR s lack of sophisticated measurement instruments and the related timeliness of the Office s studies. Meanwhile, OIR has migrated its data files from the VAX-cluster workstation (running mainframe SAS) to a Novell server, and most of the old SAS programs have been converted to PC-SAS (analysts use both PC-SAS and SPSS-PC, as well as ACCESS and Excel). Last year, the Office purchased a PC to be used as an SQL-server to experiment with creating Data Marts for more integrated data systems and easier data access.

Assessing UMBC s performance as a nationally competitive research university has been a critical OIR role, especially in the past five years. Performance Accountability reporting has been mandated for all Maryland higher education institutions since 1996, and in 1999 it was merged into the Governor s Statewide Managing For Results (MFR) reporting requirement. Both Performance Accountability and now MFR involve benchmarking performance indicators against the performance of current and aspirational peer institutions. Starting in FY 2001, MFR has been

used by the State in making campus funding decisions. OIR was instrumental in developing UMBC s MFR Report, as well as in identifying UMBC s peers, thereby playing a critical role in monitoring UMBC s performance relative to other institutions and in providing crucial information for campus planning and decision-making.

OIR plays a vital role in UMBC s planning initiatives and, moreover, provides the data, analysis, and interpretation that constitute the foundation from which the University can more effectively engage in continuous self-study. Mandated reporting to MHEC, the USM, and the State Legislature increased significantly in the 1990s. Adequate funding for this Office remains a challenge as it continues its proactive, engaged mission on campus.


## IV.G.     Resources

Since 1996, there has been considerable improvement in the level of resources available to UMBC. The next five sections outline our current status with respect to financial resources, information technology, the Albin O. Kuhn Library & Gallery, the Learning Resources Center, and the Physical Plant.

### IV.G.1.     Financial Resources

The University s financial profile is summarized in Table GEN1, which presents the actual budget, from fiscal years 1992 through 2000, and the 2001 budget appropriation. The 2002 budget request, and the conservatively estimated budgets for 2003 to 2006 are shown in Table GEN2. Total revenue has increased 50.5% between 1996 and 2000, compared with a 38.2% increase in the preceding four years (1992-1996), and the 2001 budget appropriation represents an additional 14.2% over fiscal year 2000.

The growth in revenue from tuition and fees is the result of increasing enrollments as well as moderate growth in tuition and fees per se. A cap on tuition increases limits USM institutions to a maximum of 4% per year increase in tuition. For FY 2000, tuition and fee revenue was $44.8 million, a 27.9% increase since FY 1996. The appropriation for FY 2001 represents an additional 4.8% increase over FY 2000.

Perhaps most noteworthy is the increase in State appropriations since 1996. The Middle States Evaluation Team s 1996 *Report* specifically highlighted funding parity for UMBC as a significant concern (see Section V.E. below), and the information in Table GEN1 demonstrates convincingly both that this was, indeed, a serious issue and that it is now being addressed. In the period from 1992 to 1996, State appropriations increased only 10.0%, from $40.6 million to $44.6 million. In the next four-year period, the State appropriation rose to $59.4 million, a 27.9% increase. In FY 2001, the State of Maryland s new funding guidelines went into effect, and the net effect on UMBC s budget dramatically confirmed our previous level of serious underfunding relative to our peers. The State appropriation for UMBC in 2001 was $66.5 million, a one-year

increase of 12.0%. The allotted budget increase for FY 2002 will reflect a 15.7% increase over FY 2001.

Grants and contracts have also grown substantially since 1996, particularly those funds that are restricted, such as grants and contracts for research, both for individual faculty and for research centers and institutes. The growth in all categories of restricted revenue has been extraordinary. In the period from 1992 to 1996, there was an impressive growth of 60.3% in Federal grants and contracts. However, from 1996 to 2000, the increase was 125.0%, followed by another 15% increase for the first six months of FY 2001. Fiscal year 2000 also witnessed a four-year increase of 72.6% in private gifts, grants, and contracts, and an 84.9% increase in State and local grants and contracts. (For more detail, refer to Section IV.B.2.)

Finally, UMBC s Capital Campaign, launched in 1997, has achieved outstanding success, raising more than its five-year $50 million goal in just three years. Additional details about the Capital Campaign are given in Section V.F.2., which responds to concerns of the 1996 Evaluation Team regarding external support for UMBC.

IV.G.2.        Information Resources

Technology Advances. Since the last report, UMBC has had a number of impressive accomplishments in computing and information technology. From earning two gold medals in 1999 from the Council for the Advancement and Support of Education (one for our website and one for *my*UMBC, a web portal for students, faculty, and staff) to being the first non-Research I university to receive an NSF high-speed networking award in 1997, UMBC is well positioned to assume a leadership role in the use of computing and information technology within higher education. UMBC s progress in this area ranges across teaching and learning, research, and administration.

By the end of calendar year 1996, two key recommendations of the previous year s Information Technology and Transfer (ITT) Planning Task Force had been realized. First, we put in place an advanced campus-wide network connecting every member of the campus and providing support for researchers in need of high performance. Second, we set into operation a common system for computer accounts, electronic mail, and LAN services. Also in 1996, UMBC instituted its first web-based system, EASI (Electronic Access to Student Information), which provided students with online registration, add-drop, semester grade lookup, transcripts, and billing inquiry. In 1997, UMBC was awarded a connection to the very high-speed NSF Backbone Network Service (vBNS), which increased support of research faculty, especially in collaborative activities with NASA and other regional research agencies. The following year, UMBC was accepted as a member of Internet2 (one of the first non-Research I universities to be accepted) and began working closely with other Internet2 schools in the development of high-speed networks. UMBC continues to expand and enhance the campus network with the goal of having every

desktop meet base Internet2 guidelines, a goal we expect to meet by the end of academic year 2000-2001.

In the area of teaching and learning, UMBC purchased its first course management product, WebCT, and began providing learning workshops in summer 1997. Two years later, usage had risen to 4,000 student enrollments across 75 courses each semester, where it reached a plateau. In response to this phenomenon, UMBC applied for and was awarded a grant of $205,000 from MHEC for training faculty in the use of technology-enhanced learning. Toward this end, UMBC has purchased the enterprise edition of Blackboard CourseInfo and has established a New Media Development and Learning group to support faculty.

All of UMBC s systems came through Year 2000 well, but the labor-intensive 18-month period between late 1997 and spring 1999 revealed the need for a number of administrative enhancements. In response, UMBC created an administrative system upgrade plan that included short-term improvements in order to meet current goals, as well as a longer-term improvement plan that includes the replacement of our major administrative systems with a new ERP system providing a new Student Information System, Human Resources, and Financial system. This is a five-year initiative aimed at providing better services in the areas of facilities scheduling (Schedule/Resource 15), degree audit (Degree Navigator), admissions (Exeter), and financial reporting. To provide integration among these systems and ease of use, UMBC created the *my*UMBC web portal. Providing customized information and access to students, faculty, and staff, *my*UMBC has been exceptionally well received and is now being expanded to provide support to alumni and prospective students, in addition to admitted students.

A significant aspect of this expansion took place in fall 2000 when UMBC entered into an agreement with PeopleSoft Corporation to purchase its integrated suite of administrative systems, covering human resources management, financial management, student administration, and enterprise performance management (data warehousing). The agreement was the culmination of a two-year evaluation of other systems, with PeopleSoft ultimately proving to be the tool needed to strengthen the campus administrative infrastructure and to provide better access to data across systems. It is significant that most of the USM campuses have entered into the same agreement with PeopleSoft, thereby providing increased opportunities for economies and sharing resources among campuses.

Central to all of these accomplishments has been the development of a well-conceived organizational structure for developing and deploying information technology at UMBC. In 1998, the campus established the IT Steering Committee. In keeping with UMBC s dedication to shared governance, this committee includes administrators, staff, and faculty. Recognizing the need to develop a new plan that would carry UMBC forward in the area of computing and information technology, the committee released an IT Strategic Plan in April 2000 (see Appendix H). The document examines the areas of teaching and learning, research support, and administrative systems, and  is currently being used as part of the campus planning and budgeting process.

Finally, UMBC takes the issues of computer security and computer ethics very seriously. UMBC uses the Kerberos security system, developed at MIT, to authenticate access to resources, including *my*UMBC. As part of our commitment to securing IT resources, the Office of Information Technology (OIT, formerly University Computing Services) has three full-time staff members focused on computer security issues, each of whom has taught security sessions at a number of national security conferences. UMBC has also taken a leading role in the development of a secure version of Linux for higher education. One of our OIT security staff is directing this project, presently called  bastille linux,  and our CIO (Chief Information Officer) is participating in an Educause project on securing campus IT resources.

UMBC believes that computer ethics need to be integrated into the broader issue of personal ethics. The OIT works closely with the Office of Student Judicial Affairs and the Academic Conduct Committee to promote ethical behavior and to deal with issues that arise. Our initial goal when abuses occur is to focus on educating the student about personal responsibility. To demonstrate the success of our approach, in the past five years, we have had to deal with only one repeat offender.

Computing Resources/Assured Access. UMBC is committed to ensuring all students, faculty, and staff access to a computer by fall 2001. The fundamental commitment required of the institution is to provide the necessary infrastructure for teaching, learning, and scholarship to take place. This entails ensuring that all students have equitable access to computing regardless of income and providing those students who have financial need with a variety of options. The options for students who have been identified with financial needs range from a low-cost rental machine ($120 a semester or $30 for four months) to special low-cost monthly arrangements with the Dell company (payments of under $30 a month). Depending on students  needs for portability and conversion of their work, OIT will monitor and support demand for on-campus computing in labs and at public-access terminals. All but one of the residence halls are currently wired for Ethernet access.

As of January 1, 2000, UMBC used the Microsoft Enterprise Agreement to provide students, faculty, and staff with Microsoft Office 97 and Microsoft Office 2000 Premier (Word, Excel, Access. FrontPage, Publisher, and PowerPoint), along with Microsoft Visual Studio (Visual C, C++, Basic, J++, and Visual Interdev). In addition, twice a year UMBC develops a free CD-ROM with a large number of free, high-quality software packages recommended to the campus and used in UMBC labs. This software generally includes the Netscape browser, important browser plug-ins (such as Adobe Acrobat Reader), and other selected internet utilities (such as FTP, Telnet, and NetMeeting). OIT supports and advises students, faculty, and staff in the installation of this software.

Professional development opportunities are available to all faculty and staff through OIT. The Faculty Empowerment through Common Tools (FaCT) program, launched in 2000 with a $205,000 MHEC grant, provides training and infrastructure that make it easier for faculty to use technology in their research and teaching, including courseware authorizing tools and streaming

video. UMBC is also a member of Oracle s Academic Initiative, a partnership that allows UMBC to offer an Oracle Certified Professional (OCP) Program that trains the next generation of database administrators and developers in the dominant commercial database engine for industrial applications.

As technology becomes a more commonplace pedagogical tool, the need for guidance in critical thinking about its uses will increase. English 101T has incorporated modules on technology literacy for students entering UMBC, and the Task Force on UMBC as an Honors University has proposed a required course for freshmen that would help incoming students develop critical methodologies for evaluating research materials located online.

Provost s Computer Replacement Initiative. In May 2000, the Provost launched the Computer Replacement Initiative for 2000-2001 with an announcement to Chairpersons, Directors, and Division Heads regarding deployment of new computer applications during this academic year. New applications include the following: FinanceWeb for Financial Accounting System (FAS) budget review; Degree Navigator to support student advisement; and FaCT. Because these new applications make use of the web, including streaming video and javascript, appropriate computer upgrades are needed on campus.

The Computer Replacement Initiative included a detailed policy, guidelines, and application forms with which faculty and staff were invited to submit requests through their department heads to upgrade or replace existing equipment through a subsidy program wherein the University pays 75% and the department pays 25% of the replacement costs. The OIT provided a web page for information on the initiative, as well as individual consultation and assistance to faculty and staff in determining their needs. The Vice Provost for Academic Affairs coordinated the awards process so that new equipment and upgrades could be ordered and attained by the start of the academic year. Student machines are recycled every four years, and UMBC has made a commitment to replace faculty and staff machines on a three- or four-year cycle. To meet this commitment, the budget for computer replacement will be increased systematically over the next three years. Replaced computers are returned to students  and faculty s home departments, who decide whether to surplus the machines, donate them to a school or other non-profit organization, or recycle them in another fashion.

IV.G.3.        Library

The Albin O. Kuhn (A.O.K.) Library is a user-friendly, technologically sophisticated library with approximately 750,000 volumes (as of 2000), an increase of almost 140,000 volumes since UMBC s 1996 *Self-Study*, which was submitted the year after the opening of the Library s new, seven-story addition. Also included in the holdings are 4,200 subscriptions, over one-third of which are available online, and over 1.5 million photographs and slides. The number of databases in operation is vast, providing access to nearly 100 article indexes and abstracts and to more than 800 online journals. More than 200 other reference databases can be reached from the Library s

home page, and these resources are being augmented constantly. For example, JSTOR, which provides online access to numerous journal backfiles, was acquired in 2000.

The Library also houses the campus s Library Media Collection, which offers audio and video recordings for use in research and for the enhancement of classroom presentations. Additionally, the Special Collections unit contains a non-circulating array of unique, nationally significant primary research materials, ranging from limited-edition artists books, to the Archives of the American Society for Microbiology, to a major archive of photographic works by such individuals as Lewis Hine and Alfred Stieglitz, to the Azriel Rosenfeld Science Fiction Collection and other collections of rare books. The A.O.K. Library & Gallery serves as one of the principal art galleries in the region, presenting items from Special Collections, as well as art and artifacts from around the world, in challenging and informative exhibitions for the University community and the public.

As for circulation, the Library participates in highly responsive interlibrary loan services with online request privileges, providing, in many cases, online or free fax delivery of requested materials (the UMBC Library pays the fees). UMBC users can explore online the holdings of 13 libraries at 11 USM campuses, request circulating books from these libraries, and expect delivery to the local USM library of their choice within a few days. UnCover is an especially useful resource for faculty and graduate students, providing tables of contents of recently published journals and books, as well as free fax delivery of articles, usually within 24 hours, from more than 17,000 journals. All these services are amplified by an extensive reciprocal borrowing program, which offers UMBC Library users the possibility of borrowing directly from other Baltimore area academic libraries. UMBC participates in the Maryland Digital Library Project (MDL), which is modeled after such projects as Gallileo in the State of Georgia and VIVA in Virginia. The MDL provides UMBC and all other academic institutions in Maryland access to online resources well beyond what most campuses could afford to offer within their individual library materials budgets.

Since our last report, the Library has worked closely with the OIT in fully networking the A.O.K. Library building, the results of which are quality workstations for the entire staff and over 200 workstations for users, as well as expanded printing services, web access to various Library databases and other information resources, authenticated access to proprietary-purchased online resources for off-campus users, digitization of slides, and electronic reserves.

A major change in employee status for librarians took place in April 2000, when the USM Board of Regents granted faculty status to librarians throughout the System. This measure, which had the full support of the UMBC faculty and administration, should enhance recruitment and retention of librarians. Staff expansion began in FY 2001, when two new lines were added to the Library; additional lines and student help are envisioned.

The Middle States team evaluating UMBC s 1996 *Self-Study* raised several concerns regarding the Library, especially the adequacy of holdings for doctoral research, new acquisitions,

and staffing. The Library has worked closely with administration over the past five years in developing an aggressive plan for responding to these concerns. In Section V.D. of this report, we will discuss the details of this plan and the status of its implementation, expanding upon the accomplishments just mentioned.

### IV.G.4. Learning Resources Center

The Learning Resources Center (LRC) is responsible for providing academic support to UMBC students. Each year, the LRC serves over 3,000 students, offering a wide variety of free services and programs. These include the following: tutoring by appointment for more than one hundred 100- and 200-level courses; walk-in tutoring in the Math Lab, Writing Center, and the Evening Center; paid peer-tutoring positions for qualified students; accurate course selection for new students through placement testing; study skills assistance for UMBC courses; spoken English improvement for academic use for international teaching assistants and others; early warnings to freshmen via the Freshmen Year Interim Report Program; the International Teaching Assistants Program (an orientation and instructional program for prospective international teaching assistants featuring English proficiency testing, tutoring, and/or classroom instruction); and LRC skills-development courses in math, English (ESL), reading, and studying.

### IV.G.5. Facilities:  Plant and Equipment

UMBC is currently in a period of substantial facilities growth. In 1995, facilities holdings totaled 1,619,388 gross square feet (GSF). It is expected that this number will have grown to 2,541,118 GSF by 2002. During the five-year period from 1996 through 2000, six major buildings opened, the South Campus Technology Center was acquired, new parking and recreation facilities were constructed, and numerous facility renovations were completed. The capital expenditures during this period totaled approximately $140 million. Another seven projects, in design or under construction currently, are scheduled to be completed by 2002 and will total an additional $162 million. The following time line reflects the campus s progress in terms of capital improvements since the 1996 Middle States *Self-Study*.

1996 - Purchase of South Campus: UMBC added 169,000 GSF to its facility holdings through the purchase of a multi-tenant facility at the south end of campus. This facility provides research space for start-up companies with research connections to UMBC; the tenants, in turn, provide learning experiences for UMBC students through internships, etc.

1997 - Completion of the Physical Plant Facility: The Physical Plant had been operating out of utility sheds and 50-year-old barns in the center of the campus until a new 40,216-GSF plant opened in 1997 to house all facilities-related trades and the University's parking offices.

1997-1999 - Expansion of Athletic Facilities: Several projects, some of which were discussed earlier in this report, were completed, vastly enhancing the athletic and recreational potential of life on campus. They included the following: installation of artificial turf in the soccer stadium field, which has augmented options for scheduling games; an increase in the numbers of bleachers and the shift from plain bleachers to stadium seats; renovation of the stadium locker rooms; the completion of an Olympic-size outdoor pool; and completion of the 54,000-GSF Retriever Activities Center.

1997 - Theatre Expansion: Prior to the completion of a new 3,200-GSF expansion of the building that houses the Department of Theatre, the costume and stage exhibit areas of the department were located in trailers attached to the building s main structure. Those temporary quarters were demolished and the new facility constructed in their place, providing UMBC s award-winning department with one of the best costume/design facilities in the University System.

1999 - Opening of the Physics Building: This structure provides new, state-of-the-art research laboratories, teaching laboratories, offices, and tutorial spaces for the Department of Physics, which had previously been co-located with the Department of Chemistry and Biochemistry. The renovation of the Biology Building, which was funded in part by a National Science Foundation (NSF) grant, was completed at the same time, and the Chemistry renovation is to be included in the 2002 budget request. The new Physics Building boasts one of the few atmospheric and research telescopes in the State of Maryland. The offices of the Dean of Arts and Sciences are also located in this building.

1999 - The Lawn Project: During the construction of the Physics Building, UMBC sought and received approval to redesign the five-acre parcel between the A.O.K. Library and the Physics Building, enhancing recreational possibilities for the UMBC community.

1999-2002 - Expansion of Student Housing: Strides made in this area have been considerable, as noted earlier. Erickson Hall Phases I and II have provided approximately 500 new beds; Phases III and IV, scheduled for completion in 2001-2002, will provide 500 more. The innovative approach to financing these new facilities  through a public/private partnership with the Erickson Foundation  has become a model for university entrepreneurship. The Foundation, which supports educational, scientific, and research initiatives, agreed to finance and construct the new facilities; UMBC agreed to lease the land to the Foundation (for $1 per year for 40 years) and rent rooms in the completed facilities exclusively to UMBC students. UMBC does not own the buildings, nor is it liable for debt incurred, but does provide furnishings, maintenance, and repairs. At the end of the lease term, the facilities will be donated to the University of Maryland Foundation for UMBC to continue using for student housing.

2000 - Central Plant Expansion/Chilled Water Tower: The University completed a 7,200-GSF addition to the central plant building, helping to meet the needs of our fast-growing campus. The 1.6-million-gallon chilled water tower, the only one within the University System, is an

energy conservation installation that produces chilled water at night to distribute to the campus during the day.

2000-2002 - Building Renovations for Biological Sciences and for Chemistry and Biochemistry: The Department of Biological Sciences is housed in UMBC s oldest building, which opened upon the founding of the University in 1966. No longer capable of meeting the increased demands placed upon it, the facility required gutting and replacement of its entire infrastructure. The renovated facility opened in fall 2000. The Department of Chemistry and Biochemistry, which had shared its building envelope with the Department of Physics until the latter moved into its new quarters, is currently undergoing a facilities renovation that will include upgraded teaching and research spaces, as well as improved infrastructure.

1995-2002 - Expansion of Campus Parking: Between 1995 and 2000, UMBC added several hundred parking spaces by expanding a number of surface lots, building new surface lots, and erecting a parking structure. In fall 2000, a 445-car parking structure was opened on the site of a former surface parking lot (Lot l). This multistory facility is located at the heart of the campus, adjacent to the Physics Building and in close proximity to The Commons. With more than 70 meters for short-term parking, this facility opens up the campus, making it more accessible and inviting to visitors, especially.

2001-2002 - Completion of New Buildings, including The Commons, Public Policy, and Information Technology/Engineering: The Commons, as discussed earlier, will open in January 2002. This 143,000-GSF facility will house a restaurant and food court, bookstore, retail shops, meeting spaces, and lounges. The Public Policy facility (57,500 GSF) and the Information Technology/Engineering facility (138,300 GSF) are slated to open in winter 2003. In all three of these projects, UMBC will voluntarily meet some of the new Federal standards for sustainability. These efforts comply with Governor Parris Glendening s recommendations in his Executive Order of March 2001,  Sustaining Maryland s Future with Clean Power, Green Buildings, and Energy Efficiency.  Toward this end, these buildings will use recylced materials, cork and terrazo floors, low-E glass, sunscreens on the windows, and efficient heating and cooling systems, for example.

IV.G.6.        Research Programs and Outreach Activities: New Centers on Campus

UMBC has established several new Centers since the 1996 Middle States visit. These Centers have created new opportunities for research and have enhanced curricular and pedagogical possibilities in teaching and service.

(1) The Goddard Earth Sciences and Technology Center (GEST) was launched in spring 2000 under a $75-million, five-year cooperative agreement with the National Aeronautics and Space Administration (NASA). UMBC is leading a consortium of universities and private sector companies in this venture, the goal of which is to study the earth s surface, atmosphere, and oceans. Using global satellite data and powerful computer modeling techniques, Goddard

scientists collaborate with faculty, students, and staff associated with the GEST Center in finding ways to better understand the planet and the processes that are shaping its future. Toward this end, GEST coordinates several graduate-level summer programs at the Goddard Space Flight Center, including the NASA Summer School for High Performance Computational Earth and Space Sciences, the Graduate Student Summer Program in Earth Science, and the Visiting Student Enrichment Program. The consortium, which includes Howard University (Washington, D.C.), Hampton University (Hampton, Virginia), Northrop-Grumman s Electronic Sensors and Systems Center (Baltimore), and Caelum Research Corporation (Silver Spring, Maryland), will also promote earth science education in grades K-12 and provide media outreach to foster public interest in NASA earth science research. This grant, which represents a unique and promising collaboration between government, industry, and academia, is the largest in UMBC s history.

(2) The Center for Women and Information Technology (CWIT), established in 1998, has a threefold mission: (a) to encourage more women and girls to study computer science and/or information systems and to pursue careers in Information Technology (IT); (b) to enable more women and girls to use IT comfortably and knowledgeably and to understand its rapidly increasing importance in every field, not simply in science and technology but also in the arts, the humanities, and the social sciences; and (c) to foster research on the relationship between gender and IT. As one of its first initiatives, CWIT has been working to further the incorporation of information technology into women- and gender-related courses by identifying and publicizing resources for faculty to use. UMBC s highly acclaimed Women s Studies website also offers a number of useful resources on women. In addition, CWIT organizes an annual speakers series, which features women who are internationally recognized in the field. Finally, CWIT has a special interest in helping to empower poor and/or minority women in their use of IT. In collaboration with UMBC s Computer Certification Training Center and several holistic social service programs in Baltimore City, CWIT is sponsoring the A+ certification training. A scholarship program for four 30-hour weeks of classroom and computer lab work, this program provides training, materials, help with job searches, and transportation to help women and their families transition from backgrounds of domestic violence, substance abuse, and working poverty into trained and certified IT job seekers with earning power.

(3) The Center for History Education (CHE) is the product of a partnership launched in 1998 between UMBC s Department of History, the Maryland State Department of Education, Central Maryland History Day, and the Maryland Council for History Education. The CHE s purpose is to promote and strengthen the teaching of history in Maryland schools by serving as a bridge between schoolteachers and academic historians in the State. Toward that end, the CHE helps teachers improve the quality and enrich the content of their history curricula by offering them graduate courses in World and American History, as well as graduate-level training in how to address the new and evolving requirements placed on schools by Maryland s Social Studies Standards and Core Learning Goals. The CHE courses are taught by UMBC faculty at Summer Institutes consisting of intensive, 10-day courses held at UMBC, during which the facilities of the Graduate School and all USM Libraries are made fully available to participants. The work of these Institutes is supplemented by smaller in-service workshops offered at school locations

throughout the year, also led by UMBC faculty, as well as Institute graduates. The CHE solicits advice from its partners and from school system Social Studies supervisors in designing educational packages tailored to meet the specific needs, working conditions, and professional development requirements of teachers.

(4) The Institute for Global Electronic Commerce (IGEC), launched in September 1997, is designed to promote the electronic transmission of commercial transactions through the connection of companies and universities and through the creation of new entities. It is of necessity multidisciplinary and represents the leading-edge thinkers and performers in the world of paperless commerce. The scope of the Institute is to foster a multidisciplinary educational and research program that covers such areas as Computer and Information Sciences and Technology, Law, and Business. The primary objectives are: (a) to provide leading-edge research and practical solutions to issues related to electronic commerce; (b) to establish innovative multidisciplinary and international curriculum and degree programs to train students, as well as industry and government leaders in the area of electronic commerce; (c) and to serve as an incubator for virtual companies.

(5) The Joint Center for Astrophysics (JCA) was established in 1998 as a cooperative venture between UMBC and the Laboratory for High Energy Astrophysics (LHEA) at NASA s Goddard Space Flight Center. Activities of the JCA, which is staffed by faculty from UMBC s Physics Department, include funded research in high-energy astrophysics, the development of educational opportunities in astronomy for UMBC students, and participation in educational outreach activities to the University and surrounding community. In the LHEA, a broad program of experimental and theoretical research is conducted in all phases of astrophysics associated with high-energy particles and the quanta produced in the interactions with their environments. These studies of the physics of solar, stellar, galactic, and metagallactic high-energy processes from experiments flown on balloons, rockets, earth satellites, and deep space probes lead to development of theoretical models of the origins and histories of these particles and quanta, and provide understanding of the objects and environments in which they arise.

(6) The Center for Urban Environmental Research and Education (CUERE) was originally established at UMBC with funding from the Environmental Protection Agency in 2000. The Baltimore-Washington and larger Mid-Atlantic regions provide a natural laboratory for the study of the environmental consequences of different urban and suburban development patterns and policies. Through study of examples such as the well-known development-based problems afflicting the Chesapeake Bay and Maryland s Smart Growth Initiative, researchers, graduate students, and decisions-makers have the opportunity through the Center s programs to increase their understanding of the environmental response to development and the policy initiatives intended to alleviate urban sprawl and protect terrestrial and aquatic ecosystems. The Center seeks to develop a program self-sustained by grants and contracts to train students as interns and research assistants, encourage collaborative networks, host conferences, and serve as a locus of coordination for the campus of a broad range of environmental research activities.

(7) <u>The Center for the Humanities</u>, which had just opened at the time of our 1996 *Self-Study*, has flourished in the past five years. Founded with the goal of strengthening the study of human thought and culture, the Center is the most visible focal point on campus for activity in the Humanities and aims at generating in students from all disciplines across campus an excitement about the life of the mind. Toward this end, the Center offers the Humanities Forum, an annual program which for over a decade has presented large public lectures by internationally recognized speakers, as well as smaller events featuring scholars from UMBC and other institutions in the region. Humanities Forum speakers in the past five years have included Derek Walcott, Angela Davis, Paula Giddings, Oliver Sacks, and Stephen Jay Gould, among others. The Center is also home to the Humanities Scholars Program, discussed earlier in this report.

(8) <u>The Shriver Center</u> is a national model for community outreach efforts. Although founded in 1993, prior to our last report, in honor of Robert Sargent Shriver Jr. and Eunice Kennedy Shriver, the Shriver Center continues to make extraordinary strides in addressing the urgent social needs of greater Baltimore and other cities across the nation. The Center engages faculty and students in the application of knowledge and links the theory of the classroom to the realities of urban life today in the United States by providing students with internships and service-learning experiences. Over the past five years, the Center, which encourages participation in its programs by students and faculty of UMBC and the dozen member institutions of its higher education consortium in the greater Baltimore area, has placed over 5,000 UMBC undergraduate and graduate students in 500 public, private, and non-profit host organizations. The Shriver Center provides an array of innovative opportunities, ranging from the Peaceworker program of graduate study for returned Peace Corps volunteers, to CLEARCorps, a childhood lead poisoning prevention project, to the Choice programs, which address the needs of at-risk and delinquent youth. In fall 2000, the Shriver Center s Choice Middle Schools Program received a Crystal Star Award of Excellence in Dropout Recovery, Intervention, and Prevention from the National Dropout Prevention Network.

Each year, the Center places over 700 students in internship and cooperative education experiences in public and private organizations in the Baltimore-Washington area and abroad. These professional practice programs are a major resource for employers in the region and an excellent training ground for students. By combining classroom study with on-the-job experience, students earn academic credit, grasp the links between theory and practice, and learn valuable job-related habits and skills. The Governor s Summer Internship Program and the Maryland Department of Transportation s Fellows Program, both coordinated by the Center, focus particular attention on introducing students from colleges and universities across Maryland to the rewards of public service. The Center s International Work and Service program offers students professional practice and community service placements in Africa, Europe, Asia, the Caribbean and Latin America.

In fall 2000, the Shriver Center, in partnership with UMBC s Residential Life office, inaugurated the Shriver Living Learning Center (SLLC). The SLLC involves a diverse group of undergraduate students in a residentially based, interdisciplinary experience focused on service-

learning. This distinctive living experience also benefits from the involvement of Shriver Peaceworkers, graduate-level service-learning students, and UMBC faculty who serve as mentors and advisors to SLLC participants.

Numerous other research and outreach programs have existed at UMBC for more than five years, with notable accomplishments since the 1996 *Self-Study*. Some of the highlights include the following:

The Joint Center for Earth Systems Technology (JCET) research faculty, who by charter are required to teach at least one course every two years at UMBC, also published over 114 peer-reviewed journal publications in 1999, and, since its founding in 1995, have generated over $3.3 million in funding independent of its Goddard Space Flight Center (GSFC) sponsors. JCET, like the GEST Center, was created through a cooperative agreement with NASA (specifically, the GSFC) and uses some of the same technologies for researching and monitoring changes in the earth s geography, climate, and atmosphere.

The Center for Health Program Development and Management (CHPDM) played a major role in developing the Maryland Medicaid 1115 health care reform demonstration proposal, which led to the approval and implementation in 1997 of HealthChoice, Maryland s statewide managed care program for low-income citizens. CHPDM was founded at UMBC in 1994 as a partnership with the State Department of Health and Mental Hygiene.

Faculty, staff, and students at UMBC s Imaging Research Center (IRC), which was founded in 1990, used the IRC s high-end computer animation facilities to produce a collaborative, 15-minute animation showing how the original buildings in the prehistoric ruins of Chaco Canyon, New Mexico might have looked one thousand years ago and their complex relationships to celestial events. The production of the animation, which was part of an award-winning one-hour PBS documentary titled *The Mystery of Chaco Canyon* (2000), took two years to complete. Additionally, as mentioned earlier, the IRC produced a  Virtual Tour of the Cone Sisters Apartments  for the 2001 reopening of the Cone Collection at the Baltimore Museum of Art (BMA).

The UMBC Fine Arts Gallery was awarded the prestigious American Association of Museums (AAM) First Place for Excellence in Design in 1999 for the publication of its series, *Issues in Cultural Theory*; the only national, juried event of its kind, the AAM selected the series from over 1,200 entries. The exhibitions and publications of the Fine Arts Gallery, which was founded in 1989, entail extensive educational outreach initiatives involving area school children and the public. Particularly notable among exhibitions since the last report is *Adrian Piper: A Retrospective, 1965-2000*, which received a feature-length review in *The New*

*York Times* after it opened at UMBC in fall 1999, and has traveled nationally and internationally over the past two years.

The <u>Center for Photonics Technology</u> has been instrumental the past five years in developing key components of the National Security Administration s (NSA s) advanced optical networks for computers, including biosensors and opto-electronic devices. Established in 1989, the Center seeks to promote research and education in high-speed and high-capacity optical networks and in biomedical and medical applications. The Center has received support from the NSA, NSF, and U.S. Department of Energy. Corporate partnerships have included Martin Marietta, Westinghouse, and the PIT Corporation.

" <u>The English Language Center</u> (ELC), established in 1992, has expanded exponentially in the past few years in both credit and non-credit programs and enrollments of prospective and matriculated international students. Enrollments in the Intensive English Program for spring 2001 increased over 100% from spring 2000, with 62% of these students seeking admission to UMBC degree programs. In addition to much-expanded academic English and culture courses, the ELC has been conducting workforce development programs, such as the Egyptian and Chinese Teacher-Leader programs, as well as business communications courses.

## V.    Areas of Concern, 1996: Challenges, Progress, and Plans, 2001

As noted previously, the 1996 Middle States Evaluation Team highlighted several areas of concern in its *Report*. These included balancing teaching and research, graduate education, the cycle of academic program reviews, support for the Library, funding parity vis-à-vis other institutions, and external support. Given the growth in the campus s resources over the past five years, we are able to provide an optimistic response to many of these concerns. Others remain challenges that UMBC is prepared to meet as we continue to implement the various aspects of our vision. In the sections that follow, we address each concern raised by the Evaluation Team and discuss our progress and our plans for addressing issues that remain unresolved.

## V.A.    Faculty

<u>Concern, Quoted from the 1996 *Report*</u>:

> *For the faculty, the increasing expectations for research and...external funding may serve to deemphasize their primary teaching mission. The average member...carries a five-course load.... If UMBC follows the national pattern, the emphasis on research will create pressures to reduce the teaching commitment to a four-course load. It is already difficult*

*for many students to graduate within the normal four-year period because of course enrollment limitations. If additional lines are not provided, the challenges faced by students will increase.*

Challenges, Progress, and Plans.

The concern raised by the Middle States Evaluation Team identifies a potential problem and a proposed solution. The negative impact of course enrollment limitations on students progress toward their degrees must, indeed, be considered. The potential, exacerbating problem is increasing emphasis on research and decreasing emphasis on teaching among the faculty. The proposed solution, which also addresses other challenges described in this report, is an increase in the number of faculty. We address these points in turn.

The 1996 *Report* noted that some students  have to delay graduation because they cannot get classes on schedule.   This problem has been reduced somewhat because over the past five years there has been a concerted effort to add faculty lines and create additional sections of high-demand courses. Cooperation among the Registrar s Office, the Deans, and Department Chairs has resulted in scheduling additional sections as late as the first week of classes. The success of these efforts can be gauged by the fact that the number of undergraduate sections offered, excluding independent study courses, has risen steadily from 2,113 in spring 1998 to 2,447 in fall 2000, a 15.8% increase over the past three years. Course sections in Information Systems, for example, were increased dramatically in response to extremely high enrollments in this program, which rose 44.7% among majors in the same three-year period (significantly, this percentage increase does not reflect enrollment by non-majors). This was also an acute problem in Computer Science, Modern Languages and Linguistics, and Visual Arts. As with Information Systems, additional sections were added and part-time and full-time lecturers and faculty were hired to address the needs in these departments. Moreover, 56% of new faculty lines (27 of 48) have been assigned to these high-need departments: Computer Science and Electrical Engineering, Information Systems, Modern Languages and Linguistics, and Visual Arts.

Information is also available from the UMBC Student Satisfaction Survey administered in fall 1999. A slight majority of undergraduate respondents (54.3%) reported that they were satisfied or very satisfied, overall, with their ability to get into classes; 26.7% reported dissatisfaction; and 19.0% were neutral. Fewer, however, were satisfied with their ability to get classes in the semester of their choice (35.5%); 37.0% reported dissatisfaction; 27.6% were neutral. Similarly, 33.8% were satisfied with their ability to get classes during the day and time of their choice; 39.6% were dissatisfied; 26.6% were neutral. Clearly, from the student perspective, improved course availability remains a concern.

Although additional faculty are still needed to address student demand for courses, 48 new faculty lines have been authorized over the past five years, and the concern about balancing teaching and research has diminished. There is evidence that faculty are meeting their obligations

for both teaching and research and that the potential problem of a trade-off favoring research has not materialized. Data that support this conclusion are derived from an annual workload report submitted to the University System of Maryland, as explained below.

Faculty at UMBC are governed by a USM policy that specifies percentage ranges for faculty members levels of effort in the areas of research, teaching, and service. Each campus within the System has its own policy on faculty responsibilities, which addresses purpose and philosophy, application, standard workload expectations, implementation and accountability mechanisms, and exceptions. At UMBC, each academic department, in turn, has a policy that details procedures for the following: standard course assignment to faculty; the balance between graduate and undergraduate courses; expectations regarding advisement and other student-related activities; thesis and dissertation supervision; supervision of research and independent study; participation in extra-departmental instructional activities such as Continuing Education, Interdisciplinary Studies, and Honors College; and research and other creative efforts. Thus, faculty workloads are determined in a manner that takes departmental values and priorities into account in the context of certain externally mandated requirements.

Each year, the University provides a comprehensive report on faculty workload to the University System for transmission to the Legislature. The report contains data provided by the Registrar on courses and credit hours taught, information provided by department chairs on compliance with the standard workload and reasons for exemptions, and data on faculty members non-instructional productivity provided by the faculty members in their annual reports. Table FAC10 summarizes these indicators for tenured and tenure-track (i.e., core) faculty over the past five years and gives an aggregate view of the balance among teaching, research, and service.

As noted previously, the number of tenured and tenure-track faculty has increased only slightly over the past five years (from 315 to 331[9]), despite a large number of successful faculty searches. Across all academic departments, in fiscal years 1997-2000, 69 core faculty members left the University. Retirement, relocation, and death account for about half of these losses; resignations, along with negative tenure and contract-renewal decisions, constitute the remainder (see Section IV.B.1.).

Research productivity of the core faculty, measured in terms of books, refereed and non-refereed works, creative activities, and professional presentations, has remained fairly steady over the past five years, despite the slight increase in instructional productivity. The number of grants and contracts awarded has risen, as has the number of faculty receiving those awards. This indicates that faculty members are having notable success in attracting external funding, even in this highly competitive era. The dollars awarded fluctuate considerably from year to year, but the

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[9]The numbers of tenured and tenure-track faculty, as recorded in the *Faculty Workload Report*, differ slightly from the values reported in Table FAC3 because faculty hires, resignations, leaves, promotions, and other changes in status occur throughout the academic year, and the faculty database is accessed at different times for different reports.

trajectory is clearly upward, from nearly 24.6 million in FY 1996 to almost $28.5 million in FY 2000.

The standard course load at UMBC is five courses per year. A course unit is equivalent to a traditional 3-credit lecture course that entails 150 minutes of scheduled contact per week. Independent research courses, at both the graduate and undergraduate levels, are converted into equivalent course units using conversion formulas based on the credit hours generated, with undergraduate, graduate, thesis, and dissertation research receiving progressively greater weight per credit. Over time, the formulas for converting instructional activity into course units have become refined, to better reflect the faculty s actual level of effort. For example, courses in the performing arts, with very high numbers of contact hours, are now given additional credit.

As Table FAC10 shows, the average number of course units taught by core faculty has increased over the past five years, from 5.4 to 6.1. Thus, there is no indication that emphasis on research has resulted in a compensatory reduction in teaching. When enrollments are taken into account, there has been a slight decrease in lower-division credit hours taught by core faculty. Lower-division credit hours dropped from 41.6% to 39.6% of the total credit hours, whereas upper-division increased from 47.7% to 48.8%, and graduate from 10.6% to 11.6%.

Another indication that faculty teaching activity remains high is that roughly a third of the core faculty teach more than the standard load (> 5.5 course units). This is, however, balanced by faculty who are exempted from teaching the standard load for a variety of reasons. Externally funded research permits a faculty member to subsidize his or her salary in exchange for a reduction in teaching. This is the single most frequent reason for exemption, and there has been a slight increase in such exemptions over the past five years as the numbers of faculty with funding has increased. Nevertheless, only about 11%-13% of the core faculty have exercised this option. The number of course units exempted is roughly two per year. Departmentally supported research also results in exemptions. Included in this category, however, are programs such as the Faculty Research Fellows, described earlier, which is designed to enhance faculty promotion and retention. Sabbatical leaves and exemptions for instruction-related purposes and for departmental administration are the other notable categories. Over the past five years, instruction-related exemptions have decreased while departmental administrative exemptions have increased.

In summary, the core faculty have been able to meet their teaching obligations while also being highly productive scholars. As faculty invest more and more of their energies in all of their multiple roles, particularly in teaching and research, there is a danger of burnout and of losing faculty to other institutions and to the private sector. The administration is keenly aware of this problem and is focusing its efforts on both the recruitment and the retention of additional core faculty. For example, the FY 2002 budget included 1.6 million dollars for faculty hires. Clearly these hiring efforts are key to UMBC s fulfillment of its mission and achievement of its vision.

## V.B.        Graduate Education

<u>Concern, Quoted from the 1996 *Report*</u>:

> *The University s long-term plans envision UMBC moving from its present Carnegie Doctorate-Granting II classification to that of a Carnegie Research [II] Institution ranking. Beside the challenge mentioned...above, the Team is concerned about the level of graduate support and graduate faculty recruiting. The graduate stipends, especially in science and engineering, are significantly below the national average for research universities. This impediment makes it difficult to recruit highly qualified master and doctoral students into the University s programs. Consequently, this will negatively impact the scholarship and research done at the University. The national trend of declining graduate enrollment may further exacerbate the problem. In the area of faculty recruiting, it is important to develop and maintain competitive start-up packages in order to recruit successfully outstanding graduate faculty and for that faculty to become productive scholars, researchers, and external funding recipients.*

<u>Challenges, Progress, and Plans</u>:

<u>Carnegie Status</u>. The Middle States Evaluation Team was correct in its observation that it had long been a goal of the University to attain Carnegie Research II status. Toward that end, the campus had focused a great deal of attention on increasing the production of doctoral degrees and on raising the level of its Federal research grants. In August 2000, the Carnegie Foundation announced a new classification system for higher education institutions that created two new categories for doctoral and research institutions in place of the previous four. Under the new classification, UMBC is included in the Doctoral/Research Universities-Extensive category, one of only five previously Doctoral II institutions to move to this tier of Doctoral/Research institutions. There are two criteria for the new category. First, 50 or more doctoral degrees must be awarded per year. Second, they must be awarded in at least 15 different disciplines. Federal research awards are no longer a factor.

UMBC awarded 270 doctoral degrees over the past five years, an average of 54 degrees per year, and currently has a total of twenty doctoral programs. Two of these programs, Atmospheric Physics and Gerontology, were approved in July 2000 and will require several years before awarding their first degrees. Another fairly recent program, the Language, Literacy, and Culture interdisciplinary doctoral program, initiated in fall 1998, has yet to award any degrees, but had an enrollment of 34 in fall 2000 (Table GRAD5) and should award degrees in the next few years. The Graduate School will continue to monitor degree production to ensure that we meet the new Carnegie classification criteria.

<u>Graduate Students</u>. Financial support for graduate students is extremely important if UMBC is to recruit and retain outstanding students for its graduate programs. Many programs,

even those with excellent enrollment, lose their first-choice students, either because there are no graduate assistantships available or because graduate stipends and benefits are not as attractive as those offered by competing institutions.

The beginning stipend for all assistantships for students pursuing a Ph.D. degree in academic year 1995 was approximately $12,000 per year. For FY 2000, stipends for doctoral students increased in absolute terms by 9.83% over the previous year, to $14,688 (12 months) for Step 2 Ph.D. students and to $15,824 (12 months) for Ph.D. students in their third year and beyond with recommendations. There was no change for master s students.  For FY 2001, stipends for doctoral students increased by 4% from the previous year to $15,276 (12 months) for Step 2 Ph.D. students and $16,457 for Step 3 (advanced) Ph.D. students. There was no change for master s students.

Stipends for recruited domestic students in the Mathematics, Physics, Chemistry, Biological Sciences, and Engineering programs have risen to a range of $17,000 to $25,000, depending upon the field and the qualifications of the candidate. These programs have elected to redistribute their allotment of assistantship funds in order to offer fewer assistantships, but with more competitive stipends. Special assistantships for students with exceptional qualifications may range up to $25,000. This does not include the tuition remission and health insurance benefits, which are presently valued at about $6,660 for a twelve-month award.

The subject of graduate assistantships and stipends received considerable attention in the Report of the UMBC Enrollment Management Task Force in 1999. The recommendation of that task force was to  increase graduate assistant support and the number of assistantships in selected programs to better compete nationally and regionally for high quality graduate students  (p. 33). At the time of the report, UMBC s assistantship stipends were below the NIH (National Institutes of Health) levels. With the new levels established for FY 2001, UMBC is no longer below this national benchmark and exceeds the average competitive stipend offered.

OIR s Graduate Student Satisfaction Survey was conducted by mail in spring 2000. There were 372 respondents (a response rate of 37%).  Although the sample overrepresents females, whites, and Maryland residents, it accurately represents the graduate student population by program and by part- and full-time status. Highlights from the survey are indicative of the areas of strength in UMBC s graduate programs, as well as the areas in which we have set plans for improvement. Regarding academics, three-quarters (74.7%) of the respondents were satisfied with the quality of their academic program, with 80% satisfied with the quality of instruction by full-time faculty and 72% satisfied with the quality of instruction by part-time faculty. Nearly 75% were satisfied with the relevance of the courses to their intended career.

In the area of campus services and facilities, 85% of the respondents reported using the Library s services, and of those, 82.5% were satisfied. Seventy-nine percent were satisfied with the Library facility. Nearly three-fourths of the respondents were satisfied with athletic and recreational facilities. Eighty-one percent of the respondents said that they had used the internet

and computer resources, with over three-fourths indicating satisfaction. Regarding campus climate and diversity, 81.4% agreed that interactions among students, faculty, and staff were positive. Over two-thirds agreed that there was a high degree of sensitivity and respect for individuals of different backgrounds, cultures, and lifestyles. Furthermore, 72.5% felt that faculty and staff treated male and female students equally.

Two areas in which respondents answers indicate room for improvement are also areas in which UMBC is planning or already implementing improvements. First, among the one-half of respondents who answered the questions on the pay scale for graduate assistants, only 13.8% were satisfied with the scale. This is a challenging area in which UMBC is making progress, as described above. A second area in which respondents indicated there was room for improvement was that of space for relaxing and socializing; less than half expressed satisfaction. The new Commons is slated to create environments that will enhance opportunities for the campus as a whole and for students in particular to come together comfortably and experience a greater sense of community than our present facilities permit.

Graduate Faculty. The challenges of recruiting and retaining core faculty are particularly great in UMBC s areas of programmatic emphasis. Faculty in the sciences and engineering must have state-of-the-art laboratory facilities in which to conduct their research, and salaries and benefits must be competitive, not only with respect to other academic institutions, but also in relation to business and industry.

UMBC has had considerable success in attracting first-rate junior and senior faculty. The resources provided are consistent with the scholarly agenda of the new faculty. Reduced teaching loads for the first year, availability of summer support for research, and provision of laboratory and office equipment are standard components of start-up packages across disciplines in the arts and sciences and engineering. It is acknowledged, however, that the University s programmatic emphasis at the graduate level is in disciplines where start-up costs are likely to be very high. One response to these challenges has been to limit the number of new faculty hired in the most costly disciplines in order to ensure that we can support and retain them. Although initial salaries and start-up funding have been competitive, and outstanding new faculty have been recruited, the numbers of faculty hired have been fewer than the number of authorized lines available and fewer than programmatic needs warrant. As might be expected, in some disciplines for example, Computer Science it is very difficult to hire research faculty. This presents a particularly difficult challenge in programs with high enrollment pressures, although highest priority has been given to those programs.

Like other academic institutions today, UMBC faces the challenge of losing prospective faculty to stimulating and rewarding positions outside of academia. Because of its medium size and relatively small number of academic programs, UMBC also must compete with other universities to retain its highly talented faculty (see Section IV.B.1. for further details). It is common knowledge that faculty are better able to secure significant salary increments by moving elsewhere than by staying at a single institution. UMBC has made strenuous efforts to retain

outstanding faculty who have received competing offers. In some cases, it has been possible to provide sufficient incentives to accomplish retention.

To summarize, both recruitment and retention of outstanding faculty are high priorities. The accomplishments of our current faculty are testimony to our many strengths, and the University is committed to providing a hospitable and intellectually vigorous environment, to retain and nurture the professional development of all faculty. Nevertheless, the resources necessary to attract and retain outstanding faculty and to build the programs commanded by our new Doctoral/Research Universities-Extensive status must be forthcoming if we are to reach our goal.

## V.C.         Academic Program Review

Concern, Quoted from the 1996 *Report*:

> *Presently, departmental academic programs are reviewed on a seven-year cycle. The knowledge explosion continues unabated and knowledge in some fields, particularly the sciences and engineering, can become dated or even obsolete in seven years. The Team recommends that UMBC institute a five-year cycle that includes external evaluations for both undergraduate and graduate programs in this important quality control process.*

Challenges, Progress, and Plans:

UMBC is required by the University System of Maryland to review its academic programs on a seven-year cycle. Program reviews conducted under the auspices of external accrediting agencies, which often review on a more frequent basis, may substitute for scheduled USM reviews if they have been completed within the previous two years.

The current procedure for academic program review involves preparation of the department s self-study, a process that begins approximately 15 months prior to the date certification must be provided to the USM that scheduled reviews have been completed. The self-study document consists of five major sections: (1) a comprehensive program description; (2) a student/enrollment profile; (3) a faculty profile (including faculty productivity); (4) instructional support; and (5) a general evaluation. The topics covered and questions addressed under each of these sections are presented in Appendix I, the Academic Program Review Outline. Data are provided to the department by the Office of Institutional Research, the Budget Office, and the Graduate School.

Following preparation of the self-study report, the on-campus review process begins. If the department has one or more graduate programs, the Graduate School arranges for external reviewers to visit the campus and prepare a report. The self-study and any external reports are then

reviewed by the Undergraduate and Graduate Councils, as appropriate. The Faculty Senate receives the report(s) of the Council(s) and votes on acceptance of the reports and their recommendations. These recommendations are then forwarded to the President for action. The President reports back to the Faculty Senate on actions taken and also submits to the USM Chancellor and Board of Regents an annual summary of all program reviews and actions taken.

The primary concern expressed by the 1996 Middle States Evaluation Team was that rapid changes in some fields would not be addressed under the current seven-year cycle of reviews. We believe that this concern can be, and is, addressed by ongoing processes of program development and modification, and that academic program review serves primarily to inform external agencies of the University s accomplishments, progress, and plans, rather than as the primary catalyst for those activities. (See Section VI for a discussion of reviews mandated by external agencies, such as the Accreditation Board for Engineering and Technology [ABET] and the National Council for the Accreditation of Teacher Education [NCATE].)

Procedures for review and approval of new academic programs, as well as modifications to existing programs, are within the purview of the University s Undergraduate and Graduate Councils, respectively. These committees also play a central role, as noted above, in the review of academic program self-studies and in the recommendation of actions to be taken. Both Councils meet regularly, and both entertain a steady stream of requests for new courses, changes in major requirements, and changes in other courses of study such as minors, concentrations, and certificates. In some areas at UMBC, advisory boards conduct additional, discipline-specific program reviews and provide feedback for change. For example, in the College of Engineering, an Industrial Advisory Board (IAB), consisting of top experts from industry, government, and academia, serves as a forum in which curriculum development, instruction, research, and professional development issues are discussed and policies are formulated. The IAB meets in full session biannually, with meetings of its four subcommittees (on undergraduate programs, graduate programs and research, computing and networking, and laboratories and space) held throughout the year. It is in these numerous and constant adjustments of academic programs to meet the needs of all disciplines and students, as well as the needs of external stakeholders, that the University s responsiveness to change is manifested.

Formal review, reflection, and comprehensive evaluation of a department s programs are important undertakings. Although a five-year cycle might, in principle, be reasonable and productive, we do not believe that UMBC can implement such a cycle in the current external context of mandated reviews every seven years. A related issue is the resources consumed in undertaking such reviews. As noted earlier, the faculty s workload is high in terms of both instructional and research productivity. On balance, the potential benefits of more frequent reviews do not appear to outweigh the human resources required and the additional burden on the University s already taxed infrastructure.

## V.D.        Library

*Physically, the Library is attractively designed and appointed: very user-friendly. It is logistically organized to optimize the delivery of services. The collection in support of the undergraduate program is good. The collection in terms of master s degree education is merely adequate, while the collection in support of doctoral education appears to be marginal. Given UMBC s graduate education ambitions, this is an area requiring focused attention. Additionally, the current staffing complement of the library is significantly under any generally accepted standard. Only 15 professional librarians provide for the need of a campus community of over 10,000 students and faculty. With material exits from the library totaling over 13,700 per week, the amount of time the librarians have to work with students and faculty is very limited. This, more than funding for new acquisitions, causes great concern both in the library, among its users, and the visiting Team.*

Challenges, Progress, and Plans:

The 1996 Middle States Evaluation Team s concerns regarding UMBC s Library echo concerns raised in previous external evaluations. In response to these longstanding concerns, UMBC has developed a forceful plan to address, in particular, the three problem areas mentioned above: (1) the Library collection s support of doctoral education; (2) acquisitions; and (3) staffing. Funding for the Library, particularly for resources and materials important to doctoral programs, is a priority. Both the Research and Honors Task Forces discussed earlier support targeted funding of this sort. In addition, we plan to make better use of existing resources in the region and of technology. Strategies for improving access to materials and support are outlined in this section.

Overall, the Albin O. Kuhn (A.O.K.) Library strives to satisfy the needs consistent with our Doctoral/Research Universities-Extensive status by aggressively developing online resources and services, with emphasis on improvements that render research more efficient for graduate students, as well as undergraduate students and faculty. UMBC envisions becoming a regional leader in enabling library users to accomplish the majority of their library work from their homes or offices over the internet. Such measures will save researchers vast numbers of hours on each of their projects, making UMBC more competitive in the international research community. Within the context of this vision, however, UMBC will continue to augment traditional resources and services.

Toward the enhancement of doctoral education, plans are well underway to merge information services with UMBC s flourishing online environment. Among the key elements in this project are the MDL (Maryland Digital Library, mentioned in the profile of the Library in Section IV.G.3.) and the implementation of the third generation of the Library Information Management System (LIMS 3). The MDL will enhance the online resources of all participating

academic institutions in Maryland beyond their individual capacities. LIMS 3 is supported by the USM, which has committed funding for the project; implementation is expected before the end of 2001. By 2006, the Library envisions that research will be seamlessly integrated with other online campus functions. In the area of journal research, this could mean that as many as 80% of our current journal holdings will be available online, versus the current 45%. Comparable improvements will be achieved in the areas of electronic reserves and bibliographic access tools. With the array of resources and services from information providers increasingly available on the internet, graduate research should be vastly enhanced, shifting the role of Library faculty and staff toward the presentation of research methods and the management of research activities.

In an effort to amplify support further for doctoral research, UMBC is emphasizing to graduate students, undergraduates, and faculty the importance of both online and direct use of other libraries in the region. With online access to 13 libraries at 11 USM campuses, researchers can attain requested materials within a few days, sometimes more quickly; article delivery from UnCover, for example, takes just 24 hours. Additionally, doctoral students at UMBC are encouraged to explore libraries at GWU, JHU, the Library of Congress, UMCP, the Enoch Pratt Library, and several other libraries in the Baltimore-Washington, D.C. corridor that extend generous reciprocal borrowing privileges to UMBC students and faculty. While it could be argued that traveling to the larger libraries in the region poses an inconvenience to students and faculty, it should be noted that the frequency of such trips should be quite minimal in light of enhanced options of online access and interlibrary lending just mentioned.

UMBC is making concerted efforts to increase core Library holdings within tight funding parameters, and, as noted, targeting doctoral programs as a priority. Since the last report, the Library s collection has been increased by 140,000 volumes, bringing the total to over 750,000 volumes in 2000. Journal holdings have also been increased. In FY 2000, a number of new subscriptions were acquired to augment the approximately 4,200 core collection subscriptions; increased expenditures for new subscriptions totaled approximately $40,000. In regard to the latter, it should also be noted that UMBC continues its policy of allowing faculty in each department to request the journal subscriptions they prefer, with requests from departments with graduate programs given top priority. These measures insure that the Library s holdings include those subscriptions most used and needed by faculty and by graduate students. Similar funding increases were allocated for FY 2001 and more are anticipated for FY 2002 for new acquisitions, including print and online books and journals.

Regarding staffing, UMBC fully concurs that this area of concern is of critical importance and that Library staffing is low compared to peer institutions. While improvements in automation and extensive use of student assistants compensate for some of the shortage of professionals, UMBC has made the necessary commitments to increase the Library s faculty and staff, as mentioned earlier. Two new lines were committed to the Library for FY 2001, and a proposal is under consideration for adding a Science Librarian in FY 2002, which would contribute greatly to doctoral education and research in that area of study. Other positions are being considered, as well.

On a final note, the A.O.K. Library plans to increase its hours soon, a measure that should prove especially helpful to doctoral students. In 2002, the Library s schedule will be expanded by 19 hours per week. Review of the user data from this increase will determine further adjustments of hours in subsequent years.

The longstanding concerns of Middle States evaluators in regard to UMBC s Library match our own concerns. We anticipate that the plans described above will be well underway by the time of the next *Self-Study*.

## V.E.        Funding Parity

Concern, Quoted from the1996 *Report*:

> *The case in support of what the University of Maryland Baltimore County characterizes as funding parity within the Maryland system is overwhelming. The issue might be better stated as funding disparity; namely, UMBC is funded in general terms at $4,900 per FTE below the University of Maryland College Park (UMCP). UMCP, in turn, is funded by the state at a rate per FTE that is considerably below peer institutions. The UMBC disparity is so significant that some form of planned redress of this issue within a reasonable time is strongly suggested.... Attention to this disparity issue is critical if UMBC is to continue its outstanding record of making real its mission.*

Challenges, Progress, and Plans:

Among the eleven colleges and universities in the University System of Maryland, the University of Maryland, College Park, UMBC, and the University of Maryland, Baltimore are the three research universities. The remaining institutions offer comprehensive programs at the undergraduate level, as well as master s degrees and a few specialized professional doctorates. These distinctions are reflected in both the history and the plans for future funding within the USM. As noted above, in 1996, UMBC s funding was alarmingly low. In the intervening years, the State has articulated a plan to strengthen support for higher education and to move the USM to national prominence. This has resulted in improved funding for all institutions in the USM, and particularly for UMBC.

In 1996, UMBC s revenues from tuition and fees and State appropriations totaled $79.7 million, or $10,415 per FTE student. Over the next four years, UMBC s funding increased, and by FY 2000, funding from tuition, fees, and the State s appropriation reached $13,266 per FTE student, a 33.0% increase.

As noted previously, new funding guidelines for the USM campuses were adopted in FY 2001. The guidelines call for funding to match the 75th percentile of UMBC s peer institutions.

Although the guideline has not been fully funded (it is currently funded at approximately 83% of the underlined target amount), the FY 2001 appropriation, plus tuition and fees, has resulted in $13,852 per FTE student, a one-year increase of 4.4%. The budget request for FY 2002 raises that figure to $15,072, an increase of another 8.8%. Clearly, the new funding guidelines are sensitive to the funding disparity that was noted in 1996 and to helping UMBC significantly recover from its historical pattern of being chronically underfunded.

The future status of the funding guidelines is subject to several factors. First, the long-term prognosis for adherence to the guidelines is subject to the ever-changing economic and political climate. Second, UMBC s new Doctoral/Research Universities-Extensive status implies that the selection of UMBC s  current  peers is open to renegotiation. Third, the funding guidelines provide for migration toward inclusion of aspirational peers as each university accomplishes its accountability objectives. Fourth, fulfillment of the funding guidelines is also tied to the University s performance in relation to its current peers. Although all of these factors will influence UMBC s future funding, the University s commitment to linking planning and budget will provide a consistent internal compass to guide investment and return on the resources it receives.

## V.F.  External Support

Concern, Quoted from the 1996 *Report*:

> *The System and the campus together have identified the acquisition of significant external support as critical to the enhancement of existing programs and activities and as an essential component of any new initiatives.... [W]hile the return on the campus  effort to date has been encouraging, more, much more, is required if the campus goal...is to be met during the period 1998-2002.... UMBC must continue, indeed redouble, its effort to raise the level of campus awareness regarding the need for substantially increasing external support.*

Challenges, Progress, and Plans:

UMBC has indeed redoubled its efforts to raise the level of campus awareness regarding the need to increase external support, and these efforts have met with enormous success. Significant gains in State funding were discussed in the previous section, and the substantial increases in grants and contracts were presented in Section IV.B.2. In addition, UMBC has progressed rapidly in its Capital Campaign, which has already exceeded its $50 million goal and has grown its endowment from less than $100,000 a decade ago to more than $16 million today, with additional commitments that will bring the total to more than $30 million. These accomplishments have drawn national attention to UMBC, as exemplified by Harvard Institutes for Higher Education s invitation to President Hrabowski and Vice President for Institutional

Advancement Sheldon Caplis to lead sessions on fundraising at the Institutes annual seminar for new college and university presidents. UMBC is recognized increasingly as a model for institutional advancement, particularly for colleges and universities without a long history or large endowment.

At the time of the Middle States Evaluation in 1996, we had recently recruited our Vice President for Institutional Advancement and were preparing to announce our first capital campaign, The Campaign for UMBC, in October 1997, with a planned five-year goal of $50 million. The Middle States Evaluation Team emphasized the importance of expanding the staff in the Office of Institutional Advancement (OIA), strengthening systems infrastructure, and investing in communications to cultivate the awareness of the University and its Campaign. The OIA staff has itself doubled since the 1996 *Self-Study*. Some OIA staff work with potential donors, others serve as events coordinators who plan and execute major campus events such as Convocation, Student Recognition Day, and UMBC s three yearly Commencements. OIA also hired graphic designers and writers who have created exciting publications about the campus, some of which have increased UMBC s national exposure. OIA has also strengthened its media relations staff, leading to numerous newspaper and magazine articles and broadcast stories about UMBC. *UMBC on the Map: Achievements and Philanthropy Report, 1999-2000*, published in December 2000, is a prime example of these efforts (see Appendix Item 4).

With one year remaining in The Campaign for UMBC and its initial goal already reached, the Campaign will exceed $60 million. The initial goal included $15 million in endowment monies to support faculty, staff, and student needs, $14 million in gifts-in-kind, and $21 million in contracts and grants. The Campaign has exceeded its endowment goal of $10 million, becoming the first institution in the USM to exceed its goal. To date, more than $23 million in major contributions to the endowment have been raised, resulting in its growth from a market value of approximately $3.6 million in 1997 to a current market value of approximately $16.1 million. The Campaign has achieved 63% of its contracts and grants goal and 81% of its goal for in-kind gifts.

For an institution with no history of fundraising and a very young alumni body, these results are outstanding. Consistent with the Campaign strategy, the largest percentage of gifts has come from corporations and foundations that view an investment in UMBC as an investment in future workers and citizens of the region. The Campaign s messages emphasize UMBC s commitment to excellence and achievement and to recruiting and retaining the best faculty, students, and staff. The University s leadership in high technology also serves to attract support from companies seeking strategic advantages in today s economy.

Several strategies and factors have contributed to the Campaign s success. First, UMBC s President is directly involved in major fundraising, and the University has allocated the resources necessary to develop an effective advancement team. The President s commitment to building visibility for the University s achievements and his skill as a spokesperson have led to outstanding media coverage in regional and national journals and newspapers, such as *University Business*,

*The New York Times*, *The Washington Post*, *Newsweek*, and the *Baltimore Sun*, which named President Hrabowski Marylander of the Year in 1999. As Maryland s Governor Parris Glendening has noted, reflecting on UMBC s successful fundraising efforts,  One president can make a difference.

Another factor contributing to our success lies in strong community advocacy. As a public university sharing a governing board with many other State institutions, attracting and cultivating an outstanding institutional Board of Visitors, whose members are drawn primarily from the corporate community, were essential to the Campaign s success. UMBC now has such a Board (for a list of its members, see the inside back cover of *UMBC on the Map: Achievements and Philanthropy Report, 1999-2000*, Appendix Item 4).

A third factor has been the effective linkage of the campus to community needs. By establishing a strong corporate relations team, the University has had great success in creating mutually beneficial partnerships between regional companies and University departments, particularly in the fields of engineering, life sciences, information technology, and education.

From this base of strength, OIA is now focused on preparing for the next campaign. Identifying alumni prospects with high philanthropic potential, adding breadth and depth to the corporate relations function, and continuing emphasis on national visibility will be priorities in the coming years.

Success has brought its own set of future challenges to OIA. The bar for fundraising has been raised substantially, as have campus expectations. While support for technical areas continues to grow, it remains difficult to raise dollars for the Social Sciences and the Humanities. UMBC recognizes the need to place special emphasis on alumni programming to cultivate support toward these ends. As our older alumni are establishing themselves in their careers, there will be an increasing number capable of making commitments in the $10,000-$50,000 range.

As noted,  The Campaign for UMBC  has been the catalyst for establishing a host of new corporate partnerships. These are multi-leveled relationships requiring contact with CEOs, researchers, human resource managers, marketing executives, and on-campus recruiters. As we prepare for the next campaign, the quality of stewardship with these partners will be the key to future financial support. However, these are labor-intensive activities that will require additional staff.

In summary, the success of  The Campaign for UMBC  has been built, in large measure, on highly effective public relations and advanced marketing, strategies that established UMBC s position both as an Honors University in Maryland and as a sound investment in the quality of life for citizens and businesses in our region. Because of the success of  The Campaign for UMBC  and of our institutional advancement efforts in general, the Harvard Institutes for Higher Education (HIHE) and the Council for Advancement and Support of Education (CASE), as mentioned previously, featured UMBC as a case study in their program for college and university

presidents. In anticipation of UMBC s next campaign, it will be important to continue a proactive public relations and marketing effort and to extend to a national level the excellent reputation that UMBC has achieved regionally in the past five years. This will require additional support for media relations consistent with the University s new Doctoral/Research Universities-Extensive Carnegie classification as we extend marketing communications to a broader, more national audience.

## VI. Outcomes Assessment, Institutional Self-Study, and Planning

As noted in the Provost s budget request, education is the *raison d être* for UMBC s existence. Learning and teaching are central to our mission and thus are the foci of our ongoing assessment efforts. UMBC engages in significant assessment activities designed to improve student learning and to ensure accountability for the quality of student learning produced. Assessment is embedded within all existing courses and is inherent in the reporting requirements imposed by the various governing bodies outside our institution. Indeed, there is a shared commitment to assessment that is systematic and tied to the everyday activities of the campus. UMBC depends heavily on the Office of Institutional Research (OIR) for data collection and analysis, as well as on the efforts of individual faculty, department chairs, the Offices of the Deans of Arts and Sciences, Engineering, and the Graduate School, Student Affairs, and the Alumni Office for information and data. There are many forms of ongoing assessments and multiple mandates for such information, and within this framework UMBC has chosen to afford colleges and departments some autonomy regarding self-assessment. It is expected that these assessments will be used to support the reexamination of assumptions, values, priorities, goals, objectives, practices, and programs as they relate to our mission and position among other institutions. Efforts to develop assessment strategies oriented to transformation and not just reporting are underway.

Based on the work of Thomas Angelo,[10] this section is subdivided according to four conditions necessary for the development of transformative assessment. Angelo maintains that the first step is to build shared trust by highlighting what persons are doing well. The second step is to build shared motivation by identifying goals worth working toward and problems worth solving. The third step is to build a shared language for defining the concepts used in assessment. This requires broad knowledge of the institution s data-gathering instruments currently being used. The fourth step is to develop shared guidelines for assessment. These steps are consistent with the Commission s own recommendations guiding outcomes assessment, as expressed in *Framework for Outcomes Assessment*.

Building Shared Trust. One of the first challenges for the campus community was to begin a dialogue related to assessment. At UMBC we began by asking ourselves: What are we doing

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[10]Thomas Angelo, Doing Assessment As If Learning Matters Most, *American Association of Higher Education (AAHE) Bulletin* 51:9 (May 1999), pp. 3-6.

well? What are the successes and achievements of faculty, students, and staff? Publications highlighting achievements, such as *Insights* and *UMBC on the Map: Achievements and Philanthropy Report, 1999-2000*, are disseminated widely on and off campus. Awards presented annually to outstanding teaching and research professors are conferred at the fall Convocation, as are the more recent awards honoring the accomplishments of Classified and Associate Staff members. Forums for recognizing outstanding students are plentiful, including Student Recognition Day, the Alumni Award Ceremony, installations and receptions for Phi Beta Kappa, Phi Kappa Phi, and other such honor societies, and the presentation of undergraduate and graduate student research. Other venues at UMBC for discussing what is working, what is not, and issues to consider as a campus community include informal teaching roundtables, a campus Potlatch devoted to reading texts relevant to teaching for and amidst diversity, and brown bag seminars organized to share research efforts and to discuss such topics as the incorporation of technology into teaching. The newly established Faculty Development Center contributes to these efforts, which, taken together, have advanced self-examination, reflection, and attention to assessment.

      <u>Building Shared Motivation</u>. A second step has been to identify shared goals worthy of our attention, time, and resources. The constant probing of, and attention to, our mission statement have provided direction and focus to our self-assessment. The annual University Retreat is committed to reviewing our written statements of purpose and identity and has given rise to such planning structures as the former Provost s Committee on University Priorities (PCOUP) and the current strategic planning designed to link planning and budget more closely, and to which designated task forces are central. The primary charge to the Planning Leadership Team requires linking defined goals and priorities with resources. Furthermore, the entire structure of shared governance at UMBC is dedicated to framing campus policies and procedures within a larger vision of the campus as it exists and as it evolves. Cost analyses are ongoing, as representatives from across the campus consider alternative paths to meeting our goals. Costs in terms of human time and effort, financial resources, space, political capital, and opportunity are weighed by what we will not be able to accomplish if one path is followed at the expense of another. Decisions, like success at UMBC, are never final. We have chosen a recursive evaluation scheme wherein goal setting, problem posing, problem solving, and implementation are always under scrutiny and open to debate.

      Some goals and objectives, however, are not self-identified but rather are imposed by the USM, MHEC, and other governing bodies. A primary example is Managing for Results (MFR). MFR was instituted by the Department of Budget and Management and mandates that all State agencies identify specific goals and objectives, strategies for reaching those goals, and outcomes measuring achievement within a defined time line. In FY 2001, public higher education institutions of Maryland were also mandated to carry out this process. Campus representatives from the Provost s Office, the Office of Institutional Research, and the Budget Officer attended training designed to familiarize administrators with the language, concepts, and form of the MFRs. Those so trained, in turn, worked with other campus representatives to identify and prepare UMBC s response (see Appendix J for the 2000 *Managing for Results Report*).

Outside agencies conferring professional licenses also prescribe standards and outcomes we must meet. The National Council for the Accreditation of Teacher Education (NCATE), the American Psychological Association (APA), and the Accreditation Board for Engineering and Technology (ABET) are examples. UMBC is currently accredited by the following: NCATE; the APA, which granted full accreditation to the Clinical Psychology concentration in the Human Services Psychology Master s Program; ABET, which granted accreditation to UMBC s programs in Mechanical Engineering, Chemical and Biochemical Engineering, and Computer Engineering; and the Computer Science Accreditation Board (now part of ABET), which granted accreditation to our program in Computer Science. Middle States, too, mandates the campus to engage in institution-wide assessment. Indeed, this report demonstrates not only compliance but the importance such assessment holds for UMBC as we struggle to meet our own high expectations. We realize assessment affords the campus opportunities to reinvent ourselves while building on our strengths and articulated values.

Building Shared Language and Understandings. The combined efforts described above have created a dialogue, and many meaningful conversations regarding assessment have taken place across campus. From these, we are constantly examining and choosing a language to inform our collective understandings. All too often, concepts such as effective teaching and student learning are taken for granted under a pretense of mutual agreement. We are admittedly struggling to determine indices, both quantitative and qualitative, that will define what we mean by effective teaching and adequate mastery of material. Arguments regarding what constitutes assessment data are healthy and vibrant at UMBC. We do not insist on one definition, but choose instead to include indices defined by the disciplines and the faculty, as well as by standardized measures. We see our task as working toward assessments that make a difference, that are tied to improvement and making quality evident while identifying areas of concern. Robust concepts that inform our actions are those that will survive our queries.

Indeed, this report challenges us to review what we are doing, as well as how we propose to proceed with a coherent, structured, and thorough assessment framework. As noted, we already engage in a significant number of assessment activities. We have admissions screening and placement tests for national and international students. There is teacher-developed testing within each course offered, and many programs have exit tests. Senior theses, portfolios, practica, internships, artistic performances, exhibitions, capstone experiences, and other course and/or program requirements are an integral component of educational assessment. There is post-instruction standardized testing, such as examinations for graduate school admission and professional licensure. Surveys of students when they first enter UMBC and throughout their academic careers are conducted by Student Affairs and are used to define intervention strategies, as well as the effect of those interventions. We also participate in the National Survey of Student Engagement (NSSE). The College of Engineering has undertaken a methodical approach to refining their outcomes assessment system, including surveys of graduating seniors and all alumni, analysis of survey results in comparison with peer institutions, and evaluations of each program by the College of Engineering s Industrial Advisory Board. Plans are also underway to pilot software designed to facilitate development of engineering student portfolios. Additionally,

UMBC alumni are surveyed according to MHEC regulations. The next academic steps our graduates take and their employment inform our reflections upon how well we are preparing our students for their lives after UMBC.

Institutional measures of teaching include quantitative ratings completed by each student in every course (Student Course Evaluation Questionnaire [SCEQs]), as well as narrative responses students may provide to the faculty member teaching the course. The SCEQs are used in promotion and tenure decisions; the narrative reports inform the faculty member alone. Many faculty have developed their own midterm and/or final evaluations to complement those required by the University. Some departments have instituted peer review of teaching and use these reviews in post-tenure as well as promotion and tenure decisions.

As noted above, UMBC has several assessment points for faculty including post-tenure or comprehensive review. In addition to annual reports, all core faculty are assessed at key intervals during their first and third years as members of the faculty, and for promotion and tenure during the sixth year. In the post-tenure review process, twenty percent of the tenured faculty are reviewed annually, but no faculty member is reviewed more frequently than once every five years. Merit pay is tied to departmental expectations and workload requirements.

Student needs are tied to careful placement testing, advising, and tutoring when necessary. The Learning Resources Center and the English Language Center provide tutoring and instruction for eligible students. Faculty needs are addressed through the departments, the Deans  Offices, and the new Faculty Development Center, all of which provide travel funds for conferences and workshops.

Recognizing the need for data-driven decision-making and the need to provide services to constituents efficiently and easily, UMBC has embarked on a multimillion-dollar agreement with PeopleSoft for an integrated suite of administrative systems and data warehousing. This agreement will ease data-gathering especially across campus units including admissions, advising, registration, financial aid, and accounting. It will make it possible to pose and answer questions that in the past have been too labor-intensive to address.

Building Shared Guidelines. Beyond the significant efforts evident in the production of this report, we continue to examine cognitive outcomes by asking: What is it a UMBC graduate should know and be able to do at the end of his or her experience here? Reflecting on this question, some departments have incorporated performance and portfolio assessments into their programs. For example, students wishing to enter the Department of Visual Arts must first pass a portfolio review of materials they have produced in response to departmental guidelines. All Visual Arts faculty are involved in these reviews and have noted how the portfolio review process has functioned as a catalyst for self-assessment. These reviews, which are held five times a year, stimulate discussion regarding the mission of the department and necessary curricular adjustments. Additionally, the Fine Arts Gallery holds an annual Senior Exit Exhibition of work by graduating students that is representative of their artistic growth and achievement in the

department. The Department of Education requires entering students to begin a portfolio, which they continue to develop throughout their course of study at UMBC. The portfolio is organized to reflect national professional standards and includes an array of evidence documenting student growth in numerous areas  for example, content knowledge, instructional planning and assessment, and family and community relations. These portfolios are used to assess the UMBC students  readiness for licensure. Another example is in the Department of Theatre, where all seniors are required to do a senior project, which is either a design presentation or a 10- or 15-minute performance of challenging dramatic material. Design and technical Theatre majors may design an entire production, and that work is critiqued by appropriate departmental faculty. In the College of Engineering, faculty are in the process of defining both technical and non-technical educational objectives and raising awareness of how these objectives, including those related to ethics, communication, and teamwork, can be achieved.

We have also been examining cognitive outcomes by working more closely with other institutions, including K-12, to outline standards in the disciplines. Development of the standards for a  C  paper in English is an example of collaborative work across institutions, both two- and four-year, that has aided instruction and assessment. The Center for History Education is another excellent example of a K-16 effort to develop K-12 standards in history. However, we need to develop standards and objectives in many of the disciplines on campus. We are reviewing the SCEQs and determining how to supplement these measures of student satisfaction with qualitative and quantitative assessments of student learning outcomes.

We are continuing to develop various forms of assessment that flow from UMBC s mission to influence curriculum and campus life. We will continue to involve faculty, administrators, staff, and students (both current and former) in the assessment process. Data already collected will be incorporated into the framework. Yet, a major challenge is to determine where omissions exist, and important questions remain unanswered in the present reporting. As noted earlier, success is never final.

# VII.   Conclusion

Since UMBC completed our Middle States *Self-Study* of 1996, the campus leadership has initiated and the community has embraced an active, inclusive process for planning and matching priorities to the University s budget. This process is an example of UMBC s vibrant system of shared governance. Working together in a spirit of inquiry, our faculty, administrators, staff, and students have collected and reviewed data, posed questions about how best to fulfill our mission, and challenged our creative and analytical processes as we respond to feedback from the 1996 Evaluation Team, recommendations from the six most recent task forces, and the priorities of the Planning Leadership Team. At every step, we are guided by the Vision Statement UMBC adopted in 1999:

*An Honors University in Maryland, UMBC seeks to become the best public research university of our size by combining the traditions of the liberal arts academy, the creative intensity of the research university, and the social responsibility of the public university. We will be known for integrating research, teaching and learning, and civic engagement so that each advances the other for the benefit of society.*

Implementing UMBC s Vision  is more than the theme of this PRR. It is the theme of our daily, ongoing activities as an academic community, for it is in implementing our vision that we continuously identify our progress and achievements, our goals for the future, our aspirations, and our new and remaining challenges in administering UMBC s mission.  Success is never final,  because we continue to strive for excellence, aiming higher and higher as former benchmarks are attained.

# VIII. Tables

STF3:       Full-Time Staff EEO Category and Highest Degree
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GEN2:       Estimated UMBC Budget for Fiscal Years 2002 to 2006


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P.   *A Plan of Organization for the Senates of the University of Maryland Baltimore County* (1998)
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Item 1A.   *UMBC Review: A Journal of Undergraduate Research and Creative Efforts - Spring 2000*
Item 1B.   *UMBC Review: A Journal of Undergraduate Research and Creative Efforts - Spring 2001*
Item 2.   *UMBC Undergraduate Student Satisfaction Survey - Spring 2000*
Item 3.   *UMBC Graduate Student Satisfaction Survey - Spring 2000*
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Item 5.   *UMBC Undergraduate Catalog, 2000-2002*
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