

Application Score Sheet

Proposed Project: Diversifying the Economy vis Sector Workforce Development, School Board of Escambia County (#5)

Proposed Project/Program County: Escambia County

Board of County Commission Support: Yes

Total Projected Project Cost: \$7,996,419.14

Match Provided: \$4,983,710.00

Triumph Funds Requested: \$3,012,709.14 (37.6%)

Triumph Funds Recommended:

Score: A

Triumph Board Approval: Yes/No

Date:

Economic Advisor Review

The Escambia County School District (ECSD) Proposal describes a set of CTE initiatives and expansions in several programs to be offered at ECSD and Pensacola State College. The Triumph request of \$3.0 million represents 38 percent of total project cost.

With full implementation expected by the 2020-21 school year, ECSD expects to have 1,015 students enrolled. By 2023-24 that number is expected to grow to 1,145. Because of the substantial size of the ECSD in terms of enrollment, assuming normal completion rates, the program will deliver substantial numbers of trained graduates to the work force or to articulating continuation programs both in the near term and beyond. The cost per completer to Triumph is expected to be about \$450.00 per over a three-year period.

Because the ECSD is large and the program will reach a large number of students in subject areas expected to see good job growth, and because the cost per student is low, it is reasonable to expect that the benefit/cost ratio for the program will be exceptionally high. Substantial increases in wages can be expected for program completers relative to wages associated with a standard high school degree. Assuming relatively conservative average annual increments to completers, and modest increments to completion rates, the program will likely drive substantial increases in net new wages over a 10-year window. Further, the program is projected to be self-sustaining based on the per-full time equivalent (FTE) increment to funding provided by the state.

For these reasons, staff rate this program “A” in terms of economic impact.

Project Summary *based on information provided by applicant*

The School Board of Escambia County is requesting \$3,012,709.14 from Triumph Gulf Coast, Inc. to transform the region through workforce talent development in targeted, economically

diverse sectors including IT/Cybersecurity, Advanced Manufacturing, and Aviation/Aerospace. These workforce development sectors are relatively new to Escambia School District, with the first of these academies (Cybersecurity) being implemented in the 2014-15 school year.

The future workforce talent pipeline starts in elementary school by exposing students to Science, Technology, Engineering and Mathematics (STEM). This project proposes to implement wide-scale integration of computer science and robotics at the elementary school level, then reinforce these basic innovation and automation skills sets through high school and beyond through sector-workforce development strategies in cybersecurity, advanced manufacturing and aviation.

The Escambia School District has placed a priority on responding to the skills needed by current and prospective employers. Educators work with the Florida West Economic Development Alliance, CareerSource Escarosa, Pensacola State College, the University of West Florida and many business advisory council members to prepare students for the workforce in high-skill, high-wage, high-demand fields.

The greatest investment requested by this proposal is professional development for the K-5 STEM Initiative. Elementary teachers' computer science and robotics skills must be developed to successfully lead computer science and robotics instructional activities. The District is also committed to provide an industry-certified workforce pipeline through its high school career academy model with articulation to postsecondary programs at Pensacola State College and the University of West Florida.

In addition to the significant investment in STEM teacher training at the K-5 level, the District and Pensacola State College propose to use Triumph Funds to enhance programs in target sectors including:

Cybersecurity

The proposal aims to double the number of high school Cybersecurity Academy students by creating a second and third cybersecurity academy to meet occupational demands. The academies will feed graduates into postsecondary training opportunities at George Stone Technical Center, Pensacola State College, and the University of West Florida. Cybersecurity has been identified as a targeted sector in Northwest Florida. The Northwest Florida Forward's Technical Report states that the Pensacola area has a high demand for cybersecurity certificate holders and a limited number with needed certifications.

Students will earn IT certifications such as CompTIA Security +. This certification meets stringent government standards, is approved by the U.S. Department of Defense, and is globally recognized. CompTIA Security + is the first step in the IT security career pathway. IT/Cybersecurity occupations in the region are projected to increase significantly over the next 10 years (Escambia County: +13%; Santa Rosa County: +18%).

Northwest Florida Economic Development Alliance's "Live Coastal. Work Cyber." Cybersecurity Strategic Plan Report (2017) identifies "Build a thriving cybersecurity workforce" as its #1 goal. To assist with increasing a cyber-skilled workforce, Escambia School District has invested heavily in equipment, teacher training, and in support of co-curricular activities

including CyberPatriot—the National Youth Cyber Education Program; and CyberThon, the Armed Forces Communications and Electronics Association (AFCEA) Cybersecurity Workforce Development Program. Additionally, Pensacola, under the leadership of Pensacola State College, was recently named a White House TechHire Community.

An increase in cybersecurity students will have a direct impact on the shortage of cybersecurity professionals. In Florida alone, more than 15,000 positions go unfilled every year. Depending on the level of experience and education, the entry level salary of a cybersecurity system analyst could be between \$54,000 to \$114,000.

High School Advanced Manufacturing and Maintenance

Through Escambia School District's Manufacturing Advisory Council, educators have learned the importance of students' understanding not only the theory and operation of manufacturing equipment, but, more importantly, repairing and trouble-shooting the machines that are highly automated. Through the Manufacturing Skills Standards, students participate in managing the machines and learn that they will likely be the technician who fixes the automated machine being used in manufacturing.

According to a 2017 survey by Boy Scouts of America, only 3% of middle and high school students expressed interest in pursuing careers related to the skilled trades--a field experiencing labor shortages." The District seeks to change this culture by creating "immersive" environments with the look and feel of clean production facilities equipped with robots and computer-driven equipment, thus increasing hands-on training and activities, more directly involving business and industry, providing subsidized internships, thus making the A&P Academies exciting, engaging programs that lead to college and universities and high-skill/high-wage careers.

In 2015, the Manufacturing Institute's third Skills Gap Study indicated that nearly 3.5 million manufacturing jobs nationwide would likely need to be filled between 2015 – 2025; the identified skills gap is expected to result in 2 million of those jobs being unfilled. The Northwest Florida Manufacturing Council addresses the common interests of the region's manufacturers, small and large, and they continually express a need to fill the skills gap in manufacturing caused by exiting baby boomers. It is predicted that over the next 10 years, there will be a double digit increase in the need for machinist and team assemblers (Escambia County: +10%; Santa Rosa County: +14%).

Aviation Maintenance and Training Programs

In April 2017, Oliver Wyman, a global management consulting firm, predicted that a shortage of aviation mechanics within the next decade, mainly due to the aging baby boomer workforce, will threaten the projected expansion and modernization of airline fleets around the world. The FAA 147 Airframe and Powerplant Mechanic certification earned by students in the District's aviation maintenance and training programs are globally recognized and required of aviation mechanics working on any commercial aircraft flown within United States airspace.

The aviation maintenance industry is expanding along the Gulf Coast with new additions like Airbus in Mobile, AL and VT Mobile Aerospace's expansion (VT MAE) to a new facility at Pensacola International Airport. Aviation maintenance is a high- skill and high-wage field that

will provide project participants with a relatively expedient pathway to a globally marketable employment status.

The George Stone Technical Center Aviation Maintenance program was recently awarded \$200,000 in funding for an aviation maintenance training building through a sub award from Pensacola State College's Department of Economic Opportunity Job Growth Grant. The program culminates in the FAA's "A&P" Certification, including providing students with the ability to test for these certifications locally by identifying a "DME" or Designated Mechanic Examiner. This is a competitive advantage for the region that eliminates the need for students to travel two hours or more for industry certification testing.

A Triumph Grant will provide students with the ability to perform complete airplane maintenance training projects on aircraft from "nose to tail" and by providing for a "hush house" enabling GSTC's Aviation Maintenance Program to safely house two large engines that will allow students to observe and monitor running engines as part of their required training.

Triumph funds are requested for full completion of the aviation maintenance training building and to expand the facility to include engine testing capabilities in a hush house. The addition of a hush house to the GSTC Aviation Maintenance Program will bring the program to a level that enables it to fully prepare graduates to earn the coveted A&P Certification through engine testing in a safe, realistic environment.

Triumph funds will also be used to enhance Aviation Training programs at the high school level.

Pensacola State College Programs

Funding from the recent Department of Economic Opportunity Job Growth Grant Fund is providing updates to outdated technology in the IT/Cybersecurity programs. Triumph funding would allow PSC to increase its capacity to meet identified needs of employers for skilled IT professionals while growing the local IT economic sector. Students will earn IT certifications such as CompTIA Security+ which meets stringent government standards, is approved by the U.S. Department of Defense and is globally recognized. CompTIA Security+ is the first step in the IT security career pathway.

Pensacola State College also proposes to offer Middle School STEM Summer Camp to provide 7th-grade Escambia School District students a broad exploration of STEM topics. In addition to Cybersecurity, students will have an opportunity, through structured activities, to experience disciplines such as Physics, Geology, Chemistry, Astronomy, Meteorology, Seismology, Environmental Science, Astronomy, and Anatomy. Students will be selected/referred for participation by ECSD staff.

Additionally, PSC proposes to expand its Commercial Driver Training program. In March 2017, the American Trucking Association cited approximately 48,000 unfilled trucker positions nationwide and predicts that the freight driver shortage could grow to more than 170,000 vacancies by 2025. In Florida alone, about 70% of all freight and/or commerce is transported via trucks.

According to the Florida Economic Opportunity, Bureau of Labor Market Statistics (2016-2024 projections), the need for Heavy and Tractor-Trailer Truck Drivers in Escambia and Santa Rosa counties will grow by 7.4% resulting in 334 job openings. In addition, the demand for other driving occupations requiring a Commercial Driver’s License (CDL), such as School or Special Client bus drivers, will increase 7.2% resulting in 757 openings in Escambia and Santa Rosa counties. CareerSource Escarosa reports that they are receiving continuous requests from employers seeking CDL Licensed drivers, and these job orders are going unfilled due to a lack of qualified candidates. That local need is projected to increase over the next 10 years (Escambia County: 3%; Santa Rosa County: 19%)

Often thought of as a “terminal certification” program, Commercial Driver Training will be marketed as a way for program completers who are working as a commercial driver to pay for college tuition and take advantage of “down time” to study for a career pathway that includes college and university programs in supply chain management and logistics

The District anticipates the following enrollment and completers numbers for the programs funded through Triumph:

Escambia School District/Pensacola State College Targeted Academy/Program Enrollment Trends & Projections									
Academy/Program	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Aviation Maintenance (BTWHS)	46	32	29	50	90	125	150	150	150
Automation & Production (NVHS) (Advanced Manufacturing)	87	89	74	90	100	125	125	125	125
Automation & Production (PHS) (Advanced Manufacturing)	25	30	33	45	90	125	125	125	125
Cybersecurity (PFHS& 2 new academies)	80	73	81	110	205	265	265	265	265
Aviation Maintenance (GSTC)	12	26	45	60	75	75	100	125	150
Information Technology/Cybersecurity (PSC)	50	100	185	205	225	250	250	250	250
Commercial Truck Driver (PSC)	N/A	N/A	20	20	20	50	50	60	80
TOTAL ENROLLMENT	300	350	467	580	805	1,015	1,065	1,100	1,145

At the high school and postsecondary levels, every targeted career pathway training program included in this project prepares students for and leads to an industry certification. A key component of this act is a list of state-approved industry certifications that are critical to Florida’s employers. Specific certification goals for this project are as follows:

Career Pathway Training Program	Industry Certification
High School Cybersecurity	<ul style="list-style-type: none"> ● Microsoft Office Specialist ● Security Fundamentals ● Networking Fundamentals ● CompTIA A+ Hardware ● CompTIA A+ Software ● CompTIA Linux+ ● CompTIA Security+ ● CompTIA Cybersecurity Analyst ● MTA Server 2012 ● EC-Council Certified Ethical Hacker ● Cyber Analytic Tools
High School Advanced Manufacturing	Manufacturing Skill Standards Council-Certified Production Technician (MSSC-CPT)
High School Aviation Maintenance	Aerospace/Aircraft Assembly Technician Certification
Postsecondary Aviation Maintenance	A & P Mechanic (General Aviation, Airframe Mechanic, PowerPlant Mechanic)
PSC Commercial driving	Commercial Drivers License (CDL)
PSC Cybersecurity	IC3 Computer Literacy and Microsoft Office Specialist CompTIA Project+ Microsoft 70-680/70-688 Microsoft 70-410 Cisco CCENT & Cisco CCNA CompTIA Security+ Cisco CCNA Security (IINS)

To measure the outcomes of the project, the District and PSC will use the Focus Student Information System and Student Records System, respectively, to manage all aspects of a student’s information—attendance, grades, demographics, parent/guardian information, industry certification history, teacher and student schedules, etc. Enrollment in courses and industry certification attainments are available for review at any time. Yearly enrollment data will be captured and saved for future review. Articulation/matriculation will be mined via relationships between the secondary and postsecondary institutions. A Triumph Gulf Coast, Inc. Annual Project Evaluation Report will be submitted to the Triumph Program Administrator at the end of each year.

Funding and Budget (as provided by the applicant)

5. Please provide a Project/Program Budget. Include all applicable costs and other funding sources available to support the proposal.

	Triumph Gulf Coast Request	DEO Job Growth Grant	District In Kind	PSC In Kind	Total
Equipment (over \$1,000)	\$ 837,763.48	\$ 530,750.00			\$ 1,368,513.48
Equipment (under \$1,000)	80,792.40				\$ 80,792.40
Salary, Extra Pay & Fringe Benefits ECSD Program Faculty PSC Program Faculty	648,542.00	186,779.00	300,000.00	1,849,975.00	\$ 2,985,296.00
Professional Services	393,774.40				\$ 393,774.40
Facilities GSTC Aviation Maintenance Training Facility (balance of \$75,000) ECSD (classroom/lab; sq ft*\$4/year) includes maintenance and utilities PSC (classroom/lab; sq ft*\$4/year) includes maintenance and utilities	175,000.00	233,497.00	125,360.00	357,365.00	\$ 891,222.00
Teacher Training/Tuition/Travel PSC CTE Educational Scholarships CareerSource -WIOA Individual Training Accounts (100 * \$3,500)	444,022.36	108,400.00		365,000.00	\$ 917,422.36
Instructional Materials	120,000.00	545,801.00		100,000.00	\$ 765,801.00
Supplies STEM Materials-210 sets Science Olympiad supplies Aviation Maintenance handtools Manufacturing consumables STEM Summer Camp materials	171,482.50				\$ 171,482.50
Other Transportation for student field trips Industry certification vouchers Summer camp transportation, food, etc.	141,332.00	255,283.00		25,500.00	\$ 422,115.00
Total Project Costs	\$ 3,012,709.14	\$ 1,860,510.00	\$ 425,360.00	\$ 2,697,840.00	\$ 7,996,419.14

Total Project Costs: \$7,996,419.14

B. Other Project Funding Sources:

	DEO Job Growth Grant	District In Kind	PSC In Kind	Total
Equipment (over \$1,000)	\$ 530,750.00			\$ 530,750.00
Equipment (under \$1,000)				\$ -
Salary, Extra Pay & Fringe Benefits ECSD Program Faculty PSC Program Faculty	186,779.00	300,000.00	1,849,975.00	\$ 2,336,754.00
Professional Services				\$ -
Facilities GSTC Aviation Maintenance Training Facility (balance of \$75,000) ECSD (classroom/lab; sq ft*\$4/year) includes maintenance and utilities PSC (classroom/lab; sq ft*\$4/year) includes maintenance and utilities	233,497.00	125,360.00	357,365.00	\$ 716,222.00
Teacher Training/Tuition/Travel PSC CTE Educational Scholarships CareerSource -WIOA Individual Training Accounts (100 * \$3,500)	108,400.00		365,000.00	\$ 473,400.00
Instructional Materials	545,801.00		100,000.00	\$ 645,801.00
Supplies STEM Materials-210 sets Science Olympiad supplies Aviation Maintenance handtools Manufacturing consumables STEM Summer Camp materials				\$ -
Other Transportation for student field trips Industry certification vouchers Summer camp transportation, food, etc.	255,283.00		25,500.00	\$ 280,783.00
Total Project Costs	\$ 1,860,510.00	\$ 425,360.00	\$ 2,697,840.00	\$ 4,983,710.00

Total Other Funding \$4,983,710.00

Total Amount Requested: \$3,012,709.14

The Triumph dollars would fund \$450.00 per completer or \$146.25 per program participant when the field trip participants are included) based on a total of 20,600 participants during the three-year project period. Participants per component are as follows:

Secondary/Postsecondary Training Student Participants	5,890
STEM/Computer Science Elementary Training Teacher Participants	1,750
4th& 7th Grade STEM & Career Academy Student Field Trip Participants	12,500
PSC Summer Camps Student Participants	210
Best Robotics Student Participants	250
TOTAL PARTICIPANTS	20,600

Letters of Support

- Escambia County Board of County Commissioners
- Pensacola State College
- Florida West Economic Development Alliance
- CareerSource Escarosa
- Greater Pensacola Chamber
- VT MAE
- GBSI (Global Business Solutions, Inc.)