RB25
University of Maryland Eastern Shore
University System of Maryland

Capital Budget Summary

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

Projects	*Prior Auth.*	*2016 Request*	*2017 Est.*	*2018 Est.*	*2019 Est.*	*2020 Est.*	*Beyond CIP*
New Engineering and Aviation Science Building	$90.050	$6.498	$0.000	$0.000	$0.000	$0.000	$0.000
Total	**$90.050**	**$6.498**	**$0.000**	**$0.000**	**$0.000**	**$0.000**	**$0.000**

Fund Source	*Prior Auth.*	*2016 Request*	*2017 Est.*	*2018 Est.*	*2019 Est.*	*2020 Est.*	*Beyond CIP*
GO Bonds	$90.050	$6.498	$0.000	$0.000	$0.000	$0.000	$0.000
Total	**$90.050**	**$6.498**	**$0.000**	**$0.000**	**$0.000**	**$0.000**	**$0.000**

CIP: *Capital Improvement Program*
GO: general obligation

Summary of Recommended Bond Actions

1. New Engineering and Aviation Science Building

   Approve.

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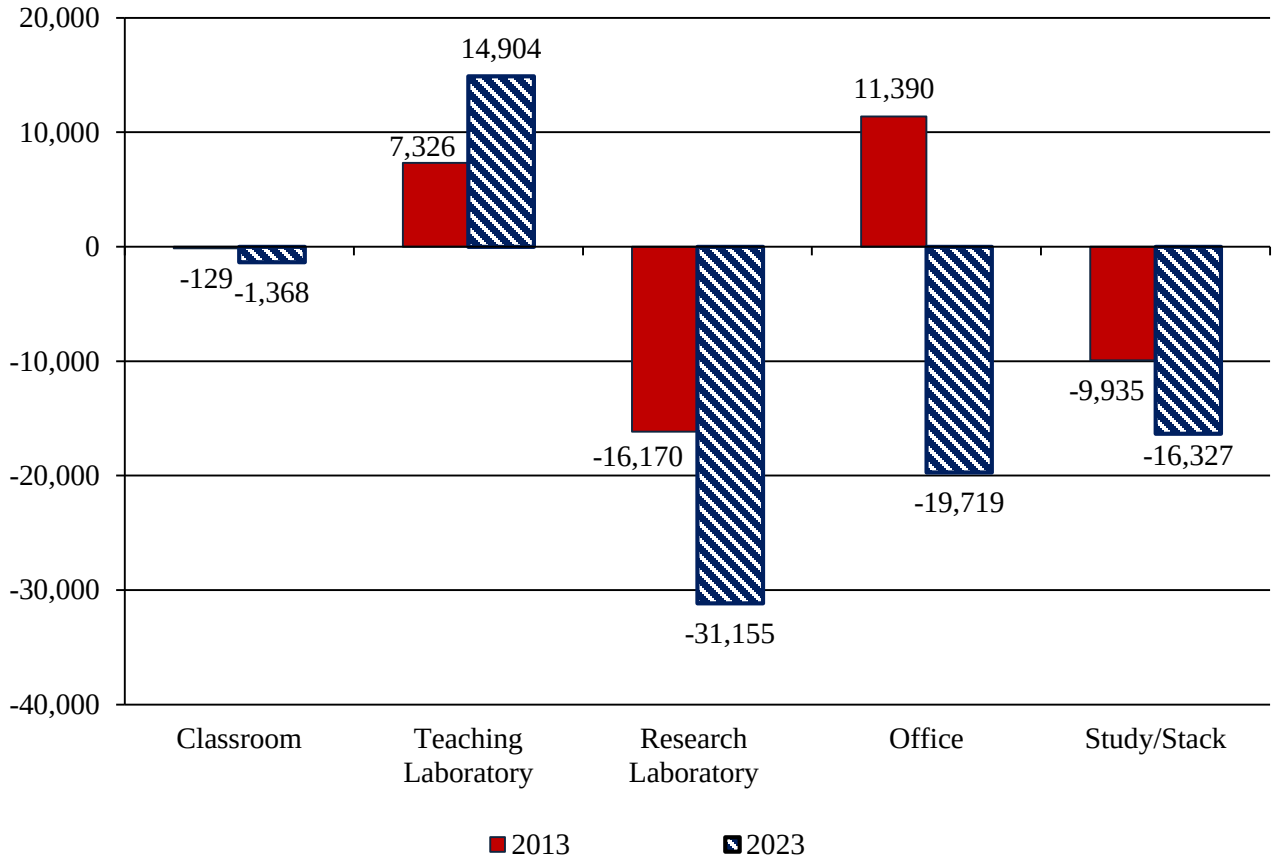
Performance Measures and Outputs

According to the fall 2013 facilities inventory, the University of Maryland Eastern Shore's (UMES) academic space totals 382,872 net assignable square feet (NASF), which includes 47,332 NASF of classroom space; 107,227 NASF of teaching laboratory space; and 151,012 NASF of office space. **Exhibit 1** shows UMES's self-reported space deficiencies in fall 2013 and projected deficiencies in fiscal 2023. UMES currently expects to have space shortages in four of five space categories.

Exhibit 1
Academic Space Deficiencies
Net Assignable Square Feet
Fall 2013 and Projected Fiscal 2023



Source: Four-year Public Colleges and Universities Academic Space Surplus/Deficit: Fall 2013, Projected Fiscal 2023, Maryland Higher Education Commission

In fiscal 2023, UMES expects to have 115,160 additional NASF than in fall 2013, an increase of 30.1%, compared to a statewide public four-year institution average increase of only 14.7%. The overall campus space deficit grows from 7,518 NASF in fall 2013 to 53,665 NASF in fiscal 2023, an increase of 46,147 NASF, or over 600.0%. The new Engineering and Aviation Science Building (EASB) will provide all five types of academic spaces for UMES and assist UMES in meeting expected enrollment growth and expansion of science, technology, engineering, and mathematics (STEM) programs, particularly with programs in aviation and computer science.

One year ago, UMES reported in its space deficit projections that it expected a 46.0% across-the-board increase in faculty, staff, and students leading to a deficit of 57,016 NASF in office space. If that deficit amount is divided by the current guideline for office space, 166 NASF, that means UMES is expecting to hire 344 faculty and staff over the next 10 years. Using the most recent data in Exhibit 1, UMES still expects to hire 119 new faculty and staff, and the expected deficit has decreased to 19,719 NASF. It is not clear why, with nothing else in the 2015 *Capital Improvement Program* (CIP), classroom and teaching laboratory space deficits do not significantly increase in a magnitude comparable to the large office space deficit. This planned growth also does not seem to match the 9.0% growth in full-time equivalent student (FTES) enrollment for UMES in enrollment projections from the Maryland Higher Education Commission. Given the most recent inputs into space calculations, from fiscal 2012 to 2013, UMES actually saw full-time daytime equivalent students decrease by 6.6% and total credits hours attempted fall by 6.3%. As has been noted in the Higher Education Overview for the fiscal 2016 operating budget, the general enrollment trend across the State is that there will be fewer first-time FTES enrolling in public four-year institutions. Budgeted enrollment for fiscal 2015 is 4,116 FTES, whereas enrollment peaked at 4,166 FTES in fiscal 2012.

The President should comment on the large projected increase in staff and faculty hiring given recent decreases in enrollment and why the space deficit increases over 600% in fiscal 2023 when enrollment is projected to grow only 9%.

Budget Overview

The fiscal 2016 budget programs $6.5 million to finish construction and equipping of EASB, the same as in the 2014 CIP. There has been no change to the building's square footage or design, and the project completion date remains August 2015. The fiscal 2015 budget had programmed $60.76 million for construction and equipment for EASB, which is approximately $0.9 million more than was programmed in the 2013 CIP. The total project cost increased from $91.5 million in the 2013 CIP to $96.6 million in the 2014 and 2015 CIPs. Most of that increase is due to a revision of the equipment list, which was not finalized until May 2014. Upon review from the Department of Budget and Management (DBM), the original equipment cost estimate was found to be only half of the $10.0 million revised estimate funded in the budget. UMES appealed this second equipment budget, but DBM did not provide any additional funding beyond the $10.0 million in the 2014 CIP. Items ineligible for State capital funding support, such as laptops and wireless microphones, will be funded from the university's plant funds, from which $116,000 has been expended to date.

When completed, the new EASB facility will provide modern class laboratory and office space for expanding UMES programs in engineering, aviation science, and computer science. The project scope does not include demolishing the existing aviation science building, Tanner Hall, which was built in 1963, or removing temporary trailers installed on campus for additional engineering classroom space. Instead, the Tanner Hall building will serve as the location of the Small Animal Research Facility, and Kiah Hall is also being repurposed for the Business, Management, and Accounting Department and the Entrepreneurship program. The spaces in Wilson Hall will be reallocated to the English department, which is the primary occupant of the building.

EASB will help improve UMES by creating new teaching, research, and open laboratory space, as well as classroom space. While the current Tanner Hall facility offers about 3,809 NASF in total space, EASB will offer about 30,000 NASF for class laboratory space. EASB also includes space for conference rooms, a library study, media production, a lounge, and central computing services that are all important for improving educational spaces at UMES. EASB will also have about 23,000 NASF for offices and about 12,000 NASF for classrooms. In total, the building will have 90,192 NASF.

UMES believes this facility is a strategic investment on the part of the State because it will greatly enhance the university's ability to train air traffic controllers. This highly specialized position requires advanced classroom technology and fulfills a critical role in the aviation industry. The only other similar program in the State is at the U.S. Naval Academy. UMES believes demands will increase the air traffic controller workforce 13.0% over the next decade. Additionally, the dedicated computer lab in EASB, an outcome of relocating the computer science department to this facility, will give all UMES students more access to computer services for assignments and research. Finally, many faculty and staff offices are under 100 NASF, which is well below the State's guideline of 166 NASF. Larger offices allow faculty to interact with students in more useful ways. If the construction schedule holds, EASB should open for the fall 2015 semester. Overall, UMES expects enrollment in aviation science, engineering, and computer science to increase from about 567 in fall 2013 to 754 in fall 2018, or 32.9%, due to EASB.

This project is consistent with the University System of Maryland (USM) initiative to increase the number of STEM degrees awarded by 40% by 2020. Additionally, the new 2013 State Plan for Postsecondary Education emphasizes the need to develop more STEM capacity in the State to meet labor market demand. USM states that achieving this goal will require an array of targeted strategies. EASB will assist in attracting students to STEM fields and retaining students over the course of their studies.

Operating Budget Impact Statement

Executive's Operating Budget Impact Statement
($ in Millions)

	FY 2016	*FY 2017*	*FY 2018*	*FY 2019*	*FY 2020*
New Engineering and Aviation Science Building					
Estimated Operating Cost	$1.650	$1.873	$1.929	$1.986	$2.046
Estimated Staffing	4	4	4	4	4

According to the 2014 session CIP, EASB is estimated to impact the fiscal 2016 operating budget by $1.65 million, increasing to $2.0 million in fiscal 2018 to account for fuel and utilities, supplies and materials, and amortized equipment. This is about $0.2 million higher in each year than the prior CIP. Estimated operating expenses also reflect 4 new positions beginning in fiscal 2016, which is unchanged from the prior year's estimate.

GO Bond Recommended Actions

1. Approve the $6.5 million in general obligation bonds for constructing and equipping the new Engineering and Aviation Science Building on the campus of the University of Maryland Eastern Shore.