

**RB25**  
**University of Maryland Eastern Shore – Capital**  
**University System of Maryland**

***Capital Budget Summary***

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

<b>Projects</b>	<b>Prior Auth.</b>	<b>2021 Request</b>	<b>2022 Est.</b>	<b>2023 Est.</b>	<b>2024 Est.</b>	<b>2025 Est.</b>	<b>Beyond CIP</b>
School of Pharmacy and Health Professions	\$16.563	\$61.287	\$18.716	\$0.000	\$0.000	\$0.000	\$0.000
Campus Flood Mitigation Project	1.008	10.000	1.506	0.000	0.000	0.000	0.000
<b>Total</b>	<b>\$17.571</b>	<b>\$71.287</b>	<b>\$20.222</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$0.000</b>

<b>Fund Source</b>	<b>Prior Auth.</b>	<b>2021 Request</b>	<b>2022 Est.</b>	<b>2023 Est.</b>	<b>2024 Est.</b>	<b>2025 Est.</b>	<b>Beyond CIP</b>
GO Bonds	\$11.563	\$61.287	\$18.716	\$0.000	\$0.000	\$0.000	\$0.000
Revenue Bonds	6.008	10.000	1.506	0.000	0.000	0.000	0.000
<b>Total</b>	<b>\$17.571</b>	<b>\$71.287</b>	<b>\$20.222</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$0.000</b>

CIP: *Capital Improvement Program*  
GO: general obligation

***Key Observations***

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The fiscal 2021 budget provides \$61.3 million to continue construction of the School of Pharmacy and Health Professions building. However, construction has been delayed awaiting the approval of permits from the Department of Natural Resources (DNR).

## ***Summary of Recommended Bond Actions***

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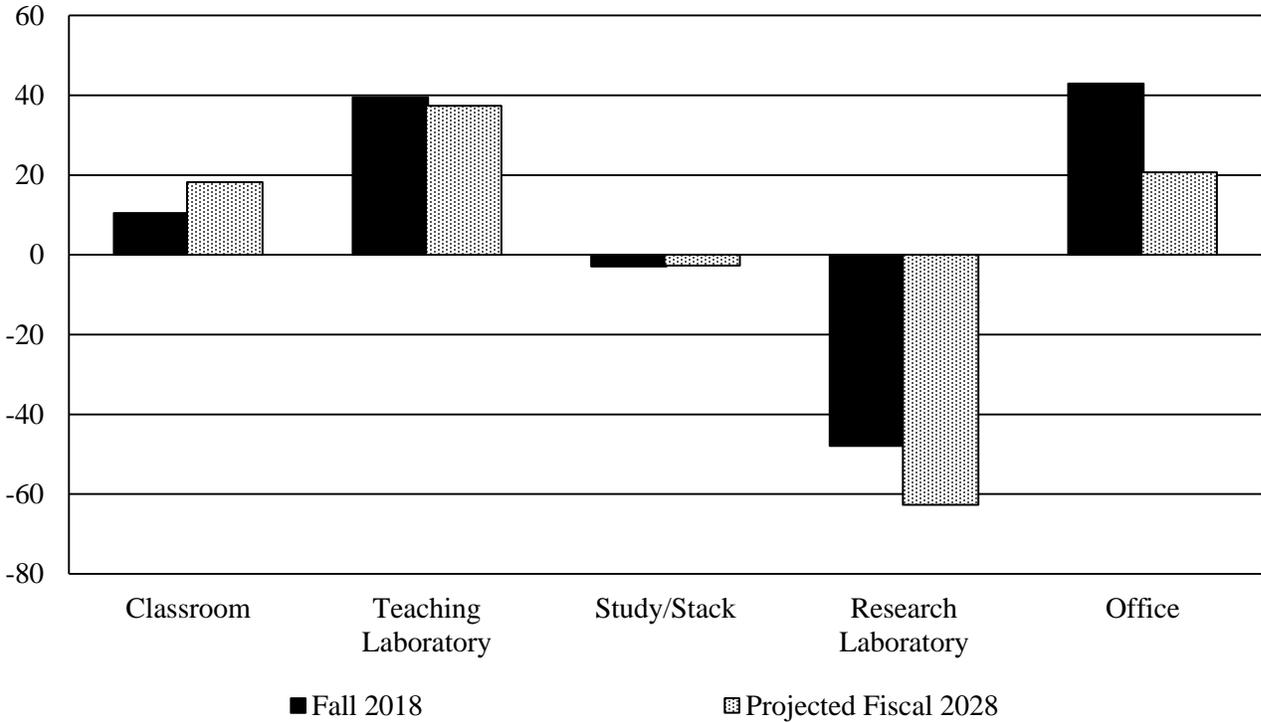
	<b><u>Funds</u></b>
1. School of Pharmacy and Health Professions	\$4,000,000 GO
Reduce funding for the School of Pharmacy and Health Professions.	
2. Campus Flood Mitigation Project	
Approve funding for the Campus Flood Mitigation Project.	
3. SECTION 13 – University of Maryland Eastern Shore – School of Pharmacy and Health Professions	\$4,000,000 P1
Add funds for preauthorization for the School of Pharmacy and Health Professionals.	
<b>Total General Obligation Reductions</b>	<b>\$4,000,000</b>
<b>Total Preauthorization Additions</b>	<b>\$4,000,000</b>

## ***Performance Measures and Outputs***

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The fall 2017 Space Guidelines Application Program (SGAP) report, the most recent report for the University of Maryland Eastern Shore (UMES), provides an estimate on the 10-year space needs of UMES. The SGAP report calculates the space needed to accommodate the projected growth in faculty, staff, and students when including all the estimated space inventory, including planned new facilities, renovations, and eliminated space over the next 10 years. UMES projects a 21.9% increase in full-time equivalent students by fiscal 2027. Despite this enrollment increase, it is estimated that the surplus in classroom space will increase to 18,209 net assignable square feet (NASF), as shown in **Exhibit 1**. While teaching laboratory space will slightly decrease by fiscal 2018, there will still be a surplus of 37,318 NASF. The deficit in research laboratory space is projected to worsen by 14,760 NASF, while the surplus of office space will decrease to 20,700 NASF despite a projected 21.9% increase in full-time equivalent faculty and staff.

**Exhibit 1**  
**Academic Space Surplus and Deficit**  
**Fall 2018 and Projected Fiscal 2028**  
**Net Assignable Square Feet**  
**(in Thousands)**



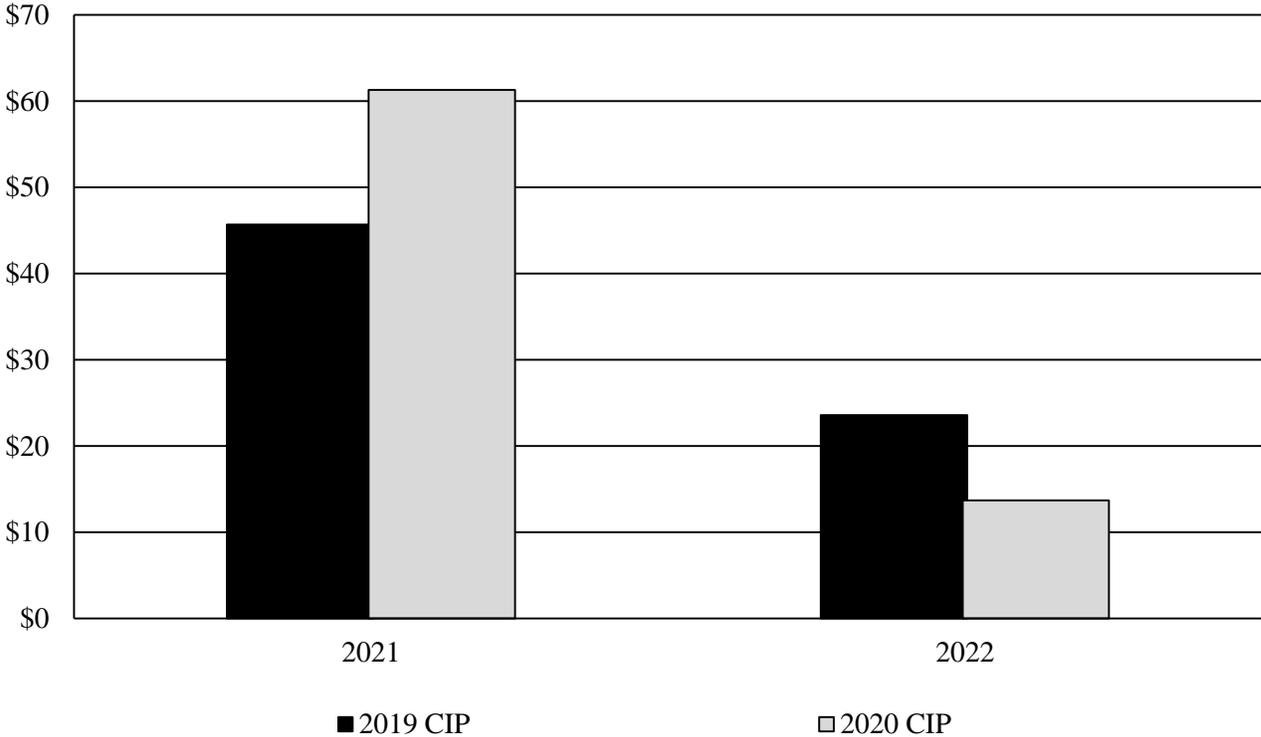
Source: University System of Maryland

## ***Budget Overview***

### **School of Pharmacy and Health Professions**

**Exhibit 2** shows the current funding schedule compared to what was programmed in the 2019 *Capital Improvement Program* (CIP). Overall, the project is estimated to cost an additional \$5.7 million to complete. The increase is attributable to the application of higher construction escalation rates used in the process of refining project cost estimates to current market conditions. Nationally and regionally, a shortage of experienced trade contractors has contributed to a depressed bidding environment and higher construction costs. This situation is especially acute for projects located on the Eastern Shore.

**Exhibit 2**  
**Comparison in Construction Funding**  
**2019 and 2020 CIP**  
**(\$ in Millions)**



CIP: *Capital Improvement Program*

Source: Department of Budget and Management

For fiscal 2021, the budget provides \$61.3 million to continue construction. This is \$15.6 million more than what was programmed in the 2019 CIP but is offset by a \$9.9 million reduction to what is programmed for fiscal 2023. The revised funding plan reflects not only the overall increased cost of the project but more so the changes to the project schedule and related monthly project cash flow analysis. The start of construction, scheduled for December 2019, has been delayed awaiting the issuance of permits from DNR. Due to this delay, according to a revised cash flow analysis, \$57.3 million will be needed for construction in fiscal 2021, which is based on construction starting in February 2020. **Therefore, the Department of Legislative Services recommends reducing the fiscal 2021 appropriation by \$4.0 million and increasing the amount of the fiscal 2022 preauthorization by a corresponding \$4.0 million.** Although the cash flow analysis suggests that \$62.0 million is needed in fiscal 2021, this includes \$4.0 million for equipment that can be procured using funds programmed for fiscal 2022.

In June 2013, the pharmacy program was fully accredited. However, the Accreditation Council on Pharmacy Education (ACPE) noted that the current facilities were not ideal for the program and stated that UMES needed to make progress in addressing the short- and long-term facilities needs of the program. Progress included a decision on where to locate a new pharmacy building and target dates for beginning and completing construction.

In April 2015, ACPE conducted a site visit and found the pharmacy facilities unsatisfactory in four categories and needing improvement in one category. ACPE noted that the school occupies space in six buildings and two temporary trailers with first- and second-year students based in different buildings and faculty and administrative offices in other buildings. While the program continues to be in compliance with accreditation standards, the lack of adequate facilities could put it in jeopardy. The project will address the following issues.

- ***Existing Classrooms Are Too Small:*** Student stations at an existing lecture hall are 12.7 NASF below the State space guidelines of 20.0 NASF. Additionally, larger classrooms allow for more flexible seating arrangements that foster better classroom interactions.
- ***Inadequate Breakout Space:*** Health profession pedagogy relies heavily on small breakout sessions during which students engage in problem-solving activities and case studies, which is followed by large group discussions. Existing space was not designed as breakout space and is located in different buildings from the lecture halls. In addition, breakout sessions are held in temporary buildings that lack HVAC.
- ***Lack of Specialized Class Laboratories:*** There are no pharmacy simulation laboratories or clinical examination suites.
- ***Insufficient Research Space:*** There are two research laboratories totaling 2,082 NASF for 10 faculty members. The smaller laboratory (882 NASF) is shared by 4 faculty members. There is only one chemical fume hood in the laboratory, which is not sufficient for the number of researchers using the laboratory. The larger laboratory (1,200 NASF) has only one biosafety hood, so researchers have to take turns using the laboratory. In fall 2015, a new research-oriented degree program in pharmaceutical sciences was launched and, while space for the program was carved out of existing space, the program needs its own dedicated laboratory.
- ***Lack of Animal Research Space:*** ACPE's 2013 evaluation noted the need for animal space to house rodents and other laboratory animals. The care of research animals must meet the guidelines established by the Institutional Animal Care and Use Committee and the Association for Assessment and Accreditation of Laboratory Animal Care. In order to qualify for the animal-related research grants, an Animal Biosafety Level 2 facility is needed.

Office space comprises 21.0% of the total NASF, as shown in **Exhibit 3**. Classroom and class laboratory space account for 35.8% of the total, and 13.5% is related to research.

**Exhibit 2**  
**Space by Classification Provided in the**  
**School of Pharmacy and Health Professions**

<u>Space</u>	<u>Net Assignable Square Feet</u>
Office	14,897
Class Laboratories	14,499
Classroom	10,933
Research Laboratories	9,577
Lounge and Meeting	7,198
Animal Facilities	4,383
Library and Library Support	4,296
Demonstration	3,277
Other	1,896
<b>Total</b>	<b>70,956</b>

Source: Department of Budget and Management

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### **Campus Flood Mitigation Project**

This project was added to the 2019 CIP because it is an emergency project. The project is funded with Academic Revenue Bonds (ARB) with \$1.0 million authorized in fiscal 2020, \$10.0 million proposed to be authorized in fiscal 2021 in SB 344, and \$1.5 programmed in fiscal 2022. The project is currently estimated to cost \$1.9 million more than the 2019 CIP estimate. This is attributable to a higher construction escalation rate used by the Department of Budget and Management based on market conditions, including regional construction factors that reflect the bidding environment on the Eastern Shore. Due to the nature of the project, a 10% construction contingency is recommended rather than the customary 5% rate.

UMES is located within a 100-year flood plain, and over the years, there has been an increase in the frequency of heavy rain events. In September 2016, flooding from Tropical Storm Irene caused the campus to close and resulted in over \$1.0 million in damages. Several buildings were flooded, and some portions of the basement of Kiah Hall still remain unusable. In addition, computers and electrical and mechanical equipment were destroyed. The latest flooding incident occurred in May 2018 when heavy rain caused a sewer line to discharge, and a number of buildings were flooded. Work includes:

- updating the electric and sewer systems, including raising transformers and transfer switches above flood elevations, adding emergency generators to buildings with sump pumps, replacing sections of the existing sewer lines that have deteriorated, and raising the rim elevation of sewer manholes located in flood-prone areas;

- constructing a floodwall along the Manokin Branch (a tributary of the Manokin River) and the addition of flood walls around basements and building entrances; and
- maintenance of existing stormwater management ponds. Two bioretention facilities are planned adjacent to Kiah Hall and the Central Steam plant, and new stormwater management ponds are planned on East Campus where future development will occur.

***Operating Budget Impact Statement***

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**Executive’s Operating Budget Impact Statement – State-owned Projects  
Fiscal 2021-2025  
(\$ in Millions)**

	2021	2022	2023	2024	2025
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<b>School of Pharmacy and Health Professions</b>						
	Estimated Operating Cost	\$0.000	\$1.670	\$1.657	\$1.705	\$1.755
	Estimated Staffing	0.00	5.00	5.00	5.00	5.00

The operating costs of the School of Pharmacy and Health Professions are estimated initially to be \$1.7 million in fiscal 2022 and gradually increase to \$1.8 million by fiscal 2025. This reflects the cost of opening and maintaining the facility, which includes fuel, utilities, equipment, and the personnel cost of 5.0 positions to maintain the facility.

