

SB 902_ Laura Nelson_NCMF_Favorable.pdf

Uploaded by: Nelson, Laura

Position: FAV

TESTIMONY PRESENTED TO THE SENATE FINANCE COMMITTEE

SB 902 ECONOMIC DEVELOPMENT - CYBER WORKFORCE PROGRAM AND FUND - ESTABLISHED

POSITION: SUPPORT

MARCH 16, 2021

Chairwoman Kelley, Vice Chairman Feldman, and members of the Committee, thank you for the opportunity to provide testimony in support of SB 902 pertaining to establishing a Cyber Workforce Program and Fund.

My name is Laura Nelson and am the President and Chief Executive Officer of the National Cryptologic Museum Foundation (NCMF) and I serve as a member of the Maryland Cybersecurity Council on the Workforce Development Sub-committee. Also, I retired from the National Security Agency in 2018 after 37 years of service.

As the bill identifies, over 22 thousand cyber jobs in Maryland are wanting for qualified people to fill them with 500,000+ positions available nationwide. The workforce pool includes those already employed in other career fields, those ready for employment, and our future pool – students all the way down to those entering kindergarten. It is important to support career pathway development that encourages those who seek new employment opportunities the means to transition into cyber while also encouraging students to seek careers in cyber.

The mission of the NCMF is to educate the public on the importance of cryptology and 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, our efforts help reduce cyber workforce deficits and current skills shortfalls, thereby promoting cyber professions as a fulfilling career choice. Leveraging the National Initiative on Cybersecurity Education (NICE) Workforce Framework, Maryland's Department of Commerce teamed with the Cybersecurity Association of Maryland Incorporated (CAMI) and other organizations like the NCMF who are focused on cyber education, can provide the effective and efficient cyber education/training programs for individuals interested in cyber careers.

NCMF provides a head start on providing the cyber education programs at the middle and high school level. This summer a middle school targeted introduction to cybersecurity and "data care" is scheduled for release. For high school students, along with our strategic partner Teach Cyber, we developed a deeper understanding. This understanding can be broken down into eight "Big Ideas" to underpin the training. These include:

- Ethics – Understanding of the broad ethical implications within social, organization, and personal values. This includes a basic understanding of right and wrong in online behaviors.

- Establishing Trust – A key principle for cybersecurity is to establish and maintain trust in both users and computers or other devices.
- Ubiquitous Connectivity – The internet is a network of networks that work seamlessly together. Understanding the basics of networking will help ensure our own security.
- Data Security – Keeping data secure and private is essential for all individuals.
- System Security – An understanding of system security and how hardware and software work together. This includes a basic understanding of hardware or software vulnerabilities.
- Adversarial Thinking – Our adversaries are ever present and will exploit our weaknesses to take advantage of us for myriad reasons. Understanding what might possibly go wrong will help individuals better protect themselves from exploitation.
- Risk – An understanding of the complexity of systems of systems, the presence of adversaries, and the dynamic and distributed nature of computing.
- Implications – Advances and decisions at a local level in computing, connectivity, and big data are driving a global, interconnected phenomenon and have significant cybersecurity implications. Students need to understand important historical events and their cybersecurity implications.

Providing cybersecurity training at the high school level will provide a deeper understanding of the opportunities that an ever-increasing interconnected world provides, but also the accompanying inherent challenges and risk. This depth of training will serve Maryland Public School students well as they transition to college or enter the workforce. These “Big Ideas” can also be used as a baseline to develop a workforce transition plan for adults seeking new opportunities in cyber related fields. Maryland needs a qualified pool of cyber individuals to support a robust cyber economy that fills the over 22 thousand available jobs. A comprehensive Cyber Workforce Program provides the strategic pipeline to satisfy Maryland’s economic goals.

I am in full support of SB 902 as providing for a Cyber Workforce Program and Fund. Creating the educational/training programs to inspire and prepare individuals of all ages for cyber careers is critical to our national security.

To the members of this committee, thank you once again for the opportunity to give testimony here today. I urge a favorable report.

Letter of Support for Senate Bill 902.pdf

Uploaded by: Abate , Gina

Position: FAV

Senator Delores G. Kelly, Chair
Senator Brian J. Feldman, Vice Chair
Finance Committee

Senator Guy Guzzone, Chair
Senator Jim Rosapepe, Vice Chair
Budget and Taxation Committee

**Edwards Performance Solutions
10980 Grantchester Way, Suite 300
Columbia, MD 21044**

Tuesday, March 16, 2021

Sincerely, my name is Gina Abate, and I am the President & CEO at Edwards Performance Solutions. I urge you to support Senate Bill 902 to establish the Cyber Workforce Program in the Partnership for Workforce Quality Program. The Cyber Workforce Program will leverage existing infrastructure in the Department of Commerce and will build on current educational programs and workforce training assets in the state. Utilizing federally awarded workforce development funds to create the Cyber Workforce Grant Fund, this Bill will provide the necessary resources to support the urgent and growing cybersecurity needs across Maryland. Fundamentally, SB 902 creates the framework for industry-driven input and collaboration in the development and execution of Maryland's workforce development strategy.

On any given day, there are more than 22,000 unfilled cybersecurity jobs in Maryland, and this doesn't include cyber positions embedded in other industries. These vacancies create security vulnerabilities in our critical infrastructure and essential services, but we don't have applicant pools with the right skills to fill our open positions. As the need for skilled cybersecurity talent continues to grow, Maryland must remain competitive to increase Maryland's overall economic position. Companies must have access to the correct internship and apprenticeship programs to provide the necessary talent pool to win and perform work in both the Federal and commercial markets. A more skilled workforce also means stronger cybersecurity programs and a reduction of breaches – keeping Maryland businesses and their customers profitable for years to come.

By supporting and investing in this Bill and the Cyber Workforce Program, you will train Marylanders for good paying jobs with high growth potential. Simply put, Senate Bill 902 can put people to work and be the economic driver we need, especially as Maryland recovers from the coronavirus pandemic.

I hope I can count on you to support this critical legislation.

Sincerely,



Gina Y. Abate
President and CEO
Edwards Performance Solutions

2103-ANCHOR Support letter for MD Senate Bill 902

Uploaded by: Dietrich, Peter

Position: FAV

Senator Delores G. Kelly, Chair
Senator Brian J. Feldman, Vice Chair
Finance Committee

Senator Guy Guzzone, Chair
Senator Jim Rosapepe, Vice Chair
Budget and Taxation Committee

Friday, March 12, 2021

My name is Peter Dietrich and I own Anchor Technologies, Inc. located in Columbia, MD. I am writing today to express my support for MD Senate Bill 902, Anchor Technologies is a 19-year old award winning cybersecurity services firm providing cybersecurity advisory services to small and medium enterprises in our beautiful State of Maryland. We are a boutique business which employs 14 people, provides internships to those interested in cybersecurity and participates in the Cyber Association of Maryland, the MD Technology Council, and the Trust X Alliance.

I urge you to support Senate Bill 902 to establish the Cyber Workforce Program in the Partnership for Workforce Quality Program. The Cyber Workforce Program will leverage existing infrastructure in the Department of Commerce and will build on current educational programs and workforce training assets in the state. Utilizing federally awarded workforce development funds to create the Cyber Workforce Grant Fund, this Bill will provide the necessary resources to support the urgent and growing cybersecurity needs across Maryland. Fundamentally, SB 902 creates the framework for industry-driven input and collaboration in the development and execution of Maryland's workforce development strategy.

Anchor Technologies is expecting to nearly double its workforce in the next 12 to 18 months as a result of launching its new online cyber-risk management platform, www.mycypr.com. This hiring process has begun and to date only approximately 10% of our ad respondents have been from the Maryland area. Many respondents are underqualified and mis-aligned with the skillsets required in the cybersecurity space. Anchor has had to develop, at great cost, its own internal apprenticeship program, bringing in candidates with core qualities and making them into cybersecurity experts in five years. This presents growth challenges for us and as a result Anchor welcomes all efforts the State could manage to grow the quality of this regions cyber workforce as well as retrain and align current workers to enter the cyber workspace.

Again, thank you so much for taking on this important initiative. Cyber breaches are a solvable problem and programs like this will pave the way for businesses to move towards breach prevention and eradicate this cancer on our economy.

Sincerely,



Peter Dietrich
President & CEO
Anchor Technologies, Inc.
pdietrich@anchortechnologies.com
410.295.7601

CAMI-SB902-Endorsement.pdf

Uploaded by: Faughnan, Chuck

Position: FAV

March 12, 2021

Senator Delores G. Kelly, Chair
Senator Brian J. Feldman, Vice Chair
Finance Committee

Senator Guy Guzzone, Chair
Senator Jim Rosapepe, Vice Chair
Budget and Taxation Committee

Senate Bill 902 Endorsement

Sincerely, My name is Chuck Faughnan, and I am the former CEO at Bridges, Inc, An Applied Insight Company. I urge you to support Senate Bill 902 to establish the Cyber Workforce Program in the Partnership for Workforce Quality Program. The Cyber Workforce Program will leverage existing infrastructure in the Department of Commerce and will build on current educational programs and workforce training assets in the state. Utilizing federally awarded workforce development funds to create the Cyber Workforce Grant Fund, this Bill will provide the necessary resources to support the urgent and growing cybersecurity needs across Maryland. Fundamentally, SB 902 creates the framework for industry-driven input and collaboration in the development and execution of Maryland's workforce development strategy.

On any given day, there are more than 22,000 unfilled cybersecurity jobs in Maryland, and this doesn't include cyber positions embedded in other industries. These vacancies create security vulnerabilities in our critical infrastructure and essential services, but we don't have applicant pools with the right skills to fill our open positions. There are many programs funded by grants to train cyber skills, however, those programs are not linked directly to open jobs at companies where the skills trained fit the job requirements and people are put to work. Employers don't have good access to people that have great potential, but no exposure to the opportunities in the cyber industry because of their socio-economic conditions. And finally, many of the training and grant programs have significant administrative requirements that small employers don't have the resources to navigate to create a successful hiring program from these sources.

By supporting and investing in this Bill and the Cyber Workforce Program, you will train Marylanders for good paying jobs with high growth potential. The Cyber Workforce Program will put socio-economically disadvantaged candidates into high paying cyber jobs by creating linkages between these training programs and employers. Specifically, the program will catalog available programs, create best practices for how employers can use the programs to hire from non-traditional labor pools enhancing diversity, identify employers that would benefit from the programs, and helping those employers navigate the administrative requirements and put people to work. Success for this program can be measured by how many people are actually put to work in high paying cyber and information technology jobs in Maryland. Simply put, Senate Bill 902 can put people to work and be the economic driver we need, especially as Maryland recovers from the coronavirus pandemic.

I hope I can count on you to support this critical legislation.

Thank You,

Bridges, Inc.

A handwritten signature in black ink, appearing to read "C. Faughnan III", written over a horizontal line.

By: _____

Name: Charles Faughnan III

Title: CEO Emeritus, CAMI Board Member

SB 902 - 723729 - Sponsor Amendments

Uploaded by: Fry Hester, Katie

Position: FAV



SB0902/723729/1

AMENDMENTS
PREPARED
BY THE
DEPT. OF LEGISLATIVE
SERVICES

16 MAR 21
12:02:39

BY: Senator Hester

(To be offered in the Finance Committee and the Budget and
Taxation Committee)

AMENDMENTS TO SENATE BILL 902

(First Reading File Bill)

AMENDMENT NO. 1

On page 1, in line 7, strike “Secretary” and substitute “Department of Commerce”;
and in lines 7 and 8, strike “on the operation and performance of” and substitute “related
to”.

AMENDMENT NO. 2

On page 4, in line 11, after “**REPORT**” insert “:

(I)”;

and in line 12, after “**PROGRAM**” insert “;**AND**

**(II) ANALYZING THE RACIAL, ETHNIC, CULTURAL,
SOCIOECONOMIC, AND GENDER DIVERSITY OF INDIVIDUALS UTILIZING
WORKFORCE PROGRAMS IDENTIFIED, CREATED, OR SUPPORTED BY THE CYBER
PROGRAM**”.

SB 902 - Sponsor Amendments

Uploaded by: Fry Hester, Katie

Position: FAV



SB0902/993426/1

AMENDMENTS
PREPARED
BY THE
DEPT. OF LEGISLATIVE
SERVICES

16 MAR 21
11:44:48

BY: Senator Hester

(To be offered in the Finance Committee and the Budget and
Taxation Committee)

AMENDMENTS TO SENATE BILL 902

(First Reading File Bill)

AMENDMENT NO. 1

On page 1, in line 2, strike “**Cyber Workforce Program and Fund – Established**” and substitute “**Partnership for Workforce Quality Program – Alterations**”; in line 3, after “of” insert “expanding the purpose of the Partnership for Workforce Quality Program and the eligible uses of the grant under the Program to include training for new employees;”; in line 23, after “the” insert “Partnership for Workforce Quality Program, the”; in the same line, after “Program” insert a comma; in line 27, after “3–401” insert “, 3–403, and 3-405(a)”; and after line 29, insert:

“BY repealing and reenacting, without amendments,

Article - Economic Development

Section 3-402

Annotated Code of Maryland

(2018 Replacement Volume and 2020 Supplement)”.

AMENDMENT NO. 2

On page 3, after line 6, insert:

“3–402.

There is a Partnership for Workforce Quality Program in the Department.

3–403.

The purpose of the Program is to provide training services to:

(Over)

(1) improve the competitiveness and productivity of the State's workforce and business community;

(2) upgrade employee skills, OR TRAIN NEW EMPLOYEES, for new technologies or production processes; and

(3) assist employers located in the State in promoting employment stability.

3-405.

(a) (1) An employer receiving assistance under the Program shall be located in the State.

(2) In order to receive assistance under the Program, an employer shall request training assistance in job-specific skills to TRAIN NEW EMPLOYEES OR TO upgrade or retain existing Maryland-based employees covered under Title 8 of the Labor and Employment Article.”.

Cyber Workforce Bill.pdf

Uploaded by: Kuhn, Tina

Position: FAV

Senator Delores G. Kelly, Chair
Senator Brian J. Feldman, Vice Chair
Finance Committee

Senator Guy Guzzone, Chair
Senator Jim Rosapepe, Vice Chair
Budget and Taxation Committee

Tina Kuhn
CyberCore Technologies
6605 Business Parkway
Elkridge, MD 21075

Tuesday, March 16, 2021

Sincerely, My name is Tina Kuhn, and I am the President and CEO at CyberCore Technologies. I urge you to support Senate Bill 902 to establish the Cyber Workforce Program in the Partnership for Workforce Quality Program. The Cyber Workforce Program will leverage existing infrastructure in the Department of Commerce and will build on current educational programs and workforce training assets in the state. Utilizing federally awarded workforce development funds to create the Cyber Workforce Grant Fund, this Bill will provide the necessary resources to support the urgent and growing cybersecurity needs across Maryland. Fundamentally, SB 902 creates the framework for industry-driven input and collaboration in the development and execution of Maryland's workforce development strategy.

On any given day, there are more than 22,000 unfilled cybersecurity jobs in Maryland, and this doesn't include cyber positions embedded in other industries. These vacancies create security vulnerabilities in our critical infrastructure and essential services, but we don't have applicant pools with the right skills to fill our open positions. CyberCore specifically needs cyber personnel willing and able to get government security clearances.

By supporting and investing in this Bill and the Cyber Workforce Program, you will train Marylanders for good paying jobs with high growth potential. Simply put, Senate Bill 902 can put people to work and be the economic driver we need, especially as Maryland recovers from the coronavirus pandemic.

I hope I can count on you to support this critical legislation.

Tina Kuhn
CyberCore Technology
President and CEO
CAMI Member Company

von Lehmen__SB 902.pdf

Uploaded by: Lehmen, Greg

Position: FAV

**TESTIMONY PRESENTED TO THE
SENATE FINANCE COMMITTEE**

**SB 902 ECONOMIC DEVELOPMENT - CYBER WORKFORCE PROGRAM AND FUND -
ESTABLISHED**

MARCH 16, 2021

Chairwoman Kelley, Vice Chairman Feldman, and members of the Committee, thank you for the opportunity to provide testimony.

I am Dr. Greg von Lehmen. I have worked on cybersecurity public policy for the last several years and am writing strictly on my own behalf to support SB 902.

The severe workforce gap that the bill would address is no doubt well documented by other testimony. I limit my remarks about the bill to six points:

1. This is not a one-sector bill. The bill aims to serve workforce needs across the Maryland's public and private sectors. Certainly, Maryland's cybersecurity services sector is a large consumer of cybersecurity talent and struggles to find and retain the talent that it needs. But the same can be said of the State and local governments, K20 schools, water districts, retailers, banks, hotel chains, hospitals, law practices, and many other organizations.
2. It puts the employers at the center. The bill provides for an employer-led process for identifying the hard-to-fill jobs that public and private employers have in common and for defining the particular knowledge, skills, and abilities (KSAs) needed for those jobs. It would do this effectively by providing for one hub organization both to a) facilitate this process and b) secure educational and training providers to develop and offer customized curricula aligned with those KSAs.
3. The bill brings together demand and supply. The bill is not simply about identifying training needs and partnering with willing providers. It is intentional about requiring the hub organization to do outreach to the unemployed and advise them about upskilling opportunities. Moreover, it would provide some scholarship support for those enrolling in the training and education programs.
4. The bill's program would be a multiplier. The program would complement and not supplant degree and certificate programs of colleges and universities in Maryland or the training relationships that they may have with individual corporate or public employers. The number of different cybersecurity roles is large and varied. The bill aims to address gap needs.
5. The bill does not require new State appropriations. It provides for the education and training use of unspent MHEC scholarship funds that would revert to the General Fund and sets up a vehicle to make immediate use of a portion of anticipated federal funds for cybersecurity workforce training.
6. The bill's approach is a proven one. The model has been used effectively in other states—Kentucky and Arizona—to meet gap needs in the healthcare industry. It can work as well in Maryland to build the State's cybersecurity workforce.

For the foregoing reasons, I urge a favorable report on the bill. Thank you.

CAMI Testimony SB 902.pdf

Uploaded by: Luik, Jennifer

Position: FAV



2288 Blue Water Blvd STE 326
Odenton, MD 21113
Phone: 443-201-1960

Senator Delores G. Kelly, Chair
Senator Brian J. Feldman, Vice Chair
Finance Committee
Senator Guy Guzzone, Chair
Senator Jim Rosapepe, Vice Chair
Budget and Taxation Committee

Decisions Oriented Inc.
2288 Blue Water Blvd STE 326
Odenton, MD 21113

Tuesday, March 16, 2021

Sincerely, My name is Jennifer Luik and I am the Co-Founder/CEO at Decisions Oriented Inc. I urge you to support Senate Bill 902 to establish the Cyber Workforce Program in the Partnership for Workforce Quality Program. The Cyber Workforce Program will leverage existing infrastructure in the Department of Commerce and will build on current educational programs and workforce training assets in the state. Utilizing federally awarded workforce development funds to create the Cyber Workforce Grant Fund, this Bill will provide the necessary resources to support the urgent and growing cybersecurity needs across Maryland. Fundamentally, SB 902 creates the framework for industry-driven input and collaboration in the development and execution of Maryland's workforce development strategy.

On any given day, there are more than 22,000 unfilled cybersecurity jobs in Maryland, and this doesn't include cyber positions embedded in other industries. These vacancies create security vulnerabilities in our critical infrastructure and essential services, but we don't have applicant pools with the right skills to fill our open positions. Currently the lead time for 534+ days to process a TS/SCI clearance. A small government contractor cannot keep an employee on overhead that long to await a clearance. As a Sub-contractor, Prime contractors will not allow a sub-contractor to place an uncleared candidate on the eCPRL to start the TS/SCI Clearance process, and therefore no opportunity for a small business to staff a cleared cybersecurity professionals. In addition, there is very little diversity and inclusion in the cleared cybersecurity field, because many technically qualified candidates that are persons of color, usually have foreign and/or incarcerated close contacts/family members. While it is not a disqualifier, it extends the process beyond 534+days to clear a TS/SCI employee, and forces businesses to not consider a diverse workforce because the ROI is not enough to clear this type of employee, and therefore systematically excluding minorities from this profession. Small businesses need some support in either changing the clearance process, or obtain some assistance in off-setting the expenses endured to clear an employee during this 534+ day process.



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By supporting and investing in this Bill and the Cyber Workforce Program, you will train Marylanders for good paying jobs with high growth potential. Simply put, Senate Bill 902 can put people to work and be the economic driver we need, especially as Maryland recovers from the coronavirus pandemic.

I hope I can count on you to support this critical legislation.

Jennifer Luik

Jennifer Luik
Co-Founder/CEO
Decisions Oriented Inc.
CAMI Member Company

Senate Bill 902 LOS_03122021.pdf

Uploaded by: OFerrall, Timothy

Position: FAV

Senator Delores G. Kelly, Chair
Senator Brian J. Feldman, Vice Chair
Finance Committee

Senator Guy Guzzone, Chair
Senator Jim Rosapepe, Vice Chair
Budget and Taxation Committee

March 12, 2021

On behalf of the Fort Meade Alliance Board of Directors I urge you to support Senate Bill (SB) 902 to establish the Cyber Workforce Program in the Partnership for Workforce Quality Program. The Cyber Workforce Program will leverage existing infrastructure in the Department of Commerce and will build on current educational programs and workforce training assets in the state. Utilizing federally awarded workforce development funds to create the Cyber Workforce Grant Fund, this Bill will provide the necessary resources to support the urgent and growing cybersecurity needs across Maryland. Fundamentally, SB 902 creates the framework for industry-driven input and collaboration in the development and execution of Maryland's workforce development strategy.

The Fort Meade Alliance (FMA) is a 501c4 nonprofit with a central mission to support and promote Fort George G. Meade (FGGM) as an economic asset and resource to the region. We play a critical role as a leader in the community, championing and facilitating Fort Meade regional initiatives to remain the first choice for military services, civilian support services and federal departments and agencies. Our frequent interaction with FGGM leadership, the more than 115 government agencies and organizations on Fort Meade and elected government officials demonstrates the Alliance's strength.

On any given day, there are more than 22,000 unfilled cybersecurity jobs in Maryland, and this doesn't include cyber positions embedded in other industries. These vacancies create security vulnerabilities in our critical infrastructure and essential services, but we don't have applicant pools with the right skills to fill our open positions.

Our membership consists of over 250 business members representing over 100,000 employees in the region. Many of these businesses represent cybersecurity and information technology (CS/IT) companies that recognize the importance of developing and recruiting talent at a young age. Troubled by the persistent shortage of skilled cyber security workers, the Fort Meade Alliance last year assembled a group of high-level representatives from business, government and educational organizations to identify key obstacles limiting the expansion of the CS/IT workforce and begin working towards solutions. SB 902 is a program that can address these critical workforce needs.

By supporting and investing in this Bill and the Cyber Workforce Program, you will train Marylanders for good paying jobs with high growth potential. Simply put, Senate Bill 902 can put people to work and be the economic driver we need, especially as Maryland recovers from the coronavirus pandemic.

I hope I can count on you to support this critical legislation.

Sincerely,



Doreen Harwood
President Fort Meade Alliance

TrainACE Testimony Letter SB 902.pdf

Uploaded by: Ricketts, Paul

Position: FAV

TrainACE
7833 Walker Drive,
Greenbelt
MD 20770

March 10, 2021

Dear Madam Chair:

Sincerely, my name is John Walther, and I am the General Manager at TrainACE. I urge you to support Senate Bill 902 to establish the Cyber Workforce Program in the Partnership for Workforce Quality Program. The Cyber Workforce Program will leverage existing infrastructure in the Department of Commerce and will build on current educational programs and workforce training assets in the state. Utilizing federally awarded workforce development funds to create the Cyber Workforce Grant Fund, this Bill will provide the necessary resources to support the urgent and growing cybersecurity needs across Maryland. Fundamentally, SB 902 creates the framework for industry-driven input and collaboration in the development and execution of Maryland's workforce development strategy.

On any given day, there are more than 22,000 unfilled cybersecurity jobs in Maryland, and this does not include cyber positions embedded in other industries. These vacancies create security vulnerabilities in our critical infrastructure and essential services, but we do not have applicant pools with the right skills to fill our open positions.

As a provider of instructor-led cybersecurity training in Maryland for over 20 years we have firsthand experience of the challenges new and current IT professionals have in getting the high-quality training they need to be able to apply for the open positions mentioned above. Online, virtual training is affordable, but often lacks the quality and timeliness of classroom learning with a live instructor. We believe that the establishment of a Cyber Workforce Program would not only improve cybersecurity infrastructure in Maryland but could be used to help make quality cybersecurity training accessible to a wider pool of candidates.

By supporting and investing in this Bill and the Cyber Workforce Program, you will train Marylanders for good paying jobs with high growth potential. Simply put, Senate Bill 902 can put people to work and be the economic driver we need, especially as Maryland recovers from the coronavirus pandemic.

I hope I can count on you to support this critical legislation.

John Walther
General Manager
TrainACE
CAMI Member Company

SB0902 Letter of Support C. Routzahn.pdf

Uploaded by: routzahn , christine

Position: FAV

Maryland General Assembly Finance Committee
& Budget and Taxation
3 East Miller Senate Office Building
Annapolis, Maryland 21401

Re: Letter of Support for SB0902

Stance: Support

Madam Chairman, Vice Chair and Members of the Committee,

The Maryland Technology Internship Program (MTIP) is pleased to provide this letter in support of the Economic Development - Cyber Workforce Program and Fund (SB0902). Since 2018, MTIP has reimbursed 600 internships, 50% of which have gone to cybersecurity firms, to support well-developed, inclusive and varied talent pipelines for employer needs in Maryland. The demand to obtain intern matching funds allocated to MTIP far exceeds the current budget allocation. MTIP obtains over 500 applications each fiscal year and is able to fund roughly 50% of those submitted based on the current budget.

Cyber threats have disrupted every sector of our lives, the Economic Development - Cyber Workforce Program and Fund will support the training and development for improved security. In Maryland, there are more than 12,000 local cybersecurity and IT firms who compete for a limited supply of qualified workers, by passing this legislation, the program can retain and source workers to increase employment and address the security gap in Maryland.

Pipeline programs such as MTIP and for example, the University of Maryland Baltimore County Cyber Scholars Program, have a proven track record for increasing the number of skilled technical workers in the state of Maryland. These collaborative partnerships greatly increase the number of technical professionals in Maryland. By partnering with industry, higher education and government, SB 0902 will support the next generation of cybersecurity professionals in our state. Additionally, the bill will broaden the cyber competency and potentially focus on increasing the participation of women and other underrepresented groups in this fast growing field.

MTIP fully supports this workforce development initiative to increase the technical cybersecurity talent in the state of Maryland. I urge you to pass this bill.

Sincerely,

Christine Routzahn

Christine Routzahn
Director
Career Center
University of Maryland, Baltimore County



CAREER CENTER

University of Maryland, Baltimore County
201 Math/Psychology Building
1000 Hilltop Circle, Baltimore, MD 21250

careers@umbc.edu // p: 410.455.2216
careers.umbc.edu

SB902_USM_FAV_SADOWSKI_TESTIMONY 3.12.21.pdf

Uploaded by: Sadowski, Tom

Position: FAV



SENATE FINANCE COMMITTEE
Senate Bill 902 – Cyber Workforce Program and Fund
March 12, 2021
Urging a Favorable Report

Chair Kelley, Vice Chair Feldman and members of the committee, for the record I am Tom Sadowski, Vice Chancellor for Economic Development with the University System of Maryland (USM), and I respectfully request your favorable review and report on Senate Bill 902.

Senate Bill 902 will establish the Cyber Workforce Program within the Maryland Department of Commerce Partnership for Workforce Quality Program. In doing so, the Cyber Workforce Program will leverage existing program infrastructure, building on current educational and workforce training assets in the state. Utilizing federally awarded workforce development funds to create the Cyber Workforce Grant Fund, Senate Bill 902 will also provide the resources necessary to support the urgent and growing talent needs of our government and industry employers in the cybersecurity sector throughout Maryland. Most importantly, Senate Bill 902 creates the framework for industry-driven input, collaboration and leadership in the development and execution of a strategic, inclusive, and sustainable workforce development strategy for Maryland.

More than 22,000 cybersecurity jobs remain unfilled in Maryland, and this does not include cyber positions embedded within other industry sectors. These vacancies create security vulnerabilities in our economy, making our critical infrastructure and essential services more vulnerable to attack, because we currently do not have applicant pools with the right skills to fill open positions. Eighty percent of open cyber positions nationally, require a bachelors, masters, or doctoral degree— but also require on average five years of technical experience. At present, the USM awards 12,000 STEM degrees each year— 7,500 of which are cybersecurity related. Senate Bill 902 will help the USM and other higher education institutions throughout Maryland provide not only the academic credentials but also help deliver the technical experience— via internships, apprenticeships and otherwise.

That will give our students, graduates, the unemployed, underemployed, and life-long learners alike, the industry certified training and credentials required to enter the workforce and satisfy immediate employer talent needs.

By supporting Senate Bill 902 and the creation of the Cyber Workforce Program, you will make possible the training of a broad and diverse population of Marylanders, thus enabling them to secure valuable, family-supporting jobs with high growth potential. Simply put, Senate Bill 902 will help to facilitate the industry leadership, technical training, and resources necessary to best equip current and prospective Maryland students, graduates,

and residents for jobs that defend our critical infrastructure, secure our intellectual property, and protect delivery of essential services for the benefit of Maryland's economy and quality of life of its citizens going forward.

Again, the USM urges a favorable report on Senate Bill 902.



SB 902.pdf

Uploaded by: Smith, Gregg

Position: FAV



March 13, 2021

Ref: Support of Senate Bill 902

Good morning,

My name is Gregg Smith, CEO of Attila Security, my 4th cybersecurity company in Maryland. I am also the Chairman of CAMI, the Cybersecurity Association of Maryland. At CAMI we represent approximately 600 companies large and small that work every day to keep our citizens, business both large and small and the government safe. At Attila and CAMI, we wholeheartedly support Senate Bill 902.

Workforce is the number one issue for both my company and all of CAMI's member companies. Today there are over 22,000 cyber security open vacancies in Maryland and 3,500,000 million jobs open in the United States. These are very high paying jobs (Leaderquest):

- Information Security Manager: \$125,000 to \$215,000
- Cybersecurity Engineer: \$120,000 to \$200,000
- Application Security Engineer: \$120,000 to \$180,000
- Cybersecurity Analyst: \$90,000 and \$160,000
- Penetration Tester (Ethical Hacker): \$80,000 to \$130,000
- Network Security Engineer: \$125,000 to \$185,000

By supporting and investing in this Bill and the Cyber Workforce Program, you will train Marylanders for good paying jobs with high growth potential. Simply put, Senate Bill 902 can put people to work and be the economic driver we need, especially as Maryland recovers from the coronavirus pandemic.

Respectfully,

A handwritten signature in black ink, appearing to read "Gregg Smith", written in a cursive style.

Gregg Smith
Chairman of the Board
Cybersecurity Association of Maryland
Chief Executive Officer
Attila Security, Inc.

Woods_Written Testimony SB 902.pdf

Uploaded by: Woods, Sarah

Position: FAV

Senator Delores G. Kelly, Chair
Senator Brian J. Feldman, Vice Chair
Finance Committee

Senator Guy Guzzone, Chair
Senator Jim Rosapepe, Vice Chair
Budget and Taxation Committee

VenturePotential, LLC
6523 Darnall Road
Towson, MD 21204

Tuesday, March 16, 2021

My name is Sarah Woods, and I am the President and Founder of VenturePotential, LLC and Marketing Advisor to the Women in Cyber Security - Critical Infrastructure. I urge you to support Senate Bill 902 to establish the Cyber Workforce Program in the Partnership for Workforce Quality Program. The Cyber Workforce Program will leverage existing infrastructure in the Department of Commerce and will build on current educational programs and workforce training assets in the state. Utilizing federally awarded workforce development funds to create the Cyber Workforce Grant Fund, this Bill will provide the necessary resources to support the urgent and growing cybersecurity needs across Maryland. Fundamentally, SB 902 creates the framework for industry-driven input and collaboration in the development and execution of Maryland's workforce development strategy.

On any given day, there are more than 22,000 unfilled cybersecurity jobs in Maryland, and this does not include cyber positions embedded in other industries. These vacancies create security vulnerabilities in our critical infrastructure and essential services, but we don't have applicant pools with the right skills to fill our open positions.

By supporting and investing in this Bill and the Cyber Workforce Program, you will train Marylanders for good paying jobs with high growth potential. Simply put, Senate Bill 902 can put people to work and be the economic driver we need, especially as Maryland recovers from the coronavirus pandemic.

I hope I can count on you to support this critical legislation.

Sincerely,

Sarah Woods

President, VenturePotential
VenturePotential.com



CAMI Member Company

TCecure LLC -- Written Testimony SB 902 - March 20

Uploaded by: Williams-Koroma, Tina

Position: FWA



Senator Delores G. Kelly, Chair
Senator Brian J. Feldman, Vice Chair
Finance Committee

Senator Guy Guzzone, Chair
Senator Jim Rosapepe, Vice Chair
Budget and Taxation Committee

TCecure, LLC
100 International Drive, Floor 23
Baltimore, MD 21202

Tuesday, March 16, 2021

My name is Tina Williams-Koroma, and I am the President/CEO at TCecure, LLC. I urge you to support Senate Bill 902 to establish the Cyber Workforce Program in the Partnership for Workforce Quality Program. The Cyber Workforce Program will leverage existing infrastructure in the Department of Commerce and will build on current educational programs and workforce training assets in the state. Utilizing federally awarded workforce development funds to create the Cyber Workforce Grant Fund, this Bill will provide the necessary resources to support the urgent and growing cybersecurity needs across Maryland. Fundamentally, SB 902 creates the framework for industry-driven input and collaboration in the development and execution of Maryland's workforce development strategy.

On any given day, there are more than 22,000 unfilled cybersecurity jobs in Maryland, and this does not include cyber positions embedded in other industries. These vacancies create security vulnerabilities in our critical infrastructure and essential services. I regularly engage with several Maryland-based workforce and economic development initiatives and organizations, including, but not limited to NPower, TEDCO, University of Maryland Baltimore County (UMBC) Training Centers (TC) apprenticeship program through the Maryland Department of Labor, Licensing, and Regulation (DLLR), Baltimore County Department of Workforce and Economic Development (DEWD), several Maryland universities' recruiting websites, etc. Despite all these engagements however, we often must look outside of Maryland to hire talent. Most of our TCecure open positions for cybersecurity not only require cyber expertise, but also require security clearances. Identifying talent with the requisite cyber knowledge, skills, abilities, AND clearance is extremely difficult, and we often miss out on opportunities to grow our employee base here in Maryland. Further, a portion of our work requires part-time labor for the temporary or short-term cyber customer requirements that often arise, and we typically must hire non-Maryland talent to satisfy these staffing requirements.

By supporting and investing in this Bill and the Cyber Workforce Program, you will train Marylanders for good paying jobs with high growth potential. Simply put, Senate Bill 902 can put people to work and be the economic driver we need, especially as Maryland recovers from



the coronavirus pandemic. I strongly recommend that the bill also be updated to include diversity and inclusion metrics reporting to track, measure, and enforce equitable outcomes in providing awareness to, and engagement of, all Marylanders who may be interested in participating in the cybersecurity workforce.

I hope I can count on you to support this critical legislation.

A handwritten signature in brown ink that reads 'Tina C. Williams-Koroma'.

Tina C. Williams-Koroma
President/CEO
TCecure, LLC
CAMI Member Company

SB 902_Commerce and Labor LOI.pdf

Uploaded by: Schulz, Kelly

Position: INFO



Larry Hogan | Governor
Boyd Rutherford | Lt. Governor
Kelly M. Schulz | Secretary of Commerce



DATE: March 16, 2021
BILL NO: Senate Bill 902
BILL TITLE: Economic Development – Cyber Workforce Program and Fund -
Established
COMMITTEE: Senate Finance

Statement of Information

Senate Bill 902 would establish a new \$25 Million Cyber Workforce Program (“Cyber Program”) within the Department of Commerce’s (“Commerce”) Partnership for Workforce Quality Program (“PWQ”) with a purpose of:

- Supporting cyber careers in new or existing workforce programs;
- Providing educational and other training scholarships related to cyber fields; and
- Providing planning, strategies, and other resources to assist the cyber industry with analyzing and identifying workforce needs in consultation with the Cybersecurity Association of Maryland (CAMI).

Commerce would oversee this program and establish eligibility criteria and priorities for assistance under the Cyber Program and be required to submit a report on the operation and performance of the Cyber Program. Commerce would also manage and supervise the Cyber Workforce Fund (“Fund”). The Fund is a special, nonlapsing fund that is not subject to the State Finance and Procurement Article. This bill would earmark \$25 Million of financial assistance provided by the federal government to the State in response to the coronavirus pandemic for the purpose of workforce development, so long as the purposes of the Cyber Program are a permissible use of the financial assistance. However, the State has not received this assistance and there is no guarantee that the State will receive more funding or that it will be a permissible use of the funds. This bill does not set forth any other additional revenue streams, nor does it guarantee an annual budget/funding for the Cyber Program. The Fund would consist of:

- Money appropriated by the state to the Fund;
- Money made available to the Fund through federal programs;
- Private contributions to the Fund;
- An application or another fee to the Cyber Program in connection with processing a request for financial assistance;
- Any unspent or unencumbered scholarship balance transferred;
- Interest earning of the Fund; and
- Any other money made available to the Fund.

Commerce would be responsible for securing the bulk of the funding through grant applications, application fees, etc.

As it relates to the Maryland Department of Labor (MD Labor), SB 902 would have the following operational impacts:

- MD Labor (Division of Unemployment Insurance) would be required to provide the names and contact information of individuals currently receiving unemployment benefits to the cyber program as the information becomes available;
- The Governor's Workforce Development Board would be engaged in that they would receive a report from the Department of Commerce on the program's operation and performance alongside the Attorney General, the Maryland Cybersecurity Council, and the Maryland Economic Development Commission.

In order for MD Labor to consider sharing the requested Unemployment Insurance information, MD Labor would first need to get a conformity letter from the U.S. Department of Labor to ensure that the provision of the information is allowable for this purpose. If it was determined allowable, MD Labor would require a data sharing agreement, and because UI cannot use federal funds for a non-UI purpose, an annual fee and fee per record would be assessed. The fee would be determined as part of a negotiation of the terms of the data sharing agreement. In addition, MD Labor would need to update its messaging to inform claimants of the use of their information.

Estimated Fiscal Impact on Commerce:

Under the assumption that the Fund revenue received in a fiscal year is allocated for workforce programs allowed under this Act in that fiscal year, there is no set special fund expenditures from the Fund annually from FY 2022 through FY 2026 and for Commerce administrative expenses up to 10% of the revenues. Of that amount, approximately 90% annually is for distribution to listed entities and the remaining balance is for Commerce administrative costs. The fund type would be special, federal, and other (private funding).

Commerce is required to administer the program and currently does not have staff that would be able to administer this program. The creation of a program such as this will require additional staff, outreach, meetings, and overall, more administrative costs. Due to the type of program, two additional employees would need to be hired to oversee the administration of the grant.

With the creation of a new program, Commerce believes that two full-time employees would be best suited for this role. These employees would be within the Office of Strategic Industries and Entrepreneurship and would be a Cyber Program Manager and a Fund Administrator, focused on assisting the director with grant agreements, disbursements, reporting requirements, symposiums, meeting with the business community and fulfilling all additional duties and tasks that are needed to effectively administer the program. This program would be a fulltime role, but Commerce does not currently have staff or resources to dedicate someone fulltime to this program.

Additional Information:

There is currently the Commerce Cybersecurity Roundtable, the Governor's Workforce Development Board's Cybersecurity and IT Committee, and an MHEC focus group on cybersecurity workforce to assist in these efforts.

Through MD Labor’s Division of Workforce Development and Adult Learning (DWDAL), the State already makes significant investments in cyber security workforce development activities. This investment primarily occurs through 2 key programs:

- The EARN Maryland Program; and,
- The Apprenticeship Innovation Fund.

EARN Maryland

Beginning in 2018, Governor Hogan has made targeted investments aimed at growing the State’s cyber and IT talent pipeline via MD Labor’s nationally recognized EARN Maryland program.

EARN is industry-led, designed with the flexibility to ensure that Maryland’s businesses have the talent they need to compete and grow. The success of the program is seeded in collaboration among a diverse group of partners, including employer and industry partners, non-profit and community-based organizations, and workforce, economic development, and education partners.

Governor Hogan’s added investment of \$3 million annually has allowed the program to grow the number of grantees targeting this industry and expand the geographic reach and capacity of grantees. To date, the program has placed more than 1,000 individuals into employment in the Information Technology and Cybersecurity industries and provided training for nearly 1,500 incumbent workers.

Below is a list of the partners MD Labor funded through EARN in FY20:

EARN Grantee	Award Amount (FY 20)
Anne Arundel Workforce Development Corporation	\$240,000
Baltimore Cyber (ICET)	\$499,750
Baltimore Cyber (ACT)	\$492,302
CCBC	\$196,610
CompTIA	\$240,000
I’m Still Standing Community Corporation	\$271,968
NPower	\$200,000
Per Scholas	\$300,000
Susquehanna Workforce Network	\$150,000
Transmosis	\$73,370
Tech Frederick	\$300,000

Apprenticeship Innovation Fund

Since 2017, MD Labor has made 12 awards to cyber security organizations through the Apprenticeship Innovation Fund, amounting to \$793,920.64:

MD Labor is home to the State’s Apprenticeship and Training Program. To support the expansion of Registered Apprenticeship in the State, MD Labor established an Apprenticeship Innovation Fund (AIF) using time-limited federal grant dollars. Through the AIF, MD Labor has invested in sustainable programs that support and engage in Registered Apprenticeship (“RA”) expansion strategies by

seeding the implementation of new and promising ideas or adapting proven strategies at the systems or service delivery level, to expand the reach of RA programs in Maryland.

AIF Grantee	Award Amount	Award Date
TranZed	\$50,000	3/2017
TranZed	\$15,000	4/2017
Alliance Technology Group	\$48,000	5/2017
CAMI	\$2,500	7/2017
Franklin Apprenticeships, LLC	\$50,000	10/2018
Baltimore Cyber Range	\$15,000	1/2020
Howard Community College	\$63,100	6/2020
Franklin Apprenticeships, LLC	\$73,000	4/2020
Howard Community College	\$15,000	8/2020
Franklin Apprenticeships, LLC	\$125,000	7/2020
Howard Community College	\$250,000	8/2020
TranZed	\$87,320.64	8/2020

It is also important to note that this bill explains: “it is the intent of the General Assembly that \$25,000,000 of financial assistance provided by the federal government to the State in response to the coronavirus pandemic for the purposes of workforce development on or after July 1, 2021, be distributed to the cyber fund, if the purposes of the cyber program are a permissible use of the financial assistance.” MD Labor’s DWDAL oversees workforce development in the State. MD Labor is not aware of any federal funds that could be used for the purposes of SB 902, however, it is important to recognize that federal workforce funds are typically provided to MD Labor and come with very stringent rules and requirements. MD Labor is committed to ensuring federal workforce dollars are spent in compliance with federal guidelines and expectations.

Commerce and Labor recognize that there is a workforce shortage in cybersecurity and have made it a priority to work with our cybersecurity partners to come up with solutions to this shortage, without duplicating current efforts and programs provided by the State.