

R30B21
University of Maryland, Baltimore
University System of Maryland

Operating Budget Data

(\$ in Thousands)

	<u>FY 08</u> <u>Actual</u>	<u>FY 09</u> <u>Working</u>	<u>FY 10</u> <u>Allowance</u>	<u>FY 09-10</u> <u>Change</u>	<u>% Change</u> <u>Prior Year</u>
General Funds	\$170,642	\$175,543	\$186,871	\$11,328	6.5%
Contingent & Back of Bill Reductions	0	0	-292	-292	
Adjusted General Fund	\$170,642	\$175,543	\$186,578	\$11,036	6.3%
Special Funds	0	9,173	0	-9,173	-100.0%
Adjusted Special Fund	\$0	\$9,173	\$0	-\$9,173	-100.0%
Other Unrestricted Funds	305,808	314,323	325,670	11,347	3.6%
Adjusted Other Unrestricted Fund	\$305,808	\$314,323	\$325,670	\$11,347	3.6%
Total Unrestricted Funds	476,450	499,039	512,540	13,502	2.7%
Contingent & Back of Bill Reductions	0	0	-292	-292	
Adjusted Total Unrestricted Funds	\$476,450	\$499,039	\$512,248	\$13,209	2.6%
Restricted Funds	391,345	425,102	431,869	6,767	1.6%
Contingent & Back of Bill Reductions	0	0	-197	-197	
Adjusted Restricted Fund	\$391,345	\$425,102	\$431,672	\$6,570	1.5%
Adjusted Grand Total	\$867,795	\$924,141	\$943,920	\$19,779	2.1%

- General funds increase \$11.0 million, or 6.3%, in the fiscal 2010 allowance, after adjusting for contingent reductions. However, after accounting for \$9.2 million of Higher Education Investment Funds (HEIF) in fiscal 2009, the underlying increase is \$1.9 million, or 1.2%, over the fiscal 2009 working appropriation.
- Other unrestricted funds increase \$11.3 million, or 3.6%, in the fiscal 2010 allowance.
- Overall, the University of Maryland, Baltimore's (UMB) adjusted budget increases 2.1%, or \$19.8 million.
- Pending actions, such as a Board of Public Works reduction to recognize furlough savings and the likelihood of HEIF underattainment, are not accounted for in these numbers.

Note: Numbers may not sum to total due to rounding.

For further information contact: Richard H. Harris

Phone: (410) 946-5530

Personnel Data

	<u>FY 08</u> <u>Actual</u>	<u>FY 09</u> <u>Working</u>	<u>FY 10</u> <u>Allowance</u>	<u>FY 09-10</u> <u>Change</u>
Regular Positions	4,401.47	4,525.56	4,494.56	-31.00
Contractual FTEs	<u>447.57</u>	<u>450.38</u>	<u>445.92</u>	<u>-4.46</u>
Total Personnel	4,849.04	4,975.94	4,940.48	-35.46

Vacancy Data: Regular Positions

Turnover and Necessary Vacancies, Excluding New Positions	45.84	1.02%
Positions and Percentage Vacant as of 12/31/08	n/a	n/a

- The allowance includes a decrease of 31.0 regular full-time equivalent (FTE) positions and a decrease of 4.5 contractual FTE positions.

Analysis in Brief

Major Trends

Growth in Extramural Funding: The total extramural funding received in fiscal 2008 was \$36.2 million more than projected in the working appropriation a year ago. This income is predicted to grow \$6.0 million in fiscal 2009 and by \$9.0 million in fiscal 2010 to \$464.0 million. UMB's 2010 goal is \$511.4 million, which is attainable if the historical extramural funding trends continue. **The President should comment on UMB's consistently modest extramural funding projections, which are regularly under the eventual actual.**

Graduates in Key Health Fields: Over the next two years, graduates from the pharmacy and dental schools are expected to increase slightly. Nursing graduates, however, are projected to grow from fewer than 250 in fiscal 2008 to more than 325 in fiscal 2010.

Issues

Affordability: The degrees UMB offers are expensive, particularly the law, medical, and dental programs. While all of UMB's growing institutional aid budget is distributed to students on a need basis, the average graduate student's debt level is \$88,116. **The President should comment on the high cost of medical, dental, and law degrees in general and, specifically, on UMB's efforts to increase affordability to students.**

Growth of Research: UMB’s budget is largely based on grants and contracts received by its faculty. An additional revenue source is the commercialization of research and technology developed at the university. Since fiscal 2005, there has been a significant increase in the number of patents filed, and there were 24 license agreements in fiscal 2008. Research and contracts generated \$450.0 million in fiscal 2008. **The President should comment on ongoing efforts by UMB to increase revenue from technology transfer.**

Recommended Actions

1. Concur with Governor’s allowance.

Updates

UMB Outside of Baltimore: Although based in Baltimore City, UMB operates throughout the State and world. It sees part of its mission to offer needed medical and social services to the State’s rural populations as well as overseas. Additionally, faculty relationships allow the university to earn research contracts with internationally based pharmaceutical firms.

R30B21 – USM – University of Maryland, Baltimore

R30B21
University of Maryland, Baltimore
University System of Maryland

Operating Budget Analysis

Program Description

The University of Maryland, Baltimore (UMB) offers primarily graduate and professional degrees in the fields of health, applied health, biomedical science and technology, social work, and law. Its professional programs include the Schools of Dentistry, Law, Medicine, Nursing, Pharmacy, and Social Work. Less than 20% of the enrollment at UMB is in baccalaureate programs.

UMB is located in downtown Baltimore and has two clinical partners – the University of Maryland Medical Center and the Veterans Administration Medical Center – as well as one research partner, the University of Maryland Biotechnology Institute. Its mission is to:

- continue to evolve and maintain a competitive edge as a center of excellence in the life and health sciences, law, and social work; and
- conduct recognized research and scholarship in the life and health sciences, law, and social work that fosters social and economic development.

The institution aims to respond to the State’s critical need for health and human services professionals. Most of the university’s programs are designed for full-time students. However, the Schools of Law, Nursing, and Social Work and the Graduate School have a significant number of part-time students. The School of Nursing offers programs that enable nurses in educationally underserved areas to earn undergraduate and graduate degrees in five outreach sites throughout the State.

UMB also aims to provide public service to all citizens in all sectors and geographic regions of Maryland, especially the community surrounding the urban campus. The institution provides legal and dental clinics, community outreach services, support to the Maryland Poison Center, and staff to its clinical partners. The university also strives to increase fundraising to deliver programs more effectively and to encourage entrepreneurial activities that generate economic development.

Carnegie Classification: Research and Special Focus Institution: Medical

Fall 2008 Undergraduate Enrollment Headcount		Fall 2008 Graduate/Prof. Enrollment Headcount	
Male	132	Male	1,594
Female	722	Female	3,708
Total	854	Total	5,302
Fall 2008 New Students Headcount		Campus (Main Campus)	
First-time	0	Acres	48.3
Transfers/Others	293	Buildings	68
Graduate/Prof.	1,613	Average Age	17
Total	1,903	Oldest	1812
Programs		Degrees Awarded (2007-2008)	
Bachelor's	3	Bachelor's	350
Master's	13	Master's	701
Doctoral/Prof.	25	Doctoral/Prof.	803
		Total Degrees	1,854

Performance Analysis: Managing for Results

UMB strives to be a leading center of education and research in health sciences, law, and social work. Toward that end, the university boasts several highly ranked programs according to the *U.S. News & World Report* and the most recent rankings. Although not all of UMB's colleges are ranked by the publication every year, several were in the most recent update. These may be found in **Exhibit 1**, which shows *U.S. News's* most recent ranking for the Pharmacy and Social Work schools and ranked programs of the School of Law. Additionally, the Schools of Medicine and Dentistry are highly ranked in the number of National Institutes of Health awards received. In fiscal 2007, the medical school was ranked thirteenth among all public medical schools, and for fiscal 2007 the dentistry school ranked eighth. Data for fiscal 2008 is not yet available.

Exhibit 1
Ranked Programs of the University of Maryland, Baltimore
Fall 2008

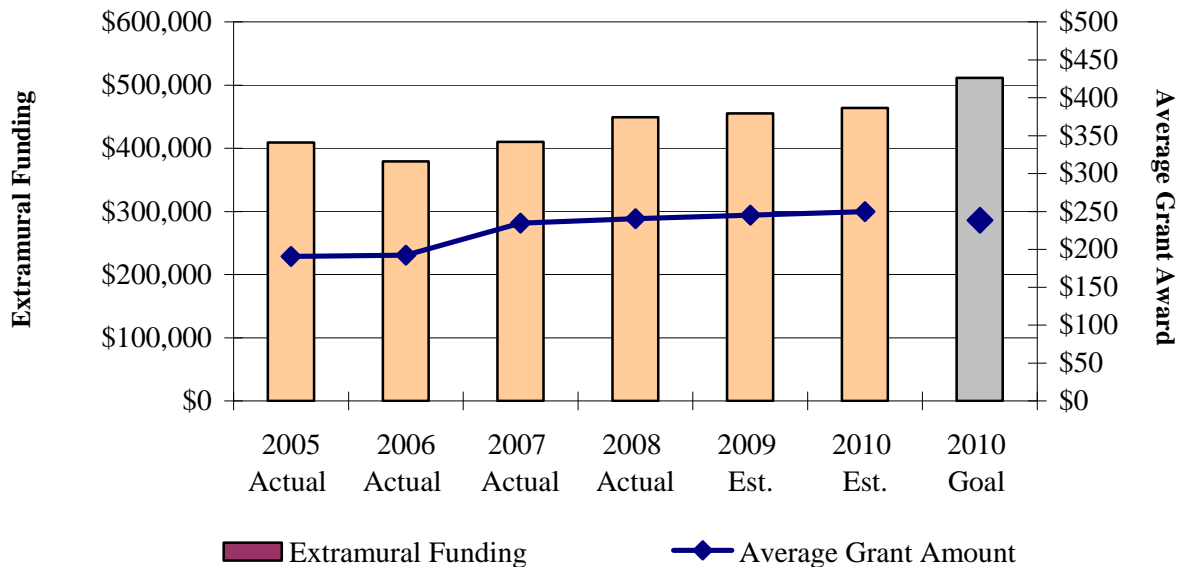
	<u>Rank</u>
School of Pharmacy	9
School of Social Work	18
Ranked School of Law Programs	
Health Law	3
Clinical Training	8
Environmental Law	8

Source: *U.S. News & World Report*; University of Maryland, Baltimore

Growth in Extramural Funding

Growth in extramural funding and faculty grant funding has continued to increase since fiscal 2006, as shown in **Exhibit 2**. Extramural funding includes research and scholarship funds received in the areas of life and health sciences, law, and social work, and it affects UMB’s impact on social and economic development. From the low of \$379.4 million in fiscal 2006, it grew 18.3% by fiscal 2008 to \$449.0 million. The projection for fiscal 2008 during the 2008 session was \$412.8 million, a difference of 8.6%, or \$36.2 million. UMB is expecting modest growth in fiscal 2009 and 2010, projecting increases under 2.0% in both years.

Exhibit 2
Extramural Funding and Average Faculty Grant Award
Fiscal 2005-2010
(\$ in Thousands)



Source: Governor’s Budget Books, Fiscal 2008-2010

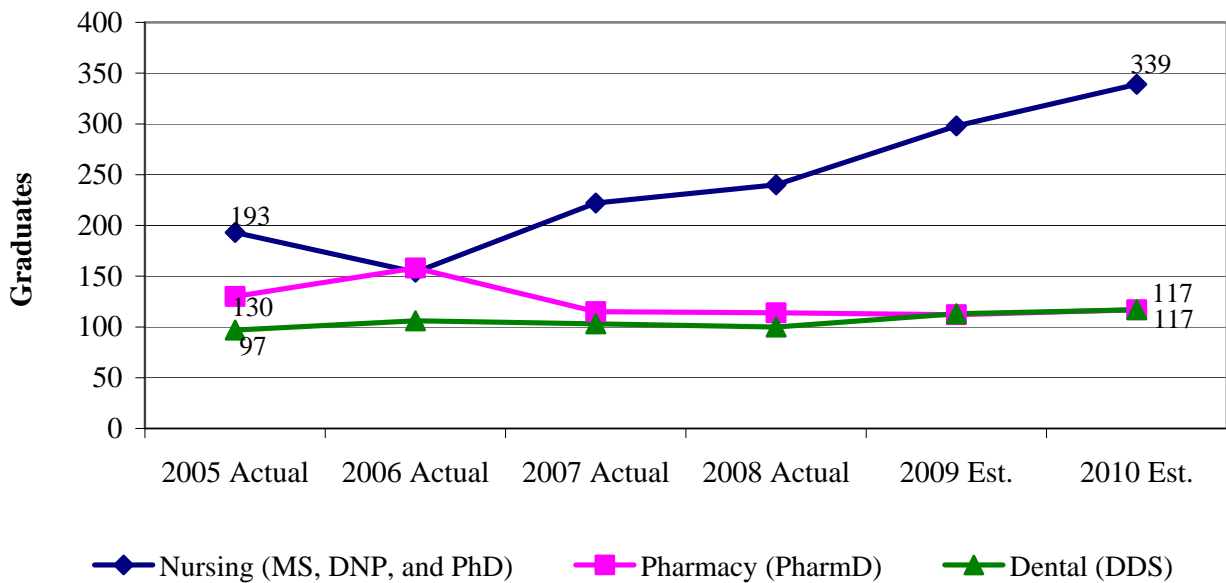
A goal was set for fiscal 2010, which was to have extramural funding levels be 25.0% higher than in fiscal 2005, or \$511.4 million. This exhibit demonstrates that UMB is currently projecting \$464.0 million for fiscal 2010, far short of that year’s goal. If growth continues at current rates, however, despite its projections, the university will meet or exceed the goal. Growth was 8.1% from fiscal 2006 to 2007 and 9.5% from fiscal 2007 to 2008. In fiscal 2009 and 2010, growth may average just under 5.0% to meet the goal. **The President should comment on UMB’s consistently modest extramural funding projections, which are regularly exceeded and have the effect of understating the budget.**

Exhibit 2 also demonstrates how growth in extramural funding appears linked to average grant award levels. Like total funding, the average grant award showed greater rates of growth after fiscal 2006, by 21.9% in fiscal 2007, a more modest 2.5% in fiscal 2008, and a projected 2.0% in fiscal 2010. Similar to extramural funding, the goal is to have the average grant level be 25.0% greater than that in fiscal 2005, or \$238,518. UMB is currently projecting the average award in fiscal 2010 will be \$250,000, well above the goal.

Health Field Graduates

As the State’s only public nursing, pharmacy and dental school, part of UMB’s mission is to meet the State’s critical need for health and human services professionals by improving access to professional careers in these fields. **Exhibit 3** shows UMB’s graduates in these fields from its nursing, pharmacy, and dental schools. The area showing the greatest growth is nursing, projecting 240 students in fiscal 2008 and 339 in 2010. This is due to increasing enrollments for its Clinical Nurse Leader and Doctor of Nursing Practice programs. UMB’s pharmacy and dental programs are projecting a stable number of graduates through fiscal 2010.

Exhibit 3
Nursing, Pharmacy, and Dental Graduates
Fiscal 2005-2010

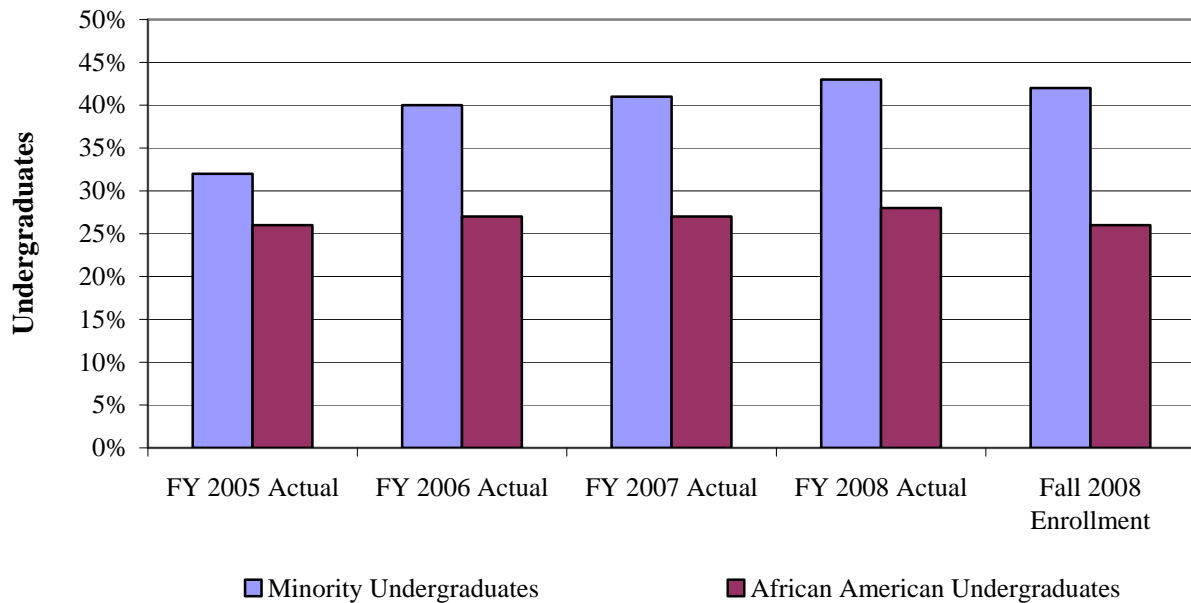


Source: Governor’s Budget Books, Fiscal 2009-2010

Undergraduate Minority Enrollment

Due to its status as a primarily graduate student institution, and on the advice of legal counsel, UMB does not report goals for enrollment of minority students, as do other University System of Maryland degree-granting institutions. The university reports only the actual percentage of graduate and undergraduate enrollment represented by minority students. Also, UMB does not report minority retention or graduation rates because it does not have any first-time freshmen students. **Exhibit 4** illustrates the percentage of minority undergraduates and African American undergraduates enrolled. The fall semester of 2008 is used in place of a fiscal 2009 projection. The percentage of undergraduates who are minorities has leveled, declining by 1 percentage point to 42%. The percentage of undergraduates who are African American fell by 2 percentage points, to 26%.

Exhibit 4
Minority and African American Undergraduates
As Percent of Student Body
Fiscal 2005-2008 and Fall 2008



Source: Governor's Budget Books, Fiscal 2009-2010

Fiscal 2009 Actions

Impact of Cost Containment

Throughout fiscal 2009, the Board of Public Works (BPW) has reduced UMB's unrestricted funds by \$3.8 million. The first reduction was \$1.0 million, which was replaced with funds originally restricted for Other Post Employment Benefit (OPEB) liabilities. The remaining \$2.8 million was distributed proportionately throughout UMB's constituent schools based on the amount of general fund support for salaries represented at each school, excluding public safety and health units. The university reports the effect will be to reduce facility renewal spending and budgets for student and institutional support.

A statewide employee furlough included higher education, and UMB reduced the salary and wage budget by \$2.7 million. The number of days required to take off was dependent on salary level, although employees earning under \$30,000 per year were exempt, as were graduate assistants and public safety employees. An additional \$54.2 million of unspecified reductions going before BPW may further impact UMB's budget, but at the time of this writing, it is unknown by what amounts.

Proposed Budget

The general fund allowance for fiscal 2010 is \$11.0 million, or 6.3%, higher than the fiscal 2009 working appropriation, as shown in **Exhibit 5**. After accounting for the Higher Education Investment Fund (HEIF) in fiscal 2009, however, the underlying growth falls to \$2.6 million, or 1.4%. A portion of the general fund growth is an increase to fund an undergraduate tuition freeze for in-state students. As UMB has few undergraduates, however, it receives only \$0.2 million to freeze tuition. The remaining increase will support the programs at USG, purchase non-capital equipment, make debt service payments, and increase institutional aid. Restricted funds grow by 1.5%, or \$6.6 million. Overall, the budget increases by 2.2%.

It should be noted the amount shown for the HEIF in Exhibit 5 is less than the total of UMB's legislative appropriation and subsequent budget amendment, which is shown in this analysis's opening exhibit. This is due to the expected underattainment of the fund, which receives a portion of the State's corporate income tax. Due to the weakening economy, it has generated less revenue than was projected during the 2008 session, and UMB is expected to receive \$742,376 less than budgeted.

Exhibit 5
Proposed Budget
University of Maryland, Baltimore
(\$ in Thousands)

	<u>2008</u> <u>Actual</u>	<u>2009</u> <u>Working</u>	<u>2010</u> <u>Adjusted</u>	<u>2009-10</u> <u>\$ Change</u>	<u>% Change</u> <u>Prior Year</u>
General Funds	\$170,642	\$175,543	\$186,578	\$11,036	6.3%
Higher Education Investment Fund*		8,431		-8,431	-100.0%
Total State Funds	\$170,642	\$183,974	\$186,578	\$2,605	1.4%
Other Unrestricted Funds	\$305,808	\$314,323	\$325,670	\$11,347	3.6%
Total Unrestricted Funds	476,450	498,296	512,248	13,952	2.8%
Restricted Funds	391,345	425,102	431,672	6,570	1.5%
Total Funds	\$867,795	\$923,398	\$943,920	\$20,521	2.2%

*It is expected Higher Education Investment Fund appropriations in fiscal 2009 will be reduced by \$742,376 due to underattainment of revenues.

Note: Numbers may not sum to total due to rounding. Fiscal 2009 does not include anticipated furlough reductions.

Restricted funds grow 1.5% in the Governor’s allowance, to \$431.7 million. A year ago, the fiscal 2009 allowance level funded UMB’s restricted funds at \$383.9 million. The fiscal 2009 working appropriation is now \$425.1 million, an increase of 10.7%. Historically, UMB’s restricted funds have grown faster than projected in the allowance, and a sizable budget amendment must be brought in mid-year to account for the increase. The university reports it decided on a conservative estimate due to the economic downturn. It is possible that another budget amendment will be required. **The President should comment on how the restricted fund allowance figure was determined.**

Impact of Cost Containment

Contingent across-the-board reductions for fiscal 2010 reduce the UMB budget by a total of \$381,828 to delete the State’s deferred compensation match. It is made up of \$292,460 in general funds and \$89,368 in restricted funds. Additional reductions to the university’s budget may occur as part of an unallocated \$30.0 million across-the-board reduction.

Changes by Program

Budget changes by program, are shown in **Exhibit 6**. The largest change occurs in Operations and Maintenance of Plant which increases by 7.9%, or \$5.6 million, due to increasing electricity costs and non-capital equipment for the Pharmacy Hall addition. Instruction is the next largest increase, growing by \$4.2 million in the allowance. This will cover costs associated with adding 80 students to UMB's pharmacy and nursing programs at the Shady Grove satellite campus.

Exhibit 6 UMB Budget Changes for Unrestricted Funds by Program Fiscal 2008-2010 (\$ in Thousands)

	<u>2008</u> <u>Actual</u>	<u>2009</u> <u>Working</u>	<u>2008-09</u> <u>% Change</u>	<u>2010</u> <u>Allowance</u>	<u>2009-10</u> <u>Change</u>	<u>2009-10</u> <u>% Change</u>
<u>Expenditures</u>						
Instruction	\$159,059	\$170,197	7.0%	\$174,432	\$4,235	2.5%
Research	55,877	54,187	-3.0%	53,686	-501	-0.9%
Public Service	4,299	4,438	3.2%	4,496	58	1.3%
Academic Support	51,087	53,626	5.0%	54,461	835	1.6%
Student Services	3,244	3,385	4.4%	3,417	31	0.9%
Institutional Support	64,703	70,241	8.6%	71,826	1,584	2.3%
Operation and Maintenance of Plant	67,674	70,713	4.5%	76,316	5,602	7.9%
Scholarships and Fellowships	8,262	9,038	9.4%	9,518	481	5.3%
Education and General Total	\$414,206	\$435,826	5.2%	\$448,152	12,326	2.8%
Hospitals	\$38,271	\$41,259	7.8%	\$42,182	\$923	2.2%
Auxiliary Enterprises	23,973	21,953	-8.4%	22,206	253	1.2%
Pending Reductions ¹		-742		-292		
Grand Total	\$476,450	\$498,296	4.6%	\$512,248	13,952	2.8%
<u>Revenues</u>						
Tuition and Fees	\$84,206	\$86,882	3.2%	\$92,070	5,187	6.0%
Higher Education Investment Fund		\$8,431			-8,431	-100.0%
General Funds	170,642	175,543	2.9%	186,578	11,036	6.3%
Other Unrestricted Funds	216,065	207,973	-3.7%	215,145	7,171	3.4%
Subtotal	\$470,914	\$478,829	1.7%	\$493,793	14,963	3.1%
Auxiliary Enterprises	\$23,238	\$23,717	2.1%	\$23,717	n/a	0.0%
Transfer (to)/from Fund Balance	-17,702	-4,250	-76.0%	-5,262	-1,012	23.8%
Grand Total	\$476,450	\$498,296	4.6%	\$512,248	13,952	2.8%

UMB: University of Maryland, Baltimore

¹Does not include furlough reduction in fiscal 2009.

Note: Unrestricted funds only. All programs.

Source: Maryland State Budget

UMB's expenditures see only one reduction, under the research program, by \$501,776, or 0.9%. Funds were spent on one-time non-capital equipment in fiscal 2009, costs that do not carry over into fiscal 2010. It should be noted that the majority of research money UMB receives is in restricted funds, not reflected in Exhibit 6. They increase by 0.7%, or \$2.2 million.

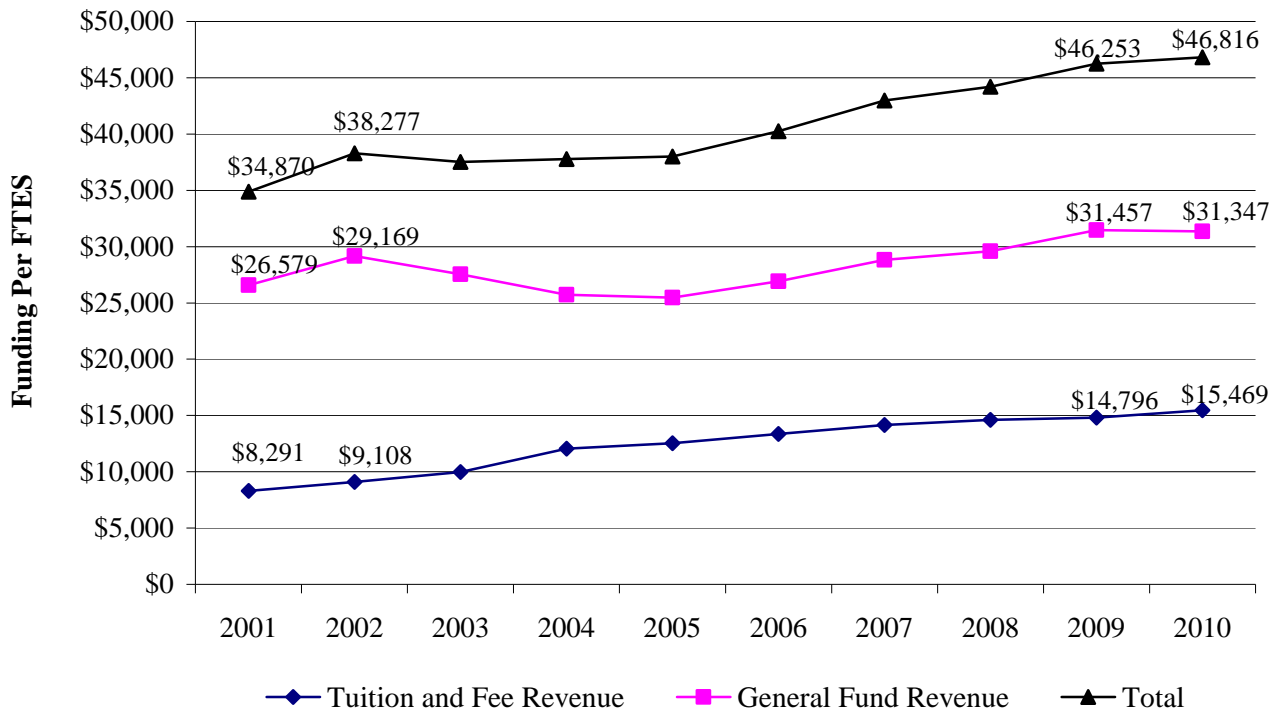
American Recovery and Reinvestment Act

The budget to UMB could see a sizable infusion of federal funds if the American Recovery and Reinvestment Act (ARRA) is passed in the United States Congress. Currently being debated, it proposes to appropriate and grant millions of dollars to higher education institutions through the State, as well as through competitive research grants. For UMB specifically, the National Institutes of Health and National Science Foundation are to receive \$6.6 billion for medical and scientific research grants. UMB is well situated to receive a share of these funds, as it is already a top recipient of federal research dollars.

Funding Per Full-time Equivalent Student

Exhibit 7 shows State funds, as well as tuition and fee revenue, per full-time equivalent student (FTES) from fiscal 2001 to 2010. Overall, the Governor's allowance grows 1.2%, to \$46,816, per FTES. In prior years, State funds grew at a faster rate than tuition and fee revenue. However, the growth over the fiscal 2009 working appropriation comes from tuition and fees, which increase 4.5%, or by \$673, per FTES. State funds decline slightly, by 0.3%, as enrollment growth outpaces State funding on a per FTES basis.

Exhibit 7
State Funds and Tuition and Fee Revenue per FTES
Fiscal 2001-2010



FTES: full-time equivalent student

Source: Governor's Budget Books, Fiscal 2003-2010

Issues

1. Affordability

While higher education is widely recognized to be very costly, the kinds of degrees UMB offers are especially expensive. It is largely a graduate and professional university, so although in-state undergraduate tuition is frozen, most UMB students do not benefit. For students graduating in the 2007-2008 academic year, the average level of debt is \$88,116 for graduate students and \$24,028 for undergraduates. **Exhibit 8** shows these graduates' average debt by degree at the time of graduation. Debt levels range from \$148,151 for a doctor of dental surgery degree to \$51,051 for a master of social work degree.

Exhibit 8
University of Maryland, Baltimore Average Student Debt
Academic 2007-2008 Graduates

Graduate/ Professional Degree

<u>Dental</u>	<u>Medicine</u>	<u>Law</u>	<u>Pharmacy</u>	<u>Physical Therapy</u>	<u>Nursing</u>	<u>Social Work</u>
\$148,151	\$142,002	\$81,187	\$92,579	\$75,884	\$60,630	\$51,051

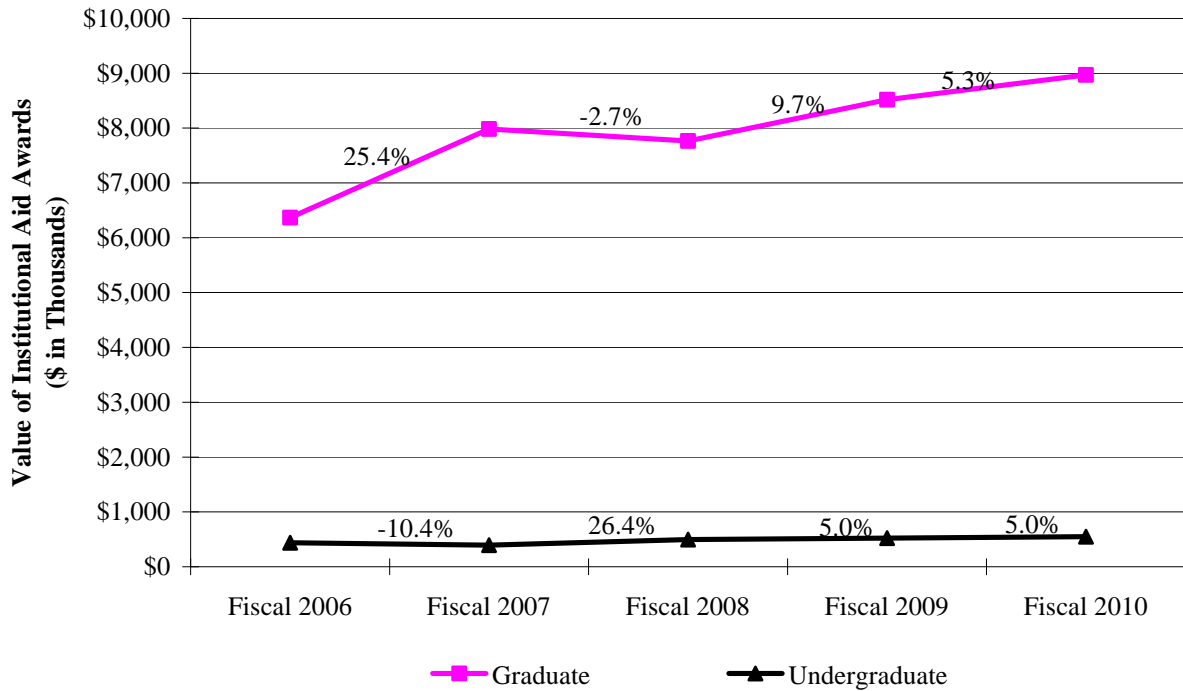
Undergraduate

<u>Dental Hygiene</u>	<u>Medical and Research Tech.</u>	<u>Nursing</u>
\$29,000	\$27,687	\$21,936

Source: University of Maryland, Baltimore

Like all other universities, UMB offers institutional aid to its students. Unlike other four-year institutions, however, UMB allocates all aid on a need basis. **Exhibit 9** shows growth in total institutional aid for both graduate and undergraduate students. Both increase in the 2010 allowance: graduate institutional aid by 5.3%, and undergraduate aid by 5.0%. Because of UMB's greater number of graduate students, as well as the comparatively higher cost of tuition, total aid for graduate students is significantly higher than that for undergraduates.

**Exhibit 9
Institutional Aid at the University of Maryland, Baltimore
Fiscal 2006-2010**



Source: University System of Maryland

For the most part, students enrolling in college complete a Free Application for Federal Student Aid to determine their eligibility for federal student loan programs. The application determines the expected family contribution (EFC) of each student, and aid is often distributed based on EFC category. **Exhibit 10** shows UMB’s graduate student aid by EFC for awards given on a need basis as well as for tuition remissions, non-competitive aid to employees or family members of employees. Of the aid awarded on a need basis, 86.1% of it is received by students with an EFC less than \$7,000. Students with an EFC of over \$15,000 received 3.5% of need-based aid. **The President should comment on the high cost of medical, dental, and law degrees in general and, specifically, on UMB’s efforts to increase affordability to students.**

Exhibit 10
Percent of Graduate Student Institutional Financial Aid Awards by EFC
Fiscal 2007

<u>EFC Category</u>	<u>Percent of All Need-based Aid</u>	<u>Percent of Tuition Remissions</u>	<u>Number of Awards</u>
\$0	52.6%	6.7%	1,085
\$1 – \$3,850	22.6%	5.9%	504
\$3,851 – \$6,999	10.9%	7.5%	300
\$7,000 – \$9,999	5.8%	2.8%	146
\$10,000 – \$14,999	4.6%	2.2%	115
\$15,000 – \$19,999	1.3%	1.9%	49
\$20,000 +	2.2%	3.5%	84

EFC: expected family contribution

Note: Numbers may not sum due to rounding. Total may not sum to 100% due to students receiving awards who did not file a Free Application for Federal Student Aid.

Source: Maryland Higher Education Commission, Financial Aid Information System 2006-2007

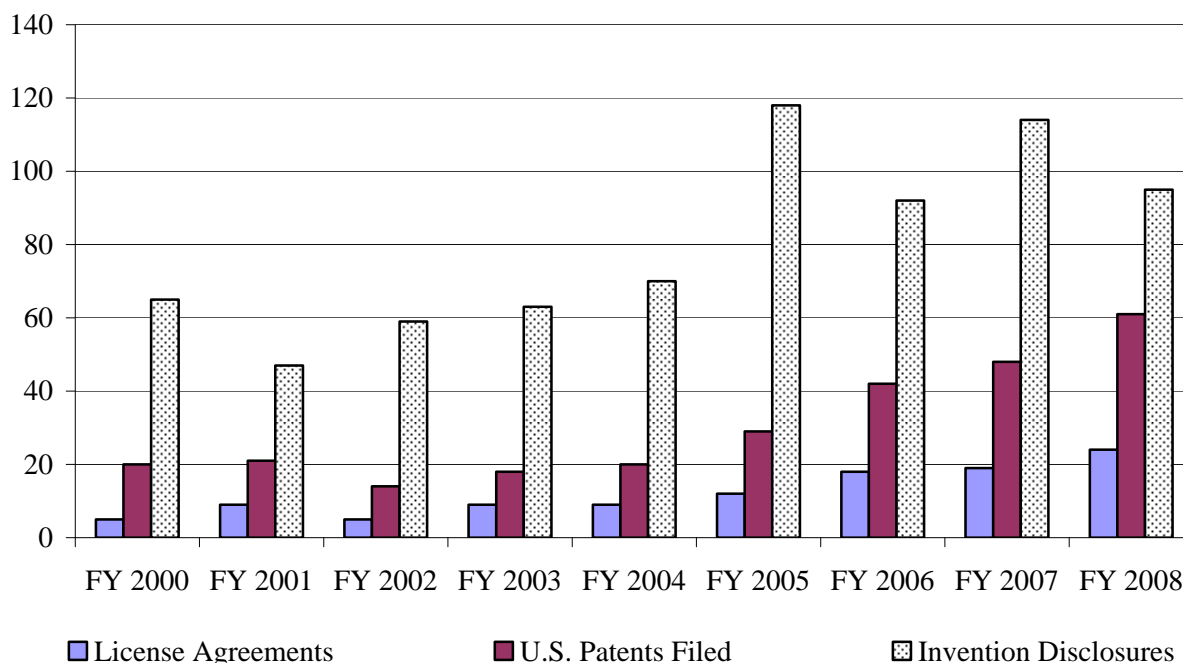
2. Growth of Research

UMB's fiscal 2008 budget totaled \$867.8 million, of which only \$170.6 million was general funds. A large part of the non-State funding that UMB receives is income generated by faculty research and the hospital, which brought in hundreds of millions in extramural funding in fiscal 2008. To win so many grant and contract awards, UMB must cultivate productive faculty.

The average amount of grant funding awarded to UMB's core faculty was \$726,941 in fiscal 2008, resulting in a total of \$450 million in grants and contracts or extramural funding. Many of these are for research to develop new drugs and treatments at the university's medical, dental, and pharmacy schools. Some of the research may be licensed and commercialized and generate revenue, but before that can happen, inventions must be developed, patents obtained, and clinical trials passed.

Exhibit 11 shows growth in license agreements, patents filed, and invention disclosures at UMB from fiscal 2000 through the 2008. License agreements have grown steadily since fiscal 2002, although at a greater rate since fiscal 2005 to 24 in fiscal 2008. The largest jump between years occurs with invention disclosures, which goes from 70 in fiscal 2004 to nearly 120 in fiscal 2005 and remains at that higher level, although there is some variation. The growth in fiscal 2005 coincides with the opening of Health Sciences Facility II.

Exhibit 11
License Agreements, U.S. Patents Filed, and Invention Disclosures at UMB
Fiscal 2000-2008



UMB: University of Maryland, Baltimore

Source: University of Maryland, Baltimore; Governor’s Budget Books, Fiscal 2010

Eventually, some of this research makes its way to market. Commonly referred to as “technology transfer,” these patents may be commercialized and later generate revenue. There are a few methods UMB employs to do this. One way is to license the technology or device to a private company. An example of this is a new technology the medical school developed to improve the effectiveness of cancer radiation treatments. It was licensed to a private company and will generate \$1.0 million for UMB in fiscal 2009.

The other method for UMB to commercialize a new technology is to form a private company. The medical school has also invented a device for the rehabilitation of stroke victims. UMB formed a private company called EncorePath to produce and sell the device and although private, UMB owns stock and will receive royalties on each device sold.

In total, licensing is expected to generate \$1.9 million in fiscal 2009. Contracts and grants are expected to generate \$416.2 million in fiscal 2010. **The President should comment on ongoing efforts by UMB to increase revenue from technology transfer.**

Recommended Actions

1. Concur with Governor's allowance.

Updates

1. UMB Outside of Baltimore

UMB has significant operations outside the Baltimore City limits. As the State's only public medical, law, nursing, and dental school, it offers education and clinical services throughout the State. The university has an international reach as well, with renowned faculty and institutes fostering relationships with organizations and companies from overseas. In fiscal 2008, these operations generated nearly \$450 million in sponsored research and \$200 million in services.

Beyond Baltimore's Border

Throughout the State, and especially in rural areas, UMB operates area health education centers (AHEC). Funded by both the State and federal grants, AHECs fill gaps in service throughout Maryland. Housed administratively in the medical school, each of UMB's six schools are involved. The medical, dental, and nursing schools offer medical care; the law school offers litigation and advocacy services; and all are involved in education programs.

While entities like AHECs are not offered by UMB out-of-state, the school does have national reach outside of the students and research. The university's library has had a contract with the National Network of Libraries of Medicine to serve the southeastern United States for 25 years. This involves programs for local organizations and libraries in places such as Mississippi and Georgia.

Going Abroad

Outside the United States, UMB operates in some fashion in nearly 40 countries. Working with federal sponsors like the Centers for Disease Control and private organizations such as the Gates Foundation, these programs are focused on disease treatment and prevention. Education is also a large focus, and the university works often with a local organization in offering services.

Another part of UMB's overseas relationships involves treatment. In recent years, it has expanded partnerships with global pharmaceutical firms for drug development and testing. One such firm, SNLB, has opened a branch at the UMB BioPark, investing \$25 million in the State. Additionally, UMB conducts clinical trials for firms based in Europe, Japan, and Israel. Faculty often come to the university with established relationships; its world-renowned institutes, like the Institute for Human Virology (IHV), attract attention themselves.

Generating Revenue

Some of UMB's rural centers generate less revenue than others, and its overseas operations generate far more. For example, a grant to provide medical care in Western Maryland is not on the same scale as a large scale double-blind drug trial, but both are important to the UMB mission. **Exhibit 12** shows UMB's income from the AHECs and its overseas programs for fiscal 2008 and 2009.

Exhibit 12
Revenue from Rural and Overseas Operations
Fiscal 2008-2009

	<u>State</u>	<u>Federal</u>	<u>Total</u>
Western Maryland AHEC			
2008	\$644,369	\$119,986	\$764,355
2009	669,369	100,375	769,744
Eastern Shore AHEC			
2008	\$601,653	\$17,700	\$619,353
2009	610,012	149,300	759,312
Overseas Operations			
2008	\$75.0 million		
2009	75.0 million		

AHEC: Area Health Education Center

Source: University of Maryland, Baltimore

Current and Prior Year Budgets

Current and Prior Year Budgets University of Maryland, Baltimore (\$ in Thousands)

	<u>General Fund</u>	<u>Special Fund</u>	<u>Other Unrestricted Fund</u>	<u>Total Unrestricted Fund</u>	<u>Restricted Fund</u>	<u>Total</u>
Fiscal 2008						
Legislative Appropriation	\$167,357	\$0	\$282,179	\$449,536	\$363,893	\$813,429
Deficiency Appropriation	0	0	5,000	5,000	10,000	15,000
Budget Amendments	5,302	0	18,628	23,930	20,000	43,930
Cost Containment	-2,016	0	0	-2,016	0	-2,016
Reversions and Cancellations	0	0	0	0	-2,548	-2,548
Actual Expenditures	\$170,642	\$0	\$305,808	\$476,450	\$391,345	\$867,795
Fiscal 2009						
Legislative Appropriation	\$175,396	\$4,281	\$295,509	\$475,186	\$402,896	\$878,083
Cost Containment	-3,750	0	0	-3,750	0	-3,750
Budget Amendments	3,897	4,892	18,814	27,603	22,206	49,808
Working Appropriation	\$175,543	\$9,173	\$314,323	\$499,039	\$425,102	\$924,141

Note: Numbers may not sum to total due to rounding.

Fiscal 2008

The fiscal 2008 legislative appropriation was \$167,356,682 in general funds and a total of \$449,535,905 in unrestricted funds. A deficiency appropriation of \$5,000,000 was included to account for additional grants and contracts awarded after the Governor proposed the budget. \$3,515,283 to fund a general fund cost-of-living-adjustment (COLA) was added to this amount, as well. A budget amendment added \$1,786,417 to account for the transfer of the Institute for Human Virology into UMB.

Unrestricted funds were reduced due to a BPW cost containment action, which lowered the budget by \$2,016,351 in general funds. However, higher sales and services of education activity added \$8,000,000 of unrestricted funds to the college. Higher tuition and fee revenue as well as other grant revenue add an additional \$10,628,412 to the university's unrestricted funds budget.

The restricted fund appropriation totaled \$363,892,814 with a \$10,000,000 deficiency appropriation for funding related to grants and contracts. A \$20,000,000 budget amendment added funds related to the IHV transfer and additional grant awards.

A cancellation of \$2,547,667 in restricted funds was due in part to lower than estimated grant awards (\$2,055,833) and lower than projected income from medical care provided by the university's physicians (\$491,834).

Fiscal 2009

The general fund appropriation was \$175,396,334 and unrestricted funds totaled \$475,186,340. This includes \$9,173,303 in funds from the Higher Education Investment Fund. A general fund COLA added \$3,896,740 to this amount, as well as \$4,892,285 in HEIF funds authorized by the General Assembly to replace a general fund reduction in the appropriation.

A budget amendment added \$18,813,696 for increased grant activity and higher tuition and fee revenue than estimated. Two BPW actions reduced the university's budget. First, the budget was reduced by \$983,871 in general funds, to be replaced with revenue previously restricted for OPEB liabilities. A second action reduced the budget by an additional \$2,766,530 in general funds.

The restricted fund appropriation was \$402,896,445 with a budget amendment added \$22,205,608 to this amount. The added funds reflected higher than projected grant and contract activity.

**Object/Fund Difference Report
University of Maryland, Baltimore**

<u>Object/Fund</u>	<u>FY08 Actual</u>	<u>FY09 Working Appropriation</u>	<u>FY10 Allowance</u>	<u>FY09 - FY10 Amount Change</u>	<u>Percent Change</u>
Positions					
01 Regular	4401.47	4525.56	4494.56	-31.00	-0.7%
02 Contractual	447.57	450.38	445.92	-4.46	-1.0%
Total Positions	4849.04	4975.94	4940.48	-35.46	-0.7%
Objects					
01 Salaries and Wages	\$ 549,756,734	\$ 581,976,465	\$ 587,779,950	\$ 5,803,485	1.0%
02 Technical and Spec. Fees	2,092,350	2,283,190	2,375,056	91,866	4.0%
03 Communication	4,639,222	4,809,999	4,807,575	-2,424	-0.1%
04 Travel	10,201,370	10,698,002	10,698,002	0	0%
06 Fuel and Utilities	19,102,936	20,221,014	23,304,541	3,083,527	15.2%
07 Motor Vehicles	1,947,392	1,682,340	1,668,949	-13,391	-0.8%
08 Contractual Services	146,879,347	160,216,421	169,700,504	9,484,083	5.9%
09 Supplies and Materials	61,675,107	65,138,809	65,141,785	2,976	0%
10 Equipment – Replacement	147,473	481,260	481,260	0	0%
11 Equipment – Additional	16,787,222	18,787,064	20,211,731	1,424,667	7.6%
12 Grants, Subsidies, and Contributions	23,406,714	24,641,246	25,169,365	528,119	2.1%
13 Fixed Charges	25,992,237	27,647,067	28,012,872	365,805	1.3%
14 Land and Structures	5,166,709	5,557,836	5,057,836	-500,000	-9.0%
Total Objects	\$ 867,794,813	\$ 924,140,713	\$ 944,409,426	\$ 20,268,713	2.2%
Funds					
40 Unrestricted Fund	\$ 476,449,666	\$ 499,038,660	\$ 512,540,297	\$ 13,501,637	2.7%
43 Restricted Fund	391,345,147	425,102,053	431,869,129	6,767,076	1.6%
Total Funds	\$ 867,794,813	\$ 924,140,713	\$ 944,409,426	\$ 20,268,713	2.2%

Note: The fiscal 2009 appropriation does not include deficiencies. The fiscal 2010 allowance does not include contingent reductions.

**Fiscal Summary
University of Maryland, Baltimore**

<u>Program/Unit</u>	<u>FY08 Actual</u>	<u>FY09 Wrk Approp</u>	<u>FY10 Allowance</u>	<u>Change</u>	<u>FY09 - FY10 % Change</u>
01 Instruction	\$ 180,749,446	\$ 190,995,412	\$ 196,093,246	\$ 5,097,834	2.7%
02 Research	336,041,351	362,872,486	364,608,599	1,736,113	0.5%
03 Public Service	10,293,689	10,280,135	11,178,098	897,963	8.7%
04 Academic Support	51,415,043	53,808,044	54,643,299	835,255	1.6%
05 Student Services	3,243,903	3,385,398	3,416,687	31,289	0.9%
06 Institutional Support	64,703,074	70,241,300	71,825,784	1,584,484	2.3%
07 Operation and Maintenance of Plant	67,674,474	70,713,468	76,315,933	5,602,465	7.9%
08 Auxiliary Enterprises	23,974,763	21,954,995	22,207,759	252,764	1.2%
17 Scholarships and Fellowships	17,238,541	18,611,578	19,092,297	480,719	2.6%
18 Hospitals	112,460,529	121,277,897	125,027,724	3,749,827	3.1%
Total Expenditures	\$ 867,794,813	\$ 924,140,713	\$ 944,409,426	\$ 20,268,713	2.2%
Unrestricted Fund	\$ 476,449,666	\$ 499,038,660	\$ 512,540,297	\$ 13,501,637	2.7%
Restricted Fund	391,345,147	425,102,053	431,869,129	6,767,076	1.6%
Total Appropriations	\$ 867,794,813	\$ 924,140,713	\$ 944,409,426	\$ 20,268,713	2.2%

Note: The fiscal 2009 appropriation does not include deficiencies. The fiscal 2010 allowance does not include contingent reductions.

**University of Maryland, Baltimore Full-time Equivalent Personnel by Budget Program
Fiscal 2006-2008**

	<u>Fiscal 2006</u>		<u>Fiscal 2007</u>		<u>Fiscal 2008</u>		Change in Share of Total <u>2006-08</u>
	<u>FTEs</u>	<u>% of Total FTEs</u>	<u>FTEs</u>	<u>% of Total FTEs</u>	<u>FTEs</u>	<u>% of Total FTEs</u>	
Instruction	1,152	28.7%	1,132	25.9%	1,149	25.6%	-3.1%
Research	1,135	28.3%	1,388	31.7%	1,377	30.7%	2.4%
Public Service	57	1.4%	65	1.5%	82	1.8%	0.4%
Academic Support	321	8.0%	377	8.6%	408	9.1%	1.1%
Student Services	41	1.0%	34	0.8%	34	0.8%	-0.3%
Institutional Support	523	13.0%	541	12.4%	581	12.9%	-0.1%
Operations, Maintenance of Plant	280	7.0%	303	6.9%	318	7.1%	0.1%
Auxiliary	59	1.5%	64	1.5%	62	1.4%	-0.1%
Hospitals	445	11.1%	470	10.7%	480	10.7%	-0.4%
Total	4,013		4,375		4,492		

FTEs: full-time equivalents

Notes: Data is for filled regular positions only. All data is self-reported and unaudited.

Source: University of Maryland, Baltimore