

**RB36**  
**University System of Maryland Office**  
 University System of Maryland

***Capital Budget Summary***

---

**Summary of State-owned Projects Funded in Governor's Request**  
 (\$ in Millions)

<i>Project Title</i>	<i>Prior Approp.</i>	<i>FY 2014 Request</i>	<i>Future Estimated</i>	<i>Estimated Total</i>	<i>DLS FY 2014 Recommd.</i>
Biomedical Sciences and Engineering Education Facility	\$0.000	\$5.000	\$154.150	\$159.150	\$5.000
<b>Total</b>	<b>\$0.000</b>	<b>\$5.000</b>	<b>\$154.150</b>	<b>\$159.150</b>	<b>\$5.000</b>

**Summary of Grant and Loan Programs Funded in Governor's Request**  
 (\$ in Millions)

<i>Program Title</i>	<i>FY 2012 Approp.</i>	<i>FY 2013 Approp.</i>	<i>FY 2014 Request</i>	<i>Percent Change</i>	<i>DLS Recommd.</i>
Capital Facilities Renewal	\$17.000	\$27.000	\$17.000	-37.0%	\$17.000
<b>Total</b>	<b>\$17.000</b>	<b>\$27.000</b>	<b>\$17.000</b>	<b>-37.0%</b>	<b>\$17.000</b>

***Summary of Recommended Bond Actions***

---

1. Shady Grove Educational Center – Biomedical Science and Engineering Education Building  
 Approve.
  
2. Capital Facilities Renewal  
 Approve.

For further information contact: Sara J. Baker

Phone: (410) 946-5530

## *Capital Improvement Program*

---

### **State-owned Capital Improvement Program (\$ in Millions)**

<i>Projects</i>	<i>Prior Auth.</i>	<i>2014 Request</i>	<i>2015 Est.</i>	<i>2016 Est.</i>	<i>2017 Est.</i>	<i>2018 Est.</i>	<i>Beyond CIP</i>
Biomedical Sciences and Engineering Education Facility	\$0.000	\$5.000	\$6.000	\$30.000	\$64.000	\$54.150	\$0.000
<b>Total</b>	<b>\$0.000</b>	<b>\$5.000</b>	<b>\$6.000</b>	<b>\$30.000</b>	<b>\$64.000</b>	<b>\$54.150</b>	<b>\$0.000</b>

<i>Fund Source</i>	<i>Prior Auth.</i>	<i>2014 Request</i>	<i>2015 Est.</i>	<i>2016 Est.</i>	<i>2017 Est.</i>	<i>2018 Est.</i>	<i>Beyond CIP</i>
<b>Total GO Bonds</b>	<b>\$0.000</b>	<b>\$5.000</b>	<b>\$6.000</b>	<b>\$30.000</b>	<b>\$64.000</b>	<b>\$54.150</b>	<b>\$0.000</b>

### **Grant and Loan Capital Improvement Program (\$ in Millions)**

<i>Program</i>	<i>2012 Approp.</i>	<i>2013 Approp.</i>	<i>2014 Request</i>	<i>2015 Est.</i>	<i>2016 Est.</i>	<i>2017 Est.</i>	<i>2018 Est.</i>
Capital Facilities Renewal	\$17.000	\$27.000	\$17.000	\$17.000	\$17.000	\$17.000	\$17.000
<b>Total</b>	<b>\$17.000</b>	<b>\$27.000</b>	<b>\$17.000</b>	<b>\$17.000</b>	<b>\$17.000</b>	<b>\$17.000</b>	<b>\$17.000</b>

<i>Fund Source</i>	<i>2012 Approp.</i>	<i>2013 Approp.</i>	<i>2014 Request</i>	<i>2015 Est.</i>	<i>2016 Est.</i>	<i>2017 Est.</i>	<i>2018 Est.</i>
GO Bonds	\$0.000	\$10.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
Revenue Bonds	17.000	17.000	17.000	17.000	17.000	17.000	17.000
<b>Total</b>	<b>\$17.000</b>	<b>\$27.000</b>	<b>\$17.000</b>	<b>\$17.000</b>	<b>\$17.000</b>	<b>\$17.000</b>	<b>\$17.000</b>

## ***Budget Overview***

---

### **Biomedical Sciences and Engineering Education Facility**

The General Assembly included language in the 2012 capital budget pre-authorizing \$5.0 million for fiscal 2014 to begin design of the Biomedical Sciences and Engineering Education Facility that will be located at the Universities at Shady Grove (USG). Funding for this project was not programmed in the 2012 *Capital Improvement Program* (CIP) but has been added to the 2013 five-year capital plan based on the availability of additional debt authorizations. The Capital Debt Affordability Committee (CDAC) recommended \$750.0 million of additional new general obligation (GO) bond authorizations in the five-year plan relative to the 2012 session limits. The 2013 CIP programs \$150.0 million of increased authorization in each of fiscal 2014 through 2018, consistent with the CDAC recommendation. If not for the additional authorization, it is unlikely this facility would have been programmed for funding in the CIP. The 2013 CIP programs \$6.0 million for design funding in fiscal 2015 and funding for construction and equipment in fiscal 2016 through 2018 of \$148.15 million, for an estimated total cost of \$159.2 million.

The 135,414 net assignable square feet (NASF) facility will provide specialized laboratory space for new and existing programs and provide additional classroom space to support future enrollment growth. USG experienced 60.5% enrollment growth between fall 2007 and 2011, with the number of students increasing from 2,519 to 4,042. Enrollment is expected to increase 87.8%, or 3,588 students, by fall 2019. USG's campus has three academic buildings which currently have 45,704 NASF of classroom space and 40,514 NASF of laboratory space which will not be able to accommodate the projected enrollment growth, particularly for health-related disciplines that require specialized space such as respiratory therapy, pharmacy, and nursing programs.

The existing laboratory space is not appropriately sized, and there are an insufficient number of laboratories to accommodate the existing programs. National and State standards for health-related disciplines *e.g.*, biological sciences and respiratory therapy, are 65 to 85 square feet (sq. ft.) per student. Currently, laboratories are below this standard and, therefore, do not have the space to accommodate a typical section of 20 to 30 students. One of the two biological science laboratories is 895 sq. ft. compared to the recommended size of 1,300 sq. ft., while the respiratory therapy program needs a laboratory that can accommodate 24 students compared to the existing space that only has room for 12 students. Furthermore, the pharmacy and nursing programs need additional space in order to meet enrollment demand. Nursing currently has two laboratories that it shares with other healthcare programs which limits the number of courses that can be offered during the day. In order to meet demand, the Nursing program, which is one of the most popular degree programs at USG, will need four additional laboratories by 2019. The pharmacy program has only one dedicated laboratory and shares other laboratories with other health science-related programs.

The current laboratory space was not designed for any of the existing programs. For example, the library was converted to provide laboratory space for the pharmacy program. Specialized laboratories will be needed for new planned program offerings that include mechanical and electrical engineering, biotechnology, dentistry, and physical therapy. It is projected, based on projected enrollment growth and the State's space guidelines, that there will be a laboratory space deficit of

44,089 NASF by 2019. Without adequate and appropriate laboratory space, USG cannot offer new programs or expand enrollment of existing programs.

There is also insufficient office space for faculty which has grown from 298 to 456 between fiscal 2008 and 2012. Offices are crowded, congested, and lack privacy. Offices in the USG III building are 142 sq. ft., less than the State standard for office work stations, and there is not enough space for temporary storage of reference materials and supplies. The total amount of office space can only adequately accommodate less than half of the existing faculty and staff requiring space. Currently, there is 34,328 NASF of office space, but it is projected USG will have a deficit of 60,105 NASF by 2019.

Overall, the new facility will provide 34,540 NASF of additional classroom space, 44,854 NASF of laboratory space, and 26,960 NASF of office space. Additionally, the building will include 11,420 NASF of clinical space. Montgomery County is contributing \$20 million to construct a new parking garage and related site improvements starting in fiscal 2015. The garage will replace those parking spaces lost due to the new building which would be constructed on an existing parking lot. The project also includes the relocation of the main entrance to the campus further down Shady Grove Road, allowing for the installation of a traffic light.

## **Capital Facilities Renewal**

This annual program provides for improvements at various facilities at the University System of Maryland (USM) institutions that are in need of renewal. Capital facilities renewal funds are allocated among institutions on a *pro rata* share of self-reported replacement costs for all State-funded academic facilities. Eligible projects must have a life expectancy of at least 15 years. Funding in fiscal 2014 includes \$17 million in revenue bonds which will enable USM to undertake 34 projects.

Facilities renewal is defined as the planned renovation, adaptation, replacement, or upgrade of the systems of a capital asset during its lifespan such that it meets assigned functions in a reliable manner. A priority for USM is to maintain an adequate annual investment in the maintenance and renewal of its capital assets. When funding is insufficient to deal with a problem such as replacing a leaking roof, repairs are made to meet the immediate concern and the replacement is “deferred,” becoming part of the backlog.

The consequences of not keeping up with facilities renewal projects as buildings age include more frequent and expensive maintenance work; electrical and mechanical systems becoming less effective, impacting academic and research activities; and eventual failure of the facility leading to closure and loss of space. As of fall 2011, the total gross square footage (GSF) of all USM facilities totaled 38.4 million GSF, of which 21.5 million GSF are State-supported buildings with a replacement value of \$9.7 billion. The University of Maryland, College Park (UMCP) has the most square footage of any institution, totaling 13.7 million, including 7.7 million of State-supported space. Approximately 32.0% of this space has not had a major renovation in 40 years. The University of Maryland, Baltimore has the second highest square footage of all institutions, totaling

6.7 million, which includes 4.0 million of State-supported space. However, over 90.0% of the space is under 30 years old. USM estimates its current backlog of deferred maintenance is \$1.6 billion, with UMCP comprising 38.9%, or \$654.3 million, of the backlog as shown in the **Exhibit 1**.

---

**Exhibit 1**  
**Deferred Maintenance Backlog**

University of Maryland, College Park	\$654,335,391
University of Maryland Baltimore County	227,724,887
Towson University	176,925,000
Salisbury University	148,503,985
University of Maryland, Baltimore	130,525,435
Bowie State University	101,995,751
Coppin State University	84,928,665
University of Baltimore	55,886,136
University of Maryland Eastern Shore	44,441,500
University of Maryland Center for Environmental Science	35,507,379
Frostburg State University	22,729,498
<b>Total</b>	<b>\$1,683,503,627</b>

Source: University System of Maryland

---

USM’s programs and policies are intended to reduce the existing backlog of deferred maintenance and find a balance between wear-and-tear on facilities and adequate spending to maintain facilities. Funding is intended to be from the operating budget, but historically, operating funds have not been able to sustain adequate levels of facility renewal funding, causing an increase in the backlog. To address the growing backlog, the Board of Regents adopted two strategies:

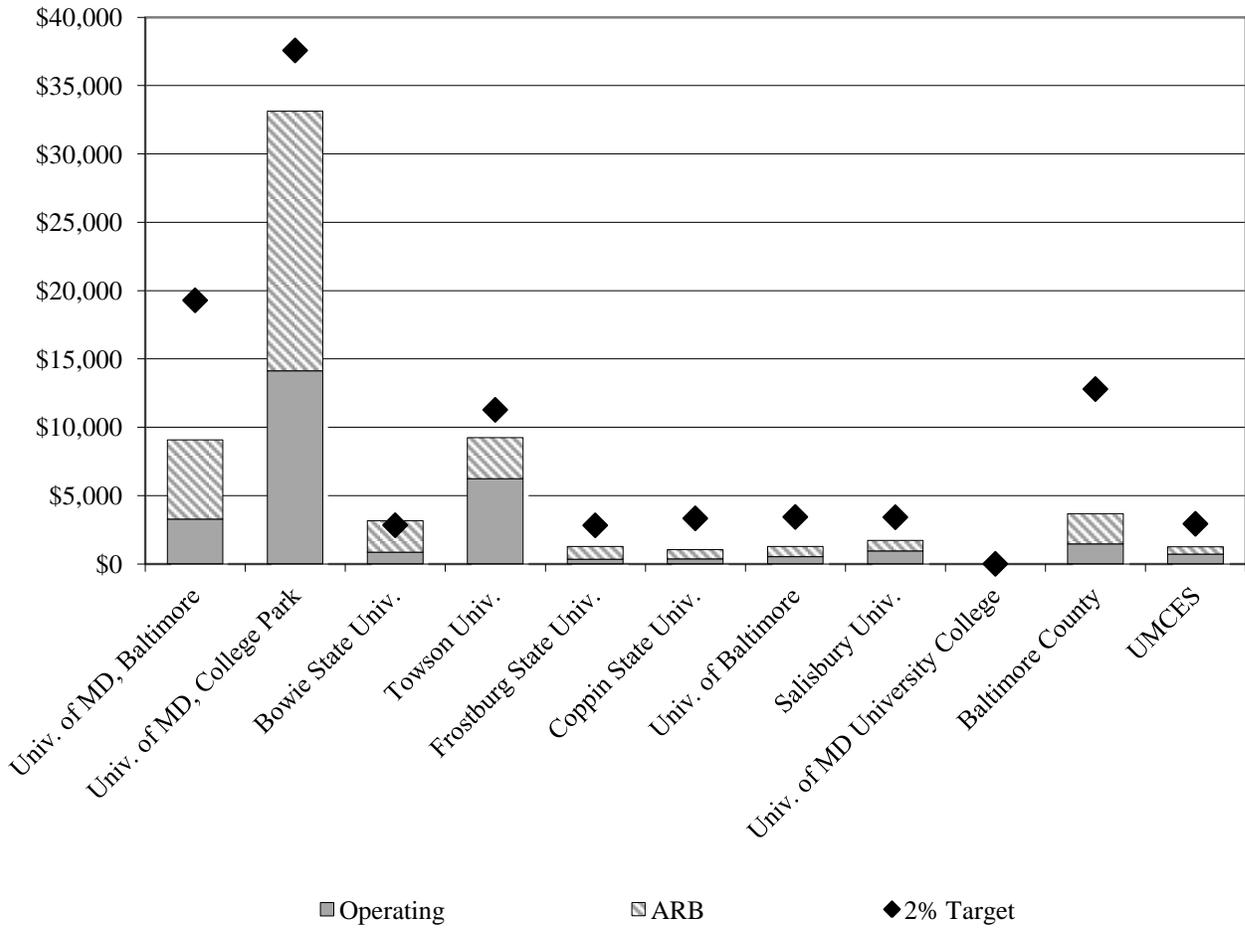
- reducing the backlog to a manageable size through deliberate spending on major renovation and replacement in the CIP; and
- adopting an annual operating spending formula based on target guideline of 2.0% of the replacement value of campus buildings in which institutions annually increase operating expenditures by 0.2% unless there are “systemwide funding constraints.”

From fiscal 2008 through 2011, expenditures on facilities renewal was, on average, equivalent to 1.4% of the replacement value of State-supported assets. However, with the downturn in the economy, State funding has been relatively flat resulting in institutions reducing their spending on

facilities renewal. In fiscal 2012, on average, expenditures were less than 1.0% of the replacement value.

**Exhibit 2** shows the fiscal 2013 operating expenditures and Academic Revenue Bond (ARB) allocated facilities renewal and the 2.0% target. It should be noted, for UMCP, an additional \$10.0 million – \$5.0 million of GO bonds and \$5.0 million of ARBs – is included to address the backlog of deferred maintenance related to its failing infrastructure. In order for USM to meet the 2.0% target, institutions would need to spend a total of \$107.6 million on deferred maintenance. In fiscal 2013, expenditures total \$67.7 million, equivalent to 1.0% of the replacement value of State-supported assets. UMCP and Towson University (TU) continue to account for over 60.0% of facilities renewal expenditures in fiscal 2013 at \$33.1 million and \$9.2 million, respectively. This spending is equivalent to 1.8 and 1.6% of the replacement value of assets at UMCP and TU, respectively. The University System of Maryland Baltimore County and Coppin State University persist in having the lowest rate with expenditures equaling 0.6%.

**Exhibit 2**  
**University System of Maryland**  
**Operating and Capital Facility Renewal Expenditures**  
**Fiscal 2013**  
**(\$ in Thousands)**



ARB: Academic Revenue Bond

UMCES: University of Maryland Center for Environmental Science

Note: The University of Maryland, College Park (UMCP) includes an additional \$5 million in general obligation bonds and \$5 million in ARBs to fund campuswide building system and infrastructure improvements; the University of Maryland University College does not have a spending target due to the unique nature of its facilities profile which includes leased buildings and buildings that are off-campus or outside the State. The University System of Maryland Office includes regional higher education centers.

Source: University System of Maryland

## ***Operating Budget Impact Statement***

---

### **Executive’s Operating Budget Impact Statement (\$ in Millions)**

	<i>FY 2014</i>	<i>FY 2015</i>	<i>FY 2016</i>	<i>FY 2017</i>	<i>FY 2018</i>
--	----------------	----------------	----------------	----------------	----------------

<b>Biomedical Sciences and Engineering Education Facility</b>					
Estimated Operating Cost	\$0.000	\$0.000	\$0.000	\$0.000	\$2.773
Estimated Staffing	0.000	0.000	0.000	0.000	8.000

## ***GO Bond Recommended Actions***

---

1. Approve \$5 million in general obligation funding to support the preliminary design of the Biomedical Sciences and Engineering Education Facility.
2. Approve \$17 million in Academic Revenue Bonds to fund facilities renewal projects at University System of Maryland institutions.