Memorandum

To: Torence Powell, Associate Vice President, Instruction and Student Learning, Cosumnes River College College (CRC)

From: Aaron Wilcher, Director, Center of Excellence (COE), North-Far North region

Date: October 10, 2018

Re: Program endorsement request for cybersecurity

Background

CRC requested a program endorsement report related to a proposed cybersecurity program.

Findings

Workforce shortages for cybersecurity positions across a range of job categories, skillsets, and credentials and certifications in California are unmistakable.

The Centers of Excellence invested in a major statewide survey on cybersecurity labor market in partnership with the U.S. Department of Defense, Office of Economic Adjustment (OEA).[1] The report's findings presented stark evidence that the community colleges should invest significant resources in training and education in cybersecurity programs. The findings showed the following key takeaways:

- An inventory in the study of cyber security-related program completions shows a paltry number of awards in the Greater Sacramento region (100, 108).
- Statewide, between 2012 and 2016, the report identified between 4,200 and 4,600 annual postsecondary awards that are focused on or include cybersecurity curriculum, but said that most programs are not focused on cybersecurity (63, 109).
- The study projected that there would be a 12-month increase of more than 15,000 cybersecurity positions across the state (63).
- More than 60 percent of employers reported at least some difficulty recruiting and hiring qualified cybersecurity workers (63).
- Employers reported that the bachelor's degree was a minimum qualification for the nine job categories covered in the survey (64).

The North/Far North Center of Excellence conducted a cybersecurity-related program endorsement report for Lake Tahoe Community College and College of the Redwoods in March, 2018. The report found very high demand in related occupations, and similar low levels of award production. In the Sacramento region the report found,

- 8 percent projected occupational growth over the next five years, with 1,500 annual openings.
- Median wages of $30 per hour to $50 per hour.
- Bachelor's degrees are the dominant level of educational attainment in related occupations.

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[1] COE. *Cybersecurity Labor Market Analysis and Statewide Survey Results from California Employers and Postsecondary Institutions,* June, 2018.

Recommendations

- The COE recommends that Cosumnes River College move forward with program investments related to cybersecurity.
- CRC should focus on transfer pathways to bachelor's degree programs.

Please contact Aaron Wilcher, COE director, for further information at wilchea@losrios.edu or 916-563-3233.