



Draft Meeting Minutes
Maryland Cybersecurity Council
Subcommittee on Education and Workforce Development
Wednesday, July 14, 2021
11:00 am – 12:00 pm
Virtual Public Meeting

Attendance (6/11)

Subcommittee members attending: Senator Katie Fry Hester (chair), Dr. Anupam Joshi, Miheer Khona, Laura Nelson, Rodney Petersen, and Senator Bryan Simonaire.

Staff: Howard Barr (Assistant Attorney General and Principal Counsel, DoIT), Nithin Venkatraman (Chief of Staff, Office of Senator Hester), and Dr. Greg von Lehmen (University Maryland Global Campus, Staff to the Maryland Cybersecurity Council).

Invited presenter: Tasha Cornish, Executive Director, Cybersecurity Association of Maryland (CAMI), at the invitation of the subcommittee chair.

1. Senator Hester welcomed the subcommittee members and confirmed with Council staff that a quorum was present. Framing the principal objective of the meeting, she noted that there were more than 26,000 cyber job openings in Maryland and that she wanted the subcommittee to consider kicking off an event in the fall to help address gaps that an industry survey conducted earlier in the year by CAMI revealed.
2. After a round of member self-introductions, Senator Hester called for the minutes of the 21 January 2021 subcommittee meeting which were unanimously approved after motions made and seconded by Dr. Joshi and Ms. Nelson, respectively.
3. To set the stage for Ms. Cornish's presentation, Senator Hester recapped the legislative history of SB 902 (Economic Development - Cyber Workforce Program and Fund – Established), which the subcommittee and another Council member, Gregg Smith, had helped shape. She noted that the bill passed the Senate unanimously with amendments but that it did not come up for a vote in the House due to lack of time at the end of the session. She recognized the strong effort that the CAMI board and its membership had made to support the bill and observed that with federal funds flowing for workforce development the need for the bill was as great as ever.
4. Ms. Cornish reviewed the [results](#) of the workforce survey. The survey elicited 71 responses from CAMI members. While a plurality (36.1%) of the respondents represented firms with 50 or fewer employees, larger firms, such as Exelon and Under Armour also participated in the survey. The survey results tracked with national surveys that indicate how challenging it is for firms to fill open cybersecurity positions. A key take-away was that workforce programs offered by the State to help address this need were either not known by respondents or were thought to have administrative burdens

that made them unattractive. The programs mentioned in the survey included the Maryland Technology Internship Program (MTIP), the Maryland Apprenticeship and Training Program (MATP), Youth Apprenticeship - Maryland Apprenticeship and Training Program, Earn Grants, and the Cyber Warrior Diversity Program.

Senator Simonaire asked whether the survey tried to get at the reasons why firms have a difficult time recruiting the talent they need. Ms. Cornish indicated that it did not. He offered that there were likely three reasons: the requirement for security clearances, the limited talent pool, and competitive salaries. He also mentioned that his firm aggressively recruited cybersecurity graduates from Maryland colleges and universities but that there are simply not enough of them. Many of them take jobs at other companies outside of the State.

Dr. Joshi seconded that observation. He noted that the 90% of the graduates of his institution in cyber-related fields were hired within three months of graduation. With respect to State programs, he asked why the State Cybersecurity Scholarship-for-Service program was limited specifically to cybersecurity degrees; why not related degrees? Senator Simonaire answered that the intention was to focus on that need in particular and not to dilute the scholarship program.

Mr. Khona asked whether retention was an issue and should be plumbed in the follow-up survey. He noted that younger professionals are more mobile and are less inclined to stay with one employer. He asked whether there were organizational changes that could increase retention of needed talent.

Mr. Petersen suggested that retention needs to be rethought. Today's cyber workers are not going to stay in the same position through their careers. To Mr. Khona's point, to retain talent, it is better to think in terms of offering mobility within organizations: look at entry level talent and commit to developing it into mid-level and later senior level talent. There is also the opportunity to retrain or reskill employees who may have started in non-cyber job roles.

Ms. Nelson concurred with Mr. Peterson's comments. She agreed that the key to retaining talent within an organization is offering rotational opportunities for staff.

Mr. Peterson asked whether nonprofits were included in the survey. Ms. Cornish answered that they were not, apart from a few universities. He also recommended including a wider range of firms. Everyone needs cybersecurity talent: retail, banking and finance, etc.

Senator Hester asked Ms. Cornish if CAMI planned to do a follow-up survey that would drill down into the levels of greatest need (entry level, mid-level, senior level) and the reasons why firms cannot fill positions. Ms. Cornish stated that CAMI was forming a

Workforce Advisory Board and that the board would be doing a follow-up survey. Senator Hester asked if the survey could be completed by December 1, so as to inform the next legislative session. Ms. Cornish indicated that this might be possible. She also suggested including the Cyber Council itself in the survey along with CAMI firms.

5. To supplement Ms. Cornish's presentation, Mr. Venkatraman provided detailed information about the variety of State programs aimed at workforce development. His information included both the key elements of each program, expenditures, and numbers of participants. The information came from a subcommittee [working document](#) that had been started in the fall 2019.
6. Senator Hester asked whether there could be a fall event that would do some "match making", viz. that would connect firms with need with State programs and counties with workforce development funds?

Mr. Petersen mentioned that the federal government had developed [tool kits](#) and [tips](#) for agency employers, offered webinars, and had begun to do one-day "[summits](#)" to introduce agencies to the array of cyber workforce programs that the federal government offers. He asked whether CyberMaryland might serve as an appropriate venue for such an event.

Senator Hester asked whether the MACo conference in mid-August might be a possibility for an event. Summarizing the action items for the subcommittee, She asked:

- Dr. Joshi and Ms. Nelson to flesh out what an event might look like if they were willing.
- Dr. von Lehmen if he would see if CyberMaryland might be interested in co-convening a "match making event".
- Mr. Petersen if he could send information about the federal government summits and tool kits for distribution to the subcommittee.
- Ms. Cornish if CAMI could push forward with an expanded survey and to have results by December 1.
- Dr. von Lehmen if he could poll for other speakers and directions for a fall subcommittee meeting.

Asking if there was further business and hearing none, Senator Hester adjourned the meeting at 12:00 pm after motions duly made and approved.