



UNIVERSITY SYSTEM *of* MARYLAND

Wednesday, February 1, 2017
University System of Maryland FY 2018 Budget Testimony
Maryland House Appropriations Subcommittee
on Education and Economic Development
USM Chancellor Robert L. Caret

Chairwoman Jones, Vice-Chairman Barnes, and members of the Committee . . . thank you for the opportunity to testify on the Governor’s FY 2018 budget recommendations for the University System of Maryland (USM). I want to thank you all as well for the tremendous support you have shown to higher education and the USM over the years.

Today I intend to keep my testimony brief, touching on three points before turning to the questions and issues raised by the legislative analysts.

First—and most importantly—on behalf of the USM, I express my support for Governor Hogan’s FY 2018 budget. I want to convey that, given the budgetary challenges being experienced by the State, we are most appreciative of the support being provided, as we know we must do our part to deal with the revenue shortfall. In brief, the Governor has proposed State support for the USM of \$1.35 billion, coming from the General Fund and the Higher Education Investment Fund.

This results in an increase of \$26.6 million—or approximately 2 percent—over the **final** FY 2017 budget, which includes the November Board of Public Works reduction of \$14.2 million.

Unfortunately, under the Budget Reconciliation and Financing Act, \$4 million to help reach funding guidelines on our campuses—funding necessary to achieve key workforce goals—was eliminated.

There are three components to the \$26.6 million increase in State funds: 1) funding for tuition relief; 2) support to implement SB 1052, the University of Maryland Strategic Partnership Act; and 3) funding for operating expenses for new building openings.

The \$16.4 million fund for tuition relief will allow for a “tuition buy-down,” enabling the USM to cap resident undergraduate tuition increases at a modest 2 percent. At an event last month announcing this, the Governor emphasized that higher education is “more important now than ever before.” With a continued focus on tuition affordability, this is the second consecutive year the Governor has provided tuition relief to make college in Maryland more affordable and accessible. As I will note later in my testimony, the USM will do our part to advance the case of affordability as well.

Another \$6.3 million is earmarked for the continued implementation of SB 1052, the University of Maryland Strategic Partnership Act, which went into effect last October. The additional dollars support the two new centers established under the legislation: the College Park-based University of Maryland Center for Economic and Entrepreneurship Development that will advance education and research in neuroscience, virtual and augmented reality, biomedical devices, data analytics, and cybersecurity; and the Baltimore-based Center for Maryland Advanced Ventures that will support and promote commercialization of university-based inventions and university-based startups. I will be speaking more to USM's expanded workforce and economic development initiatives in a few moments.

The remainder of the budget increase will help campuses pay for a portion of the costs associated with new facilities. As you know, to position Maryland for leadership in the innovation economy, recent years have seen the addition of important new academic and research facilities across the USM, with an emphasis on supporting workforce production in the STEM disciplines of science, technology, engineering, and mathematics. The Salisbury University Commons facility and the University of Maryland, Baltimore (UMB) Health Sciences Facility III both received support. However, new facilities at the University of Maryland, College Park (UMCP) and Bowie State University (BSU) did not.

Overall, the support needed for USM's Current Services Budget—driven primarily by increased financial aid, facilities renewal expenses, debt service payments, and operating funds for new buildings—outpaces our funding increase, again, due to the revenue shortfall.

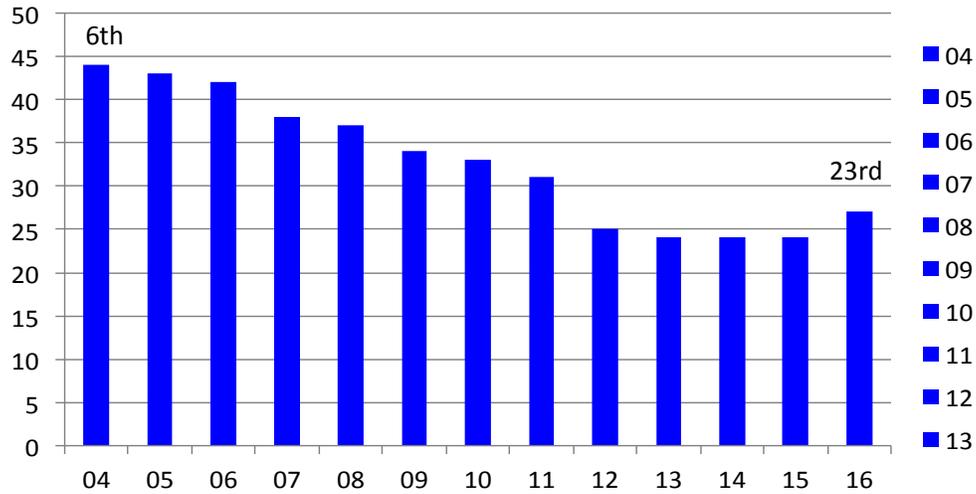
The bottom line is that this budget is lean, but fair considering the State revenue situation. It also—once again—demonstrates Maryland's commitment to higher education. And it sets us apart from—and above—our competitors in the knowledge economy. We will work to tackle the fiscal challenges in a manner that is workable for the USM and positive for the State of Maryland. I ask you to approve the budget. And—if conditions improve—I ask you to consider what we can do to add to an already strong economy by addressing the challenges of workforce shortages and changing demographics.

Just as Maryland takes pride in its strong and consistent support for higher education, so too the USM takes pride in our efforts to show *beyond question* that we are spending this money—more than \$5 billion all told—wisely and getting the State what it needs.

This brings me to my second point: How effective and efficient USM is at doing what we do and an update on our progress in key areas.

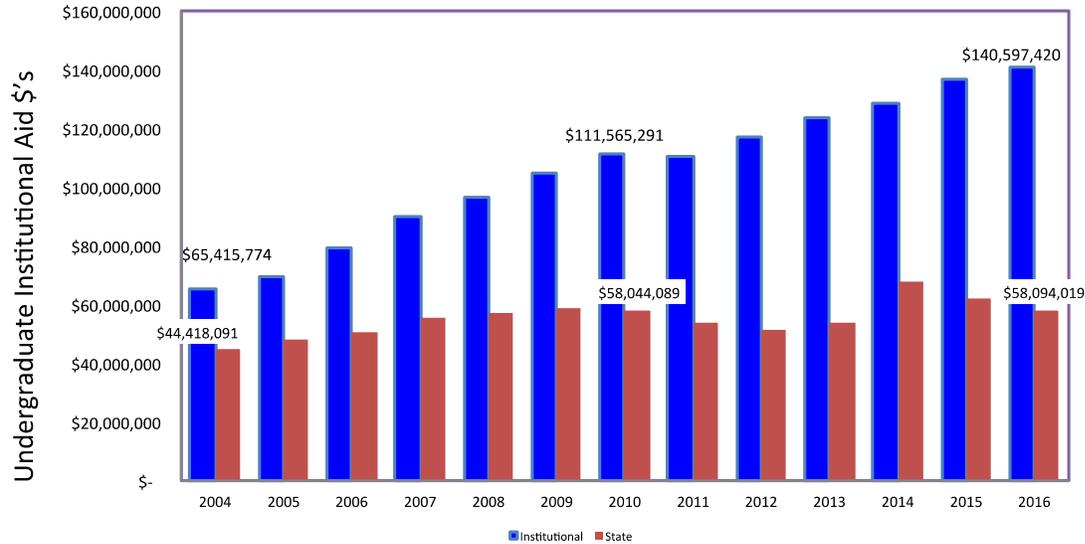
Our goal is to provide affordable access to quality higher education, with a steady focus on the ultimate goal of increased college completion. The USM has been aggressive in efforts to make tuition and fees more affordable. Over the past dozen years, with your support, the USM has moved from having the 6th highest tuition and fees in the nation all the way down to 23rd—from one of the most expensive systems to the middle of the pack.

USM Has Improved National Affordability Rankings



Over these same dozen years, undergraduate institutional financial aid has more than doubled, with an emphasis on expanding need-based aid, further enhancing affordability. In fact, while total USM aid to students—both merit-based and need-based—has increased more than 100 percent, the need-based portion is up about 200 percent. USM’s institutional commitment to increasing student aid is even more compelling when compared to similar State-based aid funding.

USM Aid to Students Has Steadily Increased While State Aid Has Held Steady



The overall effect on affordability, especially in terms of USM student debt, has been significant: Over the past two years, 47 percent of USM bachelor degree recipients did not have to take out any loans. That means that through a combination of family resources, non-loan financial aid, and income from employment, a USM degree is affordable to almost half of our students without taking on any debt. For those who do take on debt, average student loan debt at graduation across the USM is just under \$25,000.

FY15 & FY16 Degree Recipients Cumulative Financial Aid Grant Awards

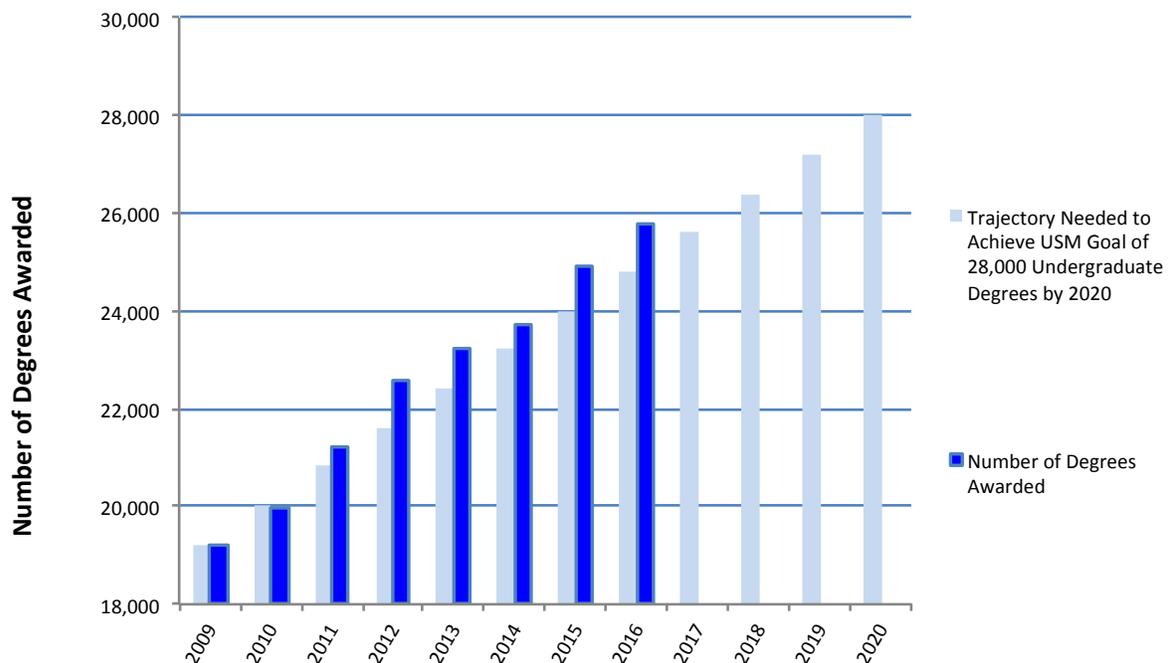
Family Income Range	Number of Degrees	% With Grants	Median Grant Amount Awarded
\$0-\$40,000	13,418	93%	\$ 17,593
\$40,001 - \$60,000	4,869	87%	\$ 12,525
\$60,001-\$90,000	4,917	72%	\$ 7,529
\$90,001-Higher	12,333	21%	\$ 4,000
Unreported/Missing	15,272	1%	\$ 4,468
Total	50,809	45%	\$ 12,954

And when you consider that over the course of a lifetime, the average worker with a bachelor's degree will earn approximately \$1 million more than a worker without, taking on debt in the mid \$20,000 range is a worthwhile investment. As I like to say, this is “Ford Focus Debt” not “Ferrari Debt.”

When you look at the overall landscape in which the USM is operating:

- A record enrollment of first-time, full-time freshmen this past fall;
- Significant growth in transfer students— with a significant portion from Maryland’s community colleges—which now represent two-thirds of new USM students annually;
- Retention levels at near record highs;
- Time-to-degree at a near record low of 4-1/2 years, 1 year better than the national average;
- And the affordability efforts I outlined . . .
 - . . . It is no wonder that we are seeing real progress on our strategic goal of helping the State of Maryland achieve its goal of 55-percent degree completion by 2020.

USM Completion Improving / Degree Production on Track



While advancing these core goals, we have been extremely mindful of our obligation to practice efficient stewardship of all system resources—regardless of the source. The Effectiveness and Efficiency (E&E) initiative—launched more than a decade ago—has become a national model for responsible cost cutting and cost containment in higher education, saving more than \$540 million since inception. E&E 2.0—launched two years ago—is intensifying this impact through the systemwide use of analytics to improve both academic and business processes and contributed more

than \$22 million in savings last year alone. In addition, families and students saved a total of \$17 million as UMUC fully implemented its open source textbook policy.

Our overall fiscal strength was reaffirmed just last month. Our bond rating—AA+ or Aa1 depending upon the rating agency—saves us millions of dollars annually compared to a less favorable rating.

At the same time we have elevated quality across the system. Between highly regarded national publications such as *Kiplinger's*, *The Princeton Review*, *Diverse Issues in Higher Education*, and *U.S. News & World Report*, you will find literally every USM degree-granting institution singled out for praise.

These results—and many others—are tracked in the new USM Scorecard, part of our commitment to transparency and accountability. If you have not yet received a copy of this easy-to-read update on USM's progress on realizing our strategic plan, let me know and I will be sure to get you one.

The bottom line is that we believe the USM is an efficient, well-run organization. Key to this success is our commitment to work AS A SYSTEM as we launch new initiatives and introduce innovative approaches utilizing the combined impact of 12 institutions working together.

This brings me to the third and final item I want to discuss: What we are doing to strengthen USM's impact on Maryland as a direct economic engine AND our potential to do even more.

As you know, Governor Hogan has made job creation a priority. USM stands as an important contributor to that effort and ranks as one of Maryland's most effective and impactful job creation engines.

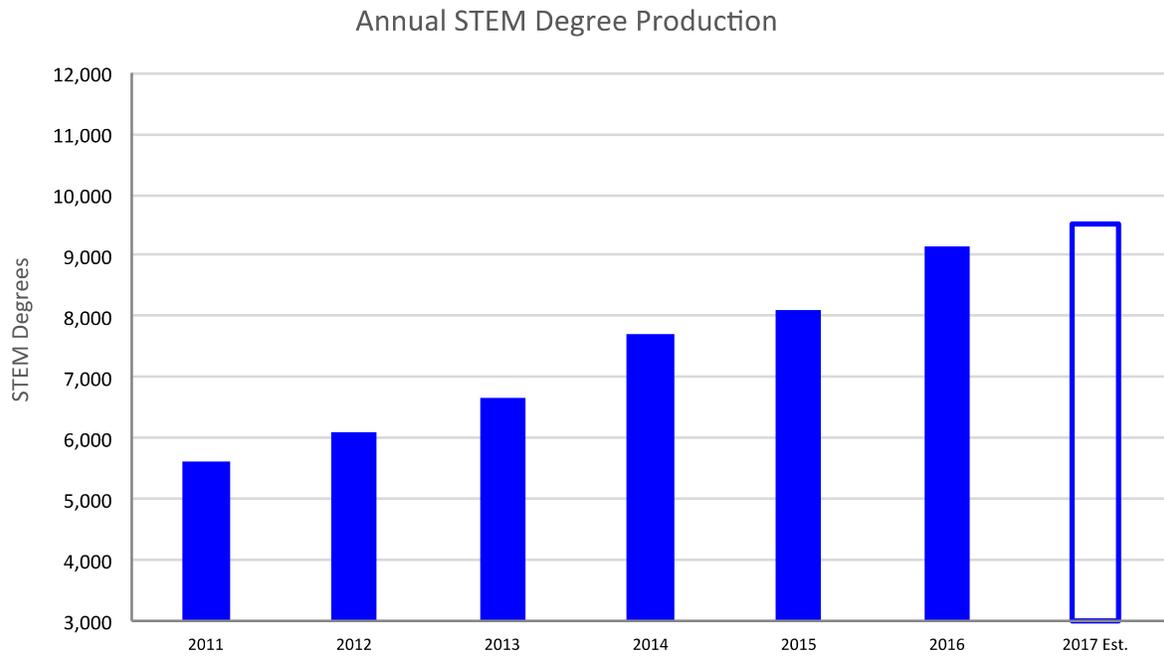
USM Impact: Who We Are & What We Do

- 172,000 students / 12 institutions / 2 regional centers
- Every Year:
 - 38,000 graduates and growing
 - 80 percent of all bachelor's degrees awarded in Maryland
 - 70-80 percent stay in Maryland after graduation
 - 900,000 alumni in Maryland
 - \$1.3 billion in Academic R&D, and rising
 - More than a million hours of service to the community
- 3 Research Parks / 200 Tenants / 5,950 Jobs
- 7 Business Incubators
- 502 new business startups over the past five years

By most measures, the national economy is improving, with the Maryland economy performing at an even higher level. However, there are concerns that we should address to ensure Maryland's longer-term economic sustainability and competitiveness. Key among these is workforce shortages in STEM health care, and other areas, leaving currently available high-wage jobs unfilled and potential economic growth—and State revenue growth—unrealized. Whether it is caused by the demographics of retirement or the absence of skilled labor, the state would do well to rectify its workforce shortage problem.

As you know, STEM education is a genuine priority in Maryland. The USM and State leaders have worked together to increase STEM degrees in recent years to position Maryland for a prosperous future.

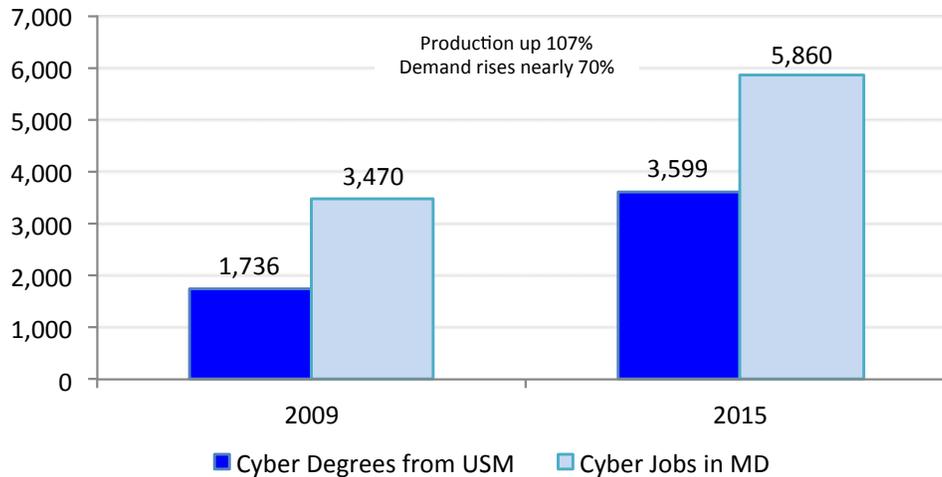
USM STEM Production Up 63% Since 2011



However, as significant as this growth has been, it has been insufficient in terms of meeting the needs of our economy. Perhaps the best manifestation of this can be seen in two of the areas that have been specifically target for increase capacity and growth: cybersecurity and bioscience/health.

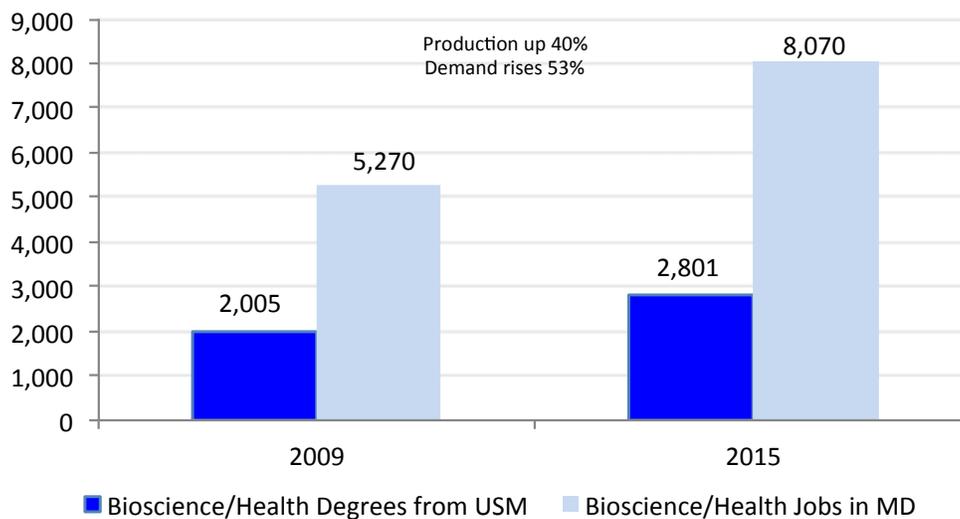
While the USM has **more than doubled** the number of cyber degrees issued in recent years, government and industry demands increased dramatically as well.

Cyber Careers - Supply and Demand



Likewise, USM degree growth in the bioscience and health arena has been strong, with degree production up 40 percent, but this growth has been outpaced by demand.

Bioscience / Health Careers - Supply and Demand



Moving forward, as the State and national economies continue to strengthen, the USM stands ready to collaborate with the State in efforts to expand capacity, advance workforce development, and enhance overall economic growth. Together we can position Maryland as a national leader and an economic powerhouse in the innovation economy.

The fact is, the USM provides Maryland with a remarkable return on investment, which could be called the “Rule of 80”:

- 80 percent of our enrollees are Maryland residents;
- We award 80 percent of bachelors degrees in Maryland;
- Up to 80 percent of our graduates stay in Maryland after graduation;
- And 80 percent of the companies we have launched—that have received upwards of \$600 million in follow-on investment—have remained in Maryland as well.

USM’s long-standing partnership with leadership in Annapolis has served the State of Maryland incredibly well. I look forward to this partnership growing and expanding as we work together for Maryland’s future. The Governor’s proposed budget—and any future support—will serve to bolster those efforts.

Turning now to the recommendations made—and issues raised—by the Department of Legislative Services.

Recommendations:

Page 22 - Department of Legislative Services (DLS) recommends eliminating the \$4.1 million and the \$4.7 million fiscal 2017 deficiencies totaling \$8.7 million.

USM Response:

The USM opposes this recommendation.

The DLS position on this matter is of serious concern, and the USM opposes this recommendation. The context for this issue is the State mid-year budget reduction enacted by the BPW this past November to address the significant under-attainment of General Fund revenue collections. One important component of that plan was to restore the State’s fund balance, and the availability of the Higher Education Investment Fund existing fund balance was among the budget options taken. It was not part of any guarantee that the HEIF account would be maintained. It was not even an issue.

In addition to the use of HEIF dollars, the institutions were also required to reduce spending by \$14.2 million, one of the highest reduction allocations in the BPW recommendations. We were asked to avoid the use of tuition rate hikes as well as layoffs of current filled positions to meet the \$14.2 million target, and we have done so. Subsequently, as HEIF revenue collections also began to under-attain, and without the availability of remaining fund balance to deal with the problem, the State recommended the deficiency budget to keep the USM whole.

If the DLS recommendation were implemented, the original \$14.2 million cut would essentially become \$23 million, or a 61% increase. In such a circumstance, the balancing choices would basically run counter to the framework that was established in November.

Page 23 - DLS recommends reducing \$70,000 of general funds at Towson University related to Hidden Waters.

USM Response:

The USM opposes this recommendation.

The USM Foundation owns the Hidden Waters residence and pays for all capital related costs. The Foundation makes the residence available to the Board of Regents for use by the USM Chancellor for fundraising and other System business and outreach events important to the State and USM institutions. The Chancellor is required by the Board of Regents to live at this residence. The lease provides for use of the property rent-free, but stipulates that the USM is responsible for paying operating costs such as utility and maintenance costs to upkeep the property. These are valid state expenses and should be treated as such. The issue is not about ownership. Rather, the appropriate analogy is that the USM and the campuses use rental space for state purposes, a construct that is similar to the use of Hidden Waters.

Page 28 - Since new State-supported revenues are more than sufficient to cover Current Services Costs, and USM is planning on transferring \$23.4 million of these revenues to the fund balance, USM does not require the total amount of State funds provided in the allowance to cover its costs. Therefore, DLS recommends reducing USM's general fund appropriation by \$16.6 million, which may result in USM reducing the amount transferred to the fund balance. Furthermore DLS recommends restricting the use of the remaining \$10.0 million of State funds (general funds and the HEIF) to fund the mandates as required in Chapter 25 of 2016.

USM Response:

The USM opposes the recommended reduction in general funds of \$16.6 million and the restriction of \$10 million of State funds for the implementation of the Strategic Partnership legislation.

This recommendation has two components that are based on the USM's growth in state supported fund balance.

- I. First of these is the description of the fund balance operation, its uses, benefits, and management.

The System's fund balance is a critical factor in the overall success of the campuses in serving the State's priorities. We have used fund balance to leverage fund raising support for important capital projects. Fund balance has been used to provide bridge loans to construction projects since receipt of donor pledges extends for seven years or more. Real world examples include the Brendan Iribe Computer Science Center and the James Clark Bio Engineering Facility, both at UMCP. The UMB Health Sciences Facility III is another. Up to \$40 million in fund balance will be needed to bridge spending until "non-budgeted funds" are realized. The largest example is the \$90 million bridge loan for the Cole Field House Renovation, a mixed-use facility with academic research and auxiliary purposes.

Towson University's New Science Facility will require a fund balance advanced to support construction based on payment changes made to the project a year ago as well as additional changes recommended in the 2018 budget. A year ago, the USM agreed to obtain donor support in lieu of State funds. The 2018 recommendation enables the State to postpone its payments for the project. The total amounts to \$15 million. At UMB, the budget recommendations call for UMB to provide \$2 million in fund balance to pay for the Electrical Sub-Station Project.

In the area of economic development, a major State priority, the fund balance has been relied upon to create an investment fund to keep promising business start-ups in need of "*second stage funding*." The \$10 million from fund balance for this purpose will leverage an additional \$15 million in venture capital to keep these nascent businesses in Maryland. As you are aware, \$10 million in fund balance was used to finance Helio-Campus, an analytics firm. The goal of the initiative is to create a value company that would generate a source of revenue for student financial aid.

It has been mentioned that the fund balance be used for infrastructure needs. On average, the fund balance provides \$70 million annually in support of institutional infrastructure and renewal projects. Importantly, at UMCP, we need to plan for a major project, likely a public private partnership to renew its energy infrastructure. It will require investment over a number of years, and we will need sufficient fund balance to create sufficient debt capacity to finance the project as direct debt or indirect (PPP) debt.

With your help through legislation, the USM was allowed to use \$50 million in fund balance to create an endowment for the purpose of strengthening the fund raising / development operations at the campuses in order to dramatically increase scholarship funds and support the recruitment of top notch faculty. This year, we will seek legislation allowing the USM to create a second endowment for the purpose of increasing spending on infrastructure.

We do not believe that the efficacy of the fund balance should be judged based on the FY 2016 to FY 2018 projected growth that has been very healthy and secured the USM credit rating. One needs to take a long-term view and approach to fully recognize the benefits of the strategy being used. By point of fact, for fiscal year 2014 the System reported a decline in unrestricted fund balances. The decline was the product of several isolated events, including resolution of the ACC exit fee dispute, a mid-year budget reduction where fund balance was used in part, and a one-year decline in University College's enrollment. That decline in fund balance prompted Standard & Poor's to place the System on negative watch in January 2015, meaning that in their view at the time, there was more than a 2/3rds likelihood that the System would be downgraded over the coming two years.

The System met with bond rating agencies January 11-12, 2017 in anticipation of a bond sale held on January 31, and all 3 bond rating agencies affirmed the System's bond ratings with a stable outlook. While the rating agencies reports were positive in their remarks about the System's financial management and borrowing plans, each also offered cautions about different threats to the current bond ratings.

For instance, from the January 23, 2017 report of Standard & Poor's:
We could consider a negative rating action over the outlook period if USM's enrollment declines, financial operating deficits on a full accrual basis are posted, or if available

resources weaken. Additional debt without a commensurate increase in available resources also could trigger a lower rating.

And

From the January 24, 2017 report of Moody's Investor Services:

Factors that Could Lead to a Downgrade

» *Significant deterioration in operating performance and reserves*

» *Significant reductions in state financial support for operations or capital*

Each institution has spending initiatives underway, both operating as well as capital that relies on the availability of funds for spending when the circumstances require and allow. Additionally, institutions have fund balance goals that must be met to satisfy the need to maintain a proportionate amount of reserves to support outstanding debt and borrowing commitments. There are many possible reasons why an institution would not be able to increase non-state support fund balance and would turn to the state supported budget to meet their targets. As described earlier, needs can relate to bridge loans for donor-funded buildings, or the restoration of state supported fund balances previously spent or borrowed, such as at Coppin. UMBC has set aside state- supported fund balance for faculty start-up costs and reserves to replace administrative systems that would not be paid from general funds.

We do not believe it wise to counteract good financial management by making base budget reductions related to financial plans and requirements adopted to protect the bond rating. USM fund balance is generally used for one-time spending, rather than the DLS proposal to use it as a source of funding to supplant ongoing state support. The majority of state supported fund balance growth is at College Park, Coppin and UMBC. Further, without a corresponding increase in other, ongoing state-supported fund sources such as tuition revenues, it would be damaging to the state-supported budgets to reduce base state appropriations as is recommended. Lastly, the institutions targeted for the use of fund balances would then not meet their fund balance goals, which could jeopardize the System's bond rating and future low borrowing costs that have saved the state millions in interest costs each year.

II. The second component is the technical analysis of the budget.

The DLS recommendation is largely based on two tables in the analysis, Exhibits 12 and 13. The Current Services Budget Costs Exhibit 12 excludes two major items, Salisbury New Facility Operating Costs (\$2.3M) and UMCP's Differential Tuition related expenditures (\$8M) which are included in revenue components in Exhibit 13. When the UMCP Tuition Differential program was approved by the Board it stated the use of the dollars included critically needed faculty to address high demand workforce needs including STEM, financial aid, and targeted increases in enrollment to close workforce shortage gaps. Once these costs are included in Current Services Costs the updated total for the USM is \$82.2M. This is a \$10 million difference, meaning, the first line of Exhibit 13 regarding the expenditure estimate of \$72.6 million should be \$82.2 million.

Exhibit 13 summarizes the revenue and expenditures related to Fiscal 2018 Current Services Costs. The revenue summary includes other new unrestricted revenues of \$8.8 million. The state-supported programs do not have significant other unrestricted funds available for current services

costs and it is unclear how this estimate was derived. Additionally, DLS also assumes that the USM will increase additional tuition revenue later in the fiscal year of \$21.9 million. Such an increase, by definition, would mean an increase in enrollment above the planned / budgeted levels. The analysis does not consider the cost of the workload increase associated with any higher enrollment. This is a major concern.

The USM contends that when all 2018 current services costs and revenues are properly presented the USM is actually in a deficit position of \$11.7 million as seen in Attachment 1. The University will be required to produce efficiencies and implement other reductions to balance the 2018 budget.

The DLS recommendation restricting general funds for SB 1052 mandates would be extremely difficult, especially if a \$16 million general fund reduction is adopted. Institutions such as College Park would find it unmanageable to absorb a \$16M reduction related to fund balance growth without a corresponding increase in tuition revenue. Additionally, the current budget bill includes the elimination of \$4 million of State Funds that were provided to increase funding guideline attainment for targeted institutions. If this recommendation to restrict \$10 million dollars is accepted it would ultimately damage the very institutions it was intended to benefit.

Page 50 -DLS recommends restricting \$250,000 of the general fund appropriation for USMO until BOR submits a report to merge UMCES, either as a whole or by individual laboratories, with the appropriate USM institution(s) whose mission most closely aligns with UMCES or its component laboratories. BOR should submit the report by December 1, 2017, outlining a plan and timeline for merging UMCES with other USM institutions and identifying ongoing cost savings totaling at least \$3 million from this process.

Page 50-DLS also recommends reducing UMCES's current unrestricted funds (general funds) by \$100,000 to reflect expected cost savings from the merging and consolidation of UMCES in fiscal 2018.

USM Response:

The USM opposes these recommendations.

Issue number 6, including its associated recommendation for achieving greater efficiency by consolidation of the University of Maryland Center for Environmental Science, is essentially the same as offered by DLS during the 2009 and 2010 Sessions. The General Assembly declined to include the recommended appropriations language then and I urge it to do so again. The analysis fails to take into account the potential for serious damage of a merger or, even worse, disassembly of the UMCES laboratories on the core mission of UMCES: to conduct research and provide sound and credible advice on Maryland's environment, particularly the Chesapeake Bay. This is a mission in which, as the Subcommittee knows, UMCES truly excels.

As the DLS analysis points out, the Board of Regents has the authority to merge or consolidate centers and institutes and the Board takes this responsibility seriously, especially for a center that is established under Maryland statutes, as is UMCES. Such action should not be forced by appropriations act language as opposed to specific amendments to these statutes.

After President Don Boesch announced his intention to conclude his service in that role at the end of this summer after 27 years at the helm, the Board of Regents considered once again whether UMCES was effective and viable as a stand-alone institution. It was only after the Board reaffirmed the responsive and effective role UMCES plays across the State and its solid international reputation that it authorized me to proceed with a national search for Don's replacement as President. That search is underway and can only be harmed by protracted consideration of the DLS consolidation recommendation.

As you know, USM institutions, including UMCES, have worked hard to improve effectiveness and efficiency. The Regents and I are not convinced that the benefits of merger listed in the DLS analysis would be achieved considering that UMCES has laboratories across the State and is already incredibly collaborative with other USM institutions in its research and education efforts. The costs savings suggested are unsupported by quantitative analysis and in our view would be *de minimus*, as UMCES already uses many administrative services provided by UMCP, UMBC and UMB. Consolidation does not in itself produce efficiency and it risks UMCES' effectiveness in unique and important mission and its broad collaborations with multiple USM partners.

Issues:

Page 11 - The Chancellor should comment on how USM, along with the institutions, plan to manage enrollment particularly at those institutions experiencing weak growth.

USM Response:

Enrollment Management is a central challenge for a University System made up of heterogeneous institutions with differing missions. Some USM institutions face substantial challenges in restraining growth in the face of demand while other institutions have struggled to maintain enrollment in the face of a changing market and declining numbers of students graduating high school. Demographic change in the State has created additional challenges, as have the development of many competing options for student education. All of this occurs in a context where Maryland's ultimate economic competitiveness is increasingly tied to the human capital of its people and the State of Maryland's goal to enhance that capital through meeting the objective of 55% college attainment.

The USM and its institutions have sought to address these challenges through three approaches:

- 1) Enhanced coordination of enrollment planning between institutions to help channel enrollment growth to lower cost institutions and institutions with capacity to grow enrollment immediately. The USM holds routine meetings with institutional leadership to review enrollment projections and plans, and chart specific enrollment flows and challenges. USM staff is coordinating planning to ensure that individual institutions are taking the activities of others into account in their planning, and ensuring that there is a greater degree of accountability for enrollment management activities.
- 2) Use of data and analytics to manage student success and improve outcomes. The USM has set a base level for analytics and data use capability on campuses, which will allow more accurate tailoring of student enrollment and advising. The USM has also implemented a system-wide program to inventory and determine the efficacy of interventions with students.

This promises to allow much more precise interventions in the future and substantial improvements in retention (and enrollment levels) particularly at our most challenged institutions.

- 3) Enrollment consultants to improve student enrollment pipelines. Shifting demography and increased competition have destabilized what had been robust established enrollment pipelines. To improve existing pipelines and to create new ones, multiple institutions have used enrollment consultants as a cost-effective approach to solving this problem. This has shown early success at increasing enrollment at Frostburg and Bowie State, although that success has been mixed at other institutions.

The DLS analysis of the funding guideline outlines strategies being contemplated to better achieve desired goals. Targeted enrollment strategies are among those being considered and discussed. Taken together these approaches will create a more nimble and effective enrollment management function both at individual institutions and for the USM as a whole.

Page 13 - The Chancellor should comment on the methodology used to calculate the fiscal year cohort, and in particular, why it does not capture students who transfer and graduate from non-USM institutions.

USM Response:

The Fiscal Year cohort measures the six-year USM graduation rates of all degree-seeking students that enter a USM institution for the first time. As mentioned in the analysis, it includes the traditional fall semester full-time new freshmen, as well as any student that begins as a transfer or as a part-time freshman not only in the fall but any semester within the fiscal year (summer, fall, winter, spring). Given the fact that nearly 2/3rds of new students entering a USM institution each year are transfers, the USM considered it particularly important, in creating this measure, to ensure that degree outcomes for those students were included in a measure that captures institutional and Systemwide degree production rates.

Students who begin at a USM institution and then transfer to a non-USM institution and graduate are not included in the rate for a number of reasons. First, once the students leave the USM then those students are no longer included in any of our (USM) data systems and therefore cannot be tracked by the System. More importantly, including only those students who USM institutions accept and retain through graduation means that the USM is able to provide, in our opinion, a more exact measure of the degree production for which each USM institution contributes towards the USM overall degree production. Therefore, this measure helps USM better track Systemwide progress toward the 28,000 degree target established by the USM as part of the state's 55% degree attainment goal.

Be assured that the USM is working both within the State and nationally to develop better approaches to tracking students across all sectors and across state boundaries to provide a more accurate view of our outcomes.

Page 23 – The Chancellor should comment on the use of general funds to maintain Hidden Waters

USM Response:

See USM response above included in the Recommendation section.

Page 35 – The Chancellor should comment if there is a correlation between positions per FTES and completion rates and what factors contributed to the increase in completions.

USM Response:

Attempts to create direct connections between completion rates and the number of positions (particularly instructional positions) are difficult and the results are not altogether clear. This is because the nature of the academic enterprise generally, and the USM specifically (as both an academic enterprise and as an organization), have changed considerably over that period. Factors including the continued expansion of online offerings, the growth of UMUC, and the pioneering of innovative teaching models have all impacted the way in which instruction and services are delivered. In addition, USM has made a concerted effort to proportionately reduce part-time faculty and instead hire full-time faculty, particularly on the non-tenure track. This has resulted in the rapid growth of a group of faculty who were not generally even discussed in 2006. These changes taken together reflect the most significant changes in higher education in at least half a century and make comparisons confusing at best. That said, over the period in question, USM has striven to maintain quality while also achieving real efficiencies in its teaching mission, and will continue to do so through the current Effectiveness and Efficiency initiative. As we utilize these new approaches we will continue to monitor such ratios to better understand and apply the variables that lead to success.

Page 36 - The Chancellor should comment on why USM and, in particular, BOR are not adhering to their tuition policy in approving rates at the beginning of the prior academic year and why four-year tuition plans have not been developed and publicized to help alleviate some financial uncertainty for students and families.

USM Response:

Tuition rate increases are a direct result of state economic environment and policy supporting higher education. Both the expected increases in state funds, as well as, gubernatorial and legislative support ultimately drive the practice of setting annual resident undergraduate tuition rates. State revenue projections that are used to support the Governor's budget have occurred later in the budget process which has ultimately driven the change in the tuition setting time frame.

Over the last decade the USM has either frozen or moderated resident undergraduate tuition when funding has been provided by the Governor and supported by the Legislature. The previous administration included tuition affordability as one of his top priorities and provided funds to freeze resident undergraduate tuition rates from 2007 to 2010. In subsequent years (2011-2014) tuition was moderated at 3%, again with funding provided to the USM. In FY 2015 and FY 2016 when material mid-year budget reductions and reduced state funding levels were experienced tuition was increased in the 5% range. The current administration has for the last two years has provided funding to reinstate moderate resident undergraduate tuition rate increases at 2%.

State funds and tuition and fee revenue combine to fund the majority of the state-supported costs in the USM budget. The Department of Budget and Management (DBM) provides state funding levels and instructions on inflationary increases such as salaries and fringe benefits to all state agencies in July. Tuition rate increases and related revenue are included in the USM annual budget submission. State funding increases are not always sufficient to fund its share of the current services needs; therefore, higher tuition increases are necessary to help cover the balance of these costs. In FY 2018 with significant increases in new facilities operating and other institutional costs, the original plan submitted in October 2017 for FY 2018 was to increase resident undergraduate rates 5%. As described above, in December 2016 the Governor finalized the Operating Budget Allowance and provided \$16.4 million in state funds to moderate resident undergraduate tuition to the level of 2%. The FY 2018 Appropriation will be finalized in April of 2017 and the USM will approve tuition rates later this spring.

In summary, as the State has taken a more active role in the determination of tuition rate changes, developing formal out year estimates on tuition has little or no value. The recent rate increases are, in most cases, lower than what the USM would have projected in the Four-Year Tuition Plan.

It should be noted that institutions do incorporate the tuition increases supported by the Governor's budget in the financial aid packages communicated to new and continuing students.

The USM does provide an annual estimate to the College Savings Plan. The estimate is in the 6% range.

Page 39 – The Chancellor should update the committees on progress implementing the USM strategic partnership (I) and the new USM office in Baltimore (II):

USM Response:

(I) MPowering the State: The University of Maryland Strategic Partnership - SB 1052: Implementation Update January 2017

1. University of Maryland Joint Steering Council officially named by Presidents of UMB and UMCP, and actively meeting.
2. Research Infrastructure task force established to seek research infrastructure alignment, cooperation, and collaboration between UMB and UMCP:
 - a. University of Maryland options for single/joint research reporting to the National Science Foundation (NSF) for national university rankings: *recommendation from Presidents to Chancellor made on 12/1/16 in accordance with law.*

Background: The preeminent national university rankings report for higher education institutions engaged in sponsored research in the US is the National Science Foundation (NSF) Higher Education Research and Development (HERD) Survey. The NSF and the HERD Survey Director have a long-standing practice of reporting an institution's research funding based upon a finding that it has one president with overall responsibility. For the University of Maryland (as defined by

SB 1052) to fit in with that definition, it would need to demonstrate significant and convincing evidence to the NSF HERD Director that it is functioning in a manner somewhat similar to a university having one president. Such evidence could be appointing Co-Vice Presidents for Research, demonstrating that the research enterprise is managed jointly, and that the Presidents' have equal authority over research-related decisions at both campuses. While there is no certain path to achieving the goal of single NSF HERD reporting, a strategy is being developed that may yield the desired result that could incorporate the above items as well as other additional items.

- b. Competitor State Peer funding guidelines analysis: *Near completion.*
 - c. Single Federal Identification Number report: *Near completion.*
 - d. Blending of research infrastructure, where meaningful: *Active changes are being implemented.* Representative actions being contemplated by the Joint Steering Council include taking a "Shared Services" approach to research administration, designing internal controls for Subrecipient/Subaward oversight and monitoring, and creating a joint committee to investigate and implement where appropriate, shared institutional reporting to external agencies.
3. Administration Task Force established to seek administrative alignment, cooperation, and collaboration between UMB and UMCP:
 - a. Review of high-level strategic opportunities, such as procurement, HR, finance, IT, travel and other systems: *Active discussions underway.*
 - b. Review of policy, procedure and practices to identify opportunities for operational changes: *Active discussions underway.*
 4. Undergraduate and Graduate Academic and Research: *Study of programs to evaluate opportunities for alignment/collaboration is in early planning stages.*
 5. Collaboration with Baltimore City, Prince George's County, and College Park: *In early planning stages; a third deans' retreat was held in late January 2017 to begin discussions.*
 6. Guidelines for Faculty Appointments that are Joint: *In early planning stages; a third deans' retreat was held in late January 2017 to begin discussions.*
 7. Center for Maryland Advanced Ventures (CMAV): *Active planning between UMB and UMCP is underway to develop an organized program to enhance entrepreneurial opportunities in Baltimore.*

CMAV will be integrated into UM Ventures, which will implement "CMAV Initiatives." The majority of funding will be dedicated to targeted grants and investments, rather than infrastructure. Over the past five years, UM Ventures has doubled the tech transfer activity and results of UMB and UMCP. In FY16, UMB and UMCP created 20 new companies based on University-owned intellectual property and assisted in creating over 100 additional companies in Maryland. The CMAV funding would enable UMB/UMCP to significantly expand these results at UMB and UMCP, provide services to all public academic institutions

in Maryland, and focus increasingly on creating jobs in Maryland.

A **UM Ventures Innovation Center** will integrate and expand entrepreneurial services and resources on the UMB campus. Programs located in the UM Ventures Innovation Center will include:

- UM Ventures, Baltimore – technology transfer of University-owned technologies
- Industry Alliances – increase industry sponsored research
- Small Business Development Center – business assistance from joint federal/UM program
- Early Stage Investment Fund – managing \$10 million in venture funding invested by the University System of Maryland and raising \$15 million from co-investors
- IP and Business Law Clinic – legal assistance from Carey School of Law faculty and students. This will be a new location for the Clinic.
- President’s Entrepreneurial Fellows – expand student fellows working on UMB-owned technologies.

The UM Ventures Innovation Center will also launch three new grant programs:

- Life Science Accelerator Grants – accelerating tech transfer of top four health sciences technologies at UMB and UMCP that have not been out-licensed for commercial development. Eligible technologies include therapeutics, vaccines, medical research tools, diagnostics, medical devices, and health informatics. Selected technologies will be assigned a project manager and awarded up to \$300,000 in funding to de-risk the technologies and increase their value to potential licensees.
- Joint UMB/UMCP entrepreneurial center(s) – located at UMB, these centers will focus on joint UMB/UMCP initiatives to commercialize technologies, collaborate with industry, and produce entrepreneurial graduates. Centers will be competitively selected based on their track record and plans to contribute to the job creation goals of the legislation. Funding will be reviewed annually. It is anticipated that one to two centers will be selected for funding.
- Baltimore City Fund – creating jobs in Baltimore City by providing grants and/or investments to University created or sponsored companies locating in Baltimore City. Funding will be focused on creating clusters of companies in priority sectors, such as computer sciences and medical devices. The Baltimore City Fund will help to attract 10 to 20 new companies to Baltimore City per year.

8. UM Center for Economic and Entrepreneurship Development (UMCEED): *In early planning between UMB and UMCP for academic and research programs in areas including virtual and augmented reality; neurosciences; biomedical devices; and cybersecurity.*

UMCEED will advance the education of students by developing degree and credential programs in the following fields of study:

- virtual and augmented reality
- neurosciences
- biomedical devices
- data analytics
- cybersecurity

These are all fields judged to be important to the Maryland State economy, and all involve multiple, interdisciplinary academic opportunities. The fund will be used to hire new faculty and build new educational programs in these critically important areas. In order to maximally leverage this investment, College Park has confidential proposals before two corporate sponsors for chairs and professorships to augment the state's investment in these key fields and enable recruitment of the most outstanding leaders in these fields. We expect there will also be opportunities for UMCEED funds to be used to fund initiatives jointly with UMB as part of our Strategic Partnership.

(II) The new office in Baltimore update:

USM Response:

The first phase of the establishment of corporate offices in Baltimore City occurred in July 2016 with the relocation of eight staff members including the Chancellor. The second phase of the move was planned for November of 2016; however, the move was delayed until February of 2017. This second phase includes an additional six staff.

Page 44 - While the MOU-financial model will help ensure the viability and sustainability of new programs, the Chancellor should comment on if there will be a review of existing programs at USG and USMH to determine if the program meets enrollment and revenue projections, and if not, what accommodations will be made for the institution.

USM Response:

As the analyst notes, the USM is in the process of developing an MOU-based financial model for programs operating at its regional centers. While the System takes exception to the statement that the current funding model is not working (it has worked well enough, after all, to develop and sustain over the past decade and a half two centers that now rank among the USM's most productive and cost effective institutions), it is true that this very success has created the pressing need to develop a different financial model for the regional centers in order to ensure they can develop and sustain the wide range of programs and enrollments envisioned for the future. The model being developed by the USM is based on a set of governing principles developed in close cooperation with the regional centers and their partnering institutions. In brief, the operating framework for the model is the development and monitoring of an agreed upon set of goals, resource expectations, and performance metrics, that are collaboratively-developed and mutually agreed upon by the regional centers and the partnering institutions. Progress under the programs, including how effectively the program is adhering to its revenue and expenditure projections as well as its enrollment and degree production goals, is assessed at agreed upon intervals, with adjustments then made to the terms of the MOU as appropriate. The ultimate goal of the model is to ensure that the educational access and workforce preparation needs of the region served by the centers are met in a manner that is both sustainable and fair to both the institutions offering programs at the regional centers and the centers themselves.

While the focus of the model, to this point, has been on developing a mechanism that will allow the regional centers and their partner institutions to equitably develop and maintain programs that have

particularly high implementation and operating costs (i.e., those programs, typically in engineering, science, and the health professions, that cannot be adequately developed and supported through the revenue generated by tuition and fees alone), the USM believes that the model, once fully developed, can serve as a mechanism to further grow and enhance, in a more collaborative and systematic manner, the broad range of academic programs and student support services offered at the regional centers. However, given that many of the programs at the regional centers already operate under specific financial and performance agreements negotiated with the centers, a broader implementation of the model that includes existing programs will need to be phased in order to avoid disruption to current operations and support service expectations. Such an expansion also is likely to have additional financial implications for the budgets of the USM, the regional centers, and each partner institution that would have to be considered prior to implementation as well.

Page 45 - The Chancellor should comment on why enhancement funds are not fully being used to support the programs identified during the 2016 session and, in particular, are being used to increase personnel at USG and for lease space for STEM labs at USMH.

USM Response:

The USM received enhancement funding in fiscal 2017 to support programs and activities designed specifically to increase degree completion at our institutions. As part of this effort, each USM institution, including the regional centers, submitted plans outlining how programs and activities at the institutions/centers would be implemented using the enhancement funds. Because many plans covered multiple years – with time needed to hire additional faculty and staff, recruit additional student cohorts, renovate or expand facilities, acquire and install new technologies, etc. – they included preliminary time lines for when various activities or programs would be rolled out and implemented. For many programs, activities designed to expand or develop summer bridge programs, increase financial aid packages, and enhance academic and career advising – programs that require additional support staff – were seen as critical to increasing degree production and these too were built into the enhancement initiatives. So the plans projected a rolling series of broadly-based activities all focused on building, attracting and supporting the programs, students, support services activities needed to increase the USM’s degree completion, starting with FY 17 but continuing to build through FY 18, FY 19 and beyond.

Both the Universities at Shady Grove (USG) and the USM Hagerstown (USMH) regional centers have used their FY 17 enhancement funds in activities that accord with the enhancement plans they submitted to the System and are designed to contribute to the USM’s goal of increasing degree completion. In USG’s case, this includes not only working with institutions like UMCP, UMBC, Towson and UMES to begin the MOU process needed to bring new or expanded degree opportunities to the center, but also the efficient one-time use of available funds to seed additional degree opportunities in nursing, digital simulation, and criminal justice. At the same time, USG has used its enhancement funding to begin addressing the student support service infrastructure needs (in areas like information technology, library and information services, and career counseling) that it identified early on in its enhancement plan as necessary for successfully expanding degree completion. Because USG can provide these services centrally to all programs operating at the center, the use of enhancement funds to support such services is more cost effective and collaborative.

As with USG, the entirety of the FY 17 enhancement funds allocated to USMH are being committed to the expansion of degree completion opportunities at the center in ways that align with the enhancement plan submitted to USM. Because USMH's needs were more complex – requiring the center not just to work with UMES to develop and implement a new hospitality program but also to seek out and forge new partnerships with local business and government groups to secure, plan and begin renovation of an appropriate site – its plans have necessarily had to be more flexible. The result, however, has been that USMH has been able to take advantage of opportunities that have arisen to multiply the potential long-term impact of the enhancement funds on the workforce preparation and degree completion opportunities available in downtown Hagerstown and the region. These opportunities included an option for the lease and build out of STEM education space above the hospitality site that will be collaboratively shared with the local school district at terms that are very reasonable to the Center, the System, and the School District. This was an opportunity not known to be available to USMH when its original plans for the use of the enhancement funds were put together but which will now allow it to expand its STEM education capabilities in the near future – a prerequisite for a number of technical and health care degree options –while also benefitting the local school system and efforts to revitalize downtown Hagerstown. Therefore the USM sees the use of enhancement funds by USMH to build educational capacity and lease STEM labs as both appropriate under the goals of the enhancement initiative and cost effective over the long term.

Page 46 - The Chancellor should comment on how the institutions will be able to fund the continuation of their B-Power programs if proven successful. The Chancellor should also comment on when Phase III will begin, particularly outreach to BCCC to increase transfer pathways for students.

USM Response:

The Phases outlined in the B-Power program are not linked to a defined timeline; rather they are stages that are iterative, building on each other over the course of the next two years. For example, Phase I, increasing enrollments, has been initiated and will be a continuing focus of the B-Power efforts. Phase II (retention) is linked to increasing enrollments, and focuses on student retention. Both Coppin and University of Baltimore have ongoing retention efforts, and the B-Power work has established enhanced partnerships with CollegeBound Foundation, Baltimore's Promise, and Baltimore's College and Career Readiness Network. Phase III, building a network of support with BCCC and Junior Achievement, is also in process. UB recently signed a new MOU with BCCC, which will be used as a model for new MOUs between CSU and BCCC as well. A portion of the transfer success will depend on improvement of the BCCC core curriculum and building a larger population of students interested in AA degrees or pathways that lead to bachelor's degrees and beyond.

USM is also focused on building better pathways for all community college transfers to CSU and UB with their complementary program mixes. Finally, with B-Power resources, UB has invested in additional dual enrollment courses offered in the schools, and UB and CSU are in the process of building a roster of complimentary course offerings for the BCPSS students who are college bound. Those courses will be offered on site in the City schools.

Page 51 - The President of UMUC, on behalf of HelioCampus, should comment on the near-term profitability of the new company and how it may be judged as successful or not. The President should also comment on any anticipated business spinoffs that may fall under the umbrella of UMUC Ventures.

USM Response:

HelioCampus has just completed its first year in operation, after being approved by the Board of Regents based on a business plan that anticipates the company will reach profitability in year 5. The company is performing well and tracking against its business plan. We are pleased that HelioCampus is currently serving three USM institutions, several other public and private institutions, and has a strong sales pipeline to grow the business.

Regarding UMUC plans to create any additional new businesses, there is an active discussion underway contemplating the creation of a new education enablement company owned by UMUC Ventures. This company would be formed by spinning off the UMUC Office of Technology, intended to serve UMUC and possibly other institutions.

Page 52 - BOR should comment on if the Chancellor will not be receiving the 5% increase in his annual base salary considering the fiscal 2018 allowance does not include funds for COLA or merit increases for State employees.

USM response:

The Chancellor will not receive the 5% increase to his base annual salary under his revised contract because the fiscal 2018 allowance does not include funds for COLA or merit increases for State employees.

Exhibit 12				
	<u>Analysis</u>	<u>USM</u>	<u>Difference</u>	<u>Explanation</u>
Current Services Costs:				
New Facilities	\$26,130,027	\$28,477,216	\$2,347,189	SU New Facilities Costs Not included in DLS Analysis
Facilities Renewal	13,762,154	13,762,154	-	
Other Institutional Specific Costs	13,570,617	13,570,617	-	
Mandated SB 1052	6,000,000	6,000,000	-	
Institutional Aid	9,427,350	9,427,350	-	
Academic Revenue Bond Debt Service	2,870,000	2,870,000	-	
Costs related to Title IX Sexual Misconduct	2,014,090	2,014,090	-	
Partial Relocation of System Office	354,000	354,000	-	
Veterinary Medicine Agreement	290,849	290,849	-	
Controlled Sub Object Adjustments	287,056	(673,889)	(960,945)	
Fuel & Utilities	259,602	259,602	-	
UMCP Tuition Differential	0	7,980,000	7,980,000	Per BOR Approval, funds directed to school improvements for financial aid, faculty, technology, equipment, enrollment, etc.
Total Current Services Costs	\$74,965,745	\$84,331,989	\$9,366,244	
ATB State Pension Adjustment	(2,402,274)	(2,175,449)	226,825	DLS included Morgan State University adjustment
Total Current Services Costs	\$72,563,471	\$82,156,540	\$9,593,069	

Exhibit 13				
	<u>Analysis</u>	<u>USM</u>	<u>Explanation</u>	
Expenditures				
Current Services Cost Increase	\$72,563,471	\$82,156,540	SU New Facilities & UMCP Tuition Differential Costs	
Total Expenditures				
Revenues				
New General Funds and Higher Education Investment Funds	26,618,609	26,618,609		
New Tuition & Fee Revenues(2.7% increase Allowance)	43,821,021	43,821,021		
Other New Unrestricted Revenues	8,808,895	0	Other unrestricted funds are not targeted to State-Support Programs	
New General Fund, Tuition & Other Revenues	79,248,525	70,439,630		
Funds Available Over CSC Allowance	\$6,685,054	(\$11,716,910)		
Additional Tuition & Fee Revenue Based on DLS 4% Assumption	21,917,018	TBD	T&F additional revenue related to enrollment which has associated instructional costs.	
Funds Available Over CSC Revised DLS Tuition Assumption	\$28,602,072	(\$11,716,910)		
Planned Transfer of State-Supported Revenues to Fund Balance	23,425,419		Planned Transfers to meet Fund Balance Goal are not available to pay for Current Services Costs.	
Estimated Ending Fiscal 2018 Fund Balance	\$1,080,098,614			