

Application Score Sheet

Proposed Project: Pensacola State College, Cyber Security and IT Programs Expansion

Proposed Project/Program County: Escambia (#257)

Board of County Commission Support:

Total Projected Project Cost: \$42,973,919

Match Provided: \$30,975,00

Triumph Funds Requested: \$11,998,919 (27.9%)

Triumph Funds Recommended by Staff: \$11,998,919

Score: A

ROI: \$44.9 per dollar of Triumph cost

Economic Analysis, Impact and Score

Pensacola State College is requesting \$11,998,919 in Triumph funding to be used to make infrastructure improvements that will allow it to deliver 6760 CAPE list certificates (see revised Table 7 provided 12/8/21 by PSC Proposal p16) over an eight-year project. Subtracting out those certificates that PSC already pays for yields a total net new certificates of 6448, for a cost to Triumph of \$1,860.87 per certificate. The match committed by PSC and its partners is from State of Florida appropriations (\$27,300,000), PSC student capital improvement fees (\$3.3 million), Escambia County (\$250,000), Santa Rosa County (\$100,000), and the City of Pensacola (\$25,000). These dollar values mean that the proposed match \$30,975,000, so that Triumph provides 27.9 percent of the \$42,973,919 cost of the project.

PSC began offering the AS in Cybersecurity in Fall 2013, and the Bachelor of Applied Science (BAS) in Cybersecurity and Information Security in Fall 2016, and the BAS is Cybersecurity and Cyber Forensics in Fall 2018. Those programs are currently housed in the Baars Building, which currently houses the College's Cybersecurity Center that includes classroom/laboratory space, 216 student stations and seven faculty offices. The proposed Triumph award would fund construction of a 46,133sf facility that would house 13 classrooms/computer labs, 408 student stations, and 18 faculty offices.

The proposed certificate program is innovative insofar as the College will integrate certificate attainment into course requirements, ensuring both a relatively high attainment rate and an academic curriculum that will match industry needs in the short run and the longer run. Dr. Fuller notes that the alignment for workforce training, appropriate for employment in the career field (diverse and evolving) meets entry level through mid-level skills with a pathway to long term skills/applications. He notes further that the project is designed to be transformational in the Triumph service region, and that the project certificate outcomes and the personnel and external partner plans are well-defined and sequenced appropriately. Dr. Fuller finds that the proposed certificates provide a blend between workforce training for existing needs and training for new

skills, particularly in cybersecurity, with room to include responses to rapidly evolving skill needs of businesses.

At a reimbursement rate of \$1,861 per net new certification, the discounted total increase in household incomes expected from the program will be \$44.9 per dollar of Triumph cost, which is quite high relative to those programs in the Triumph education portfolio. For these reasons, staff rate this program “A” in terms of economic impact.

Project Summary (based on information provided by the applicant)

Pensacola State College (PSC) is requesting a \$11,998,919 Triumph grant to expand Cyber Security and IT Programs. In addition to student tuition waivers and lab equipment, funds will support the construction of the Phase II of the Baars Building West Wing, a 46,133sf classroom/computer lab facility. PSC has received \$15.3 million in state appropriations to date for Phase II.

This Cyber Security and IT proposal was created in response to identified needs in Workforce Board Region 1 (Escambia and Santa Rosa counties) caused by events such as Hurricanes Ivan, Dennis, and Sally, the economic recession, the Deepwater Horizon Oil Spill, and the COVID-19 pandemic. The project addresses the needs of employers from several occupations within the Information Technology and Cybersecurity industry sectors as identified by CareerSource Escarosa (Region 1 Workforce Board), FloridaWest Economic Development Alliance, Inc., Enterprise Florida and the Florida Department of Economic Opportunity (DEO).

The training programs included in this project – Information Technology and Cybersecurity – will enhance efforts to move under and unemployed individuals into high-wage jobs, providing opportunities for them to achieve economic self-sufficiency for themselves and their families while at the same time supporting multiple employers from several industry sectors.

One of the objectives of this project is to increase the diversity of individuals in cybersecurity and information technology programs, improving the rates in which they enter the workforce. A National Cyber Security Center report, Decrypting Diversity, details that over 85% of professionals currently working in cybersecurity are white, and 66% of the industry identify as being male. The study asserts that improving diversity in the industry can actually help to improve security because “it can bring different ways of thinking and different skills to the table.”

As part of the process establishing need, the following employers from diverse industries have indicated their support and the need for the College’s training programs in IT/Cybersecurity :

- Global Business Solutions, Inc. (GBSI)
- Integrated Surroundings
- NOF Technologies
- Ascension – Sacred Heart Hospital
- Antler, Inc.
- Navy Federal Credit Union
- Landrum HR Workforce Solutions

- Cox Gulf Coast

The Associate of Science in Cybersecurity was first offered at the College in the fall of 2013. The Bachelor of Applied Science (BAS) degree in Cybersecurity, Information Security, was first offered in the fall of 2016, and in the fall of 2018 the Bachelor of Applied Science (BAS) degree in Cybersecurity, Cyber Forensics, was first offered.

To increase capacity and meet the unmet job demands of local and regional employers, the College applied for and was successfully awarded a Governor's Job Growth Grant in 2018 which provided upgrades in technology for two cybersecurity classrooms.

Information Technology occupations, and Cybersecurity in particular, continue to be in high demand and the need for these professionals will only continue to increase. Talent gaps exist nationwide with more than 460,000 current cybersecurity job openings – with 21,893 of those job openings in Florida. In their report *Mitigating the Cybersecurity Skills Shortage*, Cisco has estimated that there are more than 1 million unfilled security jobs worldwide and asserts that security issues are now of great concern to both companies and consumers, so “Every company is a security company.” In their August 2, 2021 issue, ZDNet asserted that “The cybersecurity jobs crisis is getting worse” as employers struggle to hire (Palmer).

Enterprise Florida, Inc., asserts that the state of Florida “boasts the nation’s third largest tech industry.” According to FloridaWest Economic Development, Inc., the Pensacola area includes more than 250 IT companies in diverse and growing IT sectors which employ nearly 3,200 people. Information Technology and Cybersecurity are two of FloridaWest’s six highlighted industry clusters.

The proposed project is transformational in that it brings to the region a dramatic change in the numbers of individuals earning industry-recognized certifications in Information Technology/Cybersecurity.

The academic program aspects of the project will be guided by the Department Head, Dean, and Advisory Committees for each program. Advisory Committees are established for all PSC Associate of Science, College Credit Certificate, Vocational Certificate, and Applied Technology Diploma programs. A vocational education advisory committee is a group of community members from outside the field of education that advises vocational educators on the design, development, implementation, evaluation, maintenance, and revision of vocational education programs. Advisory members provide an informed viewpoint that is invaluable to the educational process.

Dual Enrollment Associate in Arts (DUAL-AA) students may take any college credit class that is not AS only with their high school counselor’s approval. Dual Enrollment Associate in Science (DUAL-AS) students can take college credit AS only classes with their high school counselor’s approval. PSC has both AS-only computer science and non-AS-only computer science courses available for these Dual Enrollment students.

College-level courses, including college credit and vocational credit, may be offered by the College for secondary students participating in the Dual Enrollment Program. Course offerings include courses shown on the Dual Enrollment Course-High School Subject Area Equivalency List. Eligible secondary students shall be permitted to enroll in postsecondary courses conducted during school hours, after school hours, and during summer semesters. Developmental education instruction, other forms of pre-collegiate instruction, and physical education skills-based courses shall be ineligible for inclusion in the dual enrollment program. Courses and programs may be added, revised, or deleted at any time, 1007.271(13), F.S.

Courses and Certificates – See attached.

Budget and Funding – See attached.

Per Dr. Bradley, Dean, and Dr. Walker, Department Head for Mathematics and Computer Science, courses below which end with a “C” are lab courses and include 2 hours of classroom time and 2 hours of lab time each week. Other classes are 3 hours of class time per week. Each semester is a total of 16 weeks – 15 weeks of instruction and one week for finals. Students will be prepared to take the industry certification exam at the end of each course.

Pensacola State College has not previously had a method to capture data on students who have earned industry certifications in the IT/Cybersecurity fields, unless students request reimbursement (through Perkins grant funds) for examination costs, so we are unable to provide baseline data. In essence, all certifications counted will be new. In recent years, 39 was the high number of industry certifications tracked through the reimbursement process. This project includes embedding industry certification exams within curriculum, allowing for all to be tracked and reported.

Table 7. Projected Industry-Recognized Certifications Awarded

Course #	Course Title/Certification	Average Annual Enrollment	Projected Certifications Earned Annually	Projected Certifications Earned over 8-Year Project	Instructional Hours
CCJ2940C	<i>Cyber Forensics Capstone</i> Certification: Mile2 Certified Digital Forensics Examiners, C)DFE	6	5	40	60
CGS1061C	<i>Introduction to Computers in Technology</i> Certification: IC3 Digital Literacy Global Standard 6 (GS6) and/or Microsoft Office Specialist (MOS)	255	193	1,544	60
CTS1300C	<i>Administering Microsoft Windows Workstation</i> *Certification in development	113	68	544	60
CTS1390C	<i>Install & Configure Windows Server</i> *Certification in development	118	83	664	60

Table 7. Projected Industry-Recognized Certifications Awarded

Course #	Course Title/Certification	Average Annual Enrollment	Projected Certifications Earned Annually	Projected Certifications Earned over 8-Year Project	Instructional Hours
CNT2210C	<i>Enterprise Networking, Security & Administration</i> Certification: Cisco CCNA (200-301)	2	2	16	60
CTS2120C	<i>Security+</i> Certification: CompTIA Security+ (SYO-601)	88	72	576	60
CTS2149	<i>Fundamentals of Project Management</i> Certification: CompTIA Project+ (PKO-004)	122	94	752	45
CET2614C	<i>Cisco CCNA Security</i> Certification: Cisco CCNA Security (IINS)	50	47	376	60
CNT3421	<i>Securing the Cloud</i> Certification: CompTIA Cloud+ (CVO-002)	24	23	184	45
CNT3411	<i>Security Operations</i> Certification: Cisco CyberOps (200-201)	20	18	144	45
CIS4385	<i>Computer Forensics & Investigations</i> Certification: Mile2 Certified Digital Forensics Examiner, C)DFE	32	29	232	45
CIS3361	<i>Security Testing & Auditing</i>	31	27	216	45

Table 7. Projected Industry-Recognized Certifications Awarded

Course #	Course Title/Certification	Average Annual Enrollment	Projected Certifications Earned Annually	Projected Certifications Earned over 8-Year Project	Instructional Hours
	Certification: TestOut Ethical Hacker Pro and/or EC Council CEIH Exam				
CGS3812	<i>Business Continuity & Disaster Recovery</i> Certification: Mile2 Certified Disaster Recovery Engineer (C)DRE	32	28	224	45
CIS4357	<i>Advanced Security Practitioner</i> Certification: CompTIA CASP (CAS-004)	30	26	208	45
ISM4314	<i>Project & Change Management</i> Certification: Project Management Institute's Certified Associate in Project Management, CAPM	28	24	192	45
CIS4596	<i>Cybersecurity Capstone</i> Certification: Mile2 Certified Information Systems Security Officer, (C)ISSO	21	19	152	45
CET1178C	<i>PC Hardware</i>				60
CET1179C	<i>PC Operating Systems</i> Certification, after completion of both: CompTIA A+ (220-1001 and 220-1002)	35	31	248	60
CET1588	<i>Network+</i>	62	38	304	45

Table 7. Projected Industry-Recognized Certifications Awarded

Course #	Course Title/Certification	Average Annual Enrollment	Projected Certifications Earned Annually	Projected Certifications Earned over 8-Year Project	Instructional Hours
	Certification: CompTIA Network+ (N10-007)				
CTS2145C	<i>Cloud Essentials</i> Certification: CompTIA Cloud Essentials (CLO-002)	2	2	16	60
CIS3122C	<i>Cybersecurity Analyst (first offered in Fall 2021)</i> Certification: CompTIA CySA+ (CSO-002)	20	16	128	60
PROJECTED TOTAL INDUSTRY-RECOGNIZED CERTIFICATIONS				6,760	N/A

Exhibit A

#257 - Cyber Security/IT Programs Expansion

Budget

Estimated construction start date if applicable

1-Mar-22

Estimated education component start date if applicable

Currently underway in temporary facilities

	Category #1- Salaries & Fringe	Category #2 - Construction	Category #3- Supplies, Cert & Student Fee Waivers, Recruiting, Technology	Category #4- Furniture, Equipment, Fixtures	Total
Please change year # to actual year					
Project Total					
Program Start-Up 2020-2021	-	15,675,000.00	-	-	15,675,000.00
2022	127,204.00	24,475,000.00	195,000.00	-	24,797,204.00
2023	127,204.00	85,407.00	452,900.00	1,500,000.00	2,165,511.00
2024	127,204.00	-	186,500.00	-	313,704.00
2025	-	-	-	-	-
2026	-	-	-	-	-
2027	-	-	-	-	-
2028	-	-	-	-	-
2029	-	-	22,500.00	-	22,500.00
Project Total	381,612.00	40,235,407.00	856,900.00	1,500,000.00	42,973,919.00

Triumph

Program Start-Up 2020-2021 (Phase I)

2022	127,204.00	9,175,000.00	195,000.00	-	9,497,204.00
2023	127,204.00	85,407.00	452,900.00	1,500,000.00	2,165,511.00
2024	127,204.00	-	186,500.00	-	313,704.00
2025	-	-	-	-	-
2026	-	-	-	-	-
2027	-	-	-	-	-
2028	-	-	-	-	-
2029	-	-	22,500.00	-	22,500.00
Triumph Total	381,612.00	9,260,407.00	856,900.00	1,500,000.00	11,998,919.00

Grantee

Program Start-Up 2020-2021 (Phase I)

2022	-	3,300,000.00	-	-	-
2023	-	-	-	-	-
2024	-	-	-	-	-
2025	-	-	-	-	-
2026	-	-	-	-	-
2027	-	-	-	-	-
2028	-	-	-	-	-
2029	-	-	-	-	-
Grantee Total	-	3,300,000.00	-	-	3,300,000.00

Match Source 1 - State Appropriations

Program Start-Up 2020-2021 (Phase I)

2022	-	12,000,000.00	-	-	12,000,000.00
2023	-	15,300,000.00	-	-	15,300,000.00
2024	-	-	-	-	-
2025	-	-	-	-	-
2026	-	-	-	-	-
2027	-	-	-	-	-
2028	-	-	-	-	-
2029	-	-	-	-	-
Match Source 1 Total	-	27,300,000.00	-	-	27,300,000.00

Match Source 2 - City of Pensacola

Program Start-Up 2020-2021 (Phase I)

2022	-	\$25,000	-	-	\$25,000
2023	-	-	-	-	-
2024	-	-	-	-	-
2025	-	-	-	-	-
2026	-	-	-	-	-
2027	-	-	-	-	-
2028	-	-	-	-	-
2029	-	-	-	-	-

Match Source 2 Total

-	25,000.00	-	-	25,000.00
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Match Source 3 - Santa Rosa County

Program Start-Up 2020-2021 (Phase I)
2022
2023
2024
2025
2026
2027
2028
2029

100,000.00

100,000.00

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Match Source 3 Total

-	100,000.00	-	-	100,000.00
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Match Source 4 - Escambia County

Program Start-Up 2020-2021 (Phase I)
2022
2023
2024
2025
2026
2027
2028
2029

250,000.00

250,000.00

Match Source 4 Total

-	250,000.00	-	-	250,000.00
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