



NATIONAL CRYPTOLOGIC MUSEUM FOUNDATION  
CYBER CENTER FOR EDUCATION & INNOVATION  
★ HOME OF THE NATIONAL CRYPTOLOGIC MUSEUM ★

## Miscellaneous Grant Program ZA00 – Capital Budget Hearing

### Senate & House Capital Budget Subcommittees

March 9<sup>th</sup>, 2021

Senator Doug Peters, Chair  
Senate Capital Budget Subcommittee  
120 James Senate Office Building  
11 Bladen Street  
Annapolis, MD 21401

Delegate Ben Barnes, Chair  
House Capital Budget Subcommittee  
151 House Office Building  
6 Bladen Street  
Annapolis, MD 21401

Dear Chairmen and Members of the Capital Budget Subcommittee:

On behalf of the National Cryptologic Museum Foundation, we wish to extend our deepest appreciation for your ongoing support throughout the years regarding our long-term capital project. I am pleased to share with you that this year's FY22 Capital Budget marks the first time our request to the Administration has been recognized. In an unprecedented year and financial strain on the state's economy, we are deeply grateful for our \$100,000 capital request.

The financial commitments the state continues to provide underpin our efforts for this “shovel ready” project to begin the first phase of construction of the Cyber Center for Education and Innovation (CCEI) and the new home for the National Cryptologic Museum (NCM), located in Anne Arundel County, Maryland. This new funding will be applied to the construction of the physical infrastructure and exhibit space.

The NCMF is already beginning to return this investment to Maryland by developing and delivering a variety of robust cyber education programs and resources at the CCEI. The Center and its programmatic curriculum will strengthen cybersecurity protections for the state while stimulating the next generation of Maryland's workforce in the expansive and growing cyber and cybersecurity fields. Even during these unprecedented times, our commitment of service to the state's public education system and pursuit in developing new partnerships with various institutions have not wavered. We have begun piloting High School Cybersecurity Curriculum Guidelines in schools in Maryland.

To date, nine (9) high schools in Maryland are piloting our High School Cybersecurity Guidelines during the 2020-2021 academic school year. The pilot schools include:

- *Crofton HS - Anne Arundel County*
- *Severn School, Anne Arundel County*
- *Patterson HS - Baltimore City*
- *North Point HS - Charles County,*
- *Brunswick HS - Frederick County,*
- *Chesapeake Math & IT Academy (CMIT) - Prince Georges County*
- *Great Mills HS - St. Mary's County*
- *Leonardtown HS – St. Mary's County*
- *Snow Hill HS – Worcester County, and*

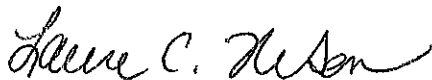
To support the state's efforts, under the COVID-19 State of Emergency, we are bringing cybersecurity education into Maryland's virtual classrooms through our *Cybersecurity Chats* and virtual 'field trip' tours of the museum for students, using our interactive and state-of-the-art Telepresence Robot, named 'Friedman.' Moreover, we continue to enhance our relations within the University System of Maryland (USM) through our partnership with the University of Maryland Global Campus (UMGC). The Foundation is collaborating with UMGC and the Maryland State Department of Education (MSDE) to develop focus groups of high school teachers, counselors, and students. The focus groups will explore the application of the High School Cybersecurity Guidelines to the State's current standards for cybersecurity education.

We are also turning our attention to Maryland middle school students in 2021. We have established a partnership with Anne Arundel Community College (AACC) to welcome three AACC students to intern under a Local Development Council (LDC) grant awarded to the Foundation late last year. The AACC interns will be developing a middle school-oriented cybersecurity gaming kiosk that will be installed at the museum. The LDC grant will further the NCMF's partnership with the National Initiative for Cybersecurity Careers and Studies (NICCS) to upgrade our Cybersecurity Escape Room with a flyaway kit. When complete, the NCMF will schedule visits to high schools statewide once students return to the classroom.

Finally, we are working with the Maryland-based Gula Tech Foundation and Start Engineering to develop a middle school booklet to introduce cybersecurity principles and professions. Our collective efforts would not be possible unless we had the continued dedication from you and the Maryland General Assembly. As the subcommittee makes decisions, in the coming weeks regarding this year's capital budget, we respectfully seek your support to preserve the appropriations dedicated for our important project.

Thank you for your ongoing support. We look forward to the day to send you an invitation to our groundbreaking in the months to come.

Very best regards,



Laura Nelson  
President and Chief Executive Officer

Enclosure

cc:

Senator Craig Zucker, Vice-Chairman, Senate Capital Budget Subcommittee  
Delegate Mark Chang, Vice-Chairman, House Capital Budget Subcommittee  
Senate & House Capital Budget Subcommittee Members



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*The Cyber Center for Education and Innovation (CCEI) is a private-public partnership between the National Cryptologic Museum Foundation (NCMF) and the National Security Agency (NSA). The CCEI will become a cross-sector enterprise delivering programs to encourage government, industry, and academia to share insights, knowledge, and resources to strengthen cybersecurity protection and workforce development across the nation while also revitalizing the National Cryptologic Museum.*

***Our guiding principles are:***

***EDUCATE*** the public, especially the nation's brightest young minds. As a nationally recognized provider of assured quality cyber education resources focused on K-20 cohorts, our efforts help reduce cyber workforce deficits and current skills shortfalls, thereby promoting cyber professions as a fulfilling career choice.

***STIMULATE*** public engagement by serving as a venue for robust proactive dialogue on issues of cyber policy, technology, and privacy. As a bridge between government and entrepreneurs, promote innovation to solve our cryptologic challenges. Finally, inspire young students to explore cryptology and to pursue STEM and analytic fields of study to support the cryptologic mission.

***COMMEMORATE*** all "those who serve in silence" in the cryptologic mission with valor and distinction, and whose contributions help enhance and preserve our way of life.

**CCEI CAPITAL CAMPAIGN**

When complete, the new state-of-the-art facility will include a new home for the National Cryptologic Museum, rare books library, conference center, multi-purpose classrooms and will serve as a venue for government and public ceremonies and events. In addition, the new CCEI facility will become the home base for the NCMF's vibrant on-going Education Program. This will allow the Education Program and its participants to take full advantage of the CCEI facilities and classrooms. The overall cost of the project is \$59M.

Since 2013, the state of Maryland has generously supported the CCEI through \$4.9M in matching and non-matching grants as well as through a thriving partnership with the University of Maryland Global Campus. **We are seeking your support for an additional \$100K in the FY22 State Capital Budget to be used as we move to Phase B for construction.**

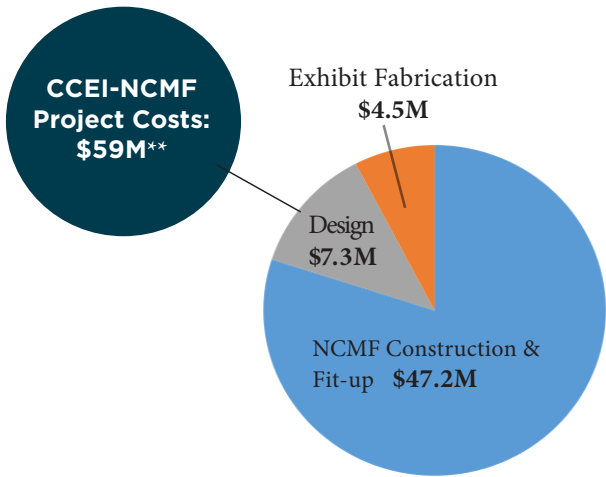
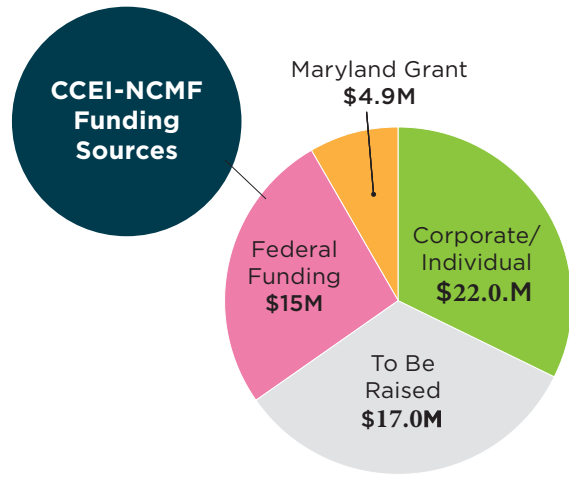


Exhibit Fabrication | \$4.5M  
 Design | \$7.3M  
 NCMF Construction & Fit-up | \$47.2M



Corporate/Individual | \$22.0M  
 Federal Funding | \$15M  
 Maryland Grant | \$4.9M  
 To Be Raised | \$17.0M

\*\* Does not include administrative operating costs associated with the project.

### CCEI AND K-12 CYBERSECURITY EDUCATION

Within Maryland, the CCEI will provide opportunities for learning and partnerships to advance Cybersecurity education to prepare the next generation to succeed in the cyber workforce of tomorrow. These partnerships include a Trilateral Agreement between the CCEI, University of Maryland Global Campus and NSA's National Cryptologic School. There are over 500,000 professional positions that are currently unfulfilled across the U.S., and 75,000 of those positions are located within the state of Maryland.

### TODAY THE CCEI EDUCATION INITIATIVES INCLUDE:

Development of a High School Cybersecurity Curriculum Guidelines.

An established presence within the **Nepris online education community** ([www.ccei.nepris.com](http://www.ccei.nepris.com)).

Through their virtual classroom platform, the CCEI offers educational courses and industry chats to 8,000 classrooms nationwide, designed to promote cybersecurity education and prepare job seekers for job opportunities in the cybersecurity field. Students and teachers can request a chat featuring a particular topic with the CCEI who then partners with experts and organizations to help meet these requests.

Providing "one-stop access" to assured quality cybersecurity curricula addressing topics such as **forensics, adversarial thinking, secure coding, SCADA security, and others**. The result is a living library of cybersecurity curricula, and a community of cybersecurity educators committed to sustaining it.

Creation of Webinars with our partners to train Teachers & School Counselors.

<b>Current National Cryptologic Museum Compared to New Cyber Center for Education &amp; Innovation - Home of the National Cryptologic Museum</b>		
	<b>CURRENT NCM</b>	<b>NEW CCEI/MUSEUM</b>
Size	19,000 sq. ft.	74,200 sq. ft.
Conference Center	60 seats	420 seats
Classrooms	2 with 80 seats	3 w/ 30 seats, 2 w/ 50 seats, 1 w/60 seats
Libraries	1 Public access	1 Public access & 1 rare books
Museum Space	6,600 sq. ft.	12,200 sq. ft.

