



**Testimony to the Maryland General Assembly
Presented by
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I am pleased to provide testimony to the General Assembly for our FY 2021 capital budget request. We greatly appreciate the General Assembly's ongoing support of our capital requests, which is transforming our campus and the state's economy. Together, we are constructing the state's future. The University deeply appreciates all that your support makes possible.

We have four projects in our capital request this year. Three projects will provide new or improved space that significantly enhances the University's research, education, and innovation capabilities. Much of the work in these facilities will contribute to the state's skilled workforce and its knowledge economy. The fourth project will replace failing infrastructure and help prevent major service interruptions, improve safety and reduce ongoing maintenance costs.

As in previous projects, the cutting-edge research and education these buildings support may translate into new private sector and federal partnerships. For example, the University is now a major innovation hub in fields such as quantum computing—greatly enhanced by the General Assembly's previous capital support. These facilities will have a similar magnetic effect attracting talent and investment to spur innovation in the fields of energy, sustainability, health and philanthropy.

This year's projects are all the more critical because facilities renewal needs and space shortages remain our greatest long-term programmatic and fiscal challenges.

Facilities Renewal Needs. We have an estimated facilities renewal need of over \$1 billion on our main campus: \$0.75 billion for the 8 million GSF of state-supported buildings and \$0.3 billion for the exterior infrastructure such as roads, sidewalks and underground utilities. We are addressing the most critical needs through ten-year CIP and institutional facilities renewal plans. One of this year's projects, for example, seeks to renovate and replace portions of the Chemistry Building, a facility in very poor condition. We are also requesting \$10M to renew failing infrastructure. In some notable cases we have lost major faculty because of sub-par conditions.

Space Shortages. Based on state formulas, we currently have a shortage of 1.5M NASF of state-supported space which is 28 percent of our existing inventory of about 5.5M NASF. Roughly one half of this shortfall (0.7M NASF) is in research space. These space shortages are very significant and of great concern. Details regarding our space shortages are attached.

The projects recommended for funding this year are critically needed to help address both our space renewal and space shortage problems. The projects will also help advance the state's strategic goals for the economy and workforce, as well as the 55 percent college completion goal.

New School of Public Policy Building (\$2.5M for Construction)

This new building - leveraged by \$39.3M of private and institutional funds as well as additional private funds for operating support – will enable the School of Public Policy to meet growing space requirements needed to support its undergraduate major, growing research programs and outreach activities. This includes its work preparing future leaders for the nonprofit corporate sector, and its direction of the campus-wide Do Good Institute. It has also become an international leader in climate change policy research. All this is part of the School's strategic goal of becoming a nationwide top-ten public policy program.

Since its creation in 1982, the School of Public Policy has become a superb professional institution, fully integrating the teaching of professional practice with the best traditions of scholarly research and analysis. In 2019, U.S. News and World Report ranked the School 25th among public policy analysis programs nationwide. It is distinguished by a stellar faculty, a distinctive curriculum integrating domestic and international affairs, and a program that emphasizes the confluence of the public, private and nonprofit sectors. With its proximity to Washington D.C., the intersection of media and public policy, and its unique comprehensive curriculum, the School of Public Policy has the potential to become one of the nation's top schools of public policy. The recent addition of its popular undergraduate program is helping to stoke the graduate school pipeline.

Over the past few years, UMD has created programs that engage all our 41,000 plus students in innovation and entrepreneurship experiences to prepare them to tackle the world's toughest problems. Much of these activities focus on bringing ideas and products to the marketplace. UMD is now working to engage all our students in social innovation and entrepreneurship. A key mission of the School of Public Policy is to infuse a culture of philanthropy across UMD to create the next generation of leaders and spur innovation in the field of philanthropy.

In addition to enabling the School of Public Policy meet growing space requirements, this building will free up space needed by the Robert H. Smith School of Business in Van Munching Hall, the School of Public Policy's current location.

A donor has committed \$10M for the building as well as a significant endowment to support the School's programmatic needs and plans for growth. In addition, UMD will provide \$29.3M for the building from institutional funds.

Construction started last November. The \$2.5M requested in FY 2021 is needed to continue construction.

Chemistry Building Wing 1 Replacement (\$5M for Planning and Construction)

This project will renovate and upgrade parts of the 68-year-old Chemistry Building to provide modern research and office space and to demolish and replace Wing 1 with a new structure outfitted with state-of-the-art research laboratories. It will enhance the ability of the Department of Chemistry and Biochemistry to partner with government and industry in pursuit of new technologies in the fields of energy, sustainability and health.

Among the most promising discoveries and technologies this new facility will support: safer *batteries* with much greater capacity yet smaller size, for use in health care, defense, and the alternative energy industry; better and cheaper *water purification devices* for parts of the world where potable water is becoming scarce; *smart textiles* and fabrics that can monitor the health of the wearer; and *new nanomaterials* that deliver and concentrate drugs directly at the disease targets, for increased effectiveness in treating cancer, arthritis and other diseases.

The upgraded and new facilities will also transform chemistry teaching from the traditional lecture/lab to a research-based approach. Students will investigate real world problems guided by faculty and industry partners (who will also conduct translational research in the same building as the instructional labs). This will increase learning and help produce better trained graduates for Maryland's workforce.

The existing research and teaching facilities are woefully outmoded, with very inadequate humidity and temperature control, limited control of chemical fumes, and inefficient design. This has resulted in faculty either foregoing certain explorations or seeking off-campus labs willing to support their research. These conditions create obstacles to discovery, and top faculty are leaving UMD for better-equipped universities. This project is needed to expand the types of research that can be conducted in the building and recruit and retain top faculty and students.

Renovation of portions of the existing building is underway, and design of the replacement wing began in May 2019. The \$5M requested in FY 2021 will complete design and begin construction of the replacement wing.

Maryland Fire and Rescue Institute Western Regional Training Center Upgrades (\$8.6M for Planning, Construction and Equipment)

The Maryland Fire and Rescue Institute (MFRI) provides critically needed emergency services training to both career and volunteer firefighters and first responders throughout Maryland to reduce the loss of human life and property from fire, accidents, and other safety hazards, while minimizing the risk of death and injury to emergency services personnel. MFRI's headquarters are located at UMD, and it has six regional training centers.

This project will upgrade the MFRI Western Regional Training Center, located in Cresaptown, Maryland. Originally built in the early 1990's, it requires expansion and upgrades to serve a growing student population, update training technology, and correct existing deficiencies. The student population has grown by more than 62 percent since 1991, with continued growth projected. This project will bring this facility to parity with other MFRI regional training centers in the state, and enhance the ability of MFRI to provide efficient and effective state-of-the-art emergency services training in this region.

The project will renovate the 5,736 GSF administration and classroom building and construct a 3,400 GSF addition, upgrade the practical training area to replace the outmoded oil-based fire simulator with an environmentally compliant propane based simulator, renovate the 2,329 GSF dilapidated firefighting prop, and construct a new 1,050 GSF storage building.

The General Assembly authorized a \$150,000 miscellaneous grant last year to begin design. The Governor's CIP recommends that the \$8.6M needed to complete design, construct and equip the facility be funded from USM fund balance.

Campuswide Building Systems and Infrastructure Improvements **(\$10M for Planning and Construction)**

This program provides UMD annual capital funds to help address a portion of our tremendous facilities renewal need, which we recently estimated at over \$1 billion. \$5M of state funds was provided in 2011 and \$10M (\$5M of State funds and \$5M of USM Academic Revenue Bonds) was provided from 2012 to 2015. In order to accommodate other priorities in the CIP, no funds were provided over the past four years. We are extremely grateful to the General Assembly and USM for their past support of this critical need, and urge the General Assembly to restore annual funding this year.

This multi-phased project addresses needs in two general categories, buildings and exterior infrastructure. The building category includes systems such as electrical gear, fire protection systems, HVAC equipment and elevators. Infrastructure includes work outside buildings such as underground utilities, roads, bridges, stormwater management ponds and exterior security lighting. This work is critically needed to improve safety and protect lives, prevent major service interruptions and reduce on-going maintenance and repair costs.

Aging and inadequate HVAC and electrical systems limit the type of research that can be conducted, interfere with instruction, and hinder our ability to meet our strategic goals. Failing exterior lighting can compromise the safety of pedestrians and vehicles. Failing storm drain lines can result in exterior flooding, disrupting university operations. Failing roofs can result in interior flooding which can damage parts of buildings and equipment and disrupt university operations, as well as pose safety issues for building occupants. Failing elevators can trap passengers and compromise their safety.

For the past few phases of this program, we have focused primarily on critical building needs. For this phase, we plan to focus on critical exterior infrastructure needs. We will replace failing street lighting along Regents Drive to enhance safety and security. We will replace failing underground steam and hot water piping serving multiple academic buildings and residence halls. Piping failures result in loss of adequate heat, humidity control or hot water in buildings, which is very disruptive. We will also replace failing underground storm water piping along Campus Drive. During heavy rains, areas along Campus Drive flood, disrupting university operations.

STATE-SUPPORTED SPACE DEFICIENCY FACTS

Below are the current and projected space deficits on campus for state-supported facilities based on Fall 2018 data.

<u>MAJOR ROOM USES</u>	<u>Current FALL 2018 Deficit (NASF)</u>	<u>Projected FALL 2028 Deficit (NASF)</u>
Classrooms	(93,412)	(58,642)
Class Laboratories	4,888	17,661
Research Laboratories	(714,446)	(734,825)
Office	(141,608) (1)	(123,238) (1)
<i>Subtotal</i>	(944,578)	(899,044)
Study Spaces	(409,449)	(291,537)
Other Room Uses (2)	(184,026) (1)	(196,861) (1)
TOTAL	(1,538,053)	(1,387,442)

(1) Applied 62.1% to the total deficit which reflects the proportion of state-supported space on the main campus.

(2) Special Use, General Use and Support Facilities - e.g., lounge, storage

NOTE: Projections are predicated upon full funding of the USM Strategic Plan. In addition, the projections take into account the projects in the last Governor's 5-year CIP.

The total current inventory of state-supported space is 5,524,335 NASF (excludes leased space). This includes 4,787,369 NASF on the main campus and 736,966 NASF off-campus.

NEW SCHOOL OF PUBLIC POLICY BUILDING



Architect's rendering of the building, which will occupy a prominent spot along Baltimore Avenue.

CHEMISTRY BUILDING WING 1 REPLACEMENT



Architect's rendering of the replacement wing.



FY 2021 Capital Budget Hearings
Request for Comment on School of Public Policy Building
University of Maryland, College Park

The President should comment on the ability to cover the increase in costs considering the use of plant funds to bridge the cost of other capital projects until receipt of private donations or other revenues.

This project was originally budgeted at \$45 million, with \$20 million from State funds, \$10 million from donor funds and \$15 million from institutional funds. This was a 55% contribution of non-budgeted funds.

Project cost has increased by \$14.3 million, partly to provide for growing programmatic needs that the building must accommodate. The CIP proposes that the increase be covered from additional institutional funds, bringing the contribution of non-budgeted funds to 66%.

Covering this cost increase will be difficult, as we will have to reallocate institutional funds and defer other important initiatives. In addition, we will strongly consider “shelling” some of the building space, to be fit-out in the future when we have available funding. We are committed to getting this building built, and will make the difficult choices needed to get it done.

We are committed to getting this building built because:

- A. It is critically needed to support a very popular and fast growing undergraduate program in public policy and a high-priority campus-wide initiative to create the next generation of nonprofit-sector leaders and spur innovation in the field of philanthropy.
- B. We need to meet the expectations of a very generous donor who has committed a significant endowment to support the School of Public Policy’s programmatic needs and plans for growth, in addition to the \$10 million to construct the building.