

RB25
University of Maryland Eastern Shore
 University System of Maryland

Capital Budget Summary

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

<i>Projects</i>	<i>Prior Auth.</i>	<i>2015 Request</i>	<i>2016 Est.</i>	<i>2017 Est.</i>	<i>2018 Est.</i>	<i>2019 Est.</i>	<i>Beyond CIP</i>
New Engineering and Aviation Science Building	\$29.295	\$59.896	\$6.500	\$0.000	\$0.000	\$0.000	\$0.000
Total	\$29.295	\$59.896	\$6.500	\$0.000	\$0.000	\$0.000	\$0.000

<i>Fund Source</i>	<i>Prior Auth.</i>	<i>2015 Request</i>	<i>2016 Est.</i>	<i>2017 Est.</i>	<i>2018 Est.</i>	<i>2019 Est.</i>	<i>Beyond CIP</i>
GO Bonds	\$29.295	\$59.896	\$6.500	\$0.000	\$0.000	\$0.000	\$0.000
Total	\$29.295	\$59.896	\$6.500	\$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.

2. SECTION 12 – University of Maryland Eastern Shore – New Engineering and Aviation Sciences Building
 Approve the pre-authorization for the 2015 session.

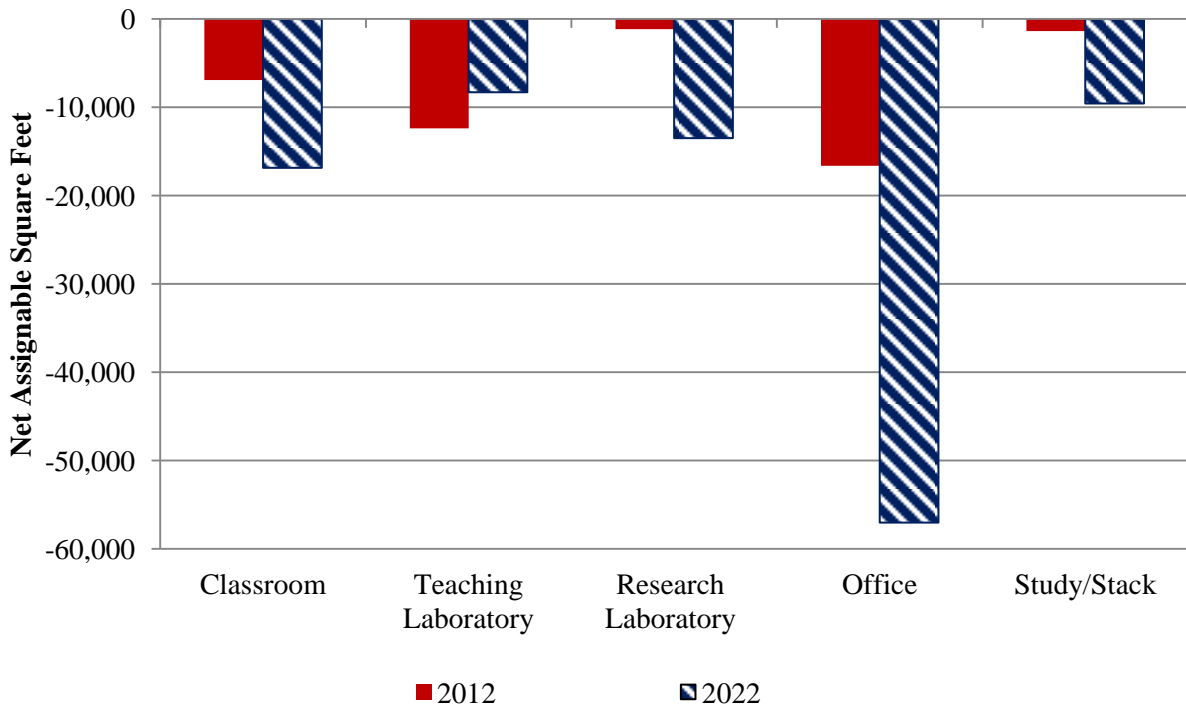
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Performance Measures and Outputs

According to the fall 2012 facilities inventory, the University of Maryland Eastern Shore’s (UMES) academic space totals 347,609 net assignable square feet (NASF), which includes 40,779 NASF of classroom space; 92,545 NASF of teaching laboratory space; and 122,731 NASF of office space. **Exhibit 1** shows UMES’s self-reported space deficiencies in fall 2012 and projected deficiencies in fiscal 2022. UMES currently expects to have space shortages in all five space categories.

Exhibit 1
Academic Space Surpluses/Deficiencies
Net Assignable Square Feet
Fall 2012 and Projected Fiscal 2022



Source: Four-year Public Colleges and Universities Academic Space Surplus/Deficit: Fall 2012, Projected Fiscal 2022, Maryland Higher Education Commission

In fiscal 2022, UMES expects to have 99,427 additional NASF than in fall 2012, an increase of 28.6%, compared to a statewide public four-year institution average increase of only 13.2%. The new Engineering and Aviation Science Building (EASB) will provide all five types of academic spaces that UMES needs 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.

Despite EASB, the expected deficit in office space, 57,016 NASF, is especially large relative to the institution's size. UMES reports in its space deficit projections that it expects a 46% across-the-board increase in faculty, staff, and students. If the deficit amount is divided by the current and more generous guideline for office space, 166 NASF, that means UMES is expecting to hire 344 faculty and staff over the next 10 years. It is not clear why, with nothing else in the *Capital Improvement Program (CIP)*, classroom and teaching laboratory space deficits do not increase, consistent with the office space deficit. Given the most recent inputs into space calculations, from fiscal 2011 to 2012, UMES actually saw full-time daytime equivalent students decrease by 9% and total credits hours attempted fall 3%. As has been noted in the Higher Education Overview for the fiscal 2015 operating budget, the general enrollment trend across the State is that there will be fewer first-time, full-time students enrolling in public four-year institutions. At another State institution, Coppin State University, there has been a large build-up of State-funded academic space and faculty and staff hiring over the past 10 years, but no corresponding increase in student enrollment, which raises concerns over how State funds are budgeted using institutions' self-reported data.

The President should comment on the large projected increase in staff and faculty hiring given recent decreases in enrollment.

Budget Overview

The fiscal 2015 budget programs \$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 has also increased from \$91.5 million to \$96.6 million. Most of that increase is due to revision of the equipment list, which has not been finalized. Upon review from the Department of Budget and Management, the equipment cost estimate was found to be about half what it should be.

The fiscal 2014 budget provided \$22.69 million to complete design and begin construction of EASB at UMES and included a pre-authorization of \$59.6 million for the 2015 session to complete the construction and allow the project to be bid and brought under contract in fiscal 2015. 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.

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 this 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. 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. In order to meet this goal, institutions will need to increase production of STEM degrees by approximately 2,200. 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)

	<i>FY 2015</i>	<i>FY 2016</i>	<i>FY 2017</i>	<i>FY 2018</i>	<i>FY 2019</i>
Engineering and Aviation Science Building					
Estimated Operating Cost	0	\$1.476	\$2.284	\$1.730	\$1.777
Estimated Staffing	0	4	4	4	4

According to the 2014 session CIP, EASB is estimated to impact the fiscal 2016 operating budget by \$1.5 million, increasing to \$1.7 million in fiscal 2018 to account for fuel and utilities, supplies and materials, and amortized equipment. Estimated operating expenses also reflect 4 new positions beginning in fiscal 2016, which is unchanged from the prior year’s estimate.

Pre-authorizations and De-authorizations

UMES has one pre-authorization for \$1.5 million in general obligation bonds in fiscal 2016 to continue funding for the new EASB.

GO Bond Recommended Actions

1. Approve the \$60.755 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.
2. Approve the pre-authorization of \$1.5 million in general obligation bonds for the 2015 session for the new Engineering and Aviation Science Building on the campus of the University of Maryland Eastern Shore.