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Cybersecurity Task Force News | September 27, 2017

Each month we will provide data and research on state and federal cybersecurity issues, pinpoint resources and toolkits from experts in the field, and shine a spotlight on the great work of one of the cybersecurity task force sponsors. This month's newsletter focuses on cybersecurity workforce and education and highlights task force sponsor CompTIA's work, and the creation of a new organization, the Association of Information Technology Professionals. But first:

Task Force Highlight: Our American States Podcasts
Cyber task force Co-Chairs Senator Thomas Alexander (SC) and Assemblywoman Jacqui Irwin (CA) have represented the task force on NCSL's podcast show Our American States. Their interviews can be found here and here.

Education and Workforce information and resources
Workforce policy is a bifurcated and complex cybersecurity challenge. We hope the following information will help you tap into the unique workforce potential in your state.

2017 State Activity
At least ten states introduced legislation in 2017 promoting workforce, training and economic development. Some snapshots of these efforts include:

- California's A.B. 276, if enacted, requests the Regents of the University of California, the Chancellor's Office of California State University, the Chancellor's Office of the California Community Colleges and independent higher education institutions to complete a report that evaluates the state of cybersecurity education and training programs, and to determine the extent to which the state is meeting the workforce needs of the cybersecurity industry.

- California bill, A.B. 405, if enacted, authorizes the Board of Governors of the California Community Colleges to establish a statewide baccalaureate degree cybersecurity pilot program at not more than 10 community college districts.

- Nevada's S. B. 200, signed by the governor, requires that students be given the opportunity to receive instruction in computer education and technology and to apply credit from those courses toward math and science credits for graduation from high school and admission to college. It also requires the Advisory Council on Science, Technology, Engineering and Mathematics to appoint a subcommittee on computer science to make recommendations concerning instruction in computer education and technology.

For more on state cybersecurity activity click here. For questions on state legislative research, contact NCSL staff, Pam Greenberg.

Sponsor Highlight: CompTIA

The challenge of unfilled tech jobs has exposed an economic disconnect in the United States. Many Americans are worried about their jobs and future—especially if they don't have a college degree. Yet employers can't seem to find enough people to fill all the tech jobs needed. By 2024, there will be 1.8 million unfilled tech jobs, and a healthy number of those jobs likely will not require a four-year college degree, according to the annual Cyberstates report, a guide to national, state and metropolitan area tech sector and tech workforce analytics, which is produced by the non-profit trade association CompTIA.

As state legislators consider new economic policies for our fast-moving digital economy, it is important to understand the magnitude of the problem created by unfilled tech jobs and to have resources that can help find the best way to train, re-train and ensure Americans have the right skills to participate in tech jobs.

In addition to Cyberstates, CompTIA has invested considerable time and energy into researching and understanding the confidence gap that is affecting the tech sector, and they have a number of resources that may be of interest to policy makers.

- Explore the Interactive Tech Industry Map by State to see the average tech profession wages per state and the percentage of a state's workforce that's in tech. For example, Virginia and Oregon tech salary ranges average between $105-$153k annually. Massachusetts and Colorado have upwards of between 6 percent and 9 percent of their workforce in tech industries. The map even provides total tech sector jobs and tech occupations.

- Interested in knowing stats on the talent gap in your state as well as how you compare to national averages? Check out CompTIA'sCybersecurity Supply/Demand Heat Map. To help identify cybersecurity workforce supply and demand, CompTIA partnered with data analytics firm Burning Glass Technologies, through a NIST grant, to create Cyberseek.org, which covers all 50 states and major metropolitan areas.

- Industry recognized certifications are a crucial tool to validating an individual's specific technology skill sets IT workforce certifications. CompTIA also works extensively with federal and state governments to ensure that the government workforce is skilled and able to meet IT needs, and in particular, cybersecurity and information assurance.

For the Full CompTIA article, click on: The Tech Jobs Conundrum: Tools for Bridging the Confidence Gap.

Congress Championing New Careers and Employees in Technology (CHANCE in Tech) Act

NCSL is tracking the Championing New Careers and Employees in Technology (H.R. 3174, the CHANCE in TECH Act). The bill seeks to establish apprenticeships in the technology section by requiring the secretary of labor to enter into contracts with industry to develop and promote apprenticeship programs in tech. It would expand work already being undertaken by the private sector and promote employer hiring needs by assessing and training workers, and targeting skill sets most in need for current open tech jobs. The bill would also mitigate costs employers take on, by establishing a CHANCE in Tech Awards for 21st Century Schools grant program. Funding sources would be appropriated under DOL appropriations act of 2017 for the implementation of the National Apprenticeship Act. It also authorizes necessary funding for FY 2018 and subsequent years. For more information on federal cybersecurity initiatives, please contact Susan Parnas Frederick or Danielle Dean.

NTIA's Broadband USA Digital Training and Workforce Development Webinar

The National Telecommunications and Information Administration (NTIA) hosted a webinar on digital training and workforce development. Watch it online and here from speakers:

- Debra Ann Hansen, Director, Washington State University

- Jacob Martinez, Founder and Executive Director, Digital NEST

- Patrick Graham, Charlotte Works, President and CEO

Department of Homeland Security Launches the NICE Framework

In the wake of DHS's NIST cybersecurity framework, which is often cited as the fundamental resource for cyber risk assessment and enterprise management tool, DHS has announced its creation of the National Initiative for Cybersecurity Education Cybersecurity Workforce Framework (NICE Framework).

The NICE framework provides public and private organizations in a range of industries the ability to build a strong and capable cybersecurity workforce. With widespread adoption of this new version, organizations can continue to develop education, training tools, inventory, build cybersecurity positions, understand and close skills gaps, and develop jobs that attract and retain talent.

There is also a Cybersecurity Workforce Development Toolkit to help retain and advance the skills of cybersecurity staff. The toolkit, which is aligned to the NICE framework, helps organizations understand their cybersecurity workforce risks and take inventory of their current cybersecurity workforce. The Toolkit also includes templates to create cybersecurity career paths, and resources to recruit and retain top cybersecurity talent.

And should you need data, the Center for Cyber Safety and Education's Global Information Security Workforce Study, gives you facts and figures to help make your case on why cybersecurity workforce is an important issue and features targeted reports on government cybersecurity workforce and on millennials and women in cybersecurity.

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