



Senator Brian Feldman, Chair
Senator Cheryl Kagan, Vice Chair
Senate Education, Energy, and the Environment Committee
Miller Senate Office Building, 2 West
Annapolis, Maryland 21401

Senate Bill 241/ HB82: Cyber Maryland Program – Revisions

Position: Support with an Amendment

January 30, 2025

Dear Chairman Feldman and Committee Members:

As President & Chief Executive Officer of the National Cryptologic Foundation (NCF), I write this letter in support (with an amendment) of Senate Bill 241/ HB 82, entitled: *Cyber Maryland Program – Revisions*.

This Departmental bill proposes transferring the Cyber Maryland Program from the Maryland Technology Development Corporation (TEDCO) to the Maryland Department of Labor. In addition, the legislation intends to expand the duties of the Program by supporting and investing in talent improvement strategies, such as those promoted within the U.S Chamber of Commerce Talent Pipeline Management Approach. NCF supports the Department's proposal and seeks this committee to consider adopting an amendment (see *attached*) that would modify one of the Program's current duties under § 11-702 (d)(3).

Pursuant to § 11-1701 (d)(3) it states that the Cyber Maryland Program shall "*facilitate partnerships for new training and education programs to address the workforce needs identified under item (1) of this subsection.*"

Similar to the proposal offered by the Department of Labor to invest in talent improvement strategies such as U.S Chamber of Commerce, NCF is merely seeking to expand the Program's duties to also invest in training and education programs as those developed and available by its national organization.

The National Cryptologic Foundation (NCF) was incorporated in April 1996 as the National Cryptologic Museum Foundation. Over the years, NCF has broadened its purpose to include a robust Education Program and to deliver an innovative approach to solving cybersecurity challenges. NCF's Vision is advancing the nation's interest in cyber and cryptology, through leadership, education, and partnerships.

The mission of the NCF is to educate the public on the importance of cybersecurity in defending our nation with a focus on educating the public, especially the nation's brightest young minds. As a nationally reputed provider of assured quality cyber education resources focused on K-20 cohorts, NCF's efforts help reduce cyber workforce deficits and current skills shortfalls, thereby promoting cyber professions as a fulfilling career choice.

Over the last four years, NCF has proudly worked alongside the Maryland General Assembly, Senate Co-Chair, Joint Committee on Cybersecurity, IT and Biotech, and the Cybersecurity Association to support the successful enactment of cyber legislation three years ago.

The purpose of the Cyber Maryland program aligns with the NCF's educational and workforce goals in Maryland and across the country. It was why NCF proudly supported the legislative passage of Senate Bill 801, which established the Cyber Maryland Program in 2023. Below are some examples of NCF's education initiatives in cybersecurity that are currently in use across the country:

- 1.) **#CYBERCHATSPodcast** - Expose youth to cybersecurity concepts, opportunities, and careers through conversations with industry professionals and youth in the cyber community.
- 2.) **Cybersecurity Computer Gaming** - In early 2021, NCF, with the help of Anne Arundel Community College student interns, developed two operational computer-based, cybersecurity-themed games with a focus on middle school students:

- Amanita Whitehat and the Curious Case of the Compromised Computers; and
- Amanita Whitehat and Mayhem at Mallory Middle

The target audience for the game is K-12 with a focus on middle school. This project had numerous benefits for the intern team, including project management experience and leveraging their cybersecurity, networking, digital forensics, and computer science knowledge.

- 3.) **OUTSMART CYBERTHREATS COLLECTION** - The NCF, in partnership with *Start Engineering*, developed, produced, and promulgated a customized focused booklet on data care and two digital companions, a Teacher's Guide and Student Workbook, aimed to engage data care novices and youth ages 10-18.

- Published and Distributed "*How to be Cyber Safe + Savy*" Booklet – Developed in partnership with Start Engineering and Gula Tech Adventures.

- 4.) **Cybersecurity Curriculum Guidelines (CCG)** - The NCF Cybersecurity Curriculum Guidelines (CCG) were created to encourage curriculum providers, teachers, and industry to create curriculum designed to inspire high school students to pursue a profession in cybersecurity, as well as develop thinkers with a cybersecurity mindset that will enhance any profession they pursue.

Seeing the need for a coherent set of guidelines, a team of K-12 educators, post-secondary educators, and cybersecurity experts, known as *Teach Cyber*, in partnership with the NCF, developed these Guidelines. *Teach Cyber* has also created teaching materials for educators

ready to teach high school cybersecurity. The *Teach Cyber* courseware is creative commons licensed, giving educators the right to adopt, adapt, and disseminate the Teach Cyber course.

Curriculum Enhancements: The "Challenge of Cybersecurity" curriculum, consisting of 8 modules, has been updated to support both full-year and modular integration into existing computing courses. Recent updates include revised module overviews, new teaching guides with classroom support, improved lesson formats, updated videos/web links, and revised documents for US Cyber Range labs.

Curriculum Impact: To date, 2,607 educators have registered for the curriculum, leading to over 16,000 downloads. Five modules have been updated, and work is ongoing to revise the remaining three modules.

5.) NCF Ambassador Program - The goal of the NCF Ambassador Program is to educate students on principles of cybersecurity through live instruction by a trained educator/expert who focuses on lessons and exercises in the NCF's "Outsmart Cyberthreats" or OC booklet.

The program is carefully designed to teach students practical things they need to know to keep their personal and important information safe online. Upon successful completion of the (4-6 week) program, they are honored for their achievements and become "ambassadors" in their school and community to encourage fellow students to learn more about being cyber safe.

Through their partnerships, such as the NSA and the University of Maryland Global, NCF is providing national educational programming and resources that are positively addressing the cybersecurity workforce needs across the country and here in Maryland (where the Foundation is based). For those reasons, it's critical for the Cyber Maryland Program to invest in educational programs such as those developed by NCF and other nationally recognized organizations.

I strongly urge this committee to support SB241/HB82 which includes NCF's friendly amendment. Thank you for your consideration.

Sincerely,



Laura Nelson
President & Chief Executive Officer
National Cryptologic Foundation

Enclosure

NCF's Proposed Language:

Section 11-1701 (C)(3).

"The Program shall:

(3) facilitate **AND INVEST** in partnerships for new training and education programs to address the workforce needs identified under item (1) of this subsection, **SUCH AS PROGRAMS DEVELOPED AND IMPLEMENTED BY THE NATIONAL CRYPTOLOGIC FOUNDATION;**”