The University of West Florida Project 10[x]

Application for Funds

March 7, 2018 Update: June 5, 2018 Update: August 24, 2018 Update: July 31, 2019



Triumph Gulf Coast, Inc. Trust Fund Application for Funds

Applicant Information

Name of Individual (if applying in individual capacity): <u>N/A</u>

Name of Entity/Organization: University of West Florida

Background of Applicant Individual/Entity/Organization: Based in Pensacola with additional locations in the region, UWF is home to five academic colleges, offering a variety of bachelor's and master's degree programs, as well as specialist degrees and a doctorate in education. With a student population of nearly 13,000, UWF is committed to a close-knit academic experience and is consistently named a top "military friendly" University, this year as number five in the nation. UWF is a driver of economic impact and supports 11,592 jobs in the region that are directly or indirectly related to the university with local incomes and wages at nearly \$1.2 billion annually across the regional economy.

Federal Employer Identification Number: 59-2976783

Contact Information:

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|------------------------------|--------------------------|
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Identify any co-applicants, partners, or other entities or organizations that will have a role in the proposed project or program and such partners proposed roles.

The Following Organizations have provided written letters in support of the UWF project:

Air Force Research Laboratory (AFRL) Munitions Directorate * American Elite Molding (AEM) * AppRiver * Baptist Health Care Corporation * Blavatnik Interdisciplinary Cyber Research Center, Tel Aviv University (ICRC TAU) * Boeing Global Services * CareerSource ESCAROSA * CareerSource Okaloosa/Walton * City of Fort Walton Beach * City of Pensacola * Cognitive Big Data Systems * Defense Information Systems Agency (DISA) * Department of Energy Consolidated Nuclear Security * Economic Development Council of Okaloosa County * Escambia County Board of County Commissioners * Escambia County School District * Florida Small Business Development Center (SBDC) Network * Florida's Great Northwest * FloridaMakes * FloridaWest * Fort Walton Machining * Greater Pensacola Chamber of Commerce * Hixardt Technologies * HSU Family Educational Foundation * IMS Expert Services * Innovation Coast * Institute for Human & Machine Cognition (IHMC) * International Institute for Counter-Terrorism * Kontact Intelligence * Metova CyberCENTS * Mission Secure, Inc. (MSI) * National Association of Veterans Program Administrators (NAVPA) * Northwest Florida Manufacturers Council (NWFMC) * Pensacola-Escambia Promotion & Development Commission (PEDC) * Regions * Ridge Global * Saltmarsh, Cleaveland & Gund * Santa Rosa County School District * Studer Community Institute * Synovus * Technology Coast Manufacturing and Engineering Network (TeCMEN) * The First: A National Banking Association * West Florida Healthcare *

Verbal support has been received from the following companies:

Armed Forces Communications and Electronics Association (AFCEA) * Avalex Technologies * Cyber Safe Workforce * Global Business Solutions Inc. * IBM * Maritech Machine, Inc. * National Security Agency (NSA) * Santa Rosa Economic Development * Space Florida * TechFarms * Technical Software Services (TECHSOFT).

Total amount of funding requested from Triumph Gulf Coast: \$14,500,000.

Total Cost Per Program Participant

A cost of **\$1,938.50 per program participant** to be funded by Triumph Gulf Coast funding is calculated based on a total of **1,440 highly qualified graduates with workforce experience and industry certificates in** Cybersecurity/IT and Advanced Manufacturing programs. A total of **3,072 industry certifications** and **2,968 trainings** will be delivered in collaboration with industry and across programs at UWF utilizing the proposed request during a five-year project period. The total project cost is \$37,400,000.00 with a \$14,500,000.00 request for funding from Triumph Gulf Coast, Inc. The request represents 39% of the total project cost.

- 1,440 embedded industry certifications + industry experiences + degrees in cybersecurity/IT, engineering, logistics and logistics/supply chain management.
- 3,072 industry certifications in the region/industry.
- 2,968 industry trainings in the region/industry.

For a total of 7,480 industry certifications + trainings + degrees. Table 1 represents the **participants** per program cost are as follows:

Table 1: Participants per program cost

| UWF Project 10[x]. Producing talent to fill critical | Participants | | |
|---|-----------------------------|---------------------------------|--------------------------------|
| gaps in the Northwest Florida high tech workforce. | 5-year Industry Certs | 5-year Industry Trainings | 5-year Degrees and Certs |
| Cybersecurity | | | |
| Multidisciplinary Cybersecurity/IT Degrees + Industry | | | 781 |
| Certifications | | | graduates |

| Industry Certifications | 2,133 | | |
|--|----------------|------------|-----------|
| | certifications | | |
| Industry Training | | 729 | |
| | | trainings | |
| Advanced Manufacturing | | | |
| Advanced Manufacturing/Engineering/Logistics | | | 659 |
| Degrees + Industry Certifications | | | graduates |
| Advanced Manufacturing Industry Certifications | 939 | | |
| | certifications | | |
| Industry Training | | 2,239 | |
| | | trainings | |
| 7,480 Total Participants | 3,072 | 2,968 | 1,440 |
| _ | industry | training | graduates |
| | certifications | completers | total |

Has the applicant in the past requested or applied for funds for all or part of the proposed project/program?



If yes, please provide detailed information concerning the prior request for funding, including:

- the date the request/application for funding was made;
- the source to which the request/application for funding was made,
- the results of the request/application for funding, and
- projected or realized results and/or outcomes from prior funding.

UWF has NOT submitted or received grant or contract funding specifically for this project and phases of UWF Project 10[x]. On an annual basis UWF submits over 100 grant applications to federal, state and other entities and reports each submission and award across a spectrum of research other funded activity. In our categories of awards for Cybersecurity, Advanced Manufacturing and Intelligent Systems/Robotics, our researchers have submitted grants in their areas of study. UWF has also received some legislative funding as listed below. The cluster areas proposed through UWF are strengths of the university and areas of high impact to the university. In UWF's ongoing grant activity, \$1,530,344 has been received to support foundational activity of UWF's Center for Cybersecurity and Advanced Manufacturing initiatives. Here are examples of recent grants in these three areas:

Examples of Grants Funded to Advanced Manufacturing, Cybersecurity and Robotics

| Amount | Action Date | Title | Source | Funding Status |
|--------------|-------------|--|--------------------------------------|-------------------|
| \$438,679.00 | 10/28/16 | FloridaMakes Manufacturing Extension Partnership | Federal flow through from NIST | Funded |

| \$62,106.00 | 8/25/16 | Northwest Florida Manufacturing Council Master Host Agreement | Private from Northwest Florida Manufacturing Council | Funded |
|--------------|----------------|---|--|--------|
| \$44,000.00 | 4/14/16 | NETC Educational Services Agreement Delivery Order R001 CompTIA+ Boot Camp | Naval Education Training Command, U.S. Navy | Funded |
| \$89,149.00 | 6/8/17 | Pathway to Cyber Camps - University of West Florida (UWF) 2017 | National Security Agency | Funded |
| \$196,829.00 | 4/6/17 | University of West Florida Proposal for the NSA CAE Regional Resource Center for the Southeast USA | National Security Agency | Funded |
| \$195,071.00 | 9/8/17 | NSA Cybersecurity for All | National Security Agency | Funded |
| \$10,000.00 | 7/14/16 | 2016 Pathways to Cyber Program | State Funding: USF | Funded |
| \$131,711.00 | 9/22/17 | University of West Florida Proposal for the NSA CAE Regional Resource Center for the Southeast | National Security Agency | Funded |
| \$176,905.00 | 8/28/17 | NSA Cybersecurity Core Curricula Development | National Security Agency | Funded |
| \$93,127.00 | 8/17/17 | Florida Cyber Pathways: Expanding Florida's Cybersecurity Workforce Through High School | USF Florida Center for Cybersecurity | Funded |
| \$100,000.00 | 7/27/17 | Cybersecurity Awareness Training and Outreach Program for Florida Small Businesses | USF Florida Center for Cybersecurity | Funded |
| \$75,212.00 | 8/17/17 | A Novel Framework to Teach Hands-on Laboratory Exercises in Cybersecurity | USF Florida Center for Cybersecurity | Funded |
| \$351,000.00 | 2017-18 budget | Advanced Manufacturing (Sea3D Laboratory) This funding was used to establish the Sea3D lab in downtown Pensacola. The Sea3D lab as an additive manufacturing laboratory establishes Phase 1 of the | Florida Legislature | Funded |

| | | UWF project in one of the UWF Historic Trust facilities in downtown Pensacola | | |
|----------------|--|---|---|--|
| \$4.4 M | Submitted Fall 2017 | Funding has not been received from the Governor's Job Growth Grant. The funding request submitted by UWF to the Governor's Jobs Growth Grant differs from UWF's Triumph request in several key ways. The UWF Jobs Growth proposal as 65 percent of the total award goes directly to six (6) sub- contractors including the Emerald Coast Technical College, Northwest Florida State College, Chipola College, Gulf Coast College, the Northwest Florida Manufacturers Council, and CareerSource Okaloosa Walton to train new manufacturing professionals at a variety of education venues between Pensacola and Marianna, Florida. | Governor's Job Growth Grant Fund | Not funded |
| | Filed Florida House of Representatives on March 3, 2017 | Cybersecurity: Programs of Distinction | Florida Legislature | Not funded |
| \$850,000.00 | Filed as a bill in the House on October 17, 2017. Florida Senate on November 15, 2017. | Cybersecurity: Programs of Distinction | Florida Legislature 2018-19 Budget | Pending Outcome of 2018 Session |
| \$1,000,000.00 | Filed March 3, 2017 | PhD Program in Intelligent Systems and Robotics UWF is NOT requesting | Project was funded by Legislature but | Not funded |

| | | Triumph funding to support the Ph.D. in Robotics and Intelligent Systems. However, the laboratories that will be used by Ph.D. students will provide opportunities for graduate students, industry and other researchers to engage in opportunities for innovation, invention and research. | vetoed by Governor due to extraneous circumstances related to K-12 education legislation and funding needs. | |
|--------------|---|--|--|--|
| \$500,000.00 | Filed House of Representatives on December 11, 2017 Florida Senate on November 15, 2017 | PhD Program in Intelligent Systems and Robotics UWF is NOT requesting Triumph funding to support the Ph.D. in Robotics and Intelligent Systems. However, the laboratories that will be used by Ph.D. students will provide opportunities for graduate students, industry and other researchers to engage in opportunities for innovation, invention and research | Florida Legislature 2018-19 Budget. | Pending Outcome of 2018 Session |

Describe the financial status of the applicant and any co-applicants or partners:

Established in 1967, the University of West Florida (UWF) is a separate public instrumentality that is part of the State university system of public universities. UWF has a sound financial base and the financial stability to support its vision and mission and the scope of its programs and services.

Today, UWF has an enrollment of approximately 13,000 students, faculty and staff of 1,910 and an annual budget of \$209 million. UWF is a demonstrated economic driver for the eight counties that comprise Northwest Florida, including Escambia, Santa Rosa, Okaloosa, Walton, Holmes, Washington, Bay and Gulf by generating an annual economic impact to region of \$1.1 billion. The University's economic condition is closely tied to that of the State of Florida, with State noncapital appropriations accounting for approximately 50% of the university's operating and non-operating revenues for the fiscal year ended June 30, 2017. Due to the University's ranking as one of the top three performers on performance metrics established by the Florida Board of Governors for the Florida State University System, UWF's State noncapital appropriations increased significantly for the 2017-18 fiscal year.

In a separate attachment, please provide financial statements or information that details the financial status of the applicant and any co-applicants or partners.

Attached are the University of West Florida 2017 Income Statement and the 2015-16 Audited Financial Statements.

Has the applicant or any co-applicants, partners or any associated or affiliated entities or individuals filed for bankruptcy in the last ten (10) years?

| T Yes | X | No |
|-------|---|----|
|-------|---|----|

If yes, please identify the entity or individual that field for bankruptcy and the date of filing.

N/A

<u>Eligibility</u>

Pursuant to Section 288.8017, Triumph Gulf Coast, Inc. was created to make awards from available funds to projects or programs that meet the priorities for economic recovery, diversification, and enhancement of the disproportionately affected counties. The disproportionately affected counties are: Bay County, Escambia County, Franklin County, Gulf County, Okaloosa County, Santa Rosa County, Walton County, or Wakulla County. *See*, Section 288.08012.

1. From the choices below, please check the box that describes the purpose of the proposed project or program (check all that apply):

| 1 | Ad valorem tax rate reduction within disproportionately affected counties; |
|---|--|
| i | Local match requirements of s. 288.0655 for projects in the |
| 1 | disproportionately affected counties; |
| | |

- Public infrastructure projects for construction, expansion, or maintenance which are shown to enhance economic recovery, diversification, and enhancement of the disproportionately affected counties;
- Grants to local governments in the disproportionately affected counties to establish and maintain equipment and trained personnel for local action plans of response to respond to disasters, such as plans created for the Coastal Impacts Assistance Program;
- ☑ Grants to support programs that prepare students for future occupations and careers at K-20 institutions that have campuses in the disproportionately affected counties. Eligible programs include those that increase students' technology skills and knowledge; encourage industry certifications; provide rigorous, alternative pathways for students to meet high school graduation requirements; strengthen career readiness initiatives; fund high-demand programs of emphasis at the bachelor's and master's level designated by the Board of Governors; and, similar to or the same as talent retention programs created by the Chancellor of the State

University System and the Commission of Education, encourage students with interest or aptitude for science, technology, engineering, mathematics, and medical disciplines to pursue postsecondary education at a state university or a Florida College System institution within the disproportionately affected counties; Grants to support programs that provide participants in the disproportionately affected counties with transferable, sustainable workforce skills that are not confined to a single employer; and



Grants to the tourism entity created under s. 288.1226 for the purpose of advertising and promoting tourism and Fresh from Florida, and grants to promote workforce and infrastructure, on behalf of all of the disproportionately affected counties.

2. Provide the title and a detailed description of the proposed project or program, including the location of the proposed project or program, a detailed description of, and quantitative evidence demonstrating how the proposed project or program will promote economic recovery, diversification, and enhancement of the disproportionately affected counties, a proposed timeline for the proposed project or program, and the disproportionately affected counties that will be impacted by the proposed project or program.



UWF Project 10[x] Program Summary Updated: July 31, 2019

Ever since Google[x] started in 2010, it has a single mission: to invent and launch "moonshot" technologies that someday make the world a radically better place. Google[x] developed a simple blueprint to find ideas that could deliver 10x impact, not just incremental improvement over the status quo: An X project must solve a problem; it has to have an audacious, sci-fi sounding technology; and there has to be at least a glimmer of hope that it's achievable in the next 5–10 years.

At UWF, we are taking the challenge through UWF Project 10[x]. We have developed an academic blueprint to make Northwest Florida a radically better place with high tech, highly educated talent, certified and ready to work. We have a "no limits" mindset –to truly create change, one has to use a different perspective and imagine something audacious, using sci-fi sounding experiences that we can achieve in the next five years.

UWF Project 10[x] is addressing the challenge of employers' inability to find and fill critical gaps in the high tech workforce. Our high tech areas of cybersecurity, advanced manufacturing and robotics are areas of big need to fill critical workforce gaps. We believe that developing world-class, credentialed talent for the future is a significant contribution to the region. Our 10[x] project will produce some of the nation's most talented and elite professionals that are skilled, credentialed and ready to work. We are creating "sci-fi looking", high tech spaces of engagement for students to work with industry and opportunities for industry and the military to collaborate and learn with us. We are bringing in top experts in the world to assist. We will educate, train and certify project participants to secure the future and protect the world. This moment of lift will be evident for years to come.

With a visionary investment from Triumph Gulf Coast, the University of West Florida will establish UWF Project 10[x] **and deliver impact** to our region. This initiative is a solid investment in the foundation of Northwest Florida's economy. *The total request for funding at* \$14,500,000 from Triumph Gulf Coast, Inc. represents 39% of the total project costs.

Project 10[x] goals include:

• Creating 1,440 career-ready college graduates **filling documented workforce needs** with critical industry certifications and experience with leaders in industry. Graduates will achieve salaries **above the average wage.**

• Training 2,968 industry and military partners through world-class training and 3.022 industry certifications to **upskill the existing workforce** using the Center for Cybersecurity and the Sea3D Advanced Manufacturing Laboratory as world-class laboratories.

Table 2 details the programming areas of focus.

Table 2: Detailed Project Programming

| UWF Project 10[x]. Producing talent to fill critical | | Participant | \$ |
|---|---|--|--------------------------------|
| gaps in the Northwest Florida high tech workforce. | 5-year Training & Industry Certs. + trainings | 5-year Training & Industry trainings | 5-year Degrees and Certs |
| Cybersecurity | | | |
| Multidisciplinary Cybersecurity/IT Degrees + Industry Certifications *Degrees (1) Cybersecurity, Bachelors, (2) Computer Information Systems, (3) Software Engineering, (4) Information Technology, (5) Computer Science, (6) Database Design, (7) IT/Cybersecurity, MS. | | | 781 graduates |
| Industry Certifications Comp TIA Security +, Comp TIA Security Analyst (CSA+), Red Hat System Administrator and EC Council Certified Ethical Hacker (CEH), ISC2 CISSP, EC- Council CEH, Certified Network Defender (CND), Certified Computer Hacking Forensic Investigator (CHFI) | 2,133 certifications | | |
| Industry Trainings Cybersecurity Fundamentals, Network Defense, Risk Management, Incident Response, Threat Intelligence, Critical Infrastructure and ICS Security, Malware Analysis | | 729 trainings | |
| Advanced Manufacturing | | | |
| Advanced Manufacturing/Engineering/Logistics Degrees + Industry Certifications *Degrees (1) Electrical Engineering, Bachelors, (2) Mechanical Engineering, Bachelors, (3) Supply Chain Logistics, Bachelors. | | | 659 graduates |
| Industry Certifications Solidworks 3D CAD, CATIA 3D Design, AS9100 Lead Auditor, Project Management Professional | 939 certifications | | |
| Industry Trainings | | 2239 completers | |

| Lean Six Sigma, Leadership Development, ISO 45001, CAPA, Blueprint, GD&T, Problem Solving, Process mapping | | | |
|--|-------------------------------------|---------------------------------|-----------------------------|
| Total Participants = 7,480 total participants | 3,022 industry certifications | 2,968 training completers | 1,440 graduates total |

Long Term Benefits of Creating Cybersecurity and Advanced Manufacturing Talent in Northwest Florida

Technology and innovation are disrupting industries and communities across the globe creating national and global competition for talent at an accelerated pace. In Northwest Florida, we have the opportunity to be competitive, vibrant and prosperous in our vision to fulfill our regional strategy for economic transformation. The University of West Florida plays a key role in building the college graduate talent pipeline to meet the needs of Northwest Florida's current and predicted future workforce.

UWF is proposing an investment toward the future. In the Southeast, the state of Georgia has already made an investment in Cybersecurity. Our region has parallels and a community with a strong plan entitled: Northwest Florida Economic Development Alliance's *Live Coastal. Work Cyber. Cybersecurity Strategic Plan Report* (2017). It focuses heavily on building a cybersecurity workforce as its primary goal.

The Augusta Model for Northwest Florida

In January 2017, Georgia Governor Nathan Deal invested \$50M to create a "Georgia Cyber Innovation and Training Center" adjacent to the Augusta University Riverfront Campus. Once announcing the state investment, project funding increased to over \$100M based on partnerships with the private sector and the military. The investment in Augusta will create a world-class cyber range and training facility focused on developing the next generation cyber workforce through training, real-world practice, education, public-private collaboration and interdisciplinary research in the fields of healthcare, computer science, electrical engineering, mathematics and robotics.

UWF is proposing to create a similar unique asset that provides an investment in Cybersecurity for Northwest Florida similar to the Augusta University's Riverfront Campus. UWF and the region has great parallels. From federal assets like the U.S. Navy's Center for Information Warfare Training and the Department of Homeland Security's National Cybersecurity and Communications Integration Training Center to many private-sector partners such as Raytheon, Northrop Grumman and Navy Federal Credit Union, this is a solid investment in the foundation of Northwest Florida's economy similar to the investment the Augusta model will provide for the community in Georgia.

According to the *Northwest Florida Forward: A Regional Strategy for Economic Transformation (2016),* talent is a key focus area creating future economic vitality and growth for the region. This proposal represents creating talent for the target industries of cybersecurity and manufacturing. Both target industries have employment opportunities in all of the sectors to include aerospace & defense, financial services and water transportation.

UWF's designation as the NSA/DHS Cybersecurity Regional Hub for the Southeast through the Center for Cybersecurity has already created strong synergy with key partners to include federal assets like the U.S. Navy Center for Information Warfare Training and the Department of Homeland Security's National Cybersecurity and Communications Integration Center and private-sector companies such as Raytheon, Northrop Grumman and Navy Federal Credit Union. The vision for the future is to be the leading destination for education, research, workforce development and training. An investment will accelerate collaboration by government organizations, private-sector businesses and talent development.

UWF's strong relationship across Northwest Florida through the Northwest Florida Manufacturers Council and FloridaMakes places us one on one with employers and improving competitiveness and productivity of Florida's Manufacturers. In Florida, over one billion dollars of impact was reported last year when working collaboratively with the FloridaMakes network. The existing relationship empowers UWF to accelerate opportunities for training and education while providing exceptional value through collaborative industry work through the Sea3D Advanced Manufacturing Laboratory.

UWF Cybersecurity: Redefining What Cybersecurity Can Be

UWF's designation as the NSA/DHS Cybersecurity Regional Hub for the Southeast through the Center for Cybersecurity has already created strong synergy with key partners to include **federal assets** like the U.S. Navy Center for Information Warfare Training and the Department of Homeland Security's National Cybersecurity and Communications Integration Center and **private-sector companies** such as Raytheon, Northrop Grumman and Navy Federal Credit Union. Threats to the cybersecurity of businesses, individuals and the local, state and national government persist, while the number of professionals qualified to deal with cyberattacks is not keeping pace with demand. Globally, **there will be 3.5 million unfilled cybersecurity**

Northwest Florida Forward: A Regional Strategy for Economic Transformation (2016) and Cyberseek.org, there are over 1,100 cybersecurity jobs available Northwest Florida alone. Northwest Florida Economic Development Alliance's *Live Coastal. Work Cyber. Cybersecurity Strategic Plan Report* (2017) focuses heavily on building a cybersecurity workforce as its primary goal.

Globally, **there will be 3.5 million unfilled cybersecurity positions** with the current supply of cybersecurity workers being very low (cyberseek.org). In Florida alone, there are 13,465 job openings and nationally there are over 313,000 job openings. In addition to unfilled jobs, employers will need to provide additional workforce training with many open positions requiring industry certifications.

Regional Employers for Cybersecurity

According to the Northwest Florida Forward: A Regional Strategy for Economic Transformation (2016) and Cyberseek.org, there are currently over **1,100 cybersecurity jobs available in Northwest Florida alone** (see Table 3). Northwest Florida Economic Development Alliance's Live Coastal. Work Cyber. Cybersecurity Strategic Plan Report (2017) focuses heavily on building a cybersecurity workforce as its primary goal.

| Area | Employed Workforce | Current Job Openings | *Median Wage |
|----------------------------|-----------------------|-------------------------|--------------|
| Pensacola/Ferry Pass/Brent | 1316 | 323 | \$70,782.00 |
| Crestview/Ft. Walton Beach | 1401 | 564 | \$86,570.00 |
| Panama City | 505 | 226 | \$82,410.00 |
| Total | 3222 | 1113 | |

Table 3: Northwest Florida Cybersecurity Job Demand

(Source: cyberseek.org)

(* Emsi 2019 Q3 dataset) - Based on SOC codes related to a "Cyber" industry

Cybersecurity is an emerging field where there isn't yet an occupational code focused exclusively on 'cybersecurity' as the code. Much like the early years when it was difficult to get a solid calculation on the number of jobs available to support computing, it is critical to look across the IT career fields to get the best estimate of available jobs. To accommodate this issue, Cyberseek.org was created to monitor the ever growing number of jobs available and to help close the skills gap so that employers and educators can monitor the supply and demand in the cybersecurity job market. Table 4 represents available jobs across the region by occupations and annual openings. **Cybersecurity** professionals' annual earnings will be above the average wage as follows: IT security specialist: \$113,701; IT security manager: \$131,600; network security engineer: \$107,868; computer network architect: \$100,240; information security analyst: \$90,120 and security engineer: \$81,078. The 2016 median pay for information security analysts is \$92,600.

| Occupational | 2019 Employment | 2025 Employment | 2019-2025 Change | % Growth | Annual Openings | Edu | cation | (2018 | wage estin | nates in dol | lars) |
|---|--------------------|--------------------|---------------------|----------|--------------------|-----|--------|-------|------------|--------------|--------|
| Code Title | | | | | | FL | BLS | Mean | Median | Entry** | Exp*** |
| 17-3031 Surveying and Mapping Technicians | 192 | 205 | 13 | 7% | 23 | PS | HS | 14.49 | 14.24 | 11.02 | 16.23 |
| 15-1131 Computer Programmers | 334 | 341 | 7 | 2% | 23 | PS | В | 34.23 | 36.06 | 20.16 | 41.27 |
| 19-4099 Life, Physical, and Social Science Technicians, All Other | 172 | 186 | 14 | 8% | 23 | Α | A | 10.84 | 10.27 | 8,93 | 11.80 |
| 17-1022 Surveyors | 248 | 266 | 18 | 7% | 21 | в | B | 29.27 | 26.93 | 18.46 | 34.68 |
| 15-1141 Database Administrators | 232 | 252 | 20 | 9% | 19 | PS | A | 19.34 | 18.08 | 12.80 | 22.61 |
| 17-3013 Mechanical Drafters | 198 | 199 | 3 | 2% | 17 | PS | A | 32.60 | 30.00 | 20.62 | 38.58 |
| 19-3099 Social Scientists and Related Workers, All Other | 163 | 171 | 8 | 5% | 17 | в | в | 18.73 | 17.92 | 13.67 | 21.26 |
| 19-4092 Forensic Science Technicians | 119 | 127 | 8 | 7% | 16 | PS | В | 14.58 | 13.78 | 11.39 | 16.18 |
| 17-2011 Aerospace Engineers | 234 | 233 | [1] | (0%) | 15 | В | в | 17.99 | 17.31 | 12.21 | 20.88 |
| 19-4091 Environmental Science and Protection Technicians, Inclu | 99 | 107 | 8 | 8% | 13 | в | В | 22.71 | 21.78 | 15.69 | 26.22 |
| 17-2061 Computer Hardware Engineers | 179 | 186 | 7 | 4% | 13 | В | 8 | 23.14 | 21.82 | 14.93 | 27.26 |
| 19-4021 Biological Technicians | 77 | 91 | 14 | 18% | 10 | Α | в | 19.53 | 13.37 | 11.44 | 23.58 |
| 17-3027 Mechanical Engineering Technicians | 103 | 109 | 6 | 6% | 10 | A | A | 30.21 | 29.79 | 19.35 | 35.64 |
| 19-3051 Urban and Regional Planners | 95 | 103 | 8 | 8% | 9 | B | M | 37.93 | 35.03 | 22.91 | 45.44 |
| 17-2081 Environmental Engineers | 112 | 121 | 9 | 8% | 9 | в | B | 19.55 | 18.64 | 13.69 | 22.48 |
| 17-2111 Health and Safety Engineers, Except Mining Safety Engi | 130 | 132 | 2 | 2% | 9 | в | 8 | 16.87 | 14.75 | 11.55 | 19.53 |
| 19-1029 Biological Scientists, All Other | 87 | 95 | 6 | 9% | 9 | B | 8 | 14.62 | 12,49 | 10,19 | 16.84 |
| 19-2031 Chemists | 85 | 92 | 7 | 8% | 9 | 8 | 8 | 19.20 | 17.22 | 12.51 | 22.54 |
| 15-2041 Statisticians | 79 | 95 | 16 | 20% | 9 | B | M | 13.80 | 13.54 | 10.09 | 15.65 |
| 19-1031 Conservation Scientists | 85 | 87 | 2 | 2% | 8 | В | 8 | 10.15 | 9.42 | 8.89 | 10.78 |
| 19-1021 Biochemists and Biophysicists | 68 | 76 | 6 | 12% | 7 | M+ | D | 21.98 | 17.12 | 10.28 | 27.83 |
| 17-3019 Drafters, All Other | 72 | 75 | 3 | 4% | 7 | PS | A | 90.32 | 82.21 | 34,44 | 118.28 |
| 17-3012 Electrical and Electronics Drafters | 63 | 68 | 5 | 8% | 6 | PS | A | 47.25 | 41.50 | 26.24 | 57.75 |
| 17-3026 Industrial Engineering Technicians | 59 | 64 | 5 | 8% | 6 | PS | A | 43.02 | 39.98 | 26.06 | 51,50 |
| 17-1012 Landscape Architects | 62 | 67 | 5 | 8% | 5 | в | B | 45.37 | 40.16 | 22.87 | 56.62 |
| 17-2041 Chemical Engineers | 60 | 66 | 6 | 10% | 5 | в | в | 37.92 | 29.85 | 15.91 | 48.93 |
| 15-2021 Mathematicians | 34 | 39 | 5 | 15% | -4 | В | M | 17.72 | 15,93 | 11.43 | 20.87 |
| 17-1021 Cartographers and Photogrammetrists | 39 | 41 | 2 | 5% | 3 | В | в | 14.88 | 14,78 | 10.42 | 17.11 |
| 19-1022 Microbiologists | 33 | 35 | 2 | 6% | 3 | M+ | B | 16.66 | 15.95 | 11.72 | 19.12 |

Table 4: Occupations and Annual Openings

Navy Federal Credit Union is a major employer providing internships, cooperative education programs, and full-time positions. Employment opportunities target students with a Bachelor's degree in Computer Science, Cybersecurity, Information Technology, Management Information Systems, Business Administration, and more. In the past year, Navy Federal Credit Union offered 35 internships and cooperative education programs to UWF. Several of UWF's interns have been hired into full-time positions upon graduation. The Department of Homeland Security at Corry Station continues to hire UWF students to lead some of the nation's most pressing cybersecurity challenges.

Northwest Florida is home to numerous military bases and contractors as well as a variety of companies and government agencies with high-tech needs. The Department of Homeland Security and large defense contractors including Northrop Grumman, Raytheon and Lockheed Martin have recently expanded their cybersecurity operations in the Northwest Florida region. Short-term and long-term employment opportunities are offered to students with a Bachelor's of Science degree in Cybersecurity, Computer Engineering, Electrical Engineering, and Information Technology. Table 5 lists specific Cybersecurity employers in the region.

Table 5: Cybersecurity Employers

| Cybersecurity Employers | Cybersecurity Employers |
|---|--|
| Air Force Research Labs | IBM |
| AppRiver | Institute for Human and Machine Cognition |
| BAE Systems | Jacobs |
| Booz Allen Hamilton | Metova CyberCENTS |
| Defense Information Systems Agency | Mission Secure, Inc. |
| Department of Defense | National Security Agency |
| Department of Energy Y-12 National | |
| Security Complex | Naval Air Station Pensacola |
| Department of Homeland Security | Naval Education and Training Command |
| Eglin Air Force Base | NAVSEA and Naval Surface Warfare Center |
| Escambia County School District | Navy Center for Information Warfare Training & Command |
| Federal Bureau of Investigations | Navy Federal Credit Union |
| Florida Agency for State Technology | Navy Information Operations Command |
| Florida Department of Law Enforcement | Northrop Grumman |
| General Dynamics Information Technology | Okaloosa County School District |
| Global Business Solutions Inc. | Raytheon |
| Hixardt Technologies Inc. | Santa Rosa County School District |

Nationally, and within Florida, the certifications that are most in demand among cybersecurity job postings include CISSP and CISM. In the Pensacola MSA, there is a high demand for CISSP certificate holders but only ten percent of cybersecurity professionals have such certification (Northwest Florida Forward Technical Report, 2017). About half of all cybersecurity job openings in the region require the Security+ certification which is almost three times the national average (Northwest Florida Forward Technical Report, 2017).

Additionally, local employers need talent with network or information technology support with industry certifications such as Security+ and Network+. Security clearances boost marketability as well. Companies include: Applied Research Associates (ARA), Avalex, BAE Systems, CDK Global, Choctawhatchee Electric Cooperative (CHELCO), EPS Corporation, General Dynamics Information Technology, Jetpay Payments, Navy Federal, Northrop Grumman, Odyssey Systems, Raytheon, Santa Rosa County and Teleforce LLC.

UWF is a new partner with the National Security Agency's National Cryptologic School on their *Joint Cyber Analysis Course (JCAC)*. This partnership will **accelerate** completion of the

undergraduate cybersecurity degree program for Joint Cyber Analysis Course graduates. Last year, more than 4,000 military students completed this complex cyber course. For JCAC graduates, the University will apply up to 30 credit hours toward a bachelor's degree in cybersecurity or 15 credit hours toward an associate's degree in general education. Once enrolled at UWF, students may be awarded up to three additional semester credit hours based on credit-by-proficiency evaluation.

The UWF Center for Cybersecurity

As the regional hub for cybersecurity education, research and partnerships, The Center for Cybersecurity propels innovative cybersecurity solutions locally, nationally and globally. Our interdisciplinary approach connects ideas and people, elevating cybersecurity in service to the greater good while supporting workforce and economic development. This critical investment in training and educating cybersecurity professionals in Northwest Florida literally builds talent for our future that will protect critical infrastructure from all levels. *[see website at: https://uwf.edu/go/cybersecurity]*

Multidisciplinary Programming + Certifications

UWF will offer multidisciplinary cybersecurity/IT programming to support the talent gap in this area by launching programming that **create career ready graduates with industry certifications, industry experience and a degree credential.** Programs including the NSA/DHS recognized Cybersecurity bachelor's program, Computer Information Systems, Software Engineering, Information Technology, Computer Science, Database Design. Certificate and certification opportunities are available to these students.

In addition, UWF will host a STEM living-learning residence hall experience with students encouraged to complete an industry certification, participate in career mentoring with industry partners, participate in industry problem solving in an industry/government sponsored program [Hacking for Defense (https://www.h4di.org/about.html)] and participate in activities within the Center for Cybersecurity [and at the Sea 3D Advanced Manufacturing Laboratory]

Industry Certifications

Demand. Using <u>Cyberseek.org</u> data, employers in the Pensacola-Gulf Breeze and Crestview-Fort Walton-Destin metro areas required or preferred certification for 39% of listed cybersecurity jobs. CompTIA Security+ and ISC² CISSP were the most popular with 367 and 168 listings respectively. ISACA's CISM also drew significant numbers with 76 listings, most associated with growth in the area's federal job sector.

Examining job openings by the <u>NICE Cybersecurity Workforce Framework</u> categories uncovers additional certifications, especially for those seeking entry level positions requiring less than five years of experience. In addition to Security+, these positions listed other CompTIA offerings, including A+, Linux+, and Network+ in addition to Cisco CCNA, CCNA Security and Microsoft Certified Solutions Associate credentials focusing on Windows 10 and Windows Server products.

Industry Certifications Alignment with UWF Programs. Based on evolving Cybersecurity and Information Technology program offerings, industry certifications such as CompTIA Security+, CCNA and CCNA Security, and RedHat Linux System Administrator certifications would bring additional benefits to the University's undergraduate student population. Advanced certifications, such as CISSP would be a good fit for Master's degree candidates in Cybersecurity, IT and the MBA Information Security Management specialization. Offering EC-Council's Certified Ethical Hacker (CEH) certification also fits with potential course alignments and this credential is considering a first step for aspiring penetration testers.

Industry Training Programs

UWF is enhancing cybersecurity workforce development across the region in several ways. In addition to offering multidisciplinary undergraduate and graduate programs and certificates, UWF is launching the Cybersecurity for All program to prepare individuals for cybersecurity jobs and provide reskilling and upskilling for workforce professionals. The program provides innovative education and training that aligns with evolving job demands and delivers knowledge and hands-on skills via customizable courses. In addition, the UWF Center for Cybersecurity will develop programs to facilitate career readiness and placement through internships, professional development workshops and career events. Specific programs will be developed to identify veterans with an aptitude for cybersecurity careers, prepare them via short term training programs and connect them with cybersecurity jobs in the area. This will help address the need for qualified cybersecurity professionals that have or can obtain clearance. The Center will also provide industry certification courses and test prep for commonly needed industry certifications in our region.

Advanced Manufacturing Initiative

Nationally, over 3.5 million professionals are needed to fill vacancies in manufacturing by 2020. Of that number, 2 million manufacturing jobs may remain vacant. The number of unfilled jobs is predicted to increase to 4.6 million by 2028 with 2.4 million vacancies. As manufacturing floors are increasingly automated, requirements for ongoing training continue to rise. Specifically, qualified professionals in artificial intelligence, robotics, autonomy and intelligent systems will be key elements of the global and local economies in the future. Nearly every facet of the economy is being transformed by these technologies and the pace is expected to accelerate.

According to Florida's Department of Economic Opportunity, manufacturing in 2019 employed 381,800 people in Florida, an increase of 11,500 people over the previous year. Manufacturing has gained jobs over the year for 101 consecutive months, after losing jobs over the year for more than four years (Florida DEO). Florida ranks among the nation's top ten states for manufacturing (Enterprise Florida Industry Brief). Northwest Florida manufacturers face significant out-of-state competition for skilled professionals. According to *Northwest Florida Forward: A Regional Strategy for Economic Transformation (2016)*, manufacturing is a key target industry for our region due to the large number of direct and indirect jobs. With manufacturing becoming more high tech, additional workforce training is needed as well as launching more college graduates in the areas of engineering, supply chain logistics, robotics and intelligent systems. **Advanced manufacturing** professionals include: Mechanical Engineering: \$95,270; Scientific Research and Development: \$99,180; Aerospace Product and Parts Manufacturing: \$98,230.

Regional Employers for Manufacturing

There are 1,901 unique job postings in manufacturing from January 2019 to March 2019 (EMSI report on Job Postings). According to HIS Economics, manufacturing in Northwest Florida continues to grow with the data showing the need for additional engineers as significant automation continues to increase. The region had seven high-performing four-digit NAICS

manufacturing sectors that outperformed the United States in terms of their employment growth and represented an above-average share of the region's economy. Accounting for more than 35 percent of total manufacturing employment in Northwest Florida, these high performing sectors include: aerospace product and parts; ship and boat building; ventilation, heating, air conditioning, and commercial refrigeration equipment; other nonmetallic mineral products; sawmills and wood preservation; veneer, plywood, and engineered wood product; and steel products from purchased steel (HIS Economics).

Additionally, the projected growth in the sector's highly-skilled workforce provides the gap for the number of existing workers requiring upskilling across Northwest Florida through a variety of certifications. Key manufacturing metrics (see Table 6) indicates average earnings of \$86,006.

| Area | Employed Workforce 2019 | Facilities with Payroll 2018 | Current Job Openings | Avg. Earnings Per Job |
|----------------------|----------------------------|---------------------------------|-------------------------|--------------------------|
| Pensacola/Ferry | 8,184 | 539 | 950 | \$80,559.00 |
| Pass/Brent | | | | |
| Crestview/Ft. Walton | 5,990 | 366 | 1297 | \$96,058.00 |
| Beach | | | | |
| Panama City | 4,877 | 267 | 577 | \$81,401.00 |
| Total | 19,051 | 1,172 | 1,585 | \$86,006.00 |

Table 6: Key Manufacturing Metrics 2019-2025

(Source: Emsi Q3 2019 Data Set | <u>www.economicmodeling.com</u>) Manufacturing NAICS codes align with NIST MEP.

In addition to specific manufacturers, engineers are employable across many domains in Northwest Florida. Table 7 lists the major local employers of engineering graduates and their general work domains. The domain indicates local employer needs.

Table 7: Engineering Employers

| Engineering Employer | Work Domain |
|------------------------------|-------------------------------|
| Gulf Power | Power Utility |
| Escambia River Electric Coop | Power Utility |
| Webb Electric | Power Distribution |
| Wintec | Government/Defense contractor |
| Schmidt Consulting | Engineering Consulting |
| Northrop Grumman | Government/Defense contractor |
| Mott McDonald | Engineering Consulting |

| Jacobs Engineering | Government/defense contractor |
|-----------------------------------|---|
| Ascend Performance Materials | Manufacturing |
| Avalex Technologies | Electronics, Manufacturing, Military equipment |
| Current Products co. | Consumer products, Manufacturing |
| Booz Allen Hamilton | Cybersecurity, analytics, engineering consulting |
| BAE Systems | Government/Defense contractor |
| Actigraph | Medical-grade activity and sleep monitoring equipment |
| Eglin Air Force Base | Civil Servant positions, Military support |
| GE Wind | Power, Turbine Manufacturing |
| Naval Surface Warfare Center | Robotics, Intelligent system, Military technology |
| Automation Control Service | Control systems |
| Applied Systems Engineering, Inc. | Government/Defense Contractor |

The Sea3D Advanced Manufacturing Laboratory

The UWF Sea3D Advanced Manufacturing Laboratory serves as a hub for multidisciplinary research, invention and discovery in the high-demand field of additive manufacturing, providing a space for real-world problems to be transformed into creative solutions. With this funding, the Sea3D Lab will expand as much as possible in its existing location with additional staffing and equipment in the UWF-owned Museum of Commerce and will renovate a space on the Joint Campus of NWFSC-UWF creating a Sea3D Lab in Fort Walton Beach. UWF has strong engineering programs and industry partners in Fort Walton Beach and the lab will support student projects with industry. The Sea3D Additive Manufacturing Laboratory is a dynamic platform for both students and the public to interact in the design, build and invent process leading to creation of talent to meet the growing need for the high technology manufacturing workforce of the future.

Degree Programs and Engagement

UWF will offer the following initiatives to support the talent gap in this area accelerating business partnerships, capstone experiences and overall increases in enrollment in both undergraduate and graduate. In each initiative industry certifications and other relevant certificates and workforce focused micro-credentials will be offered.

Undergraduate degrees with industry certification and workforce experience include: (1) Electrical Engineering, Bachelors, (2) Mechanical Engineering, Bachelors, (3) Supply Chain Logistics, Bachelors. In each of these programming areas, UWF will offer experiences at the UWF Sea3D Advanced Manufacturing laboratory enabling students to work collaboratively with governmental, corporate and academic partnerships that are critical to enhancing the overall student experience educate tomorrow's **workforce-ready college graduates** to move into positions, meeting a key target industry need. Students will take courses in this program where they will gain an industry certification.

Industry Certifications

Participants from industry and current UWF students will gain industry certifications through the Advanced Manufacturing Initiative. Industry Certifications include: 3D Design Solid Works, Project Management Professional (PMP), Systems Engineering Certificate, Corrective and Preventive Action for Aerospace Industry, Geometric Dimensioning and Tolerencing, NFPA 70E Arc Flash Compliance, 3D Scanning and File Prep, AutoCAD, AS91000 Internal Auditor, Fundamentals of Technical Writing, Certified Information Systems Auditor (CISA).

Industry Training Programs

Through the UWF Sea3D Additive Manufacturing Laboratory in Pensacola and in Fort Walton Beach, several industry training programs will be offered as a collaborative approach to increase credentialed employs in the region. Additional industry training programs to include Certified Lean Practitioner, Lean Six Sigma Green Belt and Process Mapping will be offered. Additionally, executive seminars focused on commercial aircraft design and manufacturing will also be offered through this initiative.

Project Location

This proposal extends the collaborative regional work with the *FloridaWest Economic Development Alliance Regional Cybersecurity Strategic Plan, the Northwest Florida FORWARD Plan* and the ongoing work of *The Northwest Florida Advanced Manufacturing Council, FloridaMakes* and *TecMEN*. UWF's proposal establishes an anchor for the establishment of an innovation district enabling institutions and companies to cluster and connect. Direct economic impacts will be fostered through talent development and partnerships.

Developing an Innovation District in Downtown Pensacola. UWF will accelerate all things related to cybersecurity, advanced manufacturing and intelligent systems/robotics while establishing an atmosphere for thought leading innovation. Current facilities located throughout downtown Pensacola and on campus in Fort Walton Beach allow us to move the vision forward as follows:

• The **UWF Center for Cybersecurity located in the Studer Community Institute.** The Center will feature the Florida CyberRange establishing the region as a leader in cutting-

edge skills-based cyber training and operations to detect and defend against cyber threats and attacks. It will provide a state-of-the-art, powerful, realistic training environment to support cyber warfare exercises, operations and competitions for government, military, industry, K12 and higher education, while also facilitating the development and testing of innovative cyber threat detection, defense and response solutions. The Center will provide regional access to a network of existing key partners and stakeholders across the Southeastern United States through the UWF Center for Cybersecurity's designation as a National Center of Academic Excellence and Southeastern United States Regional Hub designated by the National Security Agency and Department of Homeland Security.

- The UWF Sea3D Additive Manufacturing Laboratories located in the Museum of Commerce in Pensacola and on the NWFSC-UWF Joint Campus will feature tools for rapid prototyping and innovation. A regional synchronous network of advanced manufacturing resources and laboratories will link existing key partners and stakeholders through the Northwest Florida Manufacturers Council, TecMEN and FloridaMakes to UWF. Key partners and stakeholders will further support Manufacturing Career Academies across the region, engage regional manufacturers and provide significant research opportunities for students and researchers.
- The Intelligent Systems and Robotics Warehouse a UWF-owned property housing Intelligent Systems and Robotics situated adjacent to IHMC property in downtown Pensacola will provide access to equipment, expertise and research. The UWF-IHMC joint PhD program in Intelligent Systems and Robotics will be a centerpiece of research for students, faculty researchers, scientists and entrepreneurs.

The timeline for this project includes the launch of workforce training programs, the minor renovations of the Intelligent Systems and Robotics teaching/research space in downtown Pensacola, the launch of the downtown Center for Cybersecurity and renovations in Ft. Walton Beach and Pensacola. See Table 8 for more details.

| Table 8: Pro | ject Timeline |
|--------------|---------------|
| | |

| Date | Location | Activity |
|--------------------------------|--|---|
| Within 6 months of award | Sea3D Additive Manufacturing Industry Training & Research | Industry Certifications, Industry Training and collaborative research projects will commence immediately upon receipt of funds. Staff will be hired to support the |

| | | initiative. |
|---------------------------------|--|---|
| | | initiative. |
| | Manufacturing Degree Programs | Degree programs in Engineering and Supply Chain Logistics will begin focused expansion Initiate search for instructional personnel Scholarships will be available for students. Undergraduate Research will begin. |
| | Cybersecurity Degree Programs | Degree programs in Engineering and Cybersecurity will begin focused expansion. Initiate search for instructional personnel. Scholarships will be available for students. Undergraduate Research will begin. |
| | Cybersecurity Industry Training | The Center for Cybersecurity will launch in a location in downtown Pensacola. Industry Training and Industry Certifications will begin. Staff will be hired to support the initiative. |
| Within 12 months of award | Sea3D Additive Manufacturing: Fort Walton Beach | The renovated laboratory will launch creating opportunities for industry collaboration, UWF engineering student growth and community engagement. Staff will be hired to support the initiative. |
| | Intelligent Systems and Robotics Research | The Intelligent Systems and Robotics warehouse teaching facility will launch in a UWF- owned space downtown. Industry innovators in residence hired to participate in research, instruction and guidance. Scholarships will be available for students. Research will commence. |
| | Cybersecurity Innovator-in- Residence | Bring in first innovator in residence to work with Cybersecurity. |

| | Cybersecurity Industry Training | Expansion in downtown Pensacola. Staff will be hired to support the initiative. |
|--|--|--|
| Within 24 months of the project | Advanced Manufacturing Innovator-in-Residence | Bring in UWF's second innovator-in residence to work across the advanced manufacturing areas. |
| Within 36 months of the project | Robotics Innovator-in- Residence | • Bring in UWF's third innovator- in residence to work across the advanced manufacturing areas. |
| 2-5years of award. Progress continues throughout project with increased enrollments | | • All initiatives will continue and accelerate toward meeting the goals of the proposal with graduates, industry certifications. |

Summary

A cost of **\$1,938.50 per program participant** to be funded by Triumph Gulf Coast funding is calculated based on a total of **1,440 highly qualified graduates with workforce experience and industry certificates in** Cybersecurity/IT and Advanced Manufacturing programs. A total of **3,072 industry certifications** and **2,968 trainings** will be delivered in collaboration with industry and across programs at UWF utilizing the proposed request during a five-year project period. The total project cost is \$37,400,000.00 with a \$14,500,000.00 request for funding from Triumph Gulf Coast, Inc. <u>The request represents 39% of the total project cost.</u>

- 1,440 embedded industry certifications + industry experiences + degrees in cybersecurity/IT, engineering, logistics and logistics/supply chain management.
- 3,072 industry certifications in the region/industry.
- 2,968 industry trainings in the region/industry.

For a total of 7,480 industry certifications + trainings + degrees.

3. Explain how the proposed project or program is considered transformational and how it will affect the disproportionately affected counties in the next ten (10) years.

The UWF Project 10[x] will be an innovation engine for Northwest Florida producing talent for high demand jobs in our region and regional innovation for the future. UWF will accelerate all things related to **Cybersecurity**, **Advanced Manufacturing and Intelligent Systems/Robotics** establishing an atmosphere for thought leading innovation producing graduates and industry trained professionals for the region. The workforce need is strong in our region and will continue to accelerate. Threats to cybersecurity of businesses, individuals and the local, state and national government persist, while the number of professionals qualified to deal with cyberattacks is not keeping pace with demand. Nationally, there will be 3.5 million unfilled cybersecurity jobs by 2021 and as many as 86% of employers may need to provide additional workforce training.

More than 3.5 million professionals are needed to fill vacancies in manufacturing by 2020. Of that number, 2 million manufacturing jobs may remain vacant. Northwest Florida manufactures face significant out of state competition for skilled professionals. As manufacturing floors are increasingly operated with more emerging technologies, tools and processes, requirements for ongoing training continue to rise. Specifically, qualified professionals in artificial intelligence, robotics, autonomy and intelligent systems will be key elements of the global economy and local economies in the future. Nearly every facet of the economy is being transformed by these technologies and we anticipate the pace will only accelerate. Graduates of the UWF partnership Ph.D. program with the Institute for Human and Machine Cognition will be equipped to play leading roles in these transformations.

UWF will have a transformational effect on the region producing more graduates ready to fill documented workforce needs. In ten years, this project will continue to pay dividends through the continued development of a workforce that is appropriate for the 21st century knowledge economy. As more students graduate from the degree, certificate and certification programs offered through UWF, the region on the whole will experience a much higher degree of competitiveness that will lead to new economic opportunities for Northwest Florida residents. The transformative energy created by this project will encourage business owners and entrepreneurs to locate their new and existing enterprises to this area. Overall, the significant increase in economic activity resulting from this project will contribute to higher standards of living and greater economic security for generations to come.

The entire project is aligned to the goals of *Northwest Florida Forward: A Regional Strategy for Economic Transformation* (2016) as guiding principles that reflect the values of the region promoting a sustainable and enduring economic base; diversified industries and high wage employment growth; greater alignment of partner resources through regional collaboration; improvement of the vitality of all areas and populations of the region; and strengthening beyond traditional economic engines. Together, these goals and guiding principles represent how the broader community of Northwest Florida defines economic development with the overarching goal of economic vitality for the future.

4. Describe data or information available to demonstrate the viability of the proposed project or program.

UWF has created significant economic impact and continues to have a strong presence in the region. The value proposition for UWF is also strong with the long term need for UWF's product of creating qualified talent for current and future demand as well as additional workforce training to support emerging technology needs of the region in cybersecurity and advanced manufacturing. The assumptions to demonstrate viability of the proposed project are as follows:

- Given the selection of industry clusters for active talent development and regional innovation, it is predicted that the ability to grow and expand exists. 3.5 million unfilled cybersecurity jobs by 2021 and as many as 86% of employers may need to provide additional workforce training. More than 3.5 million professionals are needed to fill vacancies in manufacturing by 2020. Of that number, 2 million manufacturing jobs may remain vacant.
- Given the **current supply of qualified talent** and the gap predicted for the future in the areas of cybersecurity and advanced manufacturing there is a strong market opportunity. 1,100 cybersecurity positions currently remain unfilled in the region, the number may grow, Advanced Manufacturing is an important target for growth as it impacts many other clusters and offers high-wage employment growth for all areas of the region.
- Even though the median **household income for the region** (\$48,567) is currently above the state average (\$47,212), we strive to achieve the national median household income (\$53,482).
- Average earnings for the region in 2016 (\$47,943) are lower than state average earnings (\$53,376).
- National average earnings in 2016 (\$61,389) are higher than the state average earnings (\$53,376).
- Graduates of UWF programs will make salaries above the average wage to include: cybersecurity professionals: IT security specialist: \$113,701; IT security manager: \$131,600; network security engineer: \$107,868; computer network architect: \$100,240; information security analyst: \$90,120 and security engineer: \$81,078. The 2016 median pay for information security analysts is \$92,600. Advanced manufacturing professionals include: Mechanical Engineering: \$95,270; Scientific Research and Development: \$99,180; Aerospace Product and Parts Manufacturing: \$98,230.

To test these assumptions, UWF will employ an econometric simulation model to demonstrate the viability of the proposed project. Using the REMI PI+ model, we will combine sector and geography detail to provide functioning economic linkages over time. REMI incorporates basic input-output linkages but also uses a number of econometrically estimated parameters such as inter-regional migration in response to changes in economic opportunities over time. This will support any changes in spending in the region that typically affects conditions across markets.

5. Describe how the impacts to the disproportionately affected counties will be measured long term.

The long term impacts to the disproportionately affected counties will be measured in multiple ways as follows:

- The impacts of the project will be measured against the results of the econometric simulation model so as to determine (over time or in any given year) whether or not the forecasted impacts have been met by actual impacts.
- The long term impacts of the project will be measured against the actual contribution of the UWF Initiative to UWF's overall 2017-2022 Strategic Plan and the metrics employed in the State University System of Florida Board of Governors Performance Funding model that

fundamentally will produce more STEM graduates at undergraduate and graduate for the region as well as the number of students moving into careers in Northwest Florida.

• Long term impact will be measured against the supply and demand ratio of direct and indirect employment opportunities in targeted industry sectors within the disproportionately affected counties.

The UWF initiative will contribute directly to the supply of qualified potential employees to meet existing and prospective future employer demands. At the same time, UWF will provide support to workforce growth and demand both through direct engagement with private-sector entities in the areas of applied research and product/service development and through the commercialization of research through technology transfer, entrepreneurship and small business development.

6. Describe how the proposed project or program is sustainable. (Note: Sustainable means how the proposed project or program will remain financially viable and continue to perform in the long-term after Triumph Gulf Coast, Inc. funding.)

As a university that is financially stable and has produced significant economic impact for Northwest Florida for 50 years, the assurance of remaining financially viable is strong. The UWF Project will remain viable and will continue to perform in the long term after Triumph Gulf Coast, Inc. funding. The sustainability model (included) reflects how the project will be sustainable with a description following each aspect of the model.



Environmental Support

UWF receives strong internal and external support for the project. Support from UWF includes the President setting this as a strategic priority of the institution, the UWF Board of Trustees providing insights and a core leadership team that has been working on the development of the UWF project since its inception. External support includes the Escambia County Commission, the Pensacola-Escambia Development Council, the Greater Pensacola Chamber of Commerce, Florida West, the Office of the Mayor in

Fort Walton Beach and Northwest Florida Forward. Education is a great supporter with Escambia County and Santa Rosa County School Districts. The military is also a strong supporter with the Air Force Research Laboratory strongly supporting Advanced Manufacturing and national supporters with the National Security Agency (NSA) and the Department of Homeland Security (DHS) supporting through the UWF Center for Cybersecurity's designation as a Center for Academic Excellence and a regional hub by NSA and DHS.

Funding Strategy

The initial investment in regional transformation from Triumph Gulf Coast, Inc. will provide the support needed to increase production of talent. To sustain, the following is planned:

- Degree programs will produce revenue at the state level fully funded FTE.
- The Florida Cyber Range will produce significant external trainings and generate market rate revenue per month.
- The Cyber for All program will be conducted in ongoing workforce training at market rate.
- The Advanced Manufacturing Laboratory will contract with business, industry and the community for fee-based services.
- Workforce training will be conducted at market rate over time.
- All industry certifications will be conducted at market rate over time.
- Research will be conducted in partnership with industry and the military.
- Technology Transfer and Commercialization opportunities are planned.

Partnerships

UWF has over 50 partners currently endorsing the initiative. These partners range from large global companies such as The Boeing Company to military and regional partners.

Organizational Capacity

UWF has organizational capacity to manage growth over time. UWF continues to hire talented research faculty and staff to support growing program areas. This initiative will enable UWF to add instructional personnel, bring in innovators in residence, add industry certified staff, expand laboratories and support students through mentoring, living-learning opportunities, undergraduate and graduate research and scholarships to support degree attainment. In the areas of Cybersecurity, Advanced Manufacturing and Intelligent Systems/Robotics, UWF supports program development and delivery and research aligning to the UWF strategic goals for 2017-22.

Program Evaluation

For purposes of sustainability, UWF has ongoing program evaluations that are standard to the operation of a regionally accredited institution. Our evaluation of the UWF Project will filter through the ongoing data collection and assessment processes of existing program evaluation at UWF. Additionally, evaluation across the UWF project will be measured against the goals of the project that include the following:

- Launch rental facilities in downtown Pensacola and expand UWF-owned facilities in Pensacola and Fort Walton Beach for the UWF Project to connect communities, locations, labs and curriculum.
- Become a hub for talent development in key industry clusters ensuring a future workforce for Northwest Florida.
- Develop innovative programming in Cybersecurity, Advanced Manufacturing and Intelligent Systems/Robotics aligned to the Florida Board of Governors programs of strategic emphasis and regional targeted growth industries.
- Expand the entrepreneurship and innovation ecosystem to support talent development, regional innovation and future growth across the region.

UWF systematic evaluation for programs, centers and initiatives is ongoing and is as follows:

- UWF is **regionally accredited through SACSCOC**. SACSCOC requires that UWF maintain institutional effectiveness, educational programming, educational support services and administrative processes across the entire university, programming, resources and finance across all of its locations <u>http://www.sacscoc.org</u>.
- UWF's **2017-2022 Strategic Plan** emphasizes several areas that include growth in downtown Pensacola specifically focusing on community and economic engagement. Several of the goals with teaching and research also align to the UWF project https://uwf.edu/about/at-a-glance/strategic-plan/.
- The Florida Board of Governor's Performance Funding metrics supports ongoing evaluation of UWF toward specific and common metrics to include three that will be directly relevant to this project: (1) Percent of bachelor's graduates employed and/or continuing their education one year after graduation, (2) Median wages of bachelor's graduates employed one year after graduation (6) Bachelor's degrees awarded in areas of strategic emphasis.
- Center and Institute reviews are also required by the Florida Board of Governors on an annual basis and follow criteria set forth in Statute. Center and Institute program reviews occur on a five-year cycle to ensure compliance with stated purpose and specific criteria for successful operations.

Program Adaptation

Based on the review cycles and compliance with University of West Florida policies, Board of Governors regulations and Florida Statutes, The UWF project will have ongoing review cycles of program effectiveness and continue to adapt to meet the needs of the market.

Communications

As a final measure for ongoing sustainability, UWF will focus on communicating the success, impact, partnerships, courses, industry certifications, programming and research across all facilities of the UWF project. UWF maintains a university communications team as well as divisional Communications liaison teams that will manage the day-to-day activities to support the project and to fully engage the community.

7. Describe how the deliverables for the proposed project or program will be measured.

Table 9 provides deliverables and measure for the UWF project based on a set of goals aligned to Northwest Florida Forward, measures to promote maximum economic impact and deliverables aligned to common reporting models. UWF focuses on Workforce Development in setting its deliverables and program measures.

Table 9: Deliverables for Workforce Development

| WORKFORCE DEVELOPMENT | | | |
|-----------------------|---------|-------------|--|
| Goal | Measure | Deliverable | |

| | T 1 C 1 1 | |
|--|---|--|
| Talent Development The UWF project will become a hub for talent development in key | Increase number of students participating in degree programs, certificates and industry certifications to provide talent supply needs. Increase graduates of degree | Reports for degree programs submitted to the BOG. Industry certification reports BOG graduation data |
| industry clusters ensuring a future workforce for | programs, certificates and industry certifications. | |
| Northwest Florida. | Increase the number of industry certifications in the region | Reporting on successful completers and tests |
| | Increase the average regional wage/household income | Economic Modeling Specialists, Inc. (EMSI) Department of Labor (DoL)Wage |
| | Increase the average national wage/household income | Economic Modeling Specialists, Inc. (EMSI) Department of Labor (DoL)Wage |
| | Increase diversification of the regional economy based on the REMI model | REMI modeling |
| | Achieve industry cluster impact | REMI modeling |
| | Increase the number of STEM graduates | BOG reports |
| | Create targeted industry talent in cybersecurity, advanced manufacturing and intelligent systems/robotics. | BOG reports Accountability Report |
| Programming aligned to Industry Cluster Needs. | Implement high demand programs of strategic emphasis | Semester to semester enrollments |
| Develop innovative knowledge clusters and | Increase technology and skills in all students participating in the UWF project | Technology assessments, Industry Certifications |
| programming in Cybersecurity, Advanced Manufacturing and | Encourage students with an interest or aptitude in STEM to pursue postsecondary education in the region | K12, Career Academy, Competitions and Events |
| Intelligent Systems/Robotics aligned to the Florida Board of Governors programs of strategic emphasis and regional targeted growth industries. | Strengthen career exploration in the region. | K12, Career Academy, Competitions and Events |
| Partnerships: Innovation & Entrepreneurship | Leverage and enhance education, research and the military regional assets | Number of partnerships connected to research |

| Expand the entrepreneurship and | Create a sense of place that is appealing to a new generation of talented and creative people | Surveys, attendance and participation |
|---|---|---|
| innovation ecosystem to support talent | Partner with K20 educational institutions | Signed partnership agreements |
| development, regional innovation and future growth across the region. | Increase research award and expenditures | Annual increase using the National Science Foundation's HERD Survey BOG Research Scorecard |
| | Establish partnerships with counties. | Signed partnership agreements |

Priorities

1. Please check the box if the proposed project or program will meet any of the following priorities (check all that apply):

- ★ Generate maximum estimated economic benefits, based on tools and models not generally employed by economic input-output analyses, including cost-benefit, return-on-investment, or dynamic scoring techniques to determine how the long- term economic growth potential of the disproportionately affected counties may be enhanced by the investment.
- X Increase household income in the disproportionately affected counties above national average household income.
- X Leverage or further enhance key regional assets, including educational institutions, research facilities, and military bases.
- \underline{x} Partner with local governments to provide funds, infrastructure, land, or other assistance for the project.
- **X** Benefit the environment, in addition to the economy.
- $\overline{\mathbf{X}}$ Provide outcome measures.
- Partner with K-20 educational institutions or school districts located within the disproportionately affected counties as of January 1, 2017.
- Are recommended by the board of county commissioners of the county in which the project or program will be located.
- Partner with convention and visitor bureaus, tourist development councils, or chambers of commerce located within the disproportionately affected counties.

2. Please explain how the proposed project meets the priorities identified above.

Generate maximum estimated economic benefits, based on tools and models not generally employed by economic input-output analyses, including cost-benefit, return-on-investment, or dynamic scoring techniques to determine how the long- term economic growth potential of the disproportionately affected counties may be enhanced by the investment. UWF employed an econometric simulation model to demonstrate the viability of the proposed project. Econometric simulation models combine the sector detail and geography detail of input/output models but provide for functioning economic linkages between sectors and regions over time. Information on the UWF proposal was entered into REMI PI+ Version 2.1.1 (Regional Economic Models Inc.). REMI incorporates the basic input/output linkages, but also uses a number of econometrically estimated parameters, for example, interregional migration in response to changes in economic opportunities, in generating impact results. Because of these between-sector linkages, the model incorporates general equilibrium tendencies as the economy responds to shocks over time. Changes in spending in a region affect not just conditions in that market, but also in other markets within the region (economists term this a "general equilibrium") and outside the region (via trade and also via migration in response to changes in economic opportunities). This contrasts with traditional input-output models that are both static (all effects are assumed to occur simultaneously, so there is no adjustment path over time) and partial equilibrium (e.g. changes in employment do not change wage rates) in nature.

A specific example is as follows: A manufacturing facility opens in a region and pays wages higher than the area's average wage. Because of the increased demand for workers with that skill set, the region's manufacturers and possibly construction industry may have to increase their wages or benefits to retain existing workers or attract new workers. A traditional inputoutput model simulation of the economic impact holds everything else fixed (including manufacturing wages across the county) and simply documented the employment and job creation effects resulting directly at the new manufacturing facility and indirectly via businesses in its supply chain, as well as household spending induced by the new income flows.

A simulation model such as REMI captures not only the spending effects flowing from the manufacturing facility and its local suppliers and employees and owners, but also the spillover effects into other markets as wages and prices change due to competition for the same employees and other resources. These are the general equilibrium (equilibrium across all markets simultaneously) tendencies of the model. It also simulates the adjustment path over time of these market responses, using historical parameters estimated specifically for that county (the dynamic component). In an input-output model, impacts are usually measured as gross impacts, or additions to the area's economy without consideration of the extent to which, for example, a project's use of labor force may make labor more expensive to other businesses, or require additional infrastructure investment. The use of REMI attenuates this problem and so comes closer to an estimate of net, rather than gross, economic impacts because of the feedback effects present in this simulation model.

Increase household income in the disproportionately affected counties above national average household income.

- Even though the median **household income for the region** (\$48,567) is currently above the state average (\$47,212), we strive to achieve the national median household income (\$53,482).
- Average earnings for the region in 2016 (\$47,943) are lower than state average earnings (\$53,376).

- National average earnings in 2016 (\$61,389) are higher than the state average earnings (\$53,376).
- Graduates of UWF programs will make salaries above the average wage to include: cybersecurity professionals: IT security specialist: \$113,701; IT security manager: \$131,600; network security engineer: \$107,868; computer network architect: \$100,240; information security analyst: \$90,120 and security engineer: \$81,078. The 2016 median pay for information security analysts is \$92,600. Advanced manufacturing professionals include: Mechanical Engineering: \$95,270; Scientific Research and Development: \$99,180; Aerospace Product and Parts Manufacturing: \$98,230.

Leverage or further enhance key regional assets, including educational institutions, research facilities, and military bases. This proposal has over 50 organizations providing support for activity to enhance key regional assets. The letters of support are available in the Appendix of this document and are also listed beginning on page 3 of the full proposal.

Partner with local governments to provide funds, infrastructure, land, or other assistance for the project. This project was approved by the Escambia County Commission on November 30, 2017 as a top shovel ready priority. The Office of Mayor in Okaloosa County provided his letter of support as well as many other organizations in support of the Sea3D Laboratory to be located in an existing facility on the UWF-NWFSC Joint Campus.

Partner with K-20 educational institutions or school districts located within the disproportionately affected counties as of January 1, 2017. UWF is a strong partner with both Escambia and Santa Rosa County School District and has been for many years. We collaborate on teacher preparation, STEM education, STEAM education, Career Education, Career Academies, competitions and events. Events such as the BEST Robotics Competition, CyberPatriot program and others represent a long time impact with educators in the region. UWF will partner with school districts in the specific areas of Cybersecurity, Advanced Manufacturing and Intelligent Systems/Robotics. In the partnership we will offer opportunities for students and teachers to connect and learn through the UWF project, attend field trips and participate in collaborative activities to inspire and engage students in specific career fields aligned to the UWF project goals.

Are recommended by the board of county commissioners of the county in which the project or program will be located. This project was approved by the Escambia County Commission on November 30, 2017 as a top shovel ready priority. (Letter attached.)

Partner with convention and visitor bureaus, tourist development councils, or chambers of commerce located within the disproportionately affected counties. UWF is a partner with Visit Pensacola, The Greater Pensacola Chamber of Commerce and Florida West. The UWF presence downtown in rental and UWF-owned spaces will provide additional energy to downtown Pensacola. We will encourage the community, tourists and partners to engage in events, activities and events at UWF project locations throughout the downtown area.

3. Please explain how the proposed project or program meets the discretionary priorities identified by the Board.

- Are considered transformational for the future of the Northwest Florida region. The UWF will be an innovation engine for Northwest Florida producing talent for high demand jobs in our region and regional innovation for the future. The Innovation Network will accelerate all things related to Cybersecurity, Advanced Manufacturing and Intelligent Systems/Robotics establishing an atmosphere for thought leading innovation in downtown Pensacola and the Joint Campus of Northwest Florida State College and UWF. The workforce need is strong in our region and will continue to accelerate. UWF will have a transformational effect on the region producing more graduates ready to fill documented workforce needs. This project will continue the development of a workforce appropriate for the 21st century knowledge economy. As more students graduate from the degree, certificate and certification programs offered through UWF, the region on the whole will experience a much higher degree of competitiveness that will lead to new economic opportunities for Northwest Florida residents.
- May be consummated quickly and efficiently. The university invested in moving forward talent development and regional innovation by establishing the Sea 3D Advanced Manufacturing Laboratory and the Center for Cybersecurity in downtown Pensacola through other sources of funds. Both will be operational in 2019 offering programming. Within three years, this project and will increase the number of students ready to accept positions in the region as well as accelerate existing employers' workforce development needs in areas that produce immediate workforce impact. These numbers will accelerate significantly once programming and opportunities for world-class technologies are available and permanent facility is in place.
- Promote net-new jobs in the private sector with an income above regional average household income. With its focus on the targeted industry sectors of cybersecurity and advanced manufacturing, coupled with its relationship with new and existing companies aligned to this industry sector, this project will produce more talent for existing and projected jobs in the region. UWF will support new jobs for instructional personnel and staff and for the operation of the Project. However, as a university, the focus of this project is to produce talent for critical industry needs our region where salaries are above the regional and national household income. This focus aligns to the preparation of students for future occupations and careers.
- Align with Northwest Florida FORWARD, the regional strategic initiative for Northwest Florida economic transformation. This project aligns directly with Northwest Florida FORWARD, the regional strategic initiative for Northwest Florida economic transformation. Specifically, this project aligns with and directly supports all five goals established in the Northwest Florida FORWARD Strategic Action Plan: (1) Talent (2) Business Vitality (3) Infrastructure (4) Entrepreneurship and Innovation and (5) Quality of Place. There is a vital role to be played by UWF.
- Create net-new jobs in targeted industries to include: aerospace and defense, financial services/shared services, water transportation, artificial intelligence, cybersecurity, information technology, manufacturing, and robotics.

For this initiative, UWF is projected to produce 1,440 new graduates with degrees, industry experiences and industry certifications that that are qualified to fill a large number of existing employment opportunities over the initial three-year period of operation. In addition, a total of 4,831 industry certifications will be delivered across the region.

Given the stated job demand in the region for cybersecurity and advanced manufacturing, this effort will contribute to employment in targeted industries. Each existing employment position that is filled with a qualified employee results in additional economic activity that, in turn, contributes to the creation of net-new, indirect and induced employment opportunities within the regional economy. The average wage of positions in these fields **exceed** the current average wages at both the regional and national levels. At the same time, each new student enrollment represents net-new revenue to the university and, by extension, net-new expenditures throughout the regional economy. New instructional personnel, innovators in residence and staff will be hired as well as supporting students through scholarships to achieve degrees and industry certifications. This results in economic activity that then leads to the creation of net-new, indirect and induced jobs in the region.

- **Promote industry cluster impact for unique targeted industries.** Cybersecurity, advanced manufacturing, robotics and intelligent systems have strong industry cluster support in Northwest Florida. Focused education and training fuels innovation, investment, economic diversification and competitiveness. With the portfolio of education and training supported through UWF, innovation will be fueled and create industry cluster impact. Another aspect of the Innovation Network focused on innovation and entrepreneurship activities will increase corporate presence and build a bridge to career opportunities for students and regional innovation, technology transfer and commercialization.
- Create net-new jobs with wages above national average wage (*e.g.*, similar to EFI QTI program, measured on graduated scale).
 - Even though the median household income for the region (\$48,567) is currently above the state average (\$47,212), we strive to achieve the national median household income (\$53,482).
 - Average earnings for the region in 2016 (\$47,943) are lower than state average earnings (\$53,376).
 - National average earnings in 2016 (\$61,389) are higher than the state average earnings (\$53,376).
 - Graduates of UWF programs will make salaries above the average wage to include: cybersecurity professionals: IT security specialist: \$113,701; IT security manager: \$131,600; network security engineer: \$107,868; computer network architect: \$100,240; information security analyst: \$90,120 and security engineer: \$81,078. The 2016 median pay for information security analysts is \$92,600. Advanced manufacturing professionals include: Mechanical Engineering: \$95,270; Scientific Research and Development: \$99,180; Aerospace Product and Parts Manufacturing: \$98,230.
- Are located in Rural Area of Opportunity as defined by the State of Florida (DEO). For the initial operation of the UWF project, there will be no specific locations in Rural Area of Opportunities. However, UWF serves students across Northwest Florida and welcomes opportunities to network into rural areas in the future.
- **Provide a wider regional impact versus solely local impact.** This project will have an impact in Escambia and Okaloosa counties initially. A wider regional impact is planned in the Innovation Network master plan.
- Align with other similar programs across the regions for greater regional impact, and not be duplicative of other existing projects or programs. As a network, UWF is intended to connect and align with similar opportunities. Through our planning in Cybersecurity and

the creation of the FloridaWest Economic Development Alliance Regional Cybersecurity Strategic Plan, much of the connections have already been established. Similar is true with the Northwest Florida Manufacturers Council and TecMEN that works closely together in collaboration with advanced manufacturing programming.

• Enhance research and innovative technologies in the region. As a university, it is in our mission to conduct research. We currently have over \$41M in research expenditures at UWF and are focused on enhancing research and innovation through the partnerships, facilities and focus on the UWF Project. As a means to support student engagement, UWF is considered distinctive in its offerings of undergraduate research. Each year, UWF hosts an undergraduate research symposium focusing on the research of the university. This project will expand the undergraduate research efforts in the areas of cybersecurity, advanced manufacturing and intelligent systems/robotics.

In addition to the Cybersecurity and Advanced Manufacturing initiatives, the partnership with IHMC for Intelligent Systems and Robotics will establish robust opportunities for research. Specific examples of research and innovative technologies include a collaborative endeavor between UWF and IHMC. IHMC, a not-for-profit research institute of the State University System (SUS), is a pioneer of technologies aimed at leveraging and extending human capabilities through a unique interdisciplinary approach combining computer science, cognitive psychology, neuroscience, engineering, medical science, and other related science disciplines. Adding a new doctoral program follows UWF's strategic vision for research and scholarly activities and will strengthen its impact on Northwest Florida's economic development and high technology enterprise. This degree and specific research will not only serve a significant need in Florida and the U.S., but will also allow UWF graduates to be nationally and internationally recognized leaders and innovators in intelligent systems and robotics. Producing graduates with doctoral degrees in this fields will ensure that Florida trains and retains a workforce ideally suited to today's many challenges, and the graduates will provide leadership, expertise, and innovation to keep Florida at the forefront of these advances. The first research project in the UWF lab will focus on efficient interfaces for human-robot teams performing surveillance and maintenance tasks from the ground, air, or under water. For example, monitoring fertilizer run-off and algae bloom, the finding infestations of cogon grass in cattle grazing lands and treating them with minimal targeted herbicides, monitoring public utility construction sites to ensure compliance with construction plans, and monitoring bridge vibrations to understand their structural integrity. Also, there are many NASA and DoD applications of this work. The second project will focus on understanding how humans grasp objects and dexterously manipulate them. Applications will include the development of robot and prosthetic hands that are more compliant and more capable than existing hands. As part of this work, the project will study human motor control and brain activity during manipulation to develop new theories and methods applicable to robotic and prosthetic hands. To support the first research project, the UWF lab will have several flying robots and ground-based mobile robots in a netted-off safe flying area. People and robots in the area will be accurately tracked by a Vicon camera system. The second project will be supported by three Universal Robots arms, a UR3, a UR5, and a UR10, a Barrett hand BH8-282, and an i-limb ultra-hand. The lab will also house a 3D printer to design and build a new hand covered entirely in a sensitive tactile skin. PhD programs with their corresponding doctoral students, post-doctoral scientists along with

undergraduate and graduate students in other degree programs that will partner across this network are essential for academic institutions to developing cutting-edge research that generates intellectual property, technology transfer opportunities, and potential start-up businesses.

- Enhance a targeted industry cluster or create a Center of Excellence unique to Northwest Florida. The entire proposal reflects enhancing a targeted industry cluster. The significant impact of the Center for Cybersecurity's CyberRange, Sea3D Additive Manufacturing and the Intelligent Systems and Robotics Laboratories will be unique to Northwest Florida and will serve as a Center of Excellence through the network of partners that will support students completing degrees at UWF to have a competitive edge for employment.
- Create a unique asset in the region that can be leveraged for regional growth of targeted industries. The project will produce regional innovation and talent for the region with a fully functional Laboratories networked across the region with over 50 partners. As an aspirant example for the project, in January 2017 Georgia Governor Nathan Deal invested \$50M to create a "Georgia Cyber Innovation and Training Center" adjacent to the Augusta University Riverfront Campus. Once announcing the state investment, project funding increased to over \$100M based on partnerships with the private sector and the military. This investment is intended to create a world-class cyber range and training facility focused on developing the next generation cyber workforce through training, real-world practice, education, public-private collaboration and interdisciplinary research in the fields of healthcare, computer science, electrical engineering, mathematics and robotics. UWF is proposing to create a similar unique asset in our region that provides an investment in Cybersecurity for Northwest Florida similar to the Augusta University's Riverfront Campus. UWF's Project 10[x] has great parallels. From federal assets like the U.S. Navy's Center for Information Warfare Training and the Department of Homeland Security's National Cybersecurity and Communications Integration Training Center to many private-sector partners such as Raytheon, Northrop Grumman and Navy Federal Credit Union, this is a solid investment in the foundation of Northwest Florida's economy similar to the investment the Augusta model will provide for the community in Georgia.
- Demonstrate long-term financial sustainability following Triumph Gulf Coast, Inc. funding. The complete answer located in question #6 presents a full sustainability model. The model used is includes a focus on environmental support, a funding strategy, partnerships, organizational capacity and program evaluation aligned to the operation of a university. Long term, UWF is financially stable.
- Leverage funding from other government and private entity sources. Match funds come from the following sources: private, state and federal agencies (cybersecurity, advanced manufacturing, innovation) and university programming and salaries connected directly to activities of the UWF project.
- **Provide local investment and spending.** Local investment and spending are fundamental to this project. Situating temporary facilities in downtown Pensacola will establish a hub for NEW student and industry engagement.
- Are supported by more than one governmental entity and/or private sector companies, in particular proposed projects or programs supported by more than one county in the region. This project has over 50 partners supporting the project. Full letters of support are found in the Appendix and listed beginning on page 3 of the full proposal.

- **Provide clear performance metrics over duration of project or program.** The table references clear performance metrics, goals and deliverables over the duration of the project. Using the detailed Workforce Training metrics earlier in the document, the following will be outcomes that can be measured using data collected by the Florida Board of Governors. Industry certifications and industry trainings can be collected from registration and enrollment data. The following information measures the key points of the proposal.
 - 1,440 embedded industry certifications + industry experiences + degrees in cybersecurity/IT, engineering, logistics and logistics/supply chain management.
 - 3,072 industry certifications in the region/industry.
 - 2,968 industry trainings in the region/industry.
 - For a total of 7,480 industry certifications + trainings + degrees.
- Include deliverables-based payment system dependent upon achievement of interim performance metrics. Payment timelines included in full budget.

Included in Table 10 is a proposed Five-Year funding allocation chart for a successful grant.

| Project Costs | Year One | Year Two | Year Three | Year Four | Year Five |
|-----------------------|--|--|--|--|--|
| Salaries & Program | \$1,900,000.00 | \$2,400,000.00 | \$2,400,000.00 | \$2,400,000.00 | \$2,900,000.00 |
| Support | Administration | Administration | Administration | Administration | Administration |
| | Instructional Personnel | Instructional Personnel | Instructional Personnel | Instructional Personnel | Instructional Personnel |
| | Student Scholarships | Student Scholarships | Student Scholarships | Student Scholarships | Student Scholarships |
| | Center for Cybersecurity Programming | Innovators in Residence | Innovators in Residence | Innovators in Residence | Innovators in Residence |
| | Sea3D Programming | Center for Cybersecurity Programming | Center for Cybersecurity Programming | Center for Cybersecurity Programming | Center for Cybersecurity Programming |
| | Undergraduate Programming | Sea3D Programming | Sea3D Programming | Sea3D Programming | Sea3D Programming |
| | Career Services Programming | Undergraduate Programming | Undergraduate Programming | Undergraduate Programming | Undergraduate Programming |
| | 1.09.000000 | Career Services Programming | Career Services Programming | Career Services Programming | Career Services Programming |

Table 10. Five Year Funding Allocation.

| | | STEM Community Programming | STEM Community Programming | STEM Community Programming | STEM Community Programming |
|---|---|---|--|---|----------------------------------|
| Equipment & Program Supplies | \$1,000,000.00 Cybersecurity Advanced Manufacturing & Robotics | \$500,000.00 Cybersecurity Advanced Manufacturing & Robotics | \$ 500,000.00 Cybersecurity Advanced Manufacturing & Robotics | \$500,000.00 Cybersecurity Advanced Manufacturing & Robotics | |
| Total: \$14,500,000. 00 | \$2,900,000.00 | \$2,900,000.00 | \$2,900,000.00 | \$2,900,000.00 | \$2,900,000.00 |

- **Provide capacity building support for regional economic growth.** UWF will build capacity that will support regional economic growth by producing talent for the region, expanding significant and focused workforce training and promoting regional innovation through research, technology transfer and commercialization.
- Include Applicant and selected partners/vendors located in Northwest Florida. The full list of partners is located beginning on page 3 of the full proposal. Letters of support are listed in the appendix of this proposal.

4. In which of the eight disproportionately affected county/counties is the proposed project or program located? (Circle all that apply)

Escambia Santa Rosa Okaloosa Walton Bay Gulf Franklin Wakulla

5. Was this proposed project or program on a list of proposed projects and programs submitted to Triumph Gulf Coast, Inc., by one (or more) of the eight disproportionately affected Counties as a project and program located within its county?

XYes No

If yes, list all Counties that apply: ESCAMBIA

6. Does the Board of County Commissioners for each County listed in response to question 5, above, recommend this project or program to Triumph?

| x Yes | \square | No |
|-------|-----------|----|
|-------|-----------|----|

Attached in letters of support.

Approvals and Authority

1. If the Applicant is awarded grant funds based on this proposal, what approvals must be obtained before Applicant can execute an agreement with Triumph Gulf Coast, Inc.?

The President of the University of West Florida has full authority to negotiate an agreement with Triumph Gulf Coast, Inc.

The following approvals will commence within 7 - 10 days upon the agreement becoming available for execution.

- For UWF programming, salary and equipment expenses the Board of Trustees will be notified by the President of the successful Triumph grant, but approval from the Board of Trustees is not required.
- The UWF programming including degree programming, field studies, industry certifications, capstone courses, key discussions of career opportunities, internships, cooperative experiences, mentorships, shadowing and key industry partner engagements will be established. UWF will provide courtesy notification to SACS to make them aware of the programming locations.

2. If approval of a board, commission, council or other group is needed prior to execution of an agreement between the entity and Triumph Gulf Coast:

A. Provide the schedule of upcoming meetings for the group for a period of at least six months.

The UWF Board of Trustees calendar for the remainder of 2018 is as follows:

- September 19, 2019
- December 5, 2019
- March 18, 2020
- June 18, 2020
- B. State whether that group can hold special meetings, and if so, upon how many days' notice. The UWF Board of Trustees can hold a special meeting with a proper 7-day notice at any time.

3. Describe the timeline for the proposed project or program if an award of funding is approved, including milestones that will be achieved following an award through completion of the proposed project or program.

A detailed timeline is located on page 24 of this proposal.

4. Attach evidence that the undersigned has all necessary authority to execute this proposal on behalf of the entity applying for funding. This evidence may take a

variety of forms, including but not limited to: a delegation of authority, citation to relevant laws or codes, policy documents, etc. In addition, please attach any support letters from partners.

Pursuant to Article IX, section 7(c), Florida Constitution, the Florida Board of Governors establishes the powers and duties of the board of trustees for the state of Florida University System. Florida Board of Governors' Regulation 1.001 delegates powers and duties to the university boards of trustees so that the university boards have all of the powers and duties necessary and appropriate for the direction, operation, management, and accountability of each state university. The University of West Florida Board of Trustees is a public body corporate with all the powers of a body corporate, including the power to contract. Fla. BOG Reg 1.001(g). A Florida university president serves as the chief executive officer of the board of trustees. Fla. BOG Reg. 1.001(d). The University of West Florida Board of Trustees' Bylaws (hereinafter "Bylaws") designate the university president as executive officer of the board of trustees. The Bylaws also delegate to the university president all such powers as are appropriate to his/her position in promoting, supporting and protecting the interests of the university and managing and directing its affairs. Additionally, the Bylaws give the university president the authority for all educational, financial, business and administrative functions of the university. On November 16, 2017, the UWF Board of Trustees granted very broad and specific delegations of authority to the university president to operate and administer the university, including the authority to enter into and sign contracts. Finally, University of West Florida Policy-04.04-01/17 authorizes the university president to approve and execute all contracts, agreements, letters of understanding, memoranda of understanding, and other documents regarding legal assurance, commitments, and obligations on behalf of the University and its constituent units. The following items are evidence:

- Article IX, section 7(c), Florida Constitution
- Florida Board of Governors Regulation 1.001
- UWF Board of Trustees Bylaws
- UWF Board of Trustees Resolution passed in November 2017
- University Policy P-04.04-01/17

Find attached Letters from the following partners: We have received 54 letters from partners and local government.

Funding and Budget:

Pursuant to Section 288.8017, awards may not be used to finance 100 percent of any project or program. An awardee may not receive all of the funds available in any given year.

1. Identify the amount of funding sought from Triumph Gulf Coast, Inc. and the time period over which funding is requested.

The University of West Florida Project[x] is seeking \$14,500,000 in funding over three years from the start of the project.

2. What percentage of total program or project costs does the requested award from Triumph Gulf Coast, Inc. represent? (Please note that an award of funding will be for a defined monetary amount and will not be based on percentage of projected project costs.)

The requested award from Triumph Gulf Coast equals **39 percent** of the total project.

3. Please describe the types and number of jobs expected from the proposed project or program and the expected average wage.

UWF will create talent for regional employers in the areas listed below:

Graduates of UWF programs will make salaries above the average wage to include: **cybersecurity** professionals: IT security specialist: \$113,701; IT security manager: \$131,600; network security engineer: \$107,868; computer network architect: \$100,240; information security analyst: \$90,120 and security engineer: \$81,078. The 2016 median pay for information security analysts is \$92,600. Advanced manufacturing professionals include: Mechanical Engineering: \$95,270; Scientific Research and Development: \$99,180; Aerospace Product and Parts Manufacturing: \$98,230.

4. **Does the potential award supplement but not supplant existing funding sources?** If yes, describe how the potential award <u>supplements</u> existing funding sources.

X Yes 🗌 No

Existing programming currently occurs on UWF main campus, Emerald Coast Campus and online. Those programs will not be replaced by this funding. This funding will allow the addition of enhanced opportunities throughout the UWF project.

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

| Triumph Total Project Budget | Project Total | | Project Match | | Triumph Grant | |
|---|---------------|---------------|---------------|---------------|---------------|---------------|
| Equipment | \$ | 9,500,000.00 | \$ | 5,000,000.00 | \$ | 2,500,000.00 |
| Program Supplies | | 450,000.00 | | | | |
| University Programming, Supplies & Salaries | \$ | 29,950,000.00 | \$ | 17,950,000.00 | \$ | 12,000,000.00 |
| | \$ | 39,450,000.00 | \$ | 22,950,000.00 | \$ | 14,500,000.00 |

A. **Project/Program Costs: See Chart Above**. Note the request for Triumph Gulf Coast is \$14,500,000 with the remaining funds coming from other sources of funding serving as a match for this project.

Total Project Costs:

\$<u>37,400,000</u>

B. Other Project Funding Sources:



| Private Sources | \$ <u>3,000,000</u> |
|--------------------------------|----------------------------|
| University Programming | \$ <u>16,950,000</u> |
| University Salaries | <u>\$3,000,000</u> |
| Total Other Funding | \$ <u>22,950,000</u> |
| Total Amount Requested: | \$<u>14,500.000</u> |

Note: The total amount requested must equal the difference between the costs in 3A. and the other project funding sources in 3.B.

C. Provide a detailed budget narrative, including the timing and steps necessary to obtain the funding and any other pertinent budget-related information.

Throughout the duration of the project, funds will be spent on instructional personnel, staff, 3 innovators in residence, student scholarships, equipment and supplies. UWF is funding rent for these facilities. Equipment and staffing will be funded through the Triumph Gulf Coast proposal to support degree programs, industry certifications, certificates, industry training and events. Temporary locations launch in downtown Pensacola to include:

- Rental property for The Center for Cybersecurity at the Studer Community Institute.
- UWF-owned property for Sea3D Laboratory Pensacola in the UWF Historic Trust Museum of Commerce. Launched earlier in the year, small expansion.
- UWF-owned property for Intelligent Systems and Robotics Warehouse on Romano Street situated adjacent to IHMC in Pensacola.
- Existing classroom renovation for Sea3D Fort Walton Beach will occur on the Joint Campus with UWF and NWFSC to support engineering and the community.

Equipment costs will include funding to support:

- Florida's Cyber Range in the Center for Cybersecurity,
- Sea3D Additive Manufacturing for Fort Walton Beach,
- Sea3D Pensacola additional equipment, and
- Intelligent Systems and Robotics equipment.

University Programming and Salaries will be used to fund the operation/administration of the UWF project, new world-class innovators-in-residence and staff to support all of the initiatives of the project. Funding will also be used for student scholarships to support industry certifications, industry internships and opportunities for students to participate in highly engaging industry partnership experiences.

- Cybersecurity Initiatives (degrees + industry certifications, industry certifications).
- Advanced Manufacturing Initiatives (degrees + industry certifications, industry trainings).

Supplies. A small supplies budget is included to support materials for 3D printing and other various needs for the project.

All funding sources in Section B. above have already been obtained for the project.

Future Fundraising from private sources are a PRIORITY of the university and private entities for increased support of the UWF project and the programs of cybersecurity, advanced manufacturing, intelligent systems and robotics.

Applicant understands that the Triumph Gulf Coast, Inc. statute requires that the award contract must include provisions requiring a performance report on the contracted activities, must account for the proper use of funds provided under the contract, and must include provisions for recovery of awards in the event the award was based upon fraudulent information or the awardee is not meeting the performance requirements of the award.



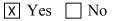
Applicant understands that awardees must regularly report to Triumph Gulf Coast, Inc. the expenditure of funds and the status of the project or program on a schedule determined by Triumph Gulf Coast, Inc.



Applicant acknowledges that Applicant and any co-Applicants will make books and records and other financial data available to Triumph Gulf Coast, Inc. as necessary to measure and confirm performance metrics and deliverables.

| Х | Yes | | No |
|---|-----|--|----|
|---|-----|--|----|

Applicant acknowledges that Triumph Gulf Coast, Inc. reserves the right to request additional information from Applicant concerning the proposed project or program.



ADDENDUM FOR WORKFORCE TRAINING PROPOSALS

1. Program Requirements

A. Will this proposal support programs that prepare students for future occupations and careers at K-20 institutions that have campuses in the disproportionately affected counties? If yes, please identify where the campuses are located and provide details on how the proposed programs that programs will be provided.

X Yes 🗌 No

Each of the UWF focus areas (cybersecurity, advanced manufacturing, intelligent systems/robotics) will serve as an innovation platform to bring the right people together to innovate, conduct research, create graduates, industry certifications and workforce training completers. The cluster-based model used to design the UWF project promotes significant partnerships to achieve world-class preparation of students for future occupations and careers. Over 50 business partners will support the UWF project providing key insights, guidance, research opportunities, student internships and cooperative experiences for students to build student experiences and prepare them for employment in their business or others throughout the region,

UWF will achieve high-impact economic engagement throughout the region by supporting UWF academic degrees, courses, certificates and certifications and workforce training emphasized across the entire project. All academic programming will align to the Board of Governors' programs of strategic emphasis, the BOG 2025 System Strategic Plan and UWF's 2017-2022 Strategic Plan, Northwest Florida Forward: A Regional Strategy for Economic Transformation (2016) and the Northwest Florida Economic Development Alliance's "Live Coastal. Work Cyber." Cybersecurity Strategic Plan Report (2017). This synergy contributes to the enhancement and diversification of the Northwest Florida economy.

The transformative energy created by this project will produce:

- 1,440 embedded industry certifications + industry experiences + degrees in cybersecurity/IT, engineering, logistics and logistics/supply chain management.
- 3,531 industry certifications in the region/industry.
- 2,239 industry trainings in the region/industry.
- For a total of 7,210 industry certifications + trainings + degrees.

Many universities offer experiences for college freshmen to become more engaged in college, build relationships and work collaboratively with a group of like-minded students with the ultimate goal of retaining students to completion of a degree. With the demand for high tech jobs in cybersecurity, advanced manufacturing and intelligent systems/robotics, higher education institutions across the United States must attract and retain more students in these specific areas in order to increase the number of graduates ready to work. To do so, it is critical to implement models that effectively recruit, retain and graduate an increasing number of students in specific high tech disciplines. The Florida Board of Governors measure the number of STEM graduates and UWF continues to maintain focus on STEM graduates.

- 1. The development of an **STEM Living Learning Community** focused on Cybersecurity, Advanced Manufacturing and Intelligent Systems/Robotics. The following will be presented focusing on cybersecurity, advanced manufacturing and intelligent systems/robotics:
 - o accelerate credit where possible,
 - o complete an industry certification,
 - o participate in a career mentoring program with industry partners at UWF,
 - participate in industry problem solving in an industry/government program called "Hacking for Defense", and
 - participate in activities in the Center for Cybersecurity's CyberRange and in Advanced Manufacturing laboratories in Pensacola and Fort Walton Beach.

Cybersecurity Initiative

<u>Location</u>: The Center for Cybersecurity is located in a leased property in the Studer Community Institute in downtown Pensacola in rental property that will house the Florida CyberRange and classroom space. The Florida CyberRange will be connected back to the UWF main campus. Industry training, degree programming and industry certifications will be offered at this location.

Globally, **there will be 3.5 million unfilled cybersecurity positions.** Employers may need to provide additional workforce training. According to the *Northwest Florida Forward: A Regional Strategy for Economic Transformation (2016)* and *Cyberseek.org*, there are over 1,300 jobs available in cybersecurity Northwest Florida alone. UWF will offer the following programming to support the talent gap in this area:

Launch focused degree programs in Cybersecurity

1. Cybersecurity, B.S. (NSA/DHS Recognized Program). This program is approved to launch in Fall 2018 as a new degree program. The program will be offered primarily face-to-face with students having the distinct opportunity to participate in the Center for Cybersecurity's CyberRange, engage with experts from across the defense sector and major corporate partners across the region, participate in internships and connect to jobs. Students can join this program through multiple channels entering as a freshman, as a transfer student, a returning adult learner or as a military student.

UWF is a new partner with the National Security Agency's National Cryptologic School on their *Joint Cyber Analysis Course*. This partnership will **accelerate** completion of the undergraduate cybersecurity degree program for Joint Cyber Analysis Course graduates. Last year, more than 4,000 military students completed this complex cyber course. For JCAC graduates, the University will apply up to 30 credit hours toward a bachelor's degree in cybersecurity or 15 credit hours toward an associate's degree in general education. Once enrolled at UWF, students may be awarded up to three additional semester credit hours based on credit-by-proficiency evaluation.

- 2. Other IT bachelor's degree programs at UWF supporting cybersecurity include Computer Information Systems, Software Engineering, Information Technology, Computer Science Database Design. Capstone, certificate and certification opportunities are available to these students. Students in these programs have full access to the Cyber Range, industry partnerships and industry certifications.
- **3. IT/Cybersecurity, M.S.** This new fully online master's program launching in Fall 2018 is partnering with the Israeli International Institute for Counter-Terrorism to offer a global perspective of cybersecurity. The program will focus on mid-career professionals in agencies and across the military. Nationally, there are only a few graduate programs in cybersecurity and the opportunity to meet the need is strong.
- 4. Funded student internships will be available through this funding for students to work in companies for semester long experiences. Experiences may be longer based on partnerships that will create highly sought after next generation cyber talent.

Industry Certifications and Certificates

1. **Industry Certifications** will be offered in the areas of Comp TIA Security +, Comp TIA Security Analyst (CSA+) and EC Council Certified Ethical Hacker (CEH). Certifications will be awarded to UWF students participating in the STEM Living-Learning Community and through degree programs related to Cybersecurity. See Table 11.

| Certification | Voucher Cost* | Course Cost | Total Cost per Student (course + voucher) | Enrollment / Completion (Five Year Total) |
|--|------------------|-----------------------|--|---|
| CompTIA Network+ | \$319 | \$3750 | \$4069 | 750 / 675 |
| CompTIA Security+ | \$339 | \$3750 | \$4089 | 750 / 675 |
| Red Hat System Administrator (includes two courses: RH124 & RH134) | \$400 | \$7500 (2 courses) | \$7900 | 120 / 108 |
| ISC2 CISSP | \$699 | \$3750 | \$4449 | 270 / 243 |
| EC-Council CEH | \$500 | \$3750 | \$4250 | 240 / 216 |
| Certified Network Defender (CND) | \$450 | \$3750 | \$4200 | 120 / 108 |
| Certified Computer Hacking Forensic | \$450 | \$3750 | \$4200 | 120 / 108 |

Table 11: Industry Certification Cost and Five-Year Enrollment

| Investigator (CHFI) | | |
|------------------------|--|-------------|
| Totals | | 2370 / 2133 |

*Retail/list price, educational discounts excluded

Table 12 provides the anticipated number of enrollments on an annual basis.

| Table 12: Industr | y Certification Enrollment | by Year |
|-------------------|----------------------------|---------|
| | | |

| Certification | Enrollment / Completion** Year 1 (# of courses) | Enrollment / Completion** Year 2 (# of courses) | Enrollment / Completion** Year 3 (# of courses) | Enrollment / Completion** Year 4 (# of courses) | Enrollment / Completion** Year 5 (# of courses) |
|--|--|--|--|--|--|
| CompTIA Network+ | 150 / 135 (5) | 150 / 135 (5) | 150 / 135 (5) | 150 / 135 (5) | 150 / 135 (5) |
| CompTIA Security+ | 150 / 135 (5) | 150 / 135 (5) | 150 / 135 (5) | 150 / 135 (5) | 150 / 135 (5) |
| Red Hat System Administrator (includes two courses: RH124 & RH134) | 0 / 0 (0) | 30 / 27 (1) | 30 / 27 (1) | 30 / 27 (1) | 30 / 27 (1) |
| ISC2 CISSP | 0 / 0 (0) | 30 / 27 (1) | 60 / 54 (2) | 90 / 81 (3) | 90 / 81 (3) |
| EC-Council CEH | 0 / 0 (0) | 30 / 27 (1) | 60 / 54 (2) | 60 / 54 (2) | 90 / 81 (3) |
| Certified Network Defender (CND) | 0 / 0 (0) | 30 / 27 (1) | 30 / 27 (1) | 30 / 27 (1) | 30 / 27 (1) |
| Certified Computer Hacking Forensic Investigator (CHFI) | 0 / 0 (0) | 30 / 27 (1) | 30 / 27 (1) | 30 / 27 (1) | 30 / 27 (1) |
| Total per Year | 30 / 270 (10) | 450 / 405 (15) | 510 / 459 (17) | 540 / 486 (18) | 570 / 513 (19) |

*Assuming 30 students per course, 90% completion rate

Industry Training Programs

Through the UWF Center for Cybersecurity, governmental, corporate and academic partnerships that are critical to enhancing the nation's cybersecurity will participate in training through the

CyberRange facility and online learning in training courses. Participants will attend strategic training programs to include Cybersecurity for All, Cybersecurity Incident Management, Cybersecurity Operations Center management and many more through the Center for Cybersecurity's world-class CyberRange and training facility developing the workforce and infrastructure needed to protect our nation from cyber threats.

Advanced Manufacturing Initiative

Each location will be networked together to provide synchronous communications among the locations as well as to the main UWF campus.

Location in Pensacola: Sea3D Additive Manufacturing Laboratory is located in a UWF-owned facility within the Museum of Commerce in downtown Pensacola to partner with all degree program offerings and serve as an intersection with industry and the community. Some classes will be offered at this location. Industry training and industry certifications will be offered at this location.

<u>Location in Pensacola</u>: The Intelligent Systems and Robotics Warehouse will be located at a UWF-owned property situated adjacent to the Institute for Human and Machine Cognition for purposes of undergraduate and graduate level hands on research and some course instruction.

Location in Fort Walton Beach: Sea3D Additive Manufacturing Laboratory will be located on the joint campus of NWFSC and UWF to partner with the UWF engineering degree program offerings and serve as an intersection with industry and the community. Classes will be offered at this location. Industry training and industry certifications will be offered at this location.

According to *Northwest Florida Forward: A Regional Strategy for Economic Transformation* (2016), manufacturing is a key target industry for our region due to the large number of jobs with a full spectrum at every level that serves as a multiplier to create additional jobs. With manufacturing becoming more high tech, additional workforce training is needed as well as launching more college graduates in the areas of engineering, supply chain logistics, robotics and intelligent systems. The Sea3D Additive Manufacturing Laboratory is a dynamic platform for both students and the public to interact in the design, build and invent process leading to creation of talent to meet the growing need for the high technology manufacturing workforce of the future.

Degree Programs and Engagement

UWF will offer the following initiatives to support the talent gap in this area accelerating business partnerships, capstone experiences and overall increases in enrollment in both undergraduate and graduate.

1. **Undergraduate degrees** include: (1) Electrical Engineering, Bachelors, (2) Mechanical Engineering, Bachelors, (3) Supply Chain Logistics, Bachelors. In each of these programming areas, UWF will offer capstone experiences at the UWF Sea3D Additive Manufacturing laboratory enabling students to work collaboratively with governmental,

corporate and academic partnerships that are critical to enhancing the overall student experience educate tomorrow's **workforce-ready college graduates** to move into positions, meeting a key target industry need. Participants will work in Advanced Manufacturing disciplines will work on laboratory experiences and with industry from this location.

- 2. Undergraduate and Graduate Research Robotics and Intelligent Systems. To support both undergraduate and graduate research in robotics and intelligent systems, UWF is launching a PhD program, in Intelligent Systems and Robotics in Fall 2019 in partnership with the Institute for Human and Machine Cognition. The launch of this program will enable UWF undergraduate and graduate students participating in significant undergraduate education to work collaboratively with PhD students and IHMC scientists. The location is a UWF-owned warehouse adjacent to IHMC.
- 3. **Funded student internships** will be available through this funding for students to work in companies for semester long experiences. Experiences may be longer based on partnerships that will create highly sought after talent.

Industry Certifications

Participants will gain industry certifications through the Advanced Manufacturing Initiative. Industry Certifications include: 3D Design Solid Works, Project Management Professional (PMP), Systems Engineering Certificate, Corrective and Preventive Action for Aerospace Industry, Geometric Dimensioning and Tolerencing, NFPA 70E Arc Flash Compliance, 3D Scanning and File Prep, AutoCAD, AS91000 Internal Auditor, Fundamentals of Technical Writing, Certified Information Systems Auditor (CISA). See Table 13 for more details on costs and completions.

| Certification | Voucher Cost* | Course Cost | Total Cost per Student (course + voucher) | Enrollment / Completion (Five Year Total) |
|----------------------------|----------------------|-------------|---|--|
| Industry Certifications | | | | |
| Solidworks 3D CAD | Assoc \$99 | | \$1349 | |
| | Professional | \$1250 | \$1349 | |
| | \$99 Expert \$149 | | \$1399 | |
| CATIA 3D Design | \$100 | \$5000 | \$5100 | |
| AS9100 Lead Auditor | \$498 | \$2500 | \$2998 | |

Table 13: Industry Certification Cost

| Project Management Professional | \$555 | \$1850 | \$2405 | |
|------------------------------------|-------|--------|--------|-----------|
| Total after 5 years | | | | 945/939 |
| | | | | |
| Industry Training | | | | |
| Lean Six Sigma | | \$2500 | \$2500 | |
| Leadership Development | | \$1000 | \$1000 | |
| ISO 45001 | | \$1250 | \$1250 | |
| САРА | | \$1000 | \$1000 | |
| Blueprint | | \$1865 | \$1856 | |
| GD&T | | \$1865 | \$1865 | |
| Problem Solving | | \$2250 | \$2250 | |
| Process mapping | | \$1000 | \$1000 | |
| Total after 5 years | | | | 2260/2239 |

Industry Training Programs

Through the UWF Sea3D Advanced Manufacturing Laboratory in Pensacola and in Fort Walton Beach, several industry training programs will be offered as a collaborative approach to increase credentialed employs in the region. To include Certified Lean Practitioner, Lean Six Sigma Green Belt and Process Mapping. Executive seminars will also be offered in Commercial Aircraft Design and Manufacturing to include, Political, Economic & Technical Issues, Logistics & Quality Assurance Considerations, Market Drivers that Establish and Safety Regulations for Commercial Aerospace. Industry trainings are critical in this field for employers focused on upskilling. Table 14 provides engagements and costs to support by student.

Table 14: Industry Trainings

| Technical Engagement | Course Cost | Cost/Student | Industry Certification (Cost) |
|-------------------------|-------------|--------------|--------------------------------|
| | | | |
| ARC Flash Training | \$4,378.00 | \$1,250.00 | e-Hazard Cert of Completion |

| Lean Six Sigma | 4 | 4 | |
|---------------------------------------|---------------------|------------|---|
| Green Belt | \$5 <i>,</i> 550.00 | \$2,500.00 | UWF Cert of Completion |
| Solidworks 3D CAD | \$5,000.00 | \$4,500.00 | Assoc & Prof exam \$99 Expert exam \$149 |
| CATIA 3 D Design | \$12,500.00 | \$5,000.00 | CATIA Certification \$100.00 |
| Project Management Professional | \$4,250.00 | \$1,865.00 | PMI Certification \$555.00 |
| | J4,230.00 | J1,00J.00 | |
| Corrective Action | <u>61 005 00</u> | ¢1.000.00 | |
| Preventive Action | \$1,835.00 | \$1,000.00 | UWF Cert of Completion |
| Orthographic | | | |
| Projection (Blueprint) | \$3,750.00 | \$1,865.00 | UWF Cert of Completion |
| Geospatial Deminsioning and | | | |
| Tolerancing | \$3 <i>,</i> 750.00 | \$1,865.00 | UWF Cert of Completion |
| Principles of Problem Solving | \$8,300.00 | \$2,250.00 | GIT Cert of Completion |
| Process Mapping | \$3,750.00 | \$1,000.00 | UWF Cert of Completion |

B. Will the proposed program (check all that apply):

- X X Increase students' technology skills and knowledge
- Encourage industry certifications
- Provide rigorous, alterative pathways for students to meet high school graduation \square requirements
- X
- Strengthen career readiness initiatives X
- Fund high-demand programs of emphasis at the bachelor's and master's level designated by the Board of Governors
- Encourage students with interest or aptitude for science, technology, engineering, X mathematics, and medical disciplines to pursue postsecondary education at a state university or a Florida College System institution within the disproportionately affected counties (similar to or the same as talent retention programs created by the Chancellor of the State University System and the Commission on Education)

For each item checked above, describe how the proposed program will achieve these goals:

- **Increase students' technology skills and knowledge.** All students participating in the UWF project will be heavily engaged with technology.
- **Encourage Industry Certifications.** Industry certifications will be offered in cybersecurity and advanced manufacturing through UWF and through partnerships across the region.
- Strengthen Career Readiness. Career readiness is a keystone of the UWF initiative. At each opportunity, focused discussions on career opportunities w through internships, cooperative experiences, mentorships, shadowing and key industry partner engagements will be established. In addition, UWF is responsible for the statewide career education and planning tool, MyCareerShines <u>https://www.floridashines.org/find-a-career/plan-your-future</u>. Almost a million *assessments* have been completed to date in Florida with this tool. As part of the Florida Virtual Campus, this tool incorporates key career education opportunities and assessments into the tool for the elementary, middle and secondary version as well as the college, university and adult version to support Northwest Florida's needs in Cybersecurity, Advanced Manufacturing, Intelligent Systems and Robotics.
- Fund high demand programs of strategic emphasis (PSE) at bachelors and masters level. Programming selected for the UWF initiative will align to the PSE list at bachelors and master's levels. UWF is not requesting funds to develop NEW degree programs but to expand existing PSE programs with business, military and K20 partnerships developing a stronger pipeline from K20 to the workforce. This includes cooperative experiences for students, internships, mentoring, job shadowing, experiences in solving current industry problems, entrepreneurship, innovation and more. For college graduates, many job applications require graduates to have experience beyond the degree to get jobs. UWF intends to provide experiences that will accelerate students to employment. In addition to graduates of degree programs in PSE, industry certifications and specific credentials also support employment acceleration for graduates as well as those already in the workforce seeking next step opportunities.
- Encourage students with interest or aptitude for science, technology, engineering, mathematics, and medical disciplines to pursue postsecondary education. Through strong partnerships with area school districts, business, industry and the military, UWF will continue to encourage, inspire and engage K12 students to choose STEM disciplines. Competitions including Cyberthon, Hacking for Defense, BEST Robotics competitions, CyberPatriot and other competitions. Summer camp activities will include NextGen Cyber camps, engineering camps, robotics camps and more. UWF has hosted STEM focused Explore Summer Camps for over 15 years. To further encourage elementary students, the Sea3D lab serves 14,000 fourth graders annually to learn additive manufacturing processes and 3D printing. Cybersecurity will offer opportunities for field trips experiencing the Florida Cyber Range and learn 'cyber hygiene.' UWF will accelerate experiences for K12 as a hub for inspiring, engaging and encouraging kids to enter STEM disciplines through focused activities, events and educational opportunities.

C. Will this proposal provide participants in the disproportionately affected counties with transferable, sustainable workforce skills but not confined to a single employer? If yes, please provide details.

X Yes No

Building transferable, sustainable workforce skills requires:

- broad availability of high quality K12,
- college and university educational programs aligned to areas of workforce need,
- alignment of labor supply to labor demand to fill existing gaps, and
- ongoing workforce training and education to support changes in the market and in emerging technologies in the future.

When implemented through successful partnerships, **this approach creates a system where more and better education and training fuels innovation, investment, economic diversification and competitiveness.** This model also prepares future generations, giving them core skills to continue learning. UWF will work closely with K12 school districts in the key focus areas of cybersecurity, advanced manufacturing, intelligent systems and robotics matching skill supply and need. High quality educational partnerships and programming with the award of certificates, certifications and degrees will provide the foundation for the future workforce training and advanced degrees.

Transferable skills will be developed in numerous ways. Foundational knowledge and skills learned in coursework will enable students to apply their existing knowledge to new situations through internships, cooperative agreements, mentoring and through engaged problem-solving. Additionally, foundational skills certified through industry certifications will enable students and those in workforce training to have recognized skills across different sectors and markets.

D. Identify the disproportionately affected counties where the proposed programs will operate or provide participants with workforce skills.

UWF will provide participants with workforce training, degree programming, certificates and industry certifications in Escambia and Okaloosa County.

E. Provide a detailed description of, and quantitative evidence demonstrating how the proposed project or program will promote:

- Economic recovery,
- Economic Diversification,
- Enhancement of the disproportionately affected counties,
- Enhancement of a Targeted Industry.

Aligned to Northwest Florida Forward: A Regional Strategy for Economic Transformation (2016) and the Northwest Florida Economic Development Alliance's "Live Coastal. Work Cyber." Cybersecurity Strategic Plan Report (2017), UWF will accelerate regional innovation through key industry partnerships producing highly qualified talent for jobs promoting economic recovery, diversification and enhancement of the economy in Northwest Florida. UWF will produce graduates ready to work that will increase the average wage in areas of high workforce demand.

To support degree programs, certificates, industry certifications and workforce training, the Center for Cybersecurity will feature the Florida Cyber Range. The Range will establish the region as a leader in cutting-edge skills-based cyber training and operations to detect and defend against cyber threats and attacks. It will provide a state-of-the-art, powerful, realistic training environment to support cyber warfare exercises, operations and competitions for government, military, industry, K12 and



higher education, while also facilitating the development and testing of innovative cyber threat detection, defense and response solutions. The Center will provide regional access to a network of existing key partners and stakeholders across the Southeastern United States through the UWF Center for Cybersecurity's designation as a National Center of Academic Excellence and Southeastern United States Regional Hub designated by the National Security Agency and Department of Homeland Security.

To support degree programs, certificates, industry certifications and workforce training, the Sea3D Additive Manufacturing Laboratories will feature tools for rapid prototyping and innovation including: carbon fiber 3D printers, metal 3D printer, 3D scanners, laser cutters, Kuka training robotic arm, PLC and industry automation training station, CNC machine, makerbot replicators, and form labs. A regional network of advanced manufacturing resources and laboratories from the new UWF Sea3D Lab located on UWF historic property to a Lab in Fort Walton Beach at the UWF-NWFSC Joint Campus and a UWF-IHMC Intelligent Systems and Robotics Warehouse in downtown Pensacola will provide access to equipment, expertise and research. The Sea3D Advanced Manufacturing Laboratories will link existing key partners and stakeholders through the Northwest Florida Manufacturers Council and FloridaMakes to the UWF project. Key partners and stakeholders will further support Manufacturing Career Academies across the region, engage regional manufacturers and provide significant research opportunities for students and researchers. The UWF-IHMC joint PhD program in Intelligent Systems and Robotics will be a centerpiece of hands-on research for students, faculty researchers, scientists and entrepreneurs.

This initiative will increase the number of students ready to accept positions in the region as well as accelerate existing employers' workforce development needs in areas that produce immediate workforce impact.

Graduates of UWF programs will make salaries above the average wage to include: **cybersecurity** professionals: IT security specialist: \$113,701; IT security manager: \$131,600; network security engineer: \$107,868; computer network architect: \$100,240; information security analyst: \$90,120 and security engineer: \$81,078. The 2016 median pay for information security analysts is \$92,600. **Advanced manufacturing** professionals include: Mechanical Engineering: \$95,270; Scientific Research and Development: \$99,180; Aerospace Product and Parts Manufacturing: \$98,230.

2. Additional Information

A. Is this an expansion of an existing training program? Is yes, describe how the proposed program will enhance or improve the existing program and how the proposal program will supplement but not supplant existing funding sources.

| Χ | Yes | | No |
|---|-----|--|----|
|---|-----|--|----|

Project 10 [x] is a new initiative for the University of West Florida. It is an expansion to existing programs and initiatives at UWF to support the region. Recognizing the need to focus on distinctive opportunities for Northwest Florida in areas of tremendous need and potential job growth, UWF will expand its model of operation to **create talent** and **regional innovation** in the areas of Cybersecurity, Advanced Manufacturing, Intelligent Systems and Robotics. The expansion will be an innovation engine to support regional innovation using future technologies and tools that will change lives and create impact for generations to come.

The expanded locations are intentional and will serve as a significant strategy to incubate creativity, innovation and forward-looking concepts and practices for Northwest Florida while producing talent and research for the future.

The expanded experiences and engagement are intentional. Through the extensive laboratory innovation atmosphere, UWF will support the hands-on immersive research and experiential learning for undergraduate and graduate students at UWF, researchers and the community as a whole. The ability to use equipment to simulate experiences, to rapid prototype new ideas through a variety of 3D printing processes and to gain experiences working side-by-side with industry will create the workforce of the future. The Florida Cyber Range alone will serve as a major hub for virtual simulation and training across the entire country. Cyber ranges are virtual environments used to simulate real-world cyber warfare in a safe and protected setting. Creating the workforce and infrastructure needed to protect our nation from cyber threats is critical to our future.

The expanded programming is intentional. Key degree programs already exist at UWF in the areas being proposed. Additional immersive and experiential programming will be added. Access can be expanded to key degree programs by expanding opportunities for immersive activity and by expanding virtual, online programs to support expansion of graduates that may not be able to participate fully on campus. UWF has developed some of the certificates and aligns to industry certifications. UWF will develop additional workforce training, certificates and enhance existing degree programs for the future.

A focus on expanding degree programming experiences will be as follows:

- building immersive, hands-on experiential learning into the program,
- promoting a stronger connection to industry,

- supporting undergraduate and graduate level research and innovation, and
- engaging in an untapped opportunity to provide high end equipment and access to new locations for students to innovate, partner with industry, thrive and prepare for their futures.

The expanded focus links arms with K12, industry and the experiential preparation of students for careers. Funding will support the expansion to talent-development focused programming by developing additional curricula, workforce training and industry certifications while focusing on innovation and entrepreneurship and career-focused experiences and job placement.

B. Indicate how the training will be delivered (*e.g.*, classroom-based, computer based, other). If in-person, identify the location(s) (e.g., city, campus, etc.) where the training will be available. If computer-based, identify the targeted location(s) (e.g., city, county) where the training will be available.

Program Delivery in Escambia County

- **UWF Main Campus** that offers the full degree program that will be supplemented and accelerated by the experiences further connecting students to industry.
- Sea3D Additive Manufacturing Laboratory located at the UWF Historic Trust's Museum of Commerce. *Face-to-face education*, workforce training and research will occur at this location. This facility is networked back to the UWF main campus and will be *networked* to the Ft. Walton Beach Advanced Manufacturing facilities to support collaboration, sharing of ideas and designs.
- Center for Cybersecurity located in downtown Pensacola. The Center for Cybersecurity will connect back to the campus for competitions but also will connect *virtually* across the region (state, nation and world) through its Cyber Range capabilities. *Face-to-face* degree programming experiences and workforce training will occur at this location.
- **Intelligent Systems and Robotics** located in a UWF owned warehouse adjacent to the Institute for Human and Machine Cognition. The majority of work at this location will be research and hands-on *face-to-face* graduate programming.

Locations in Okaloosa County

The Sea3D Advanced Manufacturing Lab will be located in an existing building at the UWF Northwest Florida State College Joint Campus in Fort Walton Beach. UWF will administer programming. *Face-to-face education*, workforce training and research will occur at this location and will fully supplement the work of engineering in Fort Walton Beach. This facility is *networked* back to the UWF main campus, industry partners and the Sea3D Pensacola laboratory. This network will enable collaboration of design challenges, design programming and 3D printing.

Locations across the region

Virtual locations. Virtual programming, administered by UWF will include synchronous programming that can connect the locations together for competition, for idea exchange and for collaboration with innovators-in-residence. Several free and "open" online courses and modules, workforce development modules, webinars and virtual events will also accelerate access across

the region.

C. Identify the number of anticipated enrolled students and completers.

Table 15: Anticipated Enrollments and Completers

| UWF Project 10[x]. Producing talent to fill critical | Participants | | |
|---|-------------------------------------|---------------------------------|--------------------------------|
| gaps in the Northwest Florida high tech workforce. | 5-year Industry Certs | 5-year Industry Trainings | 5-year Degrees and Certs |
| Cybersecurity | | | |
| Multidisciplinary Cybersecurity/IT Degrees + Industry Certifications | | | 781 graduates |
| Industry Certifications | 2,133 certifications | | |
| Industry Training | | 729 trainings | |
| Advanced Manufacturing | | | |
| Advanced Manufacturing/Engineering/Logistics Degrees + Industry Certifications | | | 659 graduates |
| Advanced Manufacturing Industry Certifications | 939 certifications | | 8 |
| Industry Training | | 2,239 trainings | |
| 7,480 Total Participants | 3,072 industry certifications | 2,968 training completers | 1,440 graduates total |

D. Indicate the length of the program (e.g., quarters, semesters, weeks, months, etc.) including anticipated beginning and ending dates.

Programming will occur as follows:

- Regular college courses will be offered each academic semester as students' progress toward a degree. Degree plans are developed and academic advisors work closely with students to complete in a timely fashion.
- Industry certifications will occur all year.
- Freshman Living and Learning will be a full year experience beginning in year 2.

E. Describe the plan to support the sustainability of the proposed program.

A complete sustainability plan is located in the main Triumph Gulf Coast, Inc. proposal. This description expands specifically on the actual programs. As a university, we have 50 years of program management and have accreditation guidelines, program reviews and policies supporting program quality and success. As stated in the full sustainability plan (in the main application), it will take all of the components working together to achieve success. Cogent to the workforce training section of this proposal, a focus on revenue in to support ongoing

programming, faculty and staff engagement seems most appropriate. The funding strategy referenced from the body of the main proposal is as follows:

Funding Strategy

The initial investment in regional transformation from Triumph Gulf Coast, Inc. will provide the support needed to start-up new locations and increase production of talent. To sustain, the following is planned:

- Degree programs will produce revenue at the state level fully funded FTE.
- The Florida Cyber Range will produce significant external trainings and generate market rate revenue per month.
- The Cyber for All program will be conducted in ongoing workforce training at market rate.
- The Advanced Manufacturing Laboratory will offer subscription pricing to the community for ongoing usage
- Conduct ongoing workforce training at market rate.
- All industry certifications will be conducted at market rate.
- Technology Transfer and Commercialization opportunities are planned.

F. Identify any certifications, degrees, etc. that will result from the completion of the program.

Table 16: Certifications, Trainings and Degrees

| UWF Project 10[x]. Producing talent to fill critical | Participants | | s |
|--|---|--|--------------------------------|
| gaps in the Northwest Florida high tech workforce. | 5-year Training & Industry Certs. + trainings | 5-year Training & Industry trainings | 5-year Degrees and Certs |
| Cybersecurity | | | |
| Multidisciplinary Cybersecurity/IT Degrees + Industry Certifications *Degrees (1) Cybersecurity, Bachelors, (2) Computer Information Systems, (3) Software Engineering, (4) Information Technology, (5) Computer Science, (6) Database Design, (7) IT/Cybersecurity, MS. | | | 781 graduates |
| Industry Certifications | 2,133 | | |
| Comp TIA Security +, Comp TIA Security Analyst (CSA+), Red Hat System Administrator and EC Council Certified Ethical Hacker (CEH), ISC2 CISSP, EC- Council CEH, Certified Network Defender (CND), Certified Computer Hacking Forensic Investigator (CHFI) | certifications | | |
| Industry Trainings | | 729 | |
| Cybersecurity Fundamentals, Network Defense, Risk | | trainings | |
| Management, Incident Response, Threat Intelligence, | | | |

| Critical Infrastructure and ICS Security, Malware Analysis | | | |
|---|----------------|------------|---------------|
| Advanced Manufacturing | | | |
| Advanced Manufacturing/Engineering/Logistics Degrees + Industry Certifications | | | 659 graduates |
| *Degrees | | | |
| (1) Electrical Engineering, Bachelors, (2) Mechanical | | | |
| Engineering, Bachelors, (3) Supply Chain Logistics, | | | |
| Bachelors. | | | |
| Industry Certifications | 939 | | |
| Solidworks 3D CAD, CATIA 3D Design, AS9100 Lead | certifications | | |
| Auditor, Project Management Professional | | | |
| Industry Trainings | | 2239 | |
| Lean Six Sigma, Leadership Development, ISO 45001, | | completers | |
| CAPA, Blueprint, GD&T, Problem Solving, Process | | | |
| mapping | | | |
| Total Participants | 3,022 | 2,968 | 1,440 |
| · | industry | training | graduates |
| = 7,480 total participants | certifications | completers | total |

G. Does this project have a local match amount? If yes, please describe the entity providing the match and the amount.

| X Yes | 🗌 No |
|-------|------|
|-------|------|

| Project Match | Match Source | Match Amount |
|--------------------------------------|----------------------------|------------------|
| Equipment | Metova CyberCents | \$ 3,000,000.00 |
| Salaries & University Programming | University of West Florida | \$ 19,950,000.00 |
| | | \$ 22,950,000.00 |

H. Provide any additional information or attachments to be considered for this proposal.

N/A

I, the undersigned, do hereby certify that I have express authority to sign this proposal on my behalf or on behalf of the above-described entity, organization, or governmental entity:

Name of Applicant: The University of West Florida

Name and Title of Authorized Representative: Dr. Martha Saunders, President

Representative Signature:

Aunder Marla

Signature Date:

July 31, 20,





DEPARTMENT OF THE AIR FORCE

AIR FORCE RESEARCH LABORATORY (AFMC) EGLIN AIR FORCE BASE, FLORIDA

TO: Dr. Pam Northrup Vice President University of West Florida (UWF) 29 Oct 2017

FROM: AFRL Munitions Directorate

SUBJECT: UWF Innovation Network with Advanced Manufacturing Center

- 1. As an advocate for STEM education, the Air Force Research Laboratory Munitions Directorate is incredibly supportive of any efforts to increase the STEM workforce for the United States. The training and recruiting of high caliber, well-educated STEM professionals are necessary for the continued success of not only the Air Force but to the country as a whole.
- 2. The UWF Innovation Network's Advanced Manufacturing Center has the potential, we believe, to directly impact the pipeline of scientists, engineers and technical professionals that are in such short supply today and will be in even higher demand in the future. By funding programs that teach relevant, marketable technical skills and focus on educating the next generation of STEM professionals, the UWF Advanced Manufacturing Innovation Center can significantly increase the number and quality of employees and educators in the future.
- 3. The Air Force Research Laboratory Munitions Directorate has a robust and growing STEM internship program. The AFRL Scholars program is designed to provide students ranging from high school to those seeking PhDs with an opportunity to work directly with our researchers to gain invaluable knowledge and experience. We encourage other institutions to develop high quality internships related to advanced manufacturing, autonomous vehicles, and robotics. The UWF Innovation Network's Advanced Manufacturing Center could be an excellent means to develop future scientists and technicians.
- 4. The Air Force Research Laboratory Munitions Directorate strongly supports the Advanced Manufacturing efforts the University of West Florida is undertaking. We look forward to discussing how we may be involved.

DAVID E. LAMBERT, ST, PhD Chief Scientist, Munitions Directorate Air Force Research Laboratory



Date: December 8, 2017

Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders,

American Elite Molding is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cyber security, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

American Elite Molding is an active participant in TeCMEN and NORTHWEST FLORIDA MANUFACTURER'S COUNCIL for activities where we strive to enhance the region's transferable and sustainable workforce skills. State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. American Elite Molding has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

Sincerely,

Barbara J. Mitchell

Barbara (BJ) Mitchell VP of Corporate Development American Elite Molding <u>bmitchell@aem-ties.com</u> 860-688-2041 (cell)

5680 John Givens Road * Crestview, FL 32539 Toll Free Phone (850) 423-4680 * Toll Free Fax (850) 423-4687 E-mail: <u>Info@aem-tie.com</u> * Web site: <u>www.americanelitemolding.com</u>



December 11, 2017

Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders

AppRiver is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. AppRiver has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

Sincerely,

2.0

Michael Murdoch President & Chief Executive Officer



1717 North E Street, Suite 320 Pensacola, FL 32501 Phone: 850-469-2338 Fax: 850-434-4841

December 12, 2017

Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders,

Baptist Health Care is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. It is our understanding that this proposal addresses a number of needs that will in turn support the emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics. The objective is that this will promote regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training, and research leading to technology transfer and commercialization of products.

Baptist Health Care is actively involved in a variety of efforts which will promote education, training, and subsequent economic development in the region. This includes efforts like Achieve Escambia, a cradle to career resource education alignment program, and Florida Great Northwest, the 12-county regional economic development organization in Northwest Florida, which is focused on making our region globallycompetitive. State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. Baptist has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

incerely

Mark Faulkner President & CEO Baptist Health Care







18.12.2017

Dr. Martha Saunders, PhD, President

University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders,

The Blavatnik Interdisciplinary Cyber Research Center (ICRC) at Tel Aviv University, Israel, is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors.

This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. The Blavatnik Interdisciplinary Cyber Research Center has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing.

We at the Blavatnik ICRC have been playing a pivotal role in developing the innovation ecosystem in Israel. In Israel's strategy, academia plays several roles. First and foremost, we operate a fund that support over 55 scientific diverse research teams. Moreover, we provide a hub for all cybersecurity stakeholders to convene. Following the insights from 8 years of experience, we have become heavily involved in discovering and helping promote issues as diverse as high-school education policy; aligning social needs with investment strategy; finding a balance between defense needs and exports; workforce career paths and more. West Florida's Innovation Network concept looks very promising for tackling the regional challenges in a comprehensive manner. We at the Blavatnik ICRC look forward to collaborating with the University of West Florida's Innovation Network and contributing to the efforts.

Sincerely,

Lior Tabansky Head of research development,

The Blavatnik Interdisciplinary Cyber Research Center, Tel Aviv University (ICRC TAU)

The Boeing Company 626 Anchors Street Fort Walton Beach, FL 32548

December 15, 2017

Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders

BMEING

Boeing is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

Boeing is an active participant in TeCMEN activities where we strive to enhance the region's transferable and sustainable workforce skills. State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. Boeing has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

Sincerely,

Henry P. Sanders Director, Special Operation Forces Boeing Global Services-Government Services



CareerSource Escarosa 3670-2A North L St | Pensacola, FL 32505 p: 850.473.0939 | f: 850.473.0935

careersourceescarosa.com

Sheryl Rehberg Executive Director

Steve Rhodes Board Chairman

December 14, 2017

Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders:

CareerSource Escarosa is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. As the "Go-To" place for jobs, CareerSource Escarosa has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

Sincerely,

. Rehberg

Sheryl Rehberg Executive Director

Pensacola Career Center 3670-2A North L St. | Pensacola, FL 32505 p: 850.607.8700

Milton Career Center 5725 HWY 90 | Milton, FL 32583 p: 850 983 5325 Century Career Center 8120 N. Century Blvd. | Century, FL 32535 p: 850.256.6259

Michele Burns, Executive Director



December 11, 2017

Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders

CareerSource Okaloosa Walton is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

CareerSource Okaloosa Walton is an active participant in TeCMEN, Northwest Florida Manufacturing Council, Florida's Great Northwest and the Economic Development Councils activities where we strive to enhance the region's transferable and sustainable workforce skills. State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. CareerSource Okaloosa Walton has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

Sincerely,

Nichel Burn

Michele Burns Executive Director



info@careersourceow.com 109 8th Avenue Shalimar, FL 32579 p: 850-651-2315 | f: 850-651-3165





City of Fort Walton Beach

Treasure of the Emerald Coast 107 Miracle Strip Parkway SW * Fort Walton Beach, FL 32548 (850) 833-9510 * Fax (850) 833-9640 *



www.fwb.org

Dick Rynearson Mayor fwbmayor@fwb.org

December 11, 2017

Dr. Martha Saunders, PhD President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders:

The City of Fort Walton Beach is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

The City of Fort Walton Beach is an active participant in TeCMEN and the Economic Development Council of Okaloosa County where we strive to enhance the region's transferable and sustainable workforce skills. Stateof-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. The City of Fort Walton Beach has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing.

The Innovation Network will provide a huge asset to employers and property owners within the City's Commerce & Technology Park, which is a close neighbor to the University of West Florida's Fort Walton Beach campus. The City is currently completing a Master Plan for the Commerce & Technology Park, and the Innovation Network will play a major role in determining the future path of the Park.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

Sincerely,

Richard a Rym

Dick Rynearson Mayor City of Fort Walton Beach



ASHTON J. HAYWARD MAYOR

February 14, 2018

Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders

I am pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. The proposal addresses a number of emerging needs in the high-tech industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics. I believe that if it were funded and implemented, the Innovation Network would provide a significant boost to efforts to expand the skills of local individuals who have the aptitude and desire to work in the high tech industry. A skilled workforce coupled with new opportunities to participate in research and product development is a sure-fire recipe for the creation of new businesses that will continue to diversify our industrial base.

As mayor, I am actively involved in local activities that enhance and promote transferable and sustainable workforce skills, not just for residents of Pensacola, but for residents throughout our entire region. Delivering programs that address the need for training and education in state-of-the-art technologies is one of the most challenging requirements facing Pensacola and Northwest Florida. I share the concerns that gave rise to UWF's Innovation Network proposal and am committed to working together with UWF and other regional partners to accelerate innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing.

I fully endorse your Triumph application and look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

lalle 1. Hannette

Ashton J. Hayward Mayor



December 18, 2017

Dr. Martha Saunders, Ph.D., President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders

Cognitive Big Data Systems is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training, and research leading to technology transfer and commercialization of products.

Cognitive Big Data Systems is an active participant in UWF Center for Cybersecurity activities as well as maintaining a strong focus on artificial intelligence/intelligent systems where we strive to enhance the region's transferable and sustainable high-tech workforce skills. We are in an innovation economy where artificial intelligence is the number one tool for enabling innovation in all fields of study. It is imperative that we use state-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. Cognitive Big Data Systems has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

Lloyd Reshard



IN REPLY REFER TO: DISA Cybersecurity Infrastructure Branch (ID66)

18 December 2017

| Subject: | DISA Letter of Support: University of West Florida (UWF) Innovation Network |
|----------|--|
| From: | Centaur Operations Chief, Defense Information Systems Agency (DISA) Cybersecurity Infrastructure Branch, ID66, Pensacola FL |
| То: | Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514 |

Dear Dr. Saunders,

DISA Pensacola is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

DISA Pensacola is an active partner of the UWF Center for Cybersecurity's activities in efforts to enhance the region's and nation's transferable and sustainable workforce skills. State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. DISA Pensacola has a valid interest in working together with the Innovation Network to facilitate internships and clearances for students, and to collaborate in the area of Research and Development (R&D) with both faculty and students in support of DISA's cybersecurity mission to protect and defend the Department of Defense Information Network (DODIN). This R&D SCIF facility could be very important to the growing cybersecurity defense and government operations in Northwest Florida.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

Sincerely,

Matthew W. Matzer Chief, Centaur Operations Acropolis Program Manager Defense Information Systems Agency (DISA) Cybersecurity Infrastructure Branch (ID66) Office: 850-452-7616



 301 Bear Creek Rd.
 Office:
 865.241.9590

 Oak Ridge, TN 37831-8112
 Mobile:
 865.206.9661

December 21, 2017

Dr. Martha Saunders President University of West Florida Building 10, Room 225 11000 University Parkway Pensacola, Florida 32514

Dear Dr. Saunders:

Outstanding Representatives of the University of West Florida (UWF)

In September, I had the distinct pleasure of meeting Nicole Gislason, Office of Career and Professional Education and Meredith Jones, Donor Relations, at a recent Gulf Coast Chapter of the National Defense Industrial Association (NDIA) meeting. Based on discussion with Ms. Gislason and Ms. Jones, my colleagues and I visited UWF for an introductory meeting with Nicole and others to discuss possible collaboration on a joint Department of Energy/Department of Defense cybersecurity project, *the Industrial Base Cybersecurity Initiative (IBCI)*, led by Y-12 National Security Complex (Y-12) in Oak Ridge, TN and executed jointly with Los Alamos National Laboratory (LANL) along with key industry and university partners.

Both Y-12 and LANL are part of the Department of Energy, National Nuclear Security Administration, Nuclear Security Enterprise, which is responsible for manufacturing, refurbishing, and maintaining the nation's nuclear weapons stockpile. Our interest lies in securing the increasingly interconnected manufacturing industrial base of small to medium size suppliers that provide critical technologies for the security of our nation. We want to raise the manufacturing industrial base to a common level of cybersecurity that is both compliant with federal regulations and guidelines and effective at addressing a very dynamic and insidious threat to national security – the theft or alteration of critical technical information.

Our collaboration meeting (Dec. 13th) included tours and substantive discussions that provided valuable insight into the depth and breadth of capability that could be brought to bear at UWF to help the IBCI project. Of particular interest are:

- Access to graduate students in the Center for Cybersecurity for funded hands-on work that benefits their academic advancement technically and financially. Dr. Eman El-Sheikh was tremendously helpful in conveying the possibilities and we are following up with her.
- Coordination and participation with Florida Makes, the Manufacturing Extension Program Liasson at UWF to reach out to manufacturers regionally to identify participant companies needed for the project. Daniel Krug has already begun to reach out and we are appreciative of his responsiveness.

- Collaboration with the staff of the UWF Innovation Institute and Chris Middleton for strategic planning and connectivity to the Department of Homeland Security to assess collaboration and possibly additional sources of funding.
- Participation with UWF Strategic Engagement Office and Dr. Chau on "Hacking for Defense" challenges as a source of engaging students to solve some difficult technical challenges of the project.
- Work force Development activities with Dr. Michelle Horton of Complete Florida and Nicole Gislason, office of Career and Professional Education, who brought us all together.

Without this very comprehensive and well-coordinated visit, we would have been unaware of the local and regional resources and leadership UWF brings to bear on cybersecurity and manufacturing innovation. I was particularly impressed with the very apparent collaborative spirit of the entire UWF team and the level of enthusiasm to support our broad scope of work.

You have a professional team exemplifying the skill and expertise of a much larger university with the added benefit of being more nimble and adaptive than a large university. This quality is important to our IBCI team and I wanted to recognize them and the UWF for an outstanding job representing your great institution.

Sincerely yours,

Dennis B. Miller Sr. Technical Advisor

DBM:dbm

Enclosures: "This is Y-12" Fact Sheet

c: Dr. Pam Northrup, Vice President, Division of Research and Strategic Innovation YDCC-RC



December 15, 2017

Dr. Martha Saunders President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders:

The Economic Development Council of Okaloosa County is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors.

As Okaloosa County's lead economic development organization, the EDC has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cyber security and advanced manufacturing.

The EDC is especially supportive of the University of West Florida's plans to leverage the shared UWF/NWFSC campus in Fort Walton Beach. We feel the opportunity to develop an Advanced Manufacturing component of the planned UWF Innovation Network on the Fort Walton Beach campus will especially benefit our TeCMEN members – businesses who comprise Okaloosa County's existing manufacturing and engineering cluster. Further, the EDC appreciates that the Innovation Network in total will serve to expand the region's existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region. Please contact me if additional information is needed regarding the TeCMEN support for the University of West Florida Innovation Network grant proposal.

Sincerely,

Kim Wintner Chairman EDC of Okaloosa County

Nathan Sparks, CEcD Executive Director EDC of Okaloosa County



Board of County Commissioners • Escambia County, Florida

December 1, 2017

Florida Triumph Gulf Coast, Inc. P.O. Box 12007 Tallahassee, FL 32317

REF: UWF Innovation Network Project

Dear TRIUMPH Gulf Coast Board Members,

At our regularly scheduled board meeting on November 30, 2017, the Escambia County Board of County Commissioners (BOCC) unanimously selected the "UWF Innovation Network Project" as a top priority shovel-ready project to recommend to you for the first round of funding. The pre-application has been submitted by the University of West Florida.

The UWF Innovation Network Project represents a transformational opportunity for new jobs, economic diversification, and economic improvement for the citizens of Escambia County and Northwest Florida. The project will establish a regional network of partners focused on education, workforce development, research and economic development. A new multi-story facility will be constructed at the downtown Pensacola Technology Campus to serve as the center of operation to strategically support emerging high-tech industry sectors in cybersecurity and advanced manufacturing to include intelligent systems and robotics. The facility will be a catalyst for the co-location of partner companies, startups and future growth in high-tech industry in the region.

Thank you for considering the UWF Innovation Network Project as a top priority shovel-ready TRIUMPH project for funding. Please let us know if we can provide any additional information.

Sincerely

Jeff Bergosh, Chairman Escambia County Board of County Commissioners





THE SCHOOL DISTRICT OF ESCAMBIA COUNTY

75 NORTH PACE BOULEVARD PENSACOLA, FL 32505 PH. 850/432-6121 • FAX: 850/469-6379 http://www.ccsd-fl.schoolloop.com MALCOLM THOMAS, SUPERINTENDENT

"Making A Positive Difference"

January 9, 2018

Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders

Escambia County School District is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

Escambia County School District is an active participant in the UWF Innovation Network's activities where we strive to enhance the region's transferable and sustainable workforce skills. State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. Escambia County School District has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

Sincerely,

Halcohn Thomas

Malcolm Thomas



Helping Businesses Grow & Succeed

Florida SBDC Network Headquarters University of West Florida 220 West Garden Street, Suite 301 Pensacola, FL 32502

www.FloridaSBDC.org

P 850.898.3479

December 18, 2017

Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear President Saunders:

Florida's Small Business Development Center (SBDC) Network is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

The Florida SBDC Network is designated "the principal business assistance organization for small businesses in the state." [Fla. Stat. § 288.001] Due to its multi-institutional focus, the State University System Board of Governors has designated the Florida SBDC Network as a State of Florida Center. [BOG Regulation 10.015] As such, Florida SBDCs actively assists companies in cybersecurity and advanced manufacturing with business development and growth activities where we strive to enhance the region's transferable and sustainable workforce skills across Florida. State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. Florida's SBDC Network has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region's job creators – small businesses – and furthering our shared goal to create economic prosperity for the citizens of Northwest Florida.

Sincerely,

Michael C. Mylue

Michael W. Myhre, CEO

Headquartered at UNIVERSITY of WEST FLORIDA



December 1, 2017

Brice F. Harris, Ph.D. Assistant Vice President Division of Research & Strategic Innovation University of West Florida 220 W. Garden Street, Suite 303 Pensacola, Florida 32502

RE: University of West Florida's Triumph Gulf Coast Application

Dear Dr. Harris:

On behalf of Florida's Great Northwest (FGNW) please accept this letter of support for the University of West Florida. Our organizations support the economic growth and prosperity of Northwest Florida.

FGNW is the regional economic development organization for the Florida Panhandle. The organization is an investor-supported 501(c)(6) nonprofit corporation created to advocate, collaborate and promote the 12-county Northwest Florida region for economic growth and diversification. One of FGNW's core initiatives has been to develop, drive and encourage the implementation of the Northwest Florida *FORWARD* regional strategy for economic transformation.

Northwest Florida benefits most when we work together. Unified, we can build a strong foundation and ensure that there are initiatives that have near-term and long-term benefits across the region. FGNW supports all projects that Triumph Gulf Coast, Inc. approves as being aligned with the Northwest Florida *FORWARD* regional strategy.

FGNW proudly supports the University of West Florida and its efforts to transform Northwest Florida's economy.

- Wilme

Kim Wilmes President & CEO



December 18, 2018

Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders

FloridaMakes is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

We are an active participant in TeCMEN and NWFMC's activities where we strive to enhance the region's transferable and sustainable workforce skills. State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. FloridaMakes has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in emerging high-technology industry sectors.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

Kevin Carr CEO



economic development alliance

January 2, 2018

Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders

FloridaWest Economic Development Alliance is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

FloridaWest is an active participant in Cybersecurity and Advanced Manufacturing activities where we strive to enhance the region's transferable and sustainable workforce skills. State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. FloridaWest has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

Sincerel

Wendell Smith President, FloridaWest Board of Directors





43 Jet Drive NW Fort Walton Beach, FL 32547 850-244-9095 850-244-4874 FAX www.fwmachining.com

December 20, 2017

Dr. Martha Saunders University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders:

Fort-Walton Machining, Inc. is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

Fort Walton Machining, Inc. is an active participant in TecMen/Economic Development of Okaloosa, Northwest Florida Manufacturers Council, Florida's Great Northwest, Okaloosa County School District Manufacturing Advisory Council, activities where we strive to enhance the region's transferable and sustainable workforce skills. State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. Fort Walton Machining, Inc.has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

Best Regards,

Ken Hill Chief Executive Officer



December 6, 2017

Chairman Allan Bense Florida Triumph Gulf Coast, Inc. P.O. Box 12007 Tallahassee, FL 32317

Chairman Bense,

It is my pleasure to inform the Triumph Gulf Coast Board of Directors that the Greater Pensacola Chamber of Commerce endorsed the University of West Florida's "UWF Innovation Network Project" to move beyond the pre-application phase and to be considered for full funding at our November Board of Directors meeting.

In reviewing this project, our board found that this submission meets the legislative requirements found in House Bill 7077 as well as the criteria that the Triumph Gulf Coast Board of Directors has discussed in committee and board meetings. The UWF Innovation Network Project is a shovel-ready project with an impressive list of public and private entities that have partnered to support this endeavor. As noted in the pre-application submission, the UWF Innovation Network Project "will accelerate regional innovation through key industry partnerships, expand multidisciplinary degree programming, promote regional innovation through research and produce highly qualified talent for jobs promoting economic recovery, diversification and enhancement of the economy in Northwest Florida."

In supporting the objective of preparing the workforce of the future in Northwest Florida, this project will serve more than 9,000 students and workforce participants in its first three years of operation. This initiative will increase the number of job-ready graduates in the region as well as accelerate existing employers' workforce development needs in areas that create quality, high-paying jobs. The education and training that will be provided by the Innovation Network Project are in fields that produce jobs with incomes higher than the regional and national average, a key data point stressed by the Triumph Board of Directors.

Thank you for the Triumph Gulf Coast Board of Director's service to Northwest Florida and for the opportunity to share this endorsement with you. Please feel free to contact me with any questions you may have.

Sincerely

Stephen R. Moorhead, Chairman Greater Pensacola Chamber of Commerce



December 11, 2017

Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders:

Hixardt Technology is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

Hixardt Technology is an active participant in UWF Center for Cybersecurity activities where we strive to enhance the region's transferable and sustainable high-tech workforce skills. State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. Hixardt Technology has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

Maler

Michael E Hicks Jr President/CEO





1.10.2018

Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders

The HSU Educational Foundation is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

The HSU Educational Foundation is an active participant in TeCMEN and the Okaloosa EDC activities where we strive to enhance the region's transferable and sustainable workforce skills. State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. The HSU Educational Foundation has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

Sincerely,

Paul S. Hsu, Ph.D.

President

70 Ready Avenue NW Fort Walton Beach, FL 32548 850.226.2776 HSU-FOUNDATION.ORG



December 11, 2017

Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders

IMS ExpertServices, Inc. is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. IMS ExpertServices, Inc. has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

Sincerely,

Bill Wein Chief Executive Officer

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December 11, 2017

Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders

Innovation Coast is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. Innovation Coast has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

Sincerely,

Bill Wein Chairman

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December 26, 2017

Dr. Martha Saunders President University of West Florida 11000 University Parkway Pensacola, FL 32514

Re: UWF Innovation Network

Dear Dr. Saunders,

The Florida Institute for Human & Machine Cognition (IHMC) is pleased to submit this letter of support for the University of West Florida's Innovation Network proposal to the Triumph Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

IHMC intends to partner with UWF and the Innovation Network to support the Intelligent Systems and Robotics Program and warehouse expansion adjacent to the IHMC property in downtown Pensacola and believes that this Innovation Network will accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent in intelligent systems, robotics, cybersecurity, advanced manufacturing and other technology careers.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the evolving workforce needs of our region.

Very truly yours,

Julie L. Sheppard Executive Vice President and Chief Legal Officer

PENSACOLA | OCALA

amiala, Ali 5, 361-302 - 162



December 13, 2017

Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders,

The International Institute for Counter-Terrorism (ICT) at the Interdisciplinary Center (IDC), Herzliya is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. ICT has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

Sincerely,

Prof. Boaz Ganor,

Ronald Lauder Chair in Counter-Terrorism Founder & Executive Director International Institute for Counter-Terrorism (ICT) Dean, Lauder School of Government, Diplomacy and Strategy The Interdisciplinary Center (IDC) Herzliya



Date: 11 December 2017

Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders

KontactIntelligence, Inc. is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. KontactIntelligence, Inc. has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

Niels K. Andersen President & CEO





25 W Avery St Pensacola, FL 32501 T: 850.910.3002 F: 618.624.7840 www.cybercents.com

December 18, 2017

Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders:

Metova CyberCENTS, a business unit of Metova Federal LLC., is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

Metova is an active partner of the UWF Center for Cybersecurity's activities and provides the Florida Cyber Range with the cyber simulators which will be used in efforts to enhance the region's and nation's transferable and sustainable workforce skills. State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. Metova has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

Sincerely,

Bill Dunn President



300 Preston Ave, Suite 500, Charlottesville, VA 22902

18 January 2018

Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders

Mission Secure Inc. (MSi) is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

MSi is an active partner of the UWF Center for Cybersecurity's activities in efforts to enhance the region's and nation's transferable and sustainable workforce skills. State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. MSi has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

Sincerely,

Brian M. Stites Vice President, Defense and Critical Infrastructure Mission Secure 434-284-8071 x731 brian@missionsecure.com



NATIONAL ASSOCIATION OF VETERANS PROGRAM ADMINISTRATORS

2020 Pennsylvania Avenue N.W • Suite 1975 • Washington, D.C. 20006-1846

December 12, 2017

Dr. Martha Sanders President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Martha Sanders,

On behalf of the National Association of Veterans Program Administrators (NAVPA), I am pleased to announce the election of Jeffery Meister to the NAVPA Board of Directors as Chair Future Conference and Region IV Delegate.

NAVPA would like to personally thank University of West Florida for endorsing your Veterans Administrator to participate in this organization and make it possible for Jeffery Meister to attend our mid-year meeting and annual conference. Not only is it beneficial for Jeffery on behalf of University of West Florida, to stay abreast of all changes the Veterans Administration makes from year to year, but he will work on initiatives to help improve and enhance the GI Bill.

Founded in 1975, NAVPA is a nationally recognized organization of program administrators who work for universities and colleges, trade schools and apprenticeship programs across our nation to insure that our student veterans are provided the best service and most accurate access to their GI Bill benefits. Although the primary scope of NAVPA is education, we also address other areas of interest and opportunity for veterans, as well as professional development for our members.

Our Board of Directors works in concert with the U.S. Departments of Veterans Affairs, Education, and Defense to promote the improvement and development of all opportunities to veterans and their dependents, for their personal growth and fullest potential. As a member of the NAVPA Board of Directors, Jeffery will be in direct contact with these federal agencies, as well as having input with the U.S. House of Representatives and Senate Veterans Affairs Committees, the American Association of Collegiate Registrars and Admissions Officers (AACRAO), the National Association of College and University Business Officers (NACUBO) and other national and regional professional organizations concerning NAVPA's mission.

Once again, thank you for your support. We look forward to an outstanding year and are proud to have Jeffery on our Board of Directors for 2018. Please feel free to visit our website at http://www.navpa.org. If you have any questions, you may contact me at 435-797-9855 or by e-mail at tony.flores@usu.edu.

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Tony Flores NAVPA President

Northwest Florida Manufacturers Council

OFFICERS

- - - -

| Chair: Ed Phelan, Maritech Machine | |
|--|---|
| Vice Chair: Barbara Mitchell, American Elite Molding | December 20, 2017 |
| Treasurer: Dan Velazquez, St. Joe Company Secretary: Wayne Henson, Eastman Chemical Company | Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514 |
| BOARD MEMBERS Terry Ellis, West Point Home John Johannemann, Ascend Performance Materials James Hodge, Cerex | Dear Dr. Saunders Northwest Florida Manufacturers Council is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products. |
| Jared Banta, <i>Rex Lumber</i> Foster Ware, <i>Gulf Power</i> Dee Setzer, <i>Ft Walton Machining</i> | The Northwest Florida Manufacturers Council is an active participant in TeCMEN, NORTHWEST FLORIDA FORWARD, Florida's Great Northwest, local EDO's and educational institutions activities where we strive to enhance the region's transferable and sustainable workforce skills. State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. We have a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing. |
| Nicole Gislason, ex-officio University of West Florida | We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region. Sincerely, <i>Cl. Phelan</i> Ed Phelan, Chairman of the Board Northwest Florida Manufacturers Council |

Northwest Florida Manufacturers Council

212 Church Street Pensacola, FL 32502



February 28, 2018

Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders

The Pensacola-Escambia Promotion & Development Commission is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. By developing new programs centered on regional diversification through talent creation in high demand industry sectors, this proposal addresses one of the greatest concerns of our emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

The Pensacola-Escambia Promotion and Development Commission (PEDC) is a government entity established by a special act of the State of Florida Legislature to promote economic development interests such as industry, tourism and commerce. State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. The PEDC has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly gualified talent for jobs in cybersecurity and advanced manufacturing.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

neerely

Chairman, Pensacola-Escambia Promotion & Development Commission



December 13, 2017

Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders

Regions Bank is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence, and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

Regions Bank is an active participant in numerous local and regional activities where we strive to enhance the region's transferable and sustainable workforce skills. State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. Regions Bank has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

Sincere

Scott L. Barrow Senior Vice President SAFP Area Wealth Executive Pensacola-FWB City President



January 5, 2018

Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders

Ridge Global LLC is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses many needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. Ridge Global LLC has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

Sincerely Steve Kohler CEO

RIDGE GLOBAL

1140 CONNECTICUT AVE. NW • SUITE 510 • WASHINGTON, DC 20036 • UNITED STATES P+1 202-833-2008 F+1 202-833-2009 W ridgeglobal.com



December 13, 2017

Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders:

Saltmarsh, Cleaveland & Gund, P.A. ("Saltmarsh") is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

Saltmarsh has been an active participant in the business community in Northwest Florida since 1944. We fully support the effort to enhance the region's transferable and sustainable workforce skills. State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. Saltmarsh has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

Sincerely,

that F. Sul

Charles F. Gund, CPA Shareholder

Since 1944

www.saltmarshcpa.com • (800) 477-7458

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Pensacola • Fort Walton Beach • Tampa • Orlando



Timothy S. Wyrosdick Superintendent of Schools

5086 Canal Street Milton, Florida 32570-6706

Phone: 850/983-5012 Cellular: 850/777-7762 Facsimile: 850/983-5013 E-mail: WyrosdickT@santarosa.k12.fl.us

Mission: Preparing Students for Success by Providing a Superior, Relevant Education

January 12, 2018

Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders:

Santa Rosa County School District is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

Santa Rosa County School District is an active participant in Northwest Florida Manufacturers Council and partners with Santa Rosa Economic Development where we strive to enhance the region's transferable and sustainable workforce skills. State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. Santa Rosa County School District has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

Sincerely,

Tim Wyrosdick Superintendent of Schools

District i Diane Scott DISTRICT 2 C. "Buddy" Hinote

ote Carol Boston

DISTRICT 4 Jennifer Granse

DISTRICT 5 Scott Peden

Vision: Our Students Will Be Productive, Successful Contributors to Society



January 8, 2018

Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders,

On behalf of the Studer Community Institute I am pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

Studer Community Institute is an active participant in working with a number of entities of the area's workforce development where we strive to enhance the region's transferable and sustainable workforce skills. State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. Studer Community Institute has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

Sincerely,

Studer Community Institute, Founder

Studer Community Institute 40 S. Alcaniz Street Pensacola, FL 32502 STUDERi.ORG

SYNOVUS

January 31, 2018

Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders,

Synovus is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

Eddie Norris Market Executive



December 12, 2017

Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders

TeCMEN (Technology Coast Manufacturing and Engineering Network) sponsored by the Economic Development Council of Okaloosa County is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors.

TeCMEN was established by the Economic Development Council of Okaloosa County in 1989 to be the premier business advocate for Science, Technology, Engineering and Math (STEM) industries. TeCMEN provides opportunities for innovative collaboration and advanced technical expertise locally, regionally, and in the competitive global marketplace. TeCMEN has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cyber security and advanced manufacturing.

TeCMEN values the University of West Florida's Innovation Network grant proposals which address a number of needs that will support emerging high-technology industry sectors of cyber security, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. TeCMEN greatly appreciates that the Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region. Please contact me if additional information is needed regarding the TeCMEN support for the University of West Florida Innovation Network grant proposal.

Tim McDonald TeCMEN Chair



Just the Bank for You!

December 12, 2017

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Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders

As a longtime Pensacola resident and business owner, with years of community involvement, I am pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

I have been an active participant in The Greater Pensacola Chamber of Commerce and several economic development efforts. I understand and appreciate our need to enhance the region's transferable and sustainable workforce skills. State-of-the-art technologies is one of the most challenging requirements facing Northwest Florida. Our entire business community has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing.

Collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region will be a top priority for all of us.

Tura Ritchie

Market President



December 19, 2017

Dr. Martha Saunders, PhD, President University of West Florida 11000 University Parkway Pensacola, FL 32514

Dear Dr. Saunders,

West Florida Healthcare is pleased to submit this letter of support for the University of West Florida's Innovation Network grant proposal to the Triumph Gulf Coast Board of Directors. This proposal addresses a number of needs that will support emerging high-technology industry sectors of cybersecurity, advanced manufacturing, artificial intelligence and robotics resulting in regional diversification through talent creation in high demand industry sectors. The Innovation Network will also expand the existing skilled workforce through education, training and research leading to technology transfer and commercialization of products.

West Florida Healthcare is an active participant in economic development, job creation, innovation and technology activities where we strive to enhance the region's transferable and sustainable workforce skills. State-of-the-art technologies and innovative programs to support emerging learning and training needs is one of the most challenging requirements facing Northwest Florida. West Florida Healthcare has a valid interest in working together with the Innovation Network to accelerate regional innovation, inspire the K-12 future workforce, and produce highly qualified talent for jobs in cybersecurity and advanced manufacturing.

We look forward to collaborating with the University of West Florida's Innovation Network to meet the workforce needs of our region.

Sincerely,

R. Carlton Ulmer President/CEO

West Florida HOSPITAL West Florida REHABILITATION INSTITUTE West Florida PAVILION

8383 North Davis Highway • Pensacola, Florida 32514 • (850) 494-4000 • www.westfloridahospital.com



Office of the President 11000 University Parkway Pensacola, FL 32514-5750

July 31, 2019

Florida Triumph Gulf Coast, Inc. P.O. Box 12007 Tallahassee, Florida 32317

Dear Triumph Board Members:

The University of West Florida agrees to use the funds awarded by Triumph Gulf Coast, Inc. in the manner intended and will not supplant funds for other uses.

Wartha Jaunder

Martha Saunders, President University of West Florida



