

RB36A
University System of Maryland Office
University System of Maryland

Facilities Renewal Program (Statewide)

General Obligation Bonds	\$10,000,000
Revenue Bonds	\$17,000,000

Summary of Recommended Bond Actions

1. Facilities Renewal Program

Approve.

Bill Text: Senate Bill 1036 – Academic Facilities Bonding Authority.

Provide funds to design, renovate, construct, and equip various facilities renewal projects on University System of Maryland campuses across the State.

Program Description: This 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 cost for all State-funded academic facilities. Eligible projects must have a life expectancy of at least 15 years. Funding in fiscal 2013 includes \$17 million in revenue bonds and a one-time \$10 million general obligation (GO) bonds funding which will enable USM to undertake 36 projects.

Program Analysis and Performance Measures

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 become less effective impacting academic and research activities; and eventual failure of the facility leading to closure and loss of space.

As buildings age, facilities renewal becomes more of an issue. As of fall 2011, the total gross square footage of all USM facilities totaled 38.4 million of which 21.5 million 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 **Exhibit 1**.

Exhibit 1
Deferred Maintenance Backlog

<u>Institution</u>	<u>Amount</u>
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
Total	\$1,683,503,627

Note: This reflects the estimated share from the fall 2011 Space Guidelines Application Programs (SGAP) report, facilities renewal survey, and campus-specific studies. The University of Maryland University College does not submit an SGAP report due to the unique nature of its facilities profile.

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:

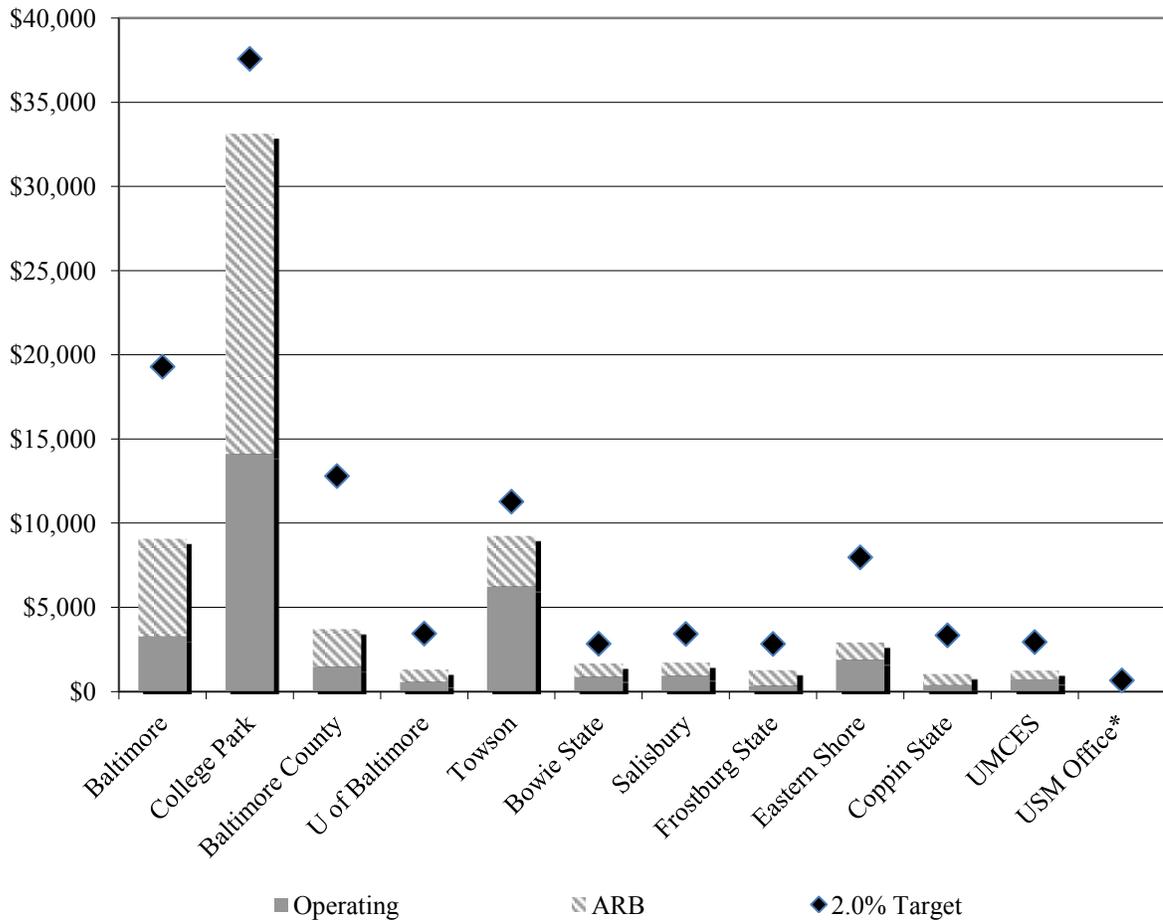
- reduce the backlog to a manageable size through deliberate spending on major renovation and replacement in the *Capital Improvement Program*; and

- adopt an annual operating spending formula based on a 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.

Exhibit 2 shows the fiscal 2013 operating expenditures and Academic Revenue Bonds (ARB) allocated facilities renewal and the 2.0% target. It should be noted, for UMCP \$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 \$108.3 million on deferred maintenance. In fiscal 2013, expenditures total \$56.2 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 equaling 64.0% 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 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 Facilities Renewal Expenditures
Fiscal 2013
(\$ in Thousands)



ARB: Academic Revenue Bonds
 UMCES: University of Maryland Center for Environmental Science
 USM: University System of Maryland

Note: The University of Maryland, College Park includes \$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 USM Office includes regional higher education centers.

Source: University System of Maryland

Authorization Encumbrance and Expenditure Data

**Authorization Summary
(\$ in Millions)**

<i>Fiscal Year</i>	<i>Authorization</i>	<i>Funds</i>		<i>Balances</i>	
		<i>Encumbered</i>	<i>Expended</i>	<i>To Be Encumbered</i>	<i>To Be Expended</i>
Prior Years	\$144.904	\$144.129	\$142.69	\$0.775	\$2.214
2008	15.000	14.383	12.959	0.617	2.041
2009	17.000	15.418	15.067	1.582	1.933
2010	17.000	15.066	12.638	1.934	4.362
2011	17.000	12.121	7.700	4.879	9.304
2012	17.000	2.905	1.000	14.095	16.004
Total	\$227.904	\$204.022	\$192.054	\$23.882	\$35.858

* USM maintains \$1.0 million of unencumbered funds for emergency projects.

It should be noted, starting in fiscal 2011, USM reverted any unspent facilities renewal funds older than four years to the USM emergency systemwide account for redistribution to fund other facilities renewal related projects. The USM Office notes nearly all of the unexpended funding in appropriations older than four years are either reverted and being used for other projects or being held in the emergency account to be used as needs arise.

GO Bond Recommended Actions

1. Approve \$17 million in Academic Revenue Bonds and \$10 million in general obligation bonds to fund facilities renewal projects at University System of Maryland institutions.

Fiscal 2013 Proposed Projects

<u>Institution</u>	<u>Project Title</u>	<u>2013 Amount</u>
Frostburg State University	Guild Center Roof Replacement	\$245,000
	Window and Exterior Door Replacements – Phase 2	400,000
Frostburg State University Total		\$645,000
University of Maryland Center for Environmental Science	Appalachian Laboratory – Relocation of Air Handling Unit #2	\$207,000
	CBL – Comprehensive Replacement of Heat Pumps and Exterior Air Conditioning Units Campuswide	110,000
University of Maryland Center for Environmental Science Total		\$317,000
Coppin State University	Campuswide Buildings, Grounds, and Signage – Repair, Replacement, and Upgrade (Phased)	\$150,000
	Campuswide HVAC Repairs, Replacement, and Mechanical Upgrades (Phased)	109,000
	Roofing Systems Repairs and Replacement – Upgrade (Phased)	150,000
Coppin State University Total		\$409,000
University of Baltimore	Upgrade Elevators Campuswide	\$418,000
University of Baltimore Total		\$418,000
University of Maryland, Baltimore	Electrical Distribution System Upgrades (Campuswide)	\$345,000
	Medical School Teaching Facility – Mechanical Infrastructure Upgrade	990,000
	Fire Alarm System Upgrades and Replacements – Campuswide	350,000

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<u>Institution</u>	<u>Project Title</u>	<u>2013 Amount</u>
	Mechanical HVAC Upgrades, Campuswide	990,000
University of Maryland, Baltimore Total		\$2,675,000
Towson University	Phased Renewal of Building Envelopes (Various Buildings)	\$400,000
	Replace Mechanical, Electrical, and Plumbing Systems (Various Buildings)	900,000
	Utility Infrastructure Renewal and Replacement	289,000
Towson University Total		\$1,589,000
University of Maryland Baltimore County	Campus Electrical Distribution/Mechanical Systems Improvements Campuswide	\$500,000
	Classroom, Laboratory, and Lecture Hall Renovations (Phased)	402,000
	Roof Replacement Campuswide (Phased)	550,000
University of Maryland Baltimore County Total		\$1,452,000
Bowie State University	Roof Replacement (Various Buildings)	\$554,000
Bowie State University Total		\$554,000
University of Maryland, College Park	Building Exterior Shell and Structural Infrastructure Improvement (Phased)	\$990,000
	Building Electrical – Mechanical Infrastructure Upgrades (Phased)	990,000
	Building HVAC Infrastructure Improvement (Phased)	990,000
	Building Mold and Asbestos Abatement (Phased)	150,000
	Campus Central Control and Monitoring System Improvement (Phased)	300,000

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<u>Institution</u>	<u>Project Title</u>	<u>2013 Amount</u>
	Campus Exterior Infrastructure Improvement (Phased)	550,000
	Campus Water, Sanitary, Drain Infrastructure Improvement (Phased)	295,000
	Maryland Agricultural Experiment Station Facilities Improvements	100,000
	Office Area Interior Improvements (Various Buildings)	900,000
	Public Area Interior Improvements (Various Buildings)	550,000
	Research/Laboratory/Data Facilities Improvements (Various Buildings)	975,000
	Teaching Facilities Technology/Equipment Improvements (Various Buildings)	510,000
University of Maryland, College Park Total		\$7,300,000
University of Maryland Eastern Shore	Resurface Outdoor Track for Physical Education	\$642,000
University of Maryland Eastern Shore Total		\$642,000
Salisbury University	Holloway Hall – Chiller Replacement	\$136,000
	Devilbiss Hall – Roof Replacement	250,000
	Holloway Hall Elevator Upgrade – Main	150,000
Salisbury University Total		\$536,000
University System of Maryland Office	Additional State Funded Facilities Renewal Projects – To Be Determined	10,000,000
	Emergency and Systemwide Projects	\$463,000
University System of Maryland Office Total		\$10,463,000
Total		\$27,000,000

CBL: Chesapeake Biological Laboratory

HVAC: heating, ventilation, and air conditioning

Prior Authorizations

Fiscal 2012 Encumbrances

<u>Institution</u>	<u>Title</u>	<u>Fiscal 2012 Appropriation</u>	<u>Remaining Fiscal 2012 Appropriation to Be Encumbered</u>	<u>Status</u>	<u>Encumbered Amount</u>
Frostburg State University	Guild Center, Window Replacement, Phase 1	\$175,000	\$175,000	Planning	\$0
	Academic Building High Voltage Transformer	65,000	65,000	Planning	0
	Academic Building HVAC Upgrades	330,000	330,000	Planning	0
	Underground High Voltage Cable Replacement	75,000	75,000	Planning	0
Coppin State University	Campuswide HVAC Repairs, Replacement, and Upgrade (Phased)	129,000	129,000	Included in Buildings	0
University of Baltimore	Academic Center Renovation	175,000	175,000	Planning	0
	Phased HVAC Improvements (Various Buildings)	243,000	243,000	Planning	0
University of Maryland, Baltimore	Medical School Teaching Facility Mechanical Infrastructure Upgrade	990,000	990,000	In Design	0
	Mechanical HVAC Upgrades, Campuswide	750,000	750,000	In Design	0
	Medical School Teaching Facility – Electrical Distribution System Upgrade (Phased)	435,000	435,000	In Design	0

<u>Institution</u>	<u>Title</u>	<u>Fiscal 2012 Appropriation</u>	<u>Remaining Fiscal 2012 Appropriation to Be Encumbered</u>	<u>Status</u>	<u>Encumbered Amount</u>
Towson University	Phased Renewal of Building Envelope and Roof Systems (Various Buildings)	400,000	400,000	Design	0
	Replace Mechanical, Electrical, and Plumbing Systems (Various Buildings)	900,000	900,000	Planning	0
	Stormwater Infrastructure Repairs and Stream Restoration/Stabilization	289,000	289,000	Design	0
University of Maryland Baltimore County	Center of Marine Biotechnology at the Columbus Center	205,000	205,000	Planning	0
	Campus Electrical Distribution/Mechanical Systems Improvements Campuswide	300,000	300,000	In Planning	0
	Classroom, Laboratory, and Lecture Hall Renovations (Phased)	397,000	362,619	In Design and Planning	34,381
	Roof Replacement Campuswide (Phased)	550,000	550,000	Planning and Bidding	0
Bowie State University	Campuswide Improvements	554,000	554,000	Planning	0
University of Maryland, College Park	Building Electrical-Mechanical Infrastructure Upgrades (Phased)	950,000	413,724	In Construction	536,276
	Building Exterior Shell and Structural Infrastructure Improvement (Phased)	890,000	440,805	In Construction	449,195
	Building HVAC Infrastructure Improvement (Phased)	950,000	517,522	In Construction	432,478
	Building Mold and Asbestos Abatement (Phased)	150,000	133,731	In Construction	16,270

<u>Institution</u>	<u>Title</u>	<u>Fiscal 2012 Appropriation</u>	<u>Remaining Fiscal 2012 Appropriation to Be Encumbered</u>	<u>Status</u>	<u>Encumbered Amount</u>
	Campus Central Control and Monitoring System Improvement (Phased)	300,000	252,994	In Construction	47,006
	Campus Exterior Infrastructure (Phased)	475,000	212,250	In Construction	262,750
	Campus Security Lighting Improvement (Phased)	300,000	300,000	In Design	0
	Campus Water, Sanitary, Drain Infrastructure Improvement (Phased)	250,000	195,820	In Construction	54,180
	Maryland Agricultural Experiment Station Facilities Improvements	100,000	100,000	In Design	0
	Office Area Interior Improvements (various buildings)	900,000	839,180	In Construction	60,820
	Public Area Interior Improvements (various buildings)	550,000	434,201	In Construction	115,799
	Research/Laboratory/Data Facilities Improvements (various buildings)	975,000	904,686	In Construction	70,314
	Teaching Facilities Technology/Equipment Improvements (various buildings)	510,000	483,053	In Construction	26,948
University of Maryland Eastern Shore	Resurface Outdoor Track for Physical Education	642,000	642,000	Planning	0
Salisbury University	Alumni House Replacement of Mechanical System	236,000	236,000	Planning	0
	Holloway Hall – Gutters and Downspout Replacement	300,000	300,000	Planning	0

<u>Institution</u>	<u>Title</u>	<u>Fiscal 2012 Appropriation</u>	<u>Remaining Fiscal 2012 Appropriation to Be Encumbered</u>	<u>Status</u>	<u>Encumbered Amount</u>
University of Maryland Center for Environmental Science	Appalachian Laboratory – Replacement of Reverse Osmosis Water System	100,000	100,000	Design	0
	Replacement of Air Handling Unit in Morris Marine Building – HPL	154,000	154,000	Planning	0
	Replacement of PBX Telephone Switch – HPL	63,000	63,000	Design	0
University System of Maryland Office	Emergency and Systemwide Projects	463,000	463,000	Held	0
Total		\$16,500,000	\$14,095,087		\$2,404,913

HPL: Horn Point Laboratory
 HVAC: heating, ventilation, and air conditioning
 PBX: private branch exchange

Fiscal 2011 Encumbrances

	<u>FY 2011 Remaining to Be Encumbered</u>
Frostburg State University	\$219,378
Towson University	867,328
University of Maryland, Baltimore	1,171,219
University of Maryland Baltimore County	1,081,870
University of Maryland, College Park	612,517
University of Maryland Eastern Shore	580,000
University System of Maryland Office	347,000
Total	\$4,879,312
Less Funded Amount	\$17,000,000
Encumbered	\$12,120,688

Fiscal 2010 Encumbrances

	<u>FY 2010 Remaining to Be Encumbered</u>
Towson University	\$467,753
University of Maryland, Baltimore	746,905
University of Maryland Baltimore County	242,121
University of Maryland, College Park	38,836
University of Maryland Eastern Shore	383,000
University System of Maryland Office	55,000
Total	\$1,933,615
Less Funded Amount	17,000,000
Encumbered	\$15,066,385

Fiscal 2009 Encumbrances

	<u>FY 2009 Remaining to Be Encumbered</u>
University of Maryland, Baltimore	\$669,085
University of Maryland Baltimore County	418,875
University System of Maryland Office	494,000
Total	\$1,581,960
Less Funded Amount	\$17,000,000
Encumbered	\$15,468,040

Fiscal 2008 Encumbrances

	<u>FY 2008 Remaining to Be Encumbered</u>
Towson University	\$57,036
University of Maryland, Baltimore	350,100
University of Maryland Baltimore County	10,000
University System of Maryland Office	200,000
Total	\$617,136
Less Funded Amount	\$15,000,000
Encumbered	\$14,382,864