#### TRIUMPH GULF COAST, INC. PRE-APPLICATION FORM

The ESCAMBIA COUNTY BOARD OF COUNTY COMMISSIONERS approved the Escambia County School Board Workforce Development Program as one of five priority projects for Triumph first round submittal. The Escambia County BCC will provide a letter of support pending Triumph pre-application review and development of a full application.

#### APPLICANT INFORMATION:

Name of Individual/Entity/Organi	ization: The School Board	d of Escambia	County (SBEC)

Brief Description of Background of Individual/Entity/Organization: The SBEC enrolls approximately 19,154 elementary, 8,177 middle, and 10,718 high school students in addition to 500 postsecondary students at George Stone Technical Center. Committed to preparing students for college and careers, SBEC seeks to expand computer science at the elementary levels and transform existing career academies in regionally-target sectors to premiere high school training academies that lead into postsecondary training or directly into careers.

#### **Contact Information:**

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Names of co-applicants, partners or other entities, organizations that will have a role in the proposed project or program: Business Advisory Council members for aviation maintenance include representatives from Pensacola Airport, VT MAE, Airbus Military, Aero-Mark, Segers Aero Corp; for advanced manufacturing members include Eastman Chemical, Custom Control Solutions, Ascend Performance Materials, ExxonMobil, General Electric, Armstrong World Industries, Southern Company; for cybersecurity, AppRiver, Global Business Solutions, Gulf Power Company, Navy Federal, and TECHSOFT. Education partners include Pensacola State College and the University of West Florida. CareerSource Escarosa and Florida West Economic Development Alliance are collaborative partners as well.

# **REQUIRED EXECUTIVE SUMMARY:**

In a maximum of three (3) pages, please describe the proposed project or program, including (i) the amount of funds being sought from Triumph Gulf Coast; (ii) the amount and identity of other sources of funds for the proposed project or program; (iii) the location of the project or program; (iv) summary description of the proposed program, including how the program will be transformational and promote economic recovery, diversification, and enhancement of the disproportionately affected counties, and (v) a summary timeline for the proposed project or program.

#### **IMPORTANT NOTICE**

This pre-application process will <u>not</u> result in an award of funding by Triumph Gulf Coast. Rather, this process is designed to facilitate submission of ideas for potential projects or programs before the Applicant expends time and/or resources to complete a full Application. All Applicants for funding are required to complete an Application, which will be scored, and then considered for award in the discretion of Triumph Gulf Coast Board.

#### **EXECUTIVE SUMMARY: Diversifying the Economy via Sector Workforce Development**

The ESCAMBIA COUNTY BOARD OF COUNTY COMMISSIONERS approved the Escambia County School Board Workforce Development Program as one of five priority projects for Triumph first round submittal. The Escambia County BCC will provide a letter of support pending Triumph pre-application review and development of a full application.

Developing talent is a priority in economic development, and it starts in elementary school by exposing students to and developing their love for Science, Technology, Engineering and Mathematics (STEM). That interest is encouraged in middle school and through explicit, targeted recruitment, high school career academies begin the formal job preparation pipeline that leads students to further postsecondary education and/or a job immediately following high school graduation.

In Escambia County, our public school system has moved fast and hard to respond to the skills needed by current and prospective employers. With 48 high school career academies and the George Stone Technical Center, educators work with business partners to prepare students for the workforce in high-skill, high-wage, high demand fields.

This proposal represents a Workforce Development initiative that aligns with the "Northwest Florida Forward: A regional strategy for economic transformation" plan taking into consideration the region's economic development challenges and opportunities and identifying guiding principles that lead to economic vitality.

# **Amount of Funds Being Sought and Other Sources**

	Triumph Amount	Other Sources
Description	Requested	Committed
K-5 STEM Initiative		\$350,000
	\$350,000	In-kind, District
Second Cybersecurity Academy		\$100,000
	\$235,000	In-kind District
Northview High School and Pensacola High School		\$68,000
"Advanced Manufacturing" Academies'	\$641,700	In-kind, District
transformation		
Booker T. Washington High School Aviation		\$68,000
Maintenance Academy transformation	\$250,000	In-kind, District
GSTC Aviation Maintenance hangar, equipment,		\$250,000
and fund student A & P Mechanic certification	\$300,000	In-kindn District
vouchers for George Stone Technical Center's		
Airframe and Powerplant Mechanic Programs		
		\$836,000
TOTAL	\$1,776,700	In-kind, District

### **Locations of the Project**

Project	Location
K-5 STEM Initiative	Elementary schools aligning as feeders with project's
	targeted high schools; eventually all elementary schools
Cybersecurity Academy	Possibly Escambia High School or Pensacola High School
Advanced Manufacturing Academies	Pensacola High School & Northview High School
Aviation Maintenance Academy	BT Washington High School
Aviation Maintenance Hangar	George Stone Technical Center

# **Summary Description of Proposed Project**

This proposal aligns with the Northwest Florida Forward Strategic plan to create "a diverse and vibrant regional economy where Northwest Florida residents and businesses have a wealth of opportunities" by transforming elementary STEM programs, targeted-sector high school career academies, and George Stone Technical Center's Aviation Maintenance Programs (Airframe and Powerplant Mechanics).

Escambia County School District's K-5 STEM initiative is being established in response to the Northwest Florida Forward; A Regional Strategy for Economic Transformation has identified that STEM programs in the K-5 classroom will help in building long-term talent supply in our region. According to the President's Council of Advisors on Science and Technology, "economic projections indicate a need for approximately 1 million more STEM professionals than the U.S. will produce at the current rate over the next decade if the country is to retain its historical preeminence in science and technology." The school district serves students from a wide variety of socio-economic backgrounds with the goal being to promote economic growth for all Escambia County elementary students regardless of their socio-economic background. To support Kindergarten-5th grade students, as they begin their journey into STEM, the following opportunities will be given to teachers and students to create sustainable change:

1) Participation in the FIRST LEGO League Jr. curriculum that encompasses robotics and coding to solve real world tasks that develop critical and computational skills. 2) Teacher professional development on the integration of STEM and literacy within standard-based instruction to create STEM-based lessons. 3) District-wide participation in the Escambia County School District's Elementary Science Olympiad that includes STEM activities such as barge building, robotics courses, etc., and allow state level participation for the Elementary Science Olympiad district winners. 5) Teacher computer science professional development focusing on coding and computational thinking activities that embed the recently adopted Florida Computer science standards and curriculum standards in Math and Science. 6) Implement comprehensive Lego Mindstorm and other robots that students will learn to build and code. 7) Field trips to local businesses that utilize robotics, manufacturing, and STEM. This initiative will increase students' interest in and passion for STEM subjects including Cybersecurity, Advanced Manufacturing, and Aviation Maintenance.

It is predicted that by 2022, there will be a shortage of almost 2 million cybersecurity professionals to fill workplace positions. Northwest Florida Economic Development Alliance's "Live Coastal. Work Cyber." Cybersecurity Strategic Plan Report identifies "Build a thriving cybersecurity workforce" as it's #1 goal. To assist with increasing a cyber-skilled workforce, Escambia County School District established a Cybersecurity Career Academy at Pine Forest High School in school year 2014-15. Students in this academy are learning vital skills needed to be prepared and ready for employment in the cyber jobs. The district has invested heavily in equipment, environment, and teacher training. Enrollment is strong. Adding an additional Cybersecurity Academy at another Escambia County School District high school will provide the opportunity to prepare additional students to articulate to the multiple postsecondary training opportunities at George Stone Technical Center, Pensacola State College, and the University of West Florida.

Escambia County School District's two Advanced Manufacturing Academies, located at Pensacola High School and Northview High School, were established in response to the Northwest Florida Manufacturing Council's identified demand for workers within the regional, targeted industry cluster of advanced manufacturing. Our barrier to success is that advanced manufacturing is not currently a desirable academy (as manifested by very low enrollment, especially at Pensacola High) to parents and students because of cultural connotations related to "factory" labor. We seek to change that culture by increasing hands-on training equipment and activities, more directly involving business and industry, and making the A & P Academies exciting, engaging programs that lead to college and/or high skill/high wage careers. Equipment trainers have been identified by ECSD and NWFL Manufacturers' Council as necessary to strengthen Escambia County's workforce education and training programs. Pensacola High School's Advanced Manufacturing Academy serves students in high-poverty neighborhoods, and Northview High School's Advanced Manufacturing Academy serves students in the rural part of the Escambia County. In addition to addressing the underserved populations with respect to income and location, the female gender also is underrepresented in the advanced manufacturing academies.

Escambia County School District's Aviation Maintenance Academy, located at Booker T. Washington High School (BTWHS), was established in response to the increasing demand for workers within the regional, targeted industry cluster of aviation maintenance. The aviation maintenance industry is expanding along the Gulf Coast with new additions like Airbus in Mobile, AL and VT Mobile Aerospace's expansion (VTMAE) to a new facility at Pensacola International Airport. The goal of the Aviation Maintenance Academy is to train students in order to develop a long-term talent supply for Escambia County businesses--current and prospective. As with advanced manufacturing, aviation maintenance, has proven to be a low-interest academy (as indicated by low enrollment) to parents and students because of cultural connotations related to "maintenance" labor. Current academy enrollment must increase. We seek to change that culture by increasing hands-on training equipment and activities, more directly involving business and industry, and making the Aviation Maintenance Academy an exciting, engaging program that lead to college and/or high skill/high wage careers. BTWHS Aviation Maintenance Academy serves students in high-poverty neighborhoods. In addition to addressing the underserved populations with respect to income and location, the female gender also is underrepresented in the aviation maintenance academy.

As a factor in attracting the VTMAE aviation maintenance facility to the Pensacola Airport, GSTC began an Aviation Maintenance training program in 2015, investing nearly \$1 million in facility renovations, equipment acquisitions, etc. The Airframe Mechanics and Power Plant Mechanics Programs are housed in three classrooms and two shop facilities for the three components of the program (General, Airframe, and Power Plant). The program has the potential of enrolling 75 students annually in the two-year program that culminates in an "A & P" Certification. Adding a hangar would provide students with the ability to perform complete airplane maintenance training projects, "nose to tail." In addition, current costs for obtaining FAA Airframe & Powerplant vouchers total nearly \$1,000 per student and the cost is a barrier to students being able to obtain these credentials. This proposal represents a request for funding to assist in constructing a hangar and subsidizing the A & P testing vouchers.

## **Summary Timeline**

Component	Year 1	Year 2	Year 3
K-5 STEM	Jr. Lego League	Jr. Lego League	Jr. Lego League
	Science Olympiad	Science Olympiad	Science Olympiad
	Teacher Training	Teacher Training	Teacher Training
New High School	Purchase	Install and implement	Utilize ACCELETRAIN
Cybersecurity	equipment/curriculum	ACCELETRAIN	Students achieve industry
Academy	Students achieve industry	Students achieve industry	certifications
	certifications	certifications	Develop student internships
	Develop student internships	Develop student internships	
High School	Purchase	Students achieve industry	Students achieve industry
Advanced	equipment/curriculum	certifications	certifications
Manufacturing	Students achieve industry	Develop student internships	Develop student internships
Career Academies'	certifications		
Transformation	Develop student internships		
High School	Purchase	Students achieve industry	Students achieve industry
Aviation	equipment/curriculum	certifications	certifications
Maintenance	Students achieve industry	Develop student internships	Develop student internships
Career Academy	certifications		
Transformation	Develop student internships		
GSTC Aviation	Construct Hangar	Purchase industry	Purchase industry
Maintenance	Purchase equipment	certification vouchers	certification vouchers
	Purchase industry	Students achieve industry	Students achieve industry
	certification vouchers	certifications	certifications
	Students achieve industry		
	certifications		