Date of Hearing: April 26, 2022

ASSEMBLY COMMITTEE ON HIGHER EDUCATION Jose Medina, Chair AB 2695 (Berman) – As Amended April 4, 2022

SUBJECT: California State University: Cybersecurity Regional Alliances and Multistakeholder Partnerships Pilot Program

SUMMARY: Establishes the Cybersecurity Regional Alliances and Multistakeholder Partnerships Pilot Program to address the cybersecurity workforce gap, as specified, and requires the office of the Chancellor of the CSU to select any number of CSU campuses to participate in the pilot program through an application process developed by the chancellor's office on or before March 1, 2023. Specifically, **this bill**:

- 1) Establishes the Cybersecurity Regional Alliances and Multistakeholder Partnerships Pilot Program in order to address the cybersecurity workforce gap by doing all of the following:
 - a) Stimulating cybersecurity education and workforce development by bringing together stakeholders in the cybersecurity ecosystem;
 - b) Aligning the cybersecurity workforce needs of employers with the education and training provided by institutions of higher education;
 - c) Increasing the pipeline of students pursuing cybersecurity careers; and,
 - d) Developing the cybersecurity workforce to meet industry needs within local or regional economies.
- 2) Requires the office of the Chancellor of the CSU, on or before March 1, 2023, to develop an application process, selection process, and criteria for CSU campuses seeking to participate in the pilot program.
- 3) Requires the office of the Chancellor of the CSU to select any number of campuses to participate in the pilot program.
- 4) Specified that each selected CSU campus will do all of the following:
 - a) Create a pilot program with goals and metrics;
 - b) Develop strategies and tactics for building successful regional alliances and multistakeholder partnerships; and,
 - c) Measure the impact and results of their pilot program and annually share the impact and results with the office of the Chancellor of the CSU.
- 5) The office of the Chancellor of the CSU must annually report the impact and results from each selected campus's pilot program to the Legislature.

6) Makes various legislative findings and declarations.

EXISTING LAW:

1) Establishes the CSU, administered by the Trustees of the CSU, as one of the segments of public postsecondary education in this state. The 23 CSU institutions of higher education located throughout the state (Education Code (EDC) Section 89000, et seq.).

FISCAL EFFECT: Unknown

COMMENTS: *Purpose*. According to the author, "The demand for cybersecurity workers is growing far faster than the supply, driven by an increasing number of cyberattacks. California and the country face a cybersecurity workforce shortage with over 63,000 open positions in the state and over 500,000 cybersecurity openings across the country. Addressing the critical cybersecurity workforce gap is essential to be prepared to meet the dynamic change and range of current and future cyber threats. Consequently, AB 2695 would establish the Cybersecurity Regional Alliances and Multistakeholder Partnerships Pilot Program to address the immediate cybersecurity workforce gap. The goal of the pilot program is to increase the pipeline of students pursuing cybersecurity careers and develop the cybersecurity workforce to meet industry needs."

Need for the bill. According to the California Cybersecurity Workforce Development and Education Strategy September 2020 report, "Global demand for cybersecurity and information security professionals and personnel has been mounting for decades and reaching a critical point. It is imperative in this modern and information-rich era to have a strong cadre of qualified and prepared cybersecurity specialists and specialized workforce (from technicians through managers) flowing into the labor pool. Based on the reliance of technology in today's digital environment, we need coordinated and linked education, training, and workforce development programs to increase statewide cybersecurity capabilities and enhance cyber-resiliency."

In September 2016, the National Initiative for Cybersecurity Education, led by the National Institute of Standards and Technology in the U.S. Department of Commerce, awarded funding for five pilot programs for Regional Alliances and Multistakeholder Partnerships to Stimulate Cybersecurity Education and Workforce Development. Through this federal funding opportunity, it was found that effective multistakeholder workforce partnerships focused on organizing multiple employers with skill shortages in specific occupations to focus on developing the skilled workforce to meet industry needs within the local or regional economy. It was also found that bringing together multiple stakeholders in the cybersecurity ecosystem – industry, government, and educational institutions – can help communities address many of the cybersecurity workforce challenges that they face today.

Cybersecurity collaboration. The September 2020 California Cybersecurity Workforce Development and Education Strategy report describes the design, development, and implementation phases of the California Cybersecurity Career Education Pipeline and Pathway Project (CCCEPPP) to transform statewide cyber education and workforce development. The CCCEPPP is an initiative of the California Cybersecurity Task Force (CCTF) Workforce Development and Education Subcommittee (WDE). The CCTF is Co-Chaired by Director Mark Ghilarducci, California Governor's Office of Emergency Services (Cal OES) and Director Amy Tong of the California Department of Technology (CDT). The strategy report noted that "...there is no current and clearly organized statewide cybersecurity workforce development and education strategy or related pipeline/pathway. Cybersecurity academic infrastructure needs bolstering in capacity and resiliency in this extraordinarily important ecosystem and space. CCCEPPP operates across all levels of education (K-12, community colleges, and universities) and addresses the need for statewide strategic cybersecurity workforce development and education preparation to meet critical "high need" essential workforce needs and emerging areas with significant capability-skill gaps.

"The California Cybersecurity Workforce Development and Education Strategy discusses the alignment and coordination of cybersecurity K-12 and Higher Education model curriculum, academic standards, extra-curricular activities, cyber competitions, professional/career development, apprenticeships, and related areas to build a solid, linked cybersecurity pipeline/pathway to serve the State of California. To be successful, public and private sector key partners/major stakeholders must collaborate and work together earnestly to design education and workforce development programs that assure prospective employers program graduates can demonstrate the necessary knowledge, skills, abilities, and competencies to meet minimum job requirements upon pipeline/pathway completion and graduation."

Arguments in support. The California Chamber of Commerce wrote in support, noting that "In an age of ever-increasing reliance on electronic records - and with the rise in phishing scams and concerted hacking against corporations and nations – there is no dispute about the importance of cybersecurity in the modern world. California (one of the tech leaders of the world) already produces too few professionals to fill present job openings for cybersecurity professionals. And the need for cybersecurity professionals will only grow as we continue to transition our personal and business records and communications into digital mediums in the coming years. AB 2695 will help prepare future generations of cybersecurity professionals to address this obvious need by creating pilot programs at participating Cal State Universities. Moreover, it will help feed good jobs to Californians. In short – we see this as a win-win."

The Silicon Valley Leadership Group wrote in support, commenting that "Cybersecurity is a growing area of importance for California consumers and residents. The rising number of cyberattacks against both public and private targets imperils our financial, technological, educational and health industries, and threatens the security of citizens' most private personal information. California faces a shortage of cybersecurity workers. AB 2695 will help build a pipeline of diverse cyber workers by establishing a pilot program in the California State University system. We enthusiastically support the creation of this pilot to align multiple universities and industry employers around a new cybersecurity ecosystem and curriculum.

Committee comments. Committee staff notes that this bill is designed to give CSU campuses the flexibility to tailor their campus-based pilot programs to meet regional needs. *Moving forward, the author may wish to consider amending this bill to include a sunset date, as is common with other pilot programs.*

REGISTERED SUPPORT / OPPOSITION:

Support

California Chamber of Commerce

Code.org Microsoft Corporation Silicon Valley Leadership Group Technet-Technology Network 1 Individual

Opposition

None on file

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