# HSU INNOVATION INSTITUTES: Phase 1 Application to Triumph Gulf Coast, Inc.

Submitted by



## Triumph Gulf Coast, Inc. Trust Fund Application for Funds

Proposal Instructions: The Triumph Gulf Coast, Inc. Trust Fund Grant Application (this document) must be completed by the entity applying for the grant and signed, as applicable, by either the individual applying for funds, an individual authorized to bind the entity applying for funds, a chief elected official, the administrator for the governmental entity or their designee. Please read the Application carefully as some questions may require a separate narrative to be completed. In addition, please complete all Addendums that may be applicable to the proposed project or program.

Triumph Gulf Coast, Inc. will make awards from available funds to projects or programs that meet the priorities for economic recovery, diversification, and enhancement of the disproportionately affected counties. Triumph Gulf Coast, Inc. may make awards for:

• Ad valorem tax rate reduction within disproportionately affected counties;

• Local match requirements of s. 288.0655 for projects in the 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.



Pursuant to Florida Law, Triumph Gulf Coast, Inc. will provide priority consideration to Applications for projects or programs that:

• 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.

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

• Leverage or further enhance key regional assets, including educational institutions, research facilities, and military bases.

• Partner with local governments to provide funds, infrastructure, land, or other assistance for the project.

• Benefit the environment, in addition to the economy.

• 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.

Additionally, the Board of Triumph Gulf Coast, Inc. may provide discretionary priority to consideration of Applications for projects and programs that:

• Are considered transformational for the future of the Northwest Florida region.

• May be consummated quickly and efficiently.

• Promote net-new jobs in the private sector with an income above regional average household income.

• Align with Northwest Florida FORWARD, the regional strategic initiative for Northwest Florida economic transformation.

• 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.

• Promote industry cluster impact for unique targeted industries.

• Create net-new jobs with wages above national average wage (e.g., similar to EFI QTI program, measured on graduated scale).

• Are located in Rural Area of Opportunity as defined by the State of Florida (DEO).

• Provide a wider regional impact versus solely local impact.

• Align with other similar programs across the regions for greater regional impact, and not be duplicative of other existing projects or programs.

• Enhance research and innovative technologies in the region.

• Enhance a targeted industry cluster or create a Center of Excellence unique to Northwest Florida.



• Create a unique asset in the region that can be leveraged for regional growth of targeted industries.

• Demonstrate long-term financial sustainability following Triumph Gulf Coast, Inc. funding.

- Leverage funding from other government and private entity sources.
- Provide local investment and spending.

• 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.

• Provide clear performance metrics over duration of project or program.

• Include deliverables-based payment system dependent upon achievement of interim performance metrics.

- Provide capacity building support for regional economic growth.
- Are environmentally conscious and business focused.
- Include Applicant and selected partners/vendors located in Northwest Florida.

Applications will be evaluated and scored based on compliance with the statutory requirements of the Triumph Gulf Coast legislation, including but not limited to the priorities identified therein and the geographic region served by the proposed project or program.



### Applicant Information

Name of Entity/Organization: <u>HSU Family Educational Foundation Inc.</u> DBA: HSU Educational Foundation

Background of Applicant: <u>Please see the following pages for response.</u>

Individual/Entity/Organization: Federal Employer Identification Number: <u>47-5426274</u>

Contact Information:

Paul S. Hsu, Ph.D. Founder and President 850.218.0090 paul.hsu@totalpartsplus.com

Primary Contact: Amanda Negron Executive Director

70 Ready Avenue N.W. Fort Walton Beach, FL 32548 850.226.2776 amanda.negron@hsu-foundation.org www.hsu-foundation.org

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.

Please see following pages for response.

#### Total amount of funding requested from Triumph Gulf Coast:

The HSU Educational Foundation respectfully requests the opportunity to partner with Triumph Gulf Coast with a request for funding in the amount of \$7.16 Million for the first of a five – phase project, establishing HSU Innovation Institutes in each of the eight disproportionately affected counties.



## **Background of Applicant Individual/ Entity/ Organization**

Founded by Dr. Paul Hsu, a successful tech-entrepreneur and visionary, the HSU Educational Foundation is committed to its mission of encouraging excellence in teaching and innovation in the classroom. A first-generation immigrant, Dr. Hsu has a proven track record over the last 40 years of starting and growing successful technology companies in Northwest Florida. Serving as mentor to numerous small businesses and a strategic driver of economic development initiatives, Dr. Hsu has long supported Northwest Florida's growth, prosperity, and industrial diversification. The HSU Educational Foundation, a 501c3 non-profit public charitable organization, was formally established in 2015. Development of the organization provided the opportunity to greatly expand on the philanthropic support Dr. Hsu had long personally contributed in the areas of education and economic development, by inviting and facilitating partnerships among private businesses, public entities, and community members who share a common interest in improving workforce development in the region.

The HSU Educational Foundation is dedicated to transforming Northwest Florida by inspiring innovation and a love of science, technology, engineering and math (STEM) among the next generation. The programs of the HSU Educational Foundation are developed from an entrepreneur's perspective and reflect an industry-driven solution for preparing students for careers of global demand.

Pressure exists to develop and diversify our workforce by developing trained students prepared with high demand skills. Furthermore, establishing a stronger talent pipeline is a key factor in attracting industry development outside the military and hospitality sectors. To make a wide and transformative impact on workforce development, our community is challenged to inspire early and continued interest in STEM among students, and to develop a pipeline connecting those students on a training pathway to jobs which earn wages above the national average.

By building partnerships across public, private, and community sectors, the Foundation serves as a student to industry bridge, offering students innovative, valuable learning opportunities not always accessible in the traditional classroom setting. Through partnership support, the Foundation currently has developed a multifaceted approach to workforce development by hosting diverse programming that includes:

- Student Workshops, Camps, Demo Days for STEM Enrichment
- Game Changers: Family Science Saturdays
- Competition Programs Solving Grand Challenges
- Educate the Educator: Professional Training and Industry Engagement
- TEAMS: Community Recognition of STEM Educators
- Guardians of the Dream: Inspiring the Entrepreneurial Spirit
- Endowed Scholarships and Community Support

#### Student Workshops, Camps and Demo Days for STEM Enrichment

The Foundation hosts camps and workshops focused on robotics, software programming, UAV flight and introduction to aeronautical, electrical and mechanical engineering, as well as, information technology and cyber security. Woven through these programs is an emphasis on building skills such as problem solving, critical thinking, proactive planning, team work, and innovative experimentation. Families are invited to witness what students are learning during and at the close of the camp



experience. Accessible through free or low-cost registration by all students; disadvantaged, rural or less traditionally represented groups are specially referred and encouraged to participate.

As evidenced by the success of each camp, training or educational awareness program, collaboration of multiple partners is what makes the Foundation's impact exponentially stronger:

- Federal support through Air Force grant funding and involvement of subject matter experts, in addition to, city and county support through use of facilities and resources
- Partnership of educational institutions and school districts providing student mentors, instructor support, and student referrals
- City, county and state governing bodies facilitating operational logistics and identifying resources
- Private businesses providing sponsorship, facilities, food, maintenance, curriculum development and guidance, as well as, subject matter expertise
- Economic development organizations and chambers of commerce lending promotional and network support
- Community volunteers and non-profit partners working as a team to accomplish the tasks

#### Game Changers: Family Science Saturdays

Participation in this program is included in a free Game Changer club membership where students and their families come to explore a themed science program that is led by an industry or professional subject matter expert, sharing how STEM concepts are used in an industry sector or career field. Topics and curriculum are developed in partnership with a business to reflect key skills prioritized in their workforce recruitment. Students and their families are given challenges to solve, hands-on experiments to conduct, and tours of industry facilities with demonstrations of equipment and technical expertise.

Some examples of Game Changer experiences include: introduction to hi-tech manufacturing equipment, learning how to make fine measurements on scales used in calibration of airplanes such as Air Force One, flight simulation and autonomous programming of drones with guidance from FAA licensed pilots, using graphic design software to develop brand logos, or hearing from engineers of a local power utility provider about electrical circuitry and safety measures. Parents receive helpful guidance about local educational resources, which classes and prerequisites their child might like to consider in their continuing years, as well as, how best to seek internship, apprenticeship and scholarship opportunities in their high school years. Parents and students are informed about the importance of gaining and keeping the security clearances required for certain occupations. The greatest aspect of this program is the involvement of parents, who become more informed advocates motivated to encourage their child to pursue these high demand career fields.

#### Competition Programs Solving Grand Challenges

HSU Educational Foundation's support of competition programs and enrichment clubs that encourage solving of Grand Challenges currently includes the following: FIRST robotics teams (FLL Jr., FLL, FTC, FRC), AFA CyberPatriot, Odyssey of the Mind, Drone Team Challenge, chess clubs and other



enrichment extracurricular platforms. Studies show that over 80% of participants in afterschool STEM programs such as FIRST demonstrate increased enthusiasm and performance in STEM classwork, as well as increased interest in pursuing STEM careers. (Afterschool Alliance)

The primary areas of support for afterschool extracurricular programs and competition teams include providing practice space, equipment, new team registration, program costs and awards, subject matter experts to serve as mentors, volunteer coaches, and training resources. By offering more opportunities for students to explore these programs, the Foundation is extending the reach of STEM enrichment within the wider community.

#### Educate the Educator: Professional Training and Industry Engagement

Hosting professional training, the Foundation exposes teachers to industry applications linking with the traditional standards. This opens doors for more innovative and novel lesson development, engaging students by drawing on real-world industry perspectives. Learning to use emerging technologies to tackle challenging concepts motivates teachers to break from traditional pedagogy and reach students in more innovative ways. For example, students are easily engaged by video gaming and app technology. Software developers can train teachers to use introductory programming tools to reach and inspire students more effectively. If a science teacher usually tasks students to write a paper about an environmental biome that demonstrates characteristics of distinct biological communities, alternatively they might also consider an innovative approach for sharing these characteristics by designing and programming a video game that reveals the same concepts. As subject matter experts from local industry increasingly offer these types of seminars, there is greater opportunity for synergy between what industry is looking for in the workplace and how teachers prepare their students to be successful.

Another way the Foundation is working to connect schools with industry is by sponsoring principals and student ambassadors to attend the TeCMEN Industry Day each year. This opportunity increases attendee awareness of the types of skills needed and opportunities available in the region. An important goal for the Foundation is to ensure students not only possess the skills needed by local employers, but that they are well informed of what regional opportunities exist in the interest of improving talent retention rates.

As a sponsor for the Educate the Educator Plus 1 program, the Foundation works in partnership with other businesses, local economic development organizations, the CareerSource agency and the school district to improve understanding among teachers and students about the nature of regional workforce talent needs. By visiting a manufacturing plant in person or meeting with hiring managers who seek specific skills, teachers gain insight to better prepare their students.

The collaborative effort of this program is unique and allows teachers, businesses, and community organizations to work together in the model of a Community of Practice (CoP), which is a central component of the Foundation's vision for developing transformative change in workforce development across the eight disproportionately affected counties of Triumph Gulf Coast.

#### Teaching Excellence Awards in Math and Science (TEAMS)

In 2014, the Foundation developed an annual awards program recognizing outstanding teachers of mathematics and science, including applied technologies, by bestowing upon them HSU Educational Foundation Teaching Excellence Awards in Mathematics and Science (TEAMS). The program has awarded over \$75,000 since its first recognition ceremony in 2015.



TEAMS 1 awards are currently bestowed on eligible teachers in Okaloosa County high schools (Crestview High School, Laurel Hill School, Baker School, Fort Walton Beach High School, Choctawhatchee High School, CHOICE, NWFSC Collegiate, and Niceville High School) through a rigorous nomination and application program scored by a selection committee made up of representatives of regional chambers of commerce. The TEAMS 1 award consists of a \$5,000 prize for deserving high school teachers of math, science, technology and engineering and currently there are four teachers chosen each year for the top prize (two in North Okaloosa and two in South Okaloosa). This program is expected to continue to expand as the Foundation grows across Northwest Florida. Soon after Dr. Hsu committed \$100,000 to the program, businesses stepped forward to offer additional \$500 Sponsored Merit Prizes. Use of the funds from these awards is entirely discretionary and teachers are encouraged to use it for themselves, however we know that many teachers apply some portion for classroom needs.

TEAMS 2 awards recognize middle and elementary level teachers who are "caught in the act" of demonstrating outstanding effort in support of the fields of robotics, math and/ or science extracurriculars and enrichment. TEAMS 2 awards range in value from \$500 to \$1000 and allow members of the community to voice their appreciation for educators who go above and beyond the traditional lesson plans and school day to inspire a love of STEM.

TEAMS 3 awards were created to help support needs that exist in the classroom or extracurricular learning setting. These awards bridge gaps in school funding of STEM curriculum, training, or materials and can stimulate development of new competition teams by covering registration and kit costs or supplementing travel expenses. Certain types of school contributions can be considered for a State of Florida matching grant, doubling the impact of the funding in the classroom.

#### Guardians of the Dream: Inspiring the Entrepreneurial Spirit

The spirit of the HSU Educational Foundation embodies the key entrepreneurial values outlined in Dr. Hsu's book, <u>Guardians of the Dream: The Enduring Legacy of America's Immigrants</u>. The insights shared from his experience building and growing several successful small tech businesses to serving as presidential appointee under several administrations, can serve as an inspirational guide for all aspiring entrepreneurs, but also for all students. Dr. Hsu advises young people to adhere to the simple but profound values of hard work and self-discipline that have stood the test of time.

Through sharing of Dr. Hsu's message and offering the book to the benefit of developing young people, the Foundation imparts lessons on the defining traits of the entrepreneurial spirit that continues to flourish in the United States, inviting all citizens to contribute to the growth and betterment of our future.

HSU Educational Foundation programs seek to cultivate Dr. Hsu's entrepreneurial principles: Stay curious - Never say no before you say maybe - Be bold - Strive to understand what makes people tick - Build relationships - Build wisely - Welcome new ideas, even from unlikely sources - Adhere to strong values.

#### Endowed Scholarships and Community Support

The HSU Educational Foundation also extends support for engineering scholarship endowments, leadership and internship organizations, career tech apprenticeships, U.S. Constitution education initiatives, and support of military and community causes.



### Partners and Proposed Roles

The HSU Educational Foundation is the sole applicant.

There are a number of businesses and community entities whose valued involvement will play a role as collaborators within the HSU INNOVATION INSTITUTE'S proposed Technology Coast Network, a Community of Practice (CoP) established in Phase 1: Okaloosa County. Technology Coast Network will continuously expand as partners join from county to county over each future phase establishing HSU INNOVATION INSTITUTES across the eight disproportionately affected counties of Triumph Gulf Coast.

<u>Industrial & Business (CoP) Partners:</u> Dr. Paul S. Hsu, PSH of Okaloosa LLC., Total Parts Plus, Inc., ActiGraph, LLC., SAI Flight Test/ Sunshine Aero, TelaForce, Boeing, Lockheed Martin, Vertex Aerospace, Intuitive Research Corporation, Beast Code, Emerald Coast Aviation, Technology Coast Manufacturing and Engineering Network (TeCMEN) and its members, Economic Development Council of Okaloosa County, Florida Great Northwest and the Northwest Florida Forward councils, Fort Walton Beach Chamber of Commerce, Crestview Area Chamber of Commerce, City of Fort Walton Beach Commerce and Technology Park Stakeholders.

<u>Educational & Public Resource (CoP) Partners:</u> Northwest Florida State College (NWFSC), University of West Florida (UWF), Embry-Riddle University, Okaloosa County School District, Emerald Coast Robotics Alliance, PLTW, CareerSource, DefenseWerx (Doolittle Institute)/ AFRL, Okaloosa Sheriff's Office (Criminal Investigation unit), Okaloosa Airports.

On August 23, 2018, a memorandum of intent was signed by NWFSC, Crestview Technology Park and HSU Educational Foundation to detail a partnership at the location of 5795 John Givens Rd. Crestview, FL, which will become home to NWFSC Advanced Technology Center of Excellence and HSU Innovation Institute operations. On this campus cornering the Bob Sikes Airport runway and the Bob Sikes Industrial Park, the college will collaborate to develop the Foundation's plans to introduce K-20 student programs leading to high wage career fields in industrial maintenance, aircraft maintenance, robotics and logistics.

The Okaloosa County School District has offered to train and certify bus drivers working for the Foundation to provide transportation for the HSU Educational Foundation's Spark Scholars participants to attend afterschool programming from local elementary schools from surrounding regions of both HSU INNOVATION INSTITUTE locations. Working with the school district, the Foundation will offer professional development opportunities and attract business partners to supply funding and training support. The Foundation will work with the district to provide STEM enrichment field and classroom opportunities for students K-12 with a special focus on inspiring interest and increased performance in grades 3-5. The Foundation will work as a partner to help solve resource challenges and to recognize and encourage STEM educators within the community. In development of the Technology Coast Network portal, schools and districts are invited to partner in the development of the STEM education network resource tool, beneficially serving students, families, educators and employers alike. The district has and can serve as a valuable partner in referring students to participate with educational enrichment workshops, camps, field trips, competition teams and the Spark Scholar program.



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

🛛 Yes 🛛 No

- 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.

## **Requested Funding:**

The HSU Educational Foundation requested and received the award of a \$232,000 grant from the Air Force Research Lab (AFRL) for the Northwest Florida STEM Education and Drone Team Challenge Program (requested April 16, 2018/ awarded May 16<sup>th</sup>, 2018).

Implementation of summer camp activities and development of Drone Team Challenge curriculum first commenced in June 2018 in advance of teacher training and registration of competition teams to take place throughout the months of September and October before a series of competition meets are held throughout the course of the 2018-2019 school year. 100+ students and student mentors have already participated with this educational program to utilize drone technologies in training tomorrow's workforce, which is in advance of actual registration for the competition team program.

'Ground Zero' teachers have been demonstrating the program in the classroom setting as well. The first teacher training session will be held on September 20<sup>th</sup>, 2018 at 709 Anchors St. and will draw elementary, middle and high school educators together to explore how to introduce the 4-level program focused on understanding of quadrotor drone technologies, aeronautical engineering concepts and piloting, rocket building and flight simulation, software programming, mechanical engineering and 3D printing/ CAD design. The 1-year grant is expected to include facility setup of basic practice meets at the 709 Anchors location, curriculum and competition program development, establishment of 11 new competition teams at high, middle and elementary school levels, professional development for teachers and coaches, and student enrichment opportunities in camps and workshops. The Foundation envisions potential growth of the program to attract student interest on a national scale.

Funding sources for the HSU INNOVATION INSTITUTES project include the grant from the Air Force Research Lab, in combination with investment and valuable in-kind contributions made by Dr. Paul Hsu, PSH of Okaloosa Inc., Northwest Florida State College, Robert Keller and regional business sponsors of youth programming, in addition to this application for Triumph Gulf Coast partnership and investment.



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

The HSU Educational Foundation is a 501(c)(3) nonprofit organization established in December 2015. Current mission-related programs are funded by donations already received or expected to be received. The proposed project allows for expansion of program reach with sustainable operations following fiveyear project establishment period.

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

#### <u>Please see the following page for response.</u>

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?  $\Box$  Yes  $\boxtimes$  No

If yes, please identify the entity or individual that field for bankruptcy and the date of filing. (If additional space is needed, please attach a Word document with your entire answer.)



INTERNAL REVENUE SERVICE P. O. BOX 2508 CINCINNATI, OH 45201

## Date: JUL 01 2016

HSU FAMILY EDUCATIONAL FOUNDATION INC C/O JASON NEGRON

3 PLEW AVENUE SHALIMAR, FL 32579 DEPARTMENT OF THE TREASURY

Employer Identification Number: 47-5426274 DLN: 17053111327016 Contact Person: ERIC KAYE ID# 31612 Contact Telephone Number: (877) 829-5500 Accounting Period Ending: December 31 Public Charity Status: 170 (b) (1) (A) (vi) Form 990/990-EZ/990-N Required: Yes. . di te Effective Date of Exemption: October 9, 2015 Contribution Deductibility: Yes Addendum Applies: NO

#### Dear Applicant:

We're pleased to tell you we determined you're exempt from federal income tax under Internal Revenue Code (IRC) Section 501(c)(3). Donors can deduct contributions they make to you under IRC Section 170. You're also qualified to receive tax deductible bequests, devises, transfers or gifts under Section 2055, 2106, or 2522. This letter could help resolve questions on your exempt status. Please keep it for your records.

Organizations exempt under IRC Section 501(c)(3) are further classified as either public charities or private foundations. We determined you're a public charity under the IRC Section listed at the top of this letter.

If we indicated at the top of this letter that you're required to file Form 990/990-EZ/990-N, our records show you're required to file an annual information return (Form 990 or Form 990-EZ) or electronic notice (Form 990-N, the e-Postcard). If you don't file a required return or notice for three consecutive years, your exempt status will be automatically revoked.

If we indicated at the top of this letter that an addendum applies, the enclosed addendum is an integral part of this letter.

For important information about your responsibilities as a tax-exempt organization, go to www.irs.gov/charities. Enter "4221-PC" in the search bar to view Publication 4221-PC, Compliance Guide for 501(c)(3) Public Charities, which describes your recordkeeping, reporting, and disclosure requirements.

Letter 947



#### HSU FAMILY EDUCATIONAL FOUNDATION

Sincerely,

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Jeffrey I. Cooper Director, Exempt Organizations Rulings and Agreements



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Letter 947

## Hsu Family Educational Foundation Balance Sheet As of September 4, 2018

	Sep 4, 18
ASSETS Current Assets Checking/Savings	1 212 44
BBVA - Checking Merrill Lynch - Checking	1,212.44 22,190.86
Total Checking/Savings	23,403.30
Accounts Receivable Accounts Receivable	232,000.00
Total Accounts Receivable	232,000.00
Total Current Assets	255,403.30
Fixed Assets Land	1,884,923.54
Total Fixed Assets	1,884,923.54
TOTAL ASSETS	2,140,326.84
LIABILITIES & EQUITY Liabilities Current Liabilities Credit Cards Foundation AmEx	981.58
Total Credit Cards	981.58
Other Current Liabilities Loan from PSH	8,000.00
Total Other Current Liabilities	8,000.00
Total Current Liabilities	8,981.58
Total Liabilities	8,981.58
Equity Unrestricted Net Assets Net Income	1,936,174.54 195,170.72
Total Equity	2,131,345.26
TOTAL LIABILITIES & EQUITY	2,140,326.84



## Hsu Family Educational Foundation Profit & Loss November 1, 2017 through September 4, 2018

Nov 1, '17 - Sep 4, 18 Ordinary Income/Expense Income Direct Public Support Individ, Business Contributions 139,500.00 Total Direct Public Support 139,500.00 Grant Income 232,000.00 Other Types of Income Miscellaneous Revenue 6.86 6.86 Total Other Types of Income 371,506.86 Total Income Expense Business Expenses Business Registration Fees 60.00 6.565.00 Membership Dues 1,182.83 Business Expenses - Other Total Business Expenses 7.807.83 47,570.00 Charitable Contribution Contract Services 26,100.00 Legal Fees Outside Contract Services 10,000.00 Contract Services - Other 15,211.00 Total Contract Services 51,311.00 1,489.62 Facilities and Equipment Marketing Web Design / Promotion Design 6.564.29 Marketing - Other 35.22 6,599.51 Total Marketing Mission 39,717.32 Operations 2,437.28 Business meeting expense Postage, Mailing Service 41.80 327.41 Supplies Operations - Other 520.17 3,326.66 Total Operations



## Hsu Family Educational Foundation Profit & Loss November 1, 2017 through September 4, 2018

	Nov 1, '17 - Sep 4, 18		
Other Types of Expenses Other Costs	300.00		
Total Other Types of Expenses	300.00		
Travel and Meetings Conference, Convention, Meeting Travel Travel and Meetings - Other	1,958.46 561.30 2,603.05		
Total Travel and Meetings	5,122.81		
Warner Robins Property	13,091.39		
Total Expense	176,336.14		
Net Ordinary Income	195,170.72		
Net Income	195,170.72		



#### <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):

 $\square$  Ad valorem tax rate reduction within disproportionately affected counties;

□ Local match requirements of s. 288.0655 for projects in the 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;

Ø 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

 $\square$  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.

## HSU Innovation Institutes, Technology Coast Network Portal, and Supporting Programs: Phase 1 - Okaloosa County

#### 1. Establishment of HSU INNOVATION INSTITUTES in Okaloosa County

#### 2. Development of the Technology Coast Network Web Portal

#### 3. Implementation of STEM Programs

#### Answering the Need

Increasing demand for qualified candidates to fill jobs in the fields of Science, Technology, Engineering, and Math (STEM), coupled with new development and reliance of constantly emerging technologies requires an innovative approach to inspiring and educating the next generation workforce. In the age of accelerated use of computing and hi-tech advancements, there is a need to equally prepare the next generation to compete for high demand careers in these sectors, as well as, creating the next wave of innovation.

According to the Department of Labor, over the next ten years there will be a 17% increase in STEM jobs, with nearly double the average compensation associated with these careers as opposed to other fields. The shortage of students interested in these fields presses employers to establish operations in STEM- friendly communities which embrace and invest in training a skilled workforce to meet rapid growth needs.

## 1. Establishment of HSU INNOVATION INSTITUTES

#### The Vision

Dr. Paul Hsu, the HSU Educational Foundation's founder and president, has served as an inspiration to many in the NW Florida region for his keen ability to identify opportunities in business, develop strategic economic development solutions, establish mutually beneficial public-private partnerships and serve as a mentor to young developing businesses. Through recent development of the HSU Educational Foundation, he has enthusiastically turned his focus on answering the call for workforce development in NW Florida with a plan to establish HSU INNOVATION INSTITUTES in each of the eight disproportionately affected counties of Triumph Gulf Coast. The HSU INNOVATION INSTITUTES will help prepare students (K-20) by increasing their technology skills and knowledge, encouraging



industry certifications, providing greater awareness and access to successful career pathways, while strengthening career interest and readiness in the fields of Science, Technology, Engineering and Math (STEM).

Under Dr. Hsu's leadership, the Foundation's perspective on preparing students for the careers of greatest demand reflects a background of understanding what drives industry growth with a deep appreciation for the roles of educators who prepare students for the workforce. By serving as a bridge between forces of industry and education, public and private interest - and through partnership with a wide scope of organizations and entities who share a common interest for creating regional transformative change, the Foundation will create hubs of innovative learning that stimulate a strong pipeline of STEM talent, propelling Northwest Florida forward and promoting economic recovery, diversification and enhancement of the disproportionately affected counties.

#### Communities of Practice

The Foundation's vision will be most impactful by developing grassroots change community by community and motivating development of programs that foster innovative skills and growth mindsets among students, leading them on to lifelong learning in the fields that offer higher wages and sustained demand. By building and engaging a regional network of companies and organizations who share a common interest in developing a regional STEM culture, the Foundation will serve to facilitate transformative change through a Communities of Practice (CoP) model. As defined by the STEM 2026 national education initiative, Communities of Practice (CoP) are usually representative of businesses, schools, mentors, community organizations, museums, libraries and public entities who generate change through collaboration. Drawing on diverse regional strengths and resources, students access more tools to achieve success. It truly takes a village to effectively educate a child.

The Foundation's unique role in the region entails interacting regularly with a wide network of influencers and this naturally positions the organization to effectuate programs and solutions in partnership with these entities, exponentially expanding reach to resources that positively impact a greater number of students. These collaborative networks of learning will surround the student with diverse opportunities to explore STEM, to engage with industry from an earlier age, and to become better informed about career training and employment opportunities. Through their participation, schools and educators will also experience a stronger understanding of industry needs and greater insight on how to teach concepts in step with their real-world applications in the workplace.

### Phase 1 Locations: Okaloosa County

- South Okaloosa HSU Innovation Institute at 709 Anchors Street, Fort Walton Beach, FL 32548
- North Okaloosa HSU Innovation Institute at 5795 John Givens Road, Crestview, FL 32536
- North Okaloosa HSU STEM RANGE, 400 Acres, Bill Lundy Road, Laurel Hill, FL 32567

### South Okaloosa HSU INNOVATION INSTITUTES

In July 2018, PSH of Okaloosa pledged a 5-year rent-free contribution, valued at \$1.26 Million, for establishment of the first HSU INNOVATION INSTITUTES at 709 Anchors Street, Fort Walton Beach,



FL 32548 to progress the first phase of this project's mission. The property at 709 Anchors St. includes a 28,100 sq. ft office/ warehouse building and is located in the heart of the Fort Walton Beach Commerce and Technology Park. Educational programs and camps were first offered on-site at the South Okaloosa HSU INNOVATION INSTITUTE location over the summer of 2018, serving students (K-12) in Okaloosa County and some visiting students from surrounding counties of Santa Rosa and Walton. Quickly attracting much interest in its earliest stages of program implementation, major site modifications are needed to expand operations, support diverse programming, and to enhance the region by serving as a community asset, revitalizing the industrial park and stimulating early workforce development.

As with Dr. Hsu's other property development projects, the Foundation recognizes the importance of creating 'quality of space" experiences in the industrial park setting. To recruit and retain a talented workforce, as well as, attracting potential new companies, the HSU INNOVATION INSTITUTES will inspire and motivate businesses to contribute to enhancing their work environments. By planting a refreshing source of eager developing and curious minds in the center of the industrial park, businesses will be able to shape development of the future workforce. Through tours, programs and family events, employers will have the unique opportunity to open their doors and 'interview' potential employee recruits of their future workforce. This serves to encourage businesses to reexamine how they engage with the public. By fostering family-friendly, fun and STEM- focused learning activity inside the industrial setting, the Foundation seeks to shift the culture from one that traditionally sets industrial spaces apart from what they consider "quality of life" in Northwest Florida.

As part of the Triumph Project funding request, the 709 Anchors property will be renovated to include 8 fully equipped STEM labs with flexible classroom, workshop and STEM competition meet settings, 4 offices, team and equipment storage space, and a drone flying arena as shown in this video clip of the architectural design layout:

#### South Okaloosa HSU INNOVATION INSTITUTE Video Walk-Through https://youtu.be/9wO2ysYK\_PE

Shown below as a blank canvas, the final design of the South Okaloosa HSU INNOVATION INSTITUTE will include distinctive features that demonstrate its roles as a hub for innovation and STEM education within the Fort Walton Beach Commerce and Technology Park. Each lab will be fully equipped with the technological equipment to support a host of STEM programs in areas of robotics and engineering, mechanical engineering workshop, virtual machines/ IT/ programming, 3D printing/ CAD design, a little Einstein's discovery lab, UAV/ aeronautical engineering, an entrepreneur's academy and a marine/ environmental engineering wet lab with K-20 levelized programming.





Entrance - South Okaloosa HSU Innovation Institute

Reception area - South Okaloosa HSU Innovation Institute





Front collaboration and lab area - South Okaloosa HSU Innovation Institute



Central collaboration and lab area - South Okaloosa HSU Innovation Institute





Drone Arena lobby and labs - South Okaloosa HSU Innovation Institute

Drone Arena - South Okaloosa HSU Innovation Institute





#### South Okaloosa Labs

• Robotics and Engineering Lab

This space will allow students to explore levelized lessons using physical or virtual robots as educational tools. Even at the most basic software programming level, students can experience learning about commands and sequence of commands to graduate to intermediate concepts of program flow model, simple sensor behaviors, decision making structures, understanding variables, functions and arrays, to flexing engineering practices by solving real-world problems, using critical thinking strategies, and working as a team.

Students will work with tools such as DOBot Robotics, Vex, Lego EV3, and Ozobot robots which provide fun and in-depth training to engage even the youngest elementary participants. As students mature to using more complex languages and programming advanced behaviors, building and prototyping new designs, the lab will offer more sophisticated robotics equipment and workshops with opportunities to learn from subject matter experts who work with robotic automation in fields of manufacturing, biomedical, natural defense, agriculture, and other commercial applications.

FIRST Program and other robotics competition teams will utilize the facilities for practice meeting space, as a tournament location, and to attend coach trainings and program kick-offs. Team participants will schedule shifts to come work with subject matter experts on loan from industry partners.

• Mechanical Engineering Workshop

Mechanical engineering workshops will explore the design, building, and testing of machines; generation, distribution, and use of energy; control and automation of manufacturing systems; and studies on how machines can provide solutions to environmental problems.

Project based learning will emphasize developing the following skills: analysis, modeling, design, and synthesis, while spurring innovative thought about how to solve important problems that can improve quality of life.

o Virtual Machines/ Programming/ IT Lab

The Virtual Machines/ Programming/ IT Lab will be fully equipped to support cyber security classroom technical requirements with computer hardware, software programming compilers, training software and VMware Workstations specified by the National Youth CyberDefense Competition Program and the AFA CyberPatriot training modules. The lab will also flexibly shift to support middle and high school students pursuing online certifications and virtual school coursework. A surprisingly high number of students from low income households do not have access to a personal home computer. The HSU INNOVATION INSTITUTE may be the only place a student can go to access online tools for homework and research studies.



• 3D Printing/ CAD Design Lab

The 3D Printing/ CAD Design Lab will encourage creativity and expose students to professionallevel technology that prepares them for the future. Students will create accurate threedimensional visualizations, custom parts, and explore cutting-edge applications. 3D Printers will be used across a wide scope of STEM applications.

• Little Einstein's Discovery Lab for PreK- 2<sup>nd</sup>

With an interest for inspiring an early love of STEM among the youngest of students, the Little Einstein's Discovery Lab will captivate the imaginations of toddlers through 2nd grade. Fully equipped with hands-on interactive tools, the lab will encourage curious exploration of STEM through age appropriate experiments and activities. During Game Changer family events, younger siblings need a levelized set of activities appropriate to their age that grasp their attention while older students experiment with more complex concepts. It is important for younger students to experience independent learning through non- restrictive, but organized play. It is equally valuable for them to witness more advanced STEM programming happening in the center which will inspire them to look ahead to opportunities in the future.

o UAV/ Aeronautical Engineering Lab and Flying Arena

The UAV/ Aeronautical Engineering Lab and Flying Arena represents the first indoor flight arena of its kind in Okaloosa County supporting student exploration of UAVS, which are expected to become a \$100 Billion industry in five years. The lab and arena will meet facility and infrastructure requirements to host Drone Team Challenge competition events. The space will allow for basic to advanced drone flight exercises inside the arena and will include stadium seating, nets, neon lit gates, a leaderboard, landing targets and flight simulation stations. Space for UAV and robotics pits will allow visiting teams the space needed to gather with their equipment when not in the competition field. The UAV lab will support the Drone Team Challenge classroom training needs allowing students to progress from levels 1-4, learning flight concepts that align with FAA Drone Certifications.

o Entrepreneurs Academy

Preparing students to be successful in STEM related fields means encouraging a strong understanding of leadership, possessing sound financial management skills, possessing a good business plan, and relying on effective marketing strategies. The Entrepreneurs Academy classroom will offer resources and workshops to student and will offer career resource services, working in partnership with organizations such as CareerSource. The lab will host invaluable skills training by teaching students about the key components of fostering a growth mindset, the traits most often possessed by successful business professionals and entrepreneurs, the important ins and outs of intellectual property, and, lastly, how to write a strong business plan and pitch it to regional business professionals. Also important and increasingly in short demand, the Entrepreneurs Academy will offer a valuable platform for developing soft skills in future employees to make these young students competitive in tomorrow's team workforce environment.



o Marine/ Environmental Engineering Wet Lab

The Marine/ Environmental Wet Lab will be a flexible work space to conduct scientific study and experiments with a focus on solving environmental challenges. With special attention on our Gulf Coast marine environment, this lab will allow students to address local environmental concerns and challenges. Continuing our business to student model of outreach, programs will feature partners from local industry, as well as local non-profits such as Choctawhatchee Basin Alliance. These environmental subject matter experts, along with those professionals serving in a government capacity can encourage our students to become stewards of our valuable land and water assets. The HSU INNOVATION INSTITUTE Environmental Lab will provide a space for program offerings in the biological, environmental and chemical sciences.

#### North Okaloosa HSU INNOVATION INSTITUTE

As part of the North Okaloosa plans for the HSU INNOVATION INSTITUTES Phase 1, a memorandum of intent was signed publicly at the TeCMEN Industry Day on August 23, 2018, between Crestview Technology Park, Northwest Florida State College, and the HSU Educational Foundation to announce career training in aircraft maintenance, industrial maintenance, robotics and logistics through the Advanced Technology Center of Excellence to be established at a property owned by Dr. Paul Hsu, Crestview Technology Park. The North Okaloosa HSU INNOVATION INSTITUTE will serve students in the rural areas of the county with customized, levelized youth programs intended to expose and lead students to pursue higher education career tech degrees and certification courses offered at the NWFSC Advanced Technologies Center of Excellence. Specifically, the establishment of an air frame and power plant mechanic school (A and P) on the Crestview Technology Park site will offer tremendous transformational growth opportunities for North Okaloosa at Bob Sikes Airport.





The NWFSC lease details plans to renovate and occupy the 53,200 sq. ft. space that is comprised of two manufacturing/ warehouse/ flex metal buildings, located on the 20 -acre Crestview Technology Air Park campus and situated at the end of the Bob Sikes Airport runway.

The college is partnering with the Foundation to facilitate shared use of the space and the instructional training so that youth participants can gain early exposure to technical career pathways. Dr. Hsu's contribution of a 5-year rent-free period of the 15-year lease term is valued at \$2.25 Million and includes the college's agreement to execute facility modifications and program development steps on an agreed upon timeline, with the first student workforce training courses to be offered in Fall 2019. The donation of a Sabreliner aircraft by Robert Keller of Sunshine Aero, valued at \$355,000, will also contribute to student training in A and P courses. The Crestview Technology Air Park campus offers unique future growth opportunities. With room to build the largest commercial airplane hangar in Okaloosa County, the campus could host an operation hiring 400 - 500 people in STEM career fields with higher than average wages.



The Foundation's commitment to inspire students to pursue these career pathways, in addition to Dr. Hsu's private in-kind donation of free rent, and NWFSC's investment represents a unique public-private partnership that will develop a student pipeline from elementary to career, stimulating the regional economy and generating jobs with wages above the national average. Working with Okaloosa County School District (OCSD) on facilitation of transportation and referral of students to participate in a Spark Scholar program will bring 3<sup>rd</sup> through 5<sup>th</sup> graders to the centers, further expanding the number of student participants who will benefit from exposure to these training tracks as part of an after-school outreach. The Career Tech Education department of the OCSD is also considering the exciting potential of offering additional dual enrollment and certification opportunities for high school students.



#### North Okaloosa HSU STEM RANGE

The final location associated with Phase 1 of the HSU INNOVATION INSTITUTES project is a 400 - acre rural property in North Okaloosa that will serve as an outdoor site for STEM field learning experiences. The HSU STEM RANGE on Bill Lundy Road in Laurel Hill will be used by students for UAV outdoor flying and exploration of mapping technologies. Facilitating the exploration of the use of drones in agriculture, exploring autonomous tractor technologies, experimental planting, and agri-business environmental study are just a few of the possibilities for this unique property. A 5-year rent free inkind donation of the leased property to the Foundation is being



provided by PSH of Okaloosa, owned by Dr. Paul Hsu, a value of \$50,000.



The HSU STEM RANGE will be focused on the exploration and application of innovative rural technologies. The site will be prepared to support UAV drone flying, as well as, testing of autonomous tractors and will be the first of its kind in the region. The range can offer exciting new ways to work with STEM in a natural environment, with plans to include installing a green house and cleared areas for agricultural study. Agricultural student support groups such as 4H and FFA will be able to hold gatherings and carry out projects on the property.

There is currently a basic 800 sq. ft. fixed building on the property, which will be renovated to add additional restroom convenience facilities. Pavilions will be added to provide shade and rain cover. As

an outdoor classroom, scouting groups, robotics and drone clubs are just a few of those who will frequent the property for lessons in a natural setting. The property is well suited for UAV flight practice and autonomous tractor activities and testing because there are no power lines, flight restrictions, buildings, cars or obstacles to pose impediments.

The unique space will require some path preparation for vehicles and field maintenance. A tractor and bull dozer are also provided as in-kind donation for the servicing of the property.





## 2. Technology Coast Network Web Portal

#### Development of the Business to Student Bridge

As the HSU INNOVATION INSTITUTES seek to bring together STEM resources in the community, the project will include development of a sophisticated Technology Coast Network (TCN) Web Portal. The TCN portal will build a digital bridge between business to student outreach and the jobs of tomorrow. Digital tracking of student's progression through business-driven enrichment programs offered at the HSU INNOVATION INSTITUTES will culminate in a shared data platform between the student, business, and educational institutions and Community of Practice (CoP) partners that will prepare them to become a ready, well-rounded employee in the careers of tomorrow.

Students will be able to use the TCN portal to track their STEM related activities through digital badging and will have the ability to develop a student resume maintaining and sharing their achieved competencies, service hours, and certifications earned. Interfacing with other web portals, the data derived from the portal can serve as a valuable tool for connecting students to resources and identifying needs and opportunities in the region. Utilizing location technology, the public can easily search for all upcoming opportunities and create a calendar of activities to keep youth active in STEM enrichment throughout the year. By linking this resource to those used by other educational institutions, data could be merged with utilization and performance tools to track student progress

For example, 3<sup>rd</sup> grader Anne Smith might participate in the HSU INNOVATION INSTITUTES SPARK Scholar program for a 9-week STEM immersion program designed to spark student interest in STEM fields. As it is her first interaction at the HSU Innovation Institute, she and her parents will be registered in the Technology Coast Network portal with the parent/guardian able to manage the students' account after creation. Anne completes her 9-week immersion program and her parents hear from Anne that she loved the drone programs. As a result, she chooses to attend the AFRL (Air Force Research Lab) sponsored Drone Team Challenge program at the HSU Innovation Institute and develop beginner drone flight and drone automation skills in elementary school. Her love for flight and avionics will have her parents seeking aviation, avionics, and programming skills focused programs at the HSU INNOVATION INSTITUTES and in the local area. In middle school, Anne will excel in math and science sparked by her early exposure to STEM fields and choose to pursue a certificate in FAA flight rules in a HSU INNOVATION INSTITUTE program sponsored by Boeing that focuses on flight basics and flight safety.

As Anne progresses into high school, she continues her exposure to STEM program offerings and eventually gets her FAA drone certification. As she continues to register for HSU Innovation Institute programs through the TCN portal, her searches for programs in the Aviation and Flight programs queue the system to return information on Aviation and Flight secondary education options at local and state universities. Late in high school, she might choose one of several tracks. Perhaps she is interested in the hands-on applications of aviation mechanics and pursues the Northwest Florida State College A & P program. If she chooses a 4-year degree pathway, Anne might enter an aeronautical engineering program at a Florida university to pursue a bachelors degree in aeronautical engineering. Using her TCN digital resume documenting her program attendance, mentor volunteer hours working with young HSU INNOVATION INSTITUTE students, and FAA drone certification, Anne is able to search the TCN database of internships while at college and land a career enhancing summer internship with AFRL or



Boeing. Upon graduation, Anne is a known commodity to Boeing. Possessing a growth mindset, a clean record as a result of social and career skills training at the HSU INNOVATION INSTITUTE, and real-world experience, Anne is now an excellent new hire candidate for Boeing.

The capability of the Technology Coast Network portal to digitally connect students to industry driven program offerings, to track program attendance and volunteerism, and to provide a platform for Community of Practice partners outreach closes the gaps to truly connect students to industry utilizing the Technology Coast Network Portal. The TCN portal will itself facilitate innovation and sharing of ideas as it will allow organizational administrators to contribute to a common forum with their announcements and special requests. Educators can use the tool to find field trip locations or to invite speakers to the classroom. Youth volunteers can match their talents and track their organizationally validated time for community service hours. Monetization strategies can be employed for portal and program sustainability. By facilitating the public's dialogue about STEM, the portal will be an invaluable resource for the community, inspiring a culture embracing pursuit of STEM skills and employment in higher demand, better paying jobs, as an end result.

## 3. Implementation of Programs

### STEM Enrichment from an Early Age

Recognizing that while there is great attention placed on STEM related programs in high school through higher education settings, a lack of engagement in elementary and middle school years makes recruiting for these programs a challenge. Student interest and achievement in STEM begins at a young age by developing a mindset that thrives on solving problems, is fueled by hands-on exploration, innovates through collaboration, and is inspired by role model mentors. Offering students opportunities for STEM enrichment from an early age can impact whether they seek certain prerequisite STEM course tracks, maintain confidence through uncertainty, and demonstrate persistence when facing rigorous challenges.

#### Camps, Workshops and Game Changer Saturdays

The HSU INNOVATION INSTITUTES offer K-20 students access to high tech, state of the art equipment, specialized industry instruction and a rotating schedule of fun and interactive STEM focused camps and workshops throughout the year customized by age group: (4-6), (7-9), (10-11), (12-14), (15-18).

As students progress through the programs, they have opportunities to receive digital badges representing their accomplishments and to acquire community service hours for volunteering as they mentor younger peers. In this capacity, they are given additional leadership opportunities and the ability to dive into specialized study more independently, gaining valuable certifications and building relationships with future employers while still attending middle and high school.

STEM workshops, camps, and family Game Changer gatherings are offered to students after school, on weekends and during the summer, with the introductory and immersive one week experiences covering topics such as: CAD/ 3D printing, Robotics/ Programming, Marine Biology/ Environmental Engineering, Cyber Security/ IT. Programs expose students to real career applications of foundational STEM concepts and further incorporate leadership, collaborative learning, critical thinking and problem-



solving skills. The flexible, creative lab setting allows for experiential learning without the structured limitations of a traditional classroom. The after-school programs, club interactions and family activities are offered at little to no cost in order to increase accessibility to all students, including low income and underrepresented groups.

By becoming a Code.org regional partner, the HSU INNOVATION INSTITUTE will seek to focus strategies on expanding access to computer science by hosting free workshops, hack-a-thons, and Hour of Code campaigns to stimulate more student interest, especially among minorities and underrepresented groups such as women.

#### Spark Scholars

Students who are identified by teachers as those who would benefit from STEM enrichment will be invited to participate in a once a week Spark Scholars program. Transported by school bus after school, Spark Scholars (grades 3-5) will come to the center (2 schools per day per center) at the South and North Okaloosa HSU INNOVATION INSTITUTE locations. Up to 80 students in South Okaloosa and 40 in North Okaloosa will have the opportunity to earn business sponsored STEM focused certifications after participating in a 9- week immersion experience exploring concepts through hands-on enrichment lessons. The lessons of this program will reflect the industry perspectives on skill tracks of highest demand and will be taught with the advisement and mentorship of industry subject matter experts.

#### Field Trips, Home School, and Professional Development Training

During the school year, customized field trip programs will take place during the day to compliment classroom curriculum. Working with industry partners, students can learn about how classroom concepts and modern technologies are used in today's workplace.

Homeschool students make up 6% of Okaloosa County students (K-12) and are often involved in Co-Operative clusters with other homeschooling families. The center can serve the needs of these students through custom workshop programming.

Offering teachers in-service training and professional development workshops can include a businessdriven approach to teaching students relational skills that will make them better employees in the workforce. Providing teachers an opportunity to become more confident with emerging technologies means it will be easier for them to use the latest technologies in the classroom and better understand career applications.

#### Competition and STEM Club Extracurricular Programs

The HSU INNOVATION INSTITUTE locations will serve as a hub after-school and on weekends for ongoing STEM exploration beyond the introductory experiences and field trips offered to elementary students. By meeting at the HSU INNOVATION INSTITUTE for extracurricular enrichment, students will enjoy participating in future engineering, math or science clubs, join FIRST robotics competition teams, Drone Team Challenge programs, CyberPatriot, Science Olympiad, Odyssey of the Mind or participate with other enrichment groups. All of these programs share a common theme of stimulating students to think critically, explore new technologies and work in collaborative environments to solve challenges.



HSU Educational Foundation is working to fulfill requirements to become an AFA CyberPatriot Center of Excellence, providing support and resources for teams all over the county to participate in a nationally successful youth cyber security competition program. This program can serve as a direct pathway to Computer Science / Cyber Security degree programs, such as those offered by the University of West Florida Cyber Security Center of Excellence.

The HSU Educational Foundation is developing the Drone Team Challenge to fulfill the vision of a local engineering educator using UAV technologies to teach software programming and robotics, mastery of flight concepts, simulation and piloting, CAD Design and 3D Printing. The 709 Anchors location will have a full-scale drone competition arena for UAV flying, while the HSU STEM RANGE will offer the outdoor setting for more rural applications. Teams will participate in regular meets to accelerate training in pursuit of testing for the FAA drone certification after achieving the highest 4th level competency. The concepts taught have wide, diverse applications and just as the platform can be a vehicle for a student to consider careers in aeronautical engineering, it might also lead a student to consider agricultural or environmental applications for drone technologies.

FIRST Robotics is a rapidly growing set of competition platforms that introduce programming of robots first with Lego blocks and work up to more sophisticated engineering. Participation growth in these programs is often restricted by needs of equipment, practice and storage space, subject matter expert mentors, as well as, facilities for meets and trainings. The HSU INNOVATION INSTITUTES are able to provide solutions such as sponsored robotics labs which both bring in business partnership for mentors and funding, but also provide use of equipment and space.

#### Talent Retention

By introducing students to career skills in an industry setting on a regular basis, the HSU INNOVATION INSTITUTE seeks to impact local talent retention and acquisition from an early age. HSU INNOVATION INSTITUTE further acts as a hub connecting students to internships, scholarships, business mentors, educational clubs and career pathways, while facilitating business support of these programs.

Beyond impacting student interest, Game Changer Saturdays offer families an opportunity to explore emerging technologies together in an effort to better equip parents to be advocates for their child. HSU INNOVATION INSTITUTE programs also secondarily inform adults about potential second careers and certification opportunities available to them. A cultural shift is made possible when families are encouraged to imagine new training possibilities in a world increasingly fueled by advances in STEM.

The HSU INNOVATION INSTITUTE will host top innovators, engineers and scientists to share what it is like working in their occupations. As students and their families learn about the employers in the region and the types of skills in high demand, the goal is to provide a clear pathway for the student to empower themselves to achieve their career aspirations and to retain these talented workers before they are attracted to go elsewhere for work.



#### Summary Timeline: HSU Innovation Institute - Triumph Gulf Coast 2018-2022

ТАЅК	Year 1	Year 2	Year 3	Year 4	Year 5
Phase 1: Fall 2018					
S. Okaloosa County					
HSU INNOVATION INSTITUTE:					
709 Anchors St., Ft. Walton Beach					
<ul> <li>Remodel, Renovate, Equip, Operations begin following 6- month renovation</li> </ul>					
N. Okaloosa County					
HSU INNOVATION INSTITUTE:					
5795 John Givens Road, Crestview.					
<ul> <li>Equip sections of building for K-20</li> </ul>					
STEM Labs with Programs to begin					
Fall 2019					
N. Okaloosa County HSU STEM RANGE					
Complete safety and maintenance					
modifications to support activities as					
early as January 2019					
Technology Coast Network (TCN) web					
portal (Plan, Design, Build, Expand)					
Begin Phase 2 Community of Practice					
(CoP) development and preparation for next HSU INNOVATION INSTITUTE					
PHASE 2: Fall 2019					
Host 2: Fail 2019     Host First Gala Fundraiser					
Establish Santa Rosa County HSU					
INNOVATION INSTITUTE					
Remodel, Renovate, Equip, Operations					
begin following 6- month renovation					
Establish Bay County HSU					
INNOVATION INSTITUTE					
Remodel, Renovate, Equip, Operations     basis following 6 month reportion					
begin following 6- month renovation     Begin Phase 3 Community of Practice					
(CoP) development and preparation for					
next HSU INNOVATION INSTITUTE					
Phase 3: Fall 2020					
Establish Walton County HSU					
INNOVATION INSTITUTE					
Remodel, Renovate, Equip, Operations					
begin following 6- month renovation					
Establish Gulf County HSU     INNOVATION INSTITUTE					
Remodel, Renovate, Equip, Operations					
begin following 6- month renovation					
Begin Phase 4 Community of Practice					
(CoP) development and preparation for					
next HSU INNOVATION INSTITUTE					
Phase 4: Fall 2021					
Establish Escambia County HSU     INNOVATION INSTITUTE					
<ul> <li>Remodel, Renovate, Equip, Operations</li> </ul>					
• Remodel, Renovate, Equip, Operations begin following 6- month renovation					
Establish Wakulla County HSU					
INNOVATION INSTITUTE					
Remodel, Renovate, Equip, Operations					
begin following 6- month renovation					
Begin Phase 5 Community of Practice					
(CoP) development and preparation for					
next HSU INNOVATION INSTITUTE Phase 5: Fall 2022					
Establish Franklin County HSU					
INNOVATION INSTITUTE					
Remodel, Renovate, Equip, Operations					
begin following 6- month renovation					
*Over the course of the 5- Phase Project. 8 counties w			Tachnalam, Coast N	laturark will conneg	hall see as see a

\*Over the course of the 5- Phase Project, 8 counties will receive HSU INNOVATION INSTITUTES. Technology Coast Network will connect all resources.



## 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. (If additional space is needed, please attach a Word document with your entire answer.)

HSU INNOVATION INSTITUTES offer a transformative solution to promote economic recovery, diversification, and enhancement of the disproportionately affected counties of the BP Oil Spill - Escambia, Santa Rosa, Okaloosa, Walton, Bay, Franklin, Wakulla and Gulf over the next ten years. The HSU Educational Foundation will inspire K-20 students in the fields of Science, Technology, Engineering and Math (STEM), preparing them for better, higher paying careers by encouraging them to explore emerging technologies and relevant applications in the workforce.

HSU INNOVATION INSTITUTES will offer STEM educational programming in each of the eight disproportionately affected counties to cultivate the knowledge, mindset, and skills needed to prepare for better jobs, with wages above the national average. Studies by the Afterschool Alliance organization report that more than 70% of students participating in STEM afterschool programming express more interest and knowledge about careers in science. They also build essential skills for success in life such as perseverance and critical thinking. American students (K-12) on average only spend 20% of their day focused on core academic study, thus opportunities exist outside the classroom for developing greater technical abilities, learning to solve rigorous challenges, and develop innovatively inclined mindsets.

HSU INNOVATION INSTITUTE programs focus on hands-on, interactive exploration of the career skills in greatest demand, as defined by our regional employer partners who engage and drive them. As a resource for local employers, the HSU INNOVATION INSTITUTE is agile and able to emphasize the custom skill needs that fit the regions potential growth sectors. Applications of STEM that are relevant for meeting needs in the community will differ from location to location, whether it is a rural vs. commercial vs. defense-focused environment and the Foundation will serve to perceive the pulse and work proactively with partners to provide appropriate workforce development solutions.

By introducing students to career skills in an industry setting on a regular basis, the HSU INNOVATION INSTITUTE seeks to impact local talent retention and acquisition from an early age. The setting further acts as a hub for coordinating internships, facilitating business involvement and support of educational clubs, programs, and scholarship opportunities, as well as, serving to facilitate mentor interaction within areas of career interest.

Beyond impacting student interest, Game Changer Saturdays offer families an opportunity to explore emerging technologies together. HSU INNOVATION INSTITUTE programs also inform adults about potential second careers and certification opportunities available to them. A cultural shift is made possible when families are encouraged to imagine new possibilities in a world increasingly fueled by advances in STEM.

The Technology Coast Network will provide a portal for connecting businesses and volunteers/mentors to students. The expansion of the network from Okaloosa County to each of the other counties will produce a collaborative surge in STEM activity to generate a cultural and educational shift that benefits both employers, aspiring entrepreneurs, and future workers.



Across Northwest Florida, HSU INNOVATION INSTITUTES will facilitate engaged and networked Communities of Practice (CoP). Communities of Practice actively engage key stakeholders in a process of collective learning that is structured around a shared mission to build relationships, jointly implement activities, share information and advance achievement of a common goal.

Through fusion of HSU INNOVATION INSTITUTES with the Technology Coast Network web portal, schools, businesses, mentors and community organizations, will collaborate for the betterment of students and to create transformational change that will impact the region for generations to follow.



## 4. Describe data or information available to demonstrate the viability of the proposed project or program. (If additional space is needed, please attach a Word document with your entire answer.)

Local employment demands drive the need for a well-trained, locally aligned future workforce. According to the U.S. Bureau of Labor Statistics, in 2015 the national average wage for all STEM occupations was \$87,570, nearly double a national average wage for non-STEM occupations of \$45,700. Ninety-three out of 100 STEM occupations had wages significantly above the national average wage for all occupations of \$48,320. Growth in STEM occupations is projected to climb the highest in mathematical science occupations at 28.2 % between 2014 and 2024. Computer occupations make up the largest segment of new STEM occupations with a 12.5% increase in that same time frame, resulting in nearly half a million new jobs. With increased demand for trained workers to fill these jobs and our focus as a business to student outreach, we are well positioned to help local businesses grow their future workforce in these fields.



#### Projected growth rates for types of STEM occupations, 2014 to 2024

Source: U.S. Bureau of Labor Statistics




Source: U.S. Bureau of Labor Statistics

At our North Okaloosa HSU INNOVATION INSTITUTE location, the programming will be aligned to act as a feeder to high tech, high demand career pathways by way of levelized, introductory experiences to higher education and certification courses offered at the Northwest Florida State College Advanced Technology Center. By providing this early exposure and experiences to young students, the HSU Educational Foundation will work to connect a student pipeline to careers with wages above the national average, many of which do not require a four-year degree. One example to consider are the tremendous opportunities created by the airframe and powerplant mechanic school which will be established at the North Okaloosa location. Boeing reported in their Current Market Outlook 2016-2035, the projected sales of over 39,000 aircraft. Honeywell Corporation projects 9,200 business jet deliveries by 2025. Boeing further reports additional staffing needs to support these sales of 679,000 maintenance technicians. With 170 FAA certified programs throughout the country graduating likely 50 technicians a year, the number of graduates will only reach 150,000 in the next twenty-five years.

Earning FAA certifications in these fields opens the door to occupations with median pay of \$56,990, according to the U.S. Bureau of Labor Statistics. This exceeds the local average wage of \$42,276. The HSU Innovation Institutes will reach students utilizing a non-traditional industry-driven approach, impacting their understanding and attitudes about occupations. Local business partners in aerospace and



defense are communicating their concerns and are calling for swift action. This demand strongly represents a need for out-of-the box solutions that drive students towards these pathways.

The viability of making a successful impact on workforce development rests in the synergy that arises in bringing together two groups (students and industry employers) ahead of when they would usually ever have the opportunity to interact. We can achieve more efficient preparation and skills training outcomes if we cultivate the interest, skills, and mindset from a younger age.

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

It is projected that K-12 students will move through the Okaloosa County locations with a projected rate of 31,620 educational encounters in a one-year period and 158,100 educational encounters over 5 years. A driving focus of the project is to inspire students in the 3-5<sup>th</sup> grade years through participation in the Spark Scholars enrichment program by inviting them to participate in a once a week afterschool immersion experience over a 9- week period. The program is designed to provide the spark that children need to sustain their interest and encourage their performance, leading to successful STEM careers. The impact of the early learning elementary and middle years programming will inspire interest, fueling a self-motivation to continue exploring STEM in and out of the classroom setting. By adding additional enrichment opportunities and exposing them to the types of occupations of greatest demand, students will begin to make informed decisions about which courses to take and whether they could be most successful by pursuing a career tech track such as those offered by the CHOICE program in Okaloosa County.

Self- discovery about considering a career path begins well before high school as students form early attitudes about their strengths and capabilities. The Foundation's goal is to ensure that enrichment experiences have as much impact on their choices as the grades received in their classrooms. Often people describe deciding they were not good at math before ever entering high school. The sentiment is often associated with a negative connotation to a classroom assignment experience or a bad test grade. The struggle and rigor of STEM challenges requires a mindset that is willing to 'fail forward' in seeking the right answer. The HSU INNOVATION INSTITUTE setting is one where there is only failure in not trying because in making mistakes or miscalculations, the student is learning and still enjoying the experience of trying another approach. This provides a transformational learning experience for students.

Among rural and underserved groups, minorities and women, our programs will provide access and encouragement to build confidence and inspire new ideas about pursuing STEM occupations. In rural areas, like Okaloosa County's Laurel Hill or Baker communities, programming opportunities will be created to travel to the students because often distance is a challenge. There can also be challenges for restricting a student's access to programs like Drone Team Challenge if it requires purchasing high tech aeronautical equipment which is where the Foundation can work to provide funding and resource solutions. Informing teachers and families about how using these technologies can advance a child's occupational opportunities may require introducing more rural applications than might be needed in the home of a child whose parents are serving in the Air Force. The use of the HSU STEM RANGE will, for example, offer particularly rich opportunities to dive into agricultural, forestry, and even search and rescue uses for drone technologies, which is expected to grow to a \$100 Billion industry in the coming years. Our impact will be helping youth to propel their futures towards high demand fields like these.



# Program Student Impact:

Program	Location	Approximate	Frequency	1 Year Total	5 Year Total		
		Number of		Student	Student		
		Students	D 11	Encounters	Encounters		
SPARK Scholars	HSU Institute	80	Daily	14,400	72,000		
$3^{rd} - 5^{th}$ Grade	S. Okaloosa		School				
		10	Year				
SPARK Scholars	HSU Institute	40	Daily	7,200	36,000		
$3^{rd} - 5^{th}$ Grade	N. Okaloosa		School				
			Year				
Teams (CyberPatriot,	HSU Institute	12	Daily	2,160	10,800		
Drone Team	S. Okaloosa		School				
Challenge, FIRST			Year				
Robotics, etc.)							
Teams (CyberPatriot,	HSU Institute	6	Daily	1,080	5,400		
Drone Team	N. Okaloosa		School				
Challenge, FIRST			Year				
Robotics, etc.)							
Homeschool Co-Op	HSU Institute	30	Weekly	1,080	5,400		
	S. Okaloosa		School				
			Year				
Homeschool Co-Op	HSU Institute	10	Weekly	360	1,800		
	N. Okaloosa		School				
			Year				
Special Event	HSU Institutes	400	Monthly	4800	24,000		
Training/ Workshops			Year-				
and Field Trips			Round				
GameChangers	<b>HSU</b> Institutes	20	Monthly	240	1,200		
			Year-				
			Round				
Summer Camp	HSU Institutes	30	Summer	300	1,500		
Programming			Weeks (10)				
Total				31,620	158,100		



### 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.)

After the initial infusion of capital from the TRIUMPH grant to help with establishing the project, sustainability will be made possible through industry partnerships, national and federal grants, and community fundraising. Investment of industry partners offers a unique opportunity to play a key role in driving workforce development and collaborate with future employees. Sponsorship opportunities provide promotional benefit to regional businesses and allow them to be even more involved with driving training programs that reflect their talent needs. A two-day STEM Gala fundraising event will be held annually starting in 2019 and involving Technology Coast Network partners and leveraging HSU Foundation's relationships in the community to rally and support STEM educational programming. With our supporting partnerships in the chambers of commerce, discussions have already begun to work together on reaching a wide number of attendees and representative businesses. The Institute will also become a hub for avid tech enthusiasts and can host fundraisers such as FPV drone racing events.

As an example of the type of sustaining support through business sponsorship, the Foundation recently received a pledge of lab sponsorship from a software company, Beast Code, which was recently recognized as the fastest growing small tech business in Florida, projected to double their workforce within the year. They are partners who not only pledged \$30,000 in sponsorship for this year towards the Virtual Machines/ IT/ Software Programming Lab, but also asked to be involved with the training sessions, as well as, invite Game Changer families into their place of business for software programming workshops. By involving their employees in our Expert Mentor program, they will further strengthen a spirit of service that is part of their corporate identity. As a new merit sponsor for our TEAMS program, they are motivated to recognize outstanding teachers of STEM within their community. We anticipate deepening and expanding mutually beneficial partnerships like these on a larger scale across all eight counties.

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

HSU INNOVATION INSTITUTES will use a database to track all students and mentors utilizing or volunteering for the programs offered via the Technology Coast Network Portal. Each 9-week Spark Scholar session, participants will earn a Spark Scholar certificate sponsored by local business partners which certifies their experience developing skills valued by local employers.

In addition to tracked data on their participation and completion of the HSU INNOVATION INSTITUTE'S programs, students will also be able to log and track time participating in other STEM activities in the eight-county region. In this way, the footprint of our impact widens by encouraging skills development experiences from a host of providers. Building social credit around STEM and earning digital badges for earned accomplishments, increases motivations and deepens focus towards pursuit of successful career tracks.

Surveys of participants, teacher participation in trainings and professional development, as well as, business engagement in the center's activities will all provide measurable impact of the project long term.



### <u>Priorities</u>

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.

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

 $\boxtimes$  Leverage or further enhance key regional assets, including educational institutions, research facilities, and military bases.

 $\boxtimes$  Partner with local governments to provide funds, infrastructure, land, or other assistance for the project.

 $\boxtimes$  Benefit the environment, in addition to the economy.

 $\bowtie$  Provide outcome measures.

 $\boxtimes$  Partner with K-20 educational institutions or school districts located within the disproportionately affected counties as of January 1, 2017.

 $\boxtimes$  Are recommended by the board of county commissioners of the county in which the project or program will be located.

 $\boxtimes$  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.

HSU Innovation Institutes will create a maximum economic benefit to the region as will be reflected by the tremendous impact made empowering students to pursue and achieve careers in STEM fields which not only offer higher wages than the national average, helping to reduce long term social costs, but also pave the way to regional economic diversity, new innovative business development, and a regional climate where businesses participate and engage in early workforce development. Public -private partnerships like that represented among Crestview Technology Park, Northwest Florida State College and the HSU Educational Foundation are better able to achieve positive, mutually beneficial outcomes by leveraging strengths and resources. Working with government partners like the Air Force Research Lab to develop programs like Drone Team Challenge and other STEM programs, the Foundation is drawing on local partnerships and leveraging the highly technical talent of our regional defense resources to accomplish workforce training goals. By developing the Technology Coast Network (TCN)



Web Portal, measuring outcomes becomes part of the student experience. Their interaction with the tools provides clear avenues for representing outcomes and can allow the organization to follow the student along their journey from elementary to career.

HSU Innovation Institutes will partner with the local school district to identify and target 3<sup>rd</sup> through 5<sup>th</sup> graders on the cusp of above average performance in math and science who could benefit from inspirational Spark Scholar programming. With the assistance of the local school district, students scoring in the average FSA score of 3 on a scale of 1-5 may be referred for the opportunity to attend a quarterly enrichment program sponsored by local businesses. This special opportunity will serve to both enrich the students STEM exposure and provide inspiration to the students to strive for higher achievement scores.

The project further meets priorities by enhancing the industrial centers of the region by adding a valuable resource that will help attract employers. The environmental impacts of the program are evidenced by a commitment to programming which emphasizes and reflects the importance of environmental responsible behaviors and by supporting a common theme within the TCN that embraces corporate responsibility and dedication to developing healthy work environments with innovative solutions for creating 'quality of space'.

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

(If additional space is needed, please attach a Word document with your entire answer.)

Please see question # 2

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

Phase 1: Okaloosa County / Phase 1 leads into each of the other 7 counties for Phase 2-5.

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?

⊠Yes □No

If yes, list all Counties that apply:

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

🛛 Yes 🗆 No



\*\*Proof of recommendation from Okaloosa County is provided per 9/18/18 approval by Resolution.

#### RESOLUTION NO. 18-\_\_\_\_182\_\_\_

RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS OF OKALOOSA COUNTY, FLORIDA; SUPPORTING THE EFFORTS OF HSU EDUCATIONAL FOUNDATION IN ITS EFFORTS TO SECURE TRIUMPH GULF COAST, INC., FUNDING FOR THE TECHNOLOGY COAST INNOVATION CENTER PROJECT; PROVIDING AN EFFECTIVE DATE.

WHEREAS, Triumph Gulf Coast, Inc., was organized to oversee and administer the distribution of funds recovered by the State of Florida for economic damages resulting from the 2010 Deepwater Horizon oil spill, and as such has invited entities to make pre-application for eligible projects; and

WHEREAS, HSU Educational Foundation submitted such a pre-application entitled Technology Coast Innovation Center; and

WHEREAS, Triumph Gulf Coast, Inc., issued a letter stating said project meets the minimum requirements for further consideration and invited HSU Educational Foundation to submit a full Application for formal consideration, and issued the preapplication number 126; and

WHEREAS, HSU Educational Foundation has completed a full Application and made that Application available for this Board; and

**WHEREAS**, said project is multi-county encompassing this county and is determined to be within the jurisdiction of this Board.

# NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF OKALOOSA COUNTY AS FOLLOWS:

- 1. The Board of County Commissioners of Okaloosa County does hereby support HSU Educational Foundation in their effort to secure Triumph Gulf Coast, Inc., funding for the Technology Coast Innovation Center Project.
- 2. This resolution shall be effective upon adoption.
- 3. A copy of this Resolution will be forwarded to Triumph Gulf Coast, Inc.



**DULY ADOPTED** this 18th day of September 2018.

**BOARD OF COUNTY COMMISSIONERS OKALOOSA COUNTY, FLORIDA** 

Graham W. Fountain, Chairman

ATTEST: J. D. PEACOCK, II Clerk of the Circuit Court

By: Deputy Clerk (Seal)

APPROVED AS TO FORM: Ru Jai By: Gregory T. Stewart

County Attorney



### 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.? (If additional space is needed, please attach a Word document with your entire answer.)

The HSU Educational Foundation Board of Directors would require a meeting for consideration of agreements and approvals.

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 HSU Educational Foundation Board of Directors meets on an annual basis except in matters requiring a more immediate meeting, in which case a special meeting is scheduled.

B. State whether that group can hold special meetings, and if so, upon how many days' notice.

(If additional space is needed, please attach a Word document with your entire answer.)

Special meetings may be scheduled to take place in a timely manner, possible to arrange within a short-term period of 1-week notice.

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. (If additional space is needed, please attach a Word document with your entire answer.)

Please find timeline under Question# 2 on page 33.

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.

See following pages for attachments.



### 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.

\$7.16 Million over 5- year period.

(If additional space is needed, please attach a Word document with your entire answer.)

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.) (If additional space is needed, please attach a Word document with your entire answer.)

Triumph Gulf Coast represents 61.05% of Phase 1 HSU INNOVATION INSTITUTE funding.

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

<u>The HSU INNOVATION INSTITUTE Phase 1 will prepare students for jobs in STEM fields with</u> <u>average wages above the national average. The Institutes themselves are projected to employ 8</u> <u>staff members in Okaloosa County with average wage reflecting \$53,750.</u>

(If additional space is needed, please attach a Word document with your entire answer.)

4. Does the potential award supplement but not supplant existing funding sources? If yes, describe how the potential award supplements existing funding sources.  $\boxtimes$  Yes  $\square$  No

Triumph funding would represent a 61% supplement to existing funds, and together with in-kind rent-free contributions being applied, to the project. If renovations or program needs are achieved for less than potential awarded amount, those funds would be returned to Triumph.

(If additional space is needed, please attach a Word document with your entire answer.)

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

A. Project/Program Costs: <u>Please see following pages for response.</u>

Example Costs (Note: Not exhaustive list of possible Cost categories.)

Construction \$ Reconstruction \$ Design & Engineering \$ Land Acquisition \$



Land Improvement \$ Equipment \$ Supplies \$ Salaries \$ Other (specify) \$ Total Project Costs: \$11,728,150

B. Other Project Funding Sources: Example Funding Sources (Note: Not an exhaustive list of possible Funding Sources.) City/County \$ Private Sources \$ Other (e.g., grants, etc.) \$ Total Other Funding \$4,568,150 Total Amount Requested: \$7,160,000

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.

Detailed budget is provided on following pages. Dr. Paul Hsu, as a benefactor of educational programs and the Foundation's founder, seeding primary support for the initial development of programs ahead of steadily growing partner support, would be able to provide funds as needed ahead of reimbursement on behalf of the Foundation.

(If additional space is needed, please attach a Word document with your entire answer.)

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.

🛛 Yes 🛛 No

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.

🛛 Yes 🗆 No

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.

🛛 Yes 🗆 No

Applicant acknowledges that Triumph Gulf Coast, Inc. reserves the right to request additional information from Applicant concerning the proposed project or program.  $\boxtimes$  Yes  $\square$  No



# HSU INNOVATION INSTITUTES: PHASE 1 PROJECT COSTS

		709 Anch	ors	/ South C	)kal	oosa							
	FY	2019	FY	2020	FY	2021	FY	2022	FY	2023	То	tal	
1. Personnel	\$	350,000	\$	350,000	\$	350,000	\$	350,000	\$	350,000	\$	1,750,000	
2. Equipment	\$	300,000	\$	25,000	\$	25,000	\$	25,000	\$	25,000	\$	400,000	
3. Facility Operations	\$	84,000	\$	84,000	\$	84,000	\$	84,000	\$	84,000	\$	420,000	
4. Renovation & Property Modification	\$	2,200,000	\$	100,000	\$	100,000	\$	100,000	\$	100,000	\$	2,600,000	
5. Portal	\$	410,000	\$	200,000	\$	25,000	\$	25,000	\$	25,000	\$	685,000	
6. Facility Security	\$	36,000	\$	36,000	\$	36,000	\$	36,000	\$	36,000	\$	180,000	
	\$	3,380,000	\$	795,000	\$	620,000	\$	620,000	\$	620,000	\$	6,035,000	
		СТАР	/ N	orth Okal	oos	а							
	FY 2019		FY 2020		FY 2021		FY 2022		FY 2023		Total		
1. Personnel	\$	80,000	\$	80,000	\$	80,000	\$	80,000	\$	80,000	\$	400,000	
2. Equipment	\$	95,000	\$	5,000	\$	5,000	\$	5,000	\$	5,000	\$	115,000	
3. Facility Operations	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
4. Renovation & Property Modification	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
5. Portal	\$	130,000	\$	55,000	\$	10,000	\$	10,000	\$	10,000	\$	215,000	
6. Facility Security	\$	12,000	\$	12,000	\$	12,000	\$	12,000	\$	12,000	\$	12,000	
	\$	317,000	\$	152,000	\$	107,000	\$	107,000	\$	107,000	\$	790,000	
1		North Oka	loo	sa HSU ST	EM	Range							
	FY 2019			FY 2020		FY 2021		FY 2022		FY 2023		Total	
1. Personnel	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
2. Equipment	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
3. Facility Maintenance	\$	12,000	\$	12,000	\$	12,000	\$	12,000	\$	12,000	\$	60,000	
4. Renovation & Property Modification	\$	55,000	\$	55,000	\$	55,000	\$	55,000	\$	55,000	\$	275,000	
5. Portal	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
6. Facility Security		-		-		-		-		-	\$	-	
	\$	67,000	\$	67,000	\$	67,000	\$	67,000	\$	67,000	\$	335,000	
	_												
· · · · · · · · · · · · · · · · · · ·		•	Tot	al Project									
	FY 2019			2020	FY 2021		FY 2022		FY 2023		Total		
1. Personnel	\$	430,000	\$	430,000	\$	430,000	\$	430,000	\$	430,000	\$	2,150,000	
2. Equipment	\$	395,000	\$	30,000	\$	30,000	\$	30,000	\$	30,000	\$	515,000	
3. Facility Operations & Maintenance	\$	96,000	\$	96,000	\$	96,000	\$	96,000	\$	96,000	\$	480,000	
4. Renovation & Property Modification	\$	2,255,000	\$	155,000	\$	155,000	\$	155,000	\$	155,000	\$	2,875,000	
5. Portal	\$	540,000	\$	255,000	\$	35,000	\$	35,000	\$	35,000	\$	900,000	
6. Facility Security	\$	48,000	\$	48,000	\$	48,000	\$	48,000	\$	48,000	\$	240,000	
	\$	3,764,000	\$	1,014,000	\$	794,000	\$	794,000	\$	794,000	\$	7,160,000	
	_												
		Amounts fu	und	ed by oth	er s	ources							
	FY	2019	FY	2020	FY	2021	FY	2022	FY	2023	То	tal	
1. Air Force Research Lab	\$	232,000	\$	232,000	\$	232,000	\$	232,000	\$	232,000	\$	1,160,000	
2. 709 Anchors Rent in Kind	\$	252,000	\$	252,000	\$	252,000	\$	252,000	\$	252,000	\$	1,260,000	
3. CTAP Rent in Kind	\$	294,630	\$	294,630	\$	294,630	\$	294,630	\$	294,630	\$	1,473,150	
4. Range Rent in Kind	\$	10,000	\$	10,000	\$	10,000	\$	10,000	\$	10,000	\$	50,000	
5. Direct Public Support	\$	125,000	\$	125,000	\$	125,000	\$	125,000	\$	125,000	\$	625,000	
	\$	913,630	\$	913,630	\$	913,630	\$	913,630	\$	913,630	\$	4,568,150	



# 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 will prepare students for future occupations and at which K-20 institutions that programs will be provided.

### ⊠Yes ⊡No

(If additional space is needed, please attach a Word document with your entire answer.)

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

ØIncrease students' technology skills and knowledge

Encourage industry certifications

Derive Provide rigorous, alterative pathways for students to meet high school graduation requirements

ØStrengthen career readiness initiatives

 $\Box$ 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, 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.

<u>Please see question #2 covering the plans to prepare students for careers of global demand.</u> (If additional space is needed, please attach a Word document with your entire answer.)

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.  $\square$ Yes  $\square$ No

(If additional space is needed, please attach a Word document with your entire answer.)



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

Phase 1 will include established HSU INNOVATION INSTITUTES in Okaloosa County and the development of a Technology Coast Network web portal that will be used to bridge partnerships and resources across all eight counties. With each phase year, additional counties will be reached by the common vision of this HSU INNOVATION INSTITUTES project. (If additional space is needed, please attach a Word document with your entire answer.)

*E. Provide a detailed description of, and quantitative evidence demonstrating how the proposed project or program will promote:* <u>See response from question #2 on page 18.</u>

o Economic recovery,

o Economic Diversification,

o Enhancement of the disproportionately affected counties,

o Enhancement of a Targeted Industry.

(If additional space is needed, please attach a Word document with your entire answer.)

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.  $\boxtimes$  Yes  $\square$ No

See Organizational Background question #1 and Project Details question #2.

(If additional space is needed, please attach a Word document with your entire answer.)

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.

All are classroom-based programs with locations described in question #2.

(If additional space is needed, please attach a Word document with your entire answer.)

C. Identify the number of anticipated enrolled students and completers. (If additional space is needed, please attach a Word document with your entire answer.)

See Impact Chart on page 38.



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

Most programs run with the same timeframe as the school district calendar, such as enrichment and competition teams, Spark Scholars, special school related and field trips. Other programs are year-round such as coach training, teacher professional development, Game Changer Saturdays, and Open Teen Lab. Summer camps run for the 10 weeks in summer.

E. Describe the plan to support the sustainability of the proposed program. (If additional space is needed, please attach a Word document with your entire answer.) <u>See responses from question #6 on page 39.</u>

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

<u>Students will receive business sponsored skill certifications at the 3<sup>rd</sup> -5<sup>th</sup> grade level.</u> <u>Middle and high school level students will be encouraged to pursue certifications online utilizing</u> <u>computers in the center. The Drone Team Challenge program will align with FAA certification</u> <u>requirements and students will be encouraged to complete the 4-level program before testing.</u> *(If additional space is needed, please attach a Word document with your entire answer.)* 

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

🗆 Yes 🗷 No

(If additional space is needed, please attach a Word document with your entire answer.)

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

Please see following pages.

(If additional space is needed, please attach a Word document with your entire answer.)



*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: Paul S. Hsu, Ph.D., Founder and President Valles

Name and Title of Authorized Representative: Amanda Negron, Executive Director Signature Date: 9/5/2018

10/13/2017 FINAL



### Electronic Articles of Incorporation 15000009907 For

2015

HSU FAMILY EDUCATIONAL FOUNDATION, INC.

The undersigned incorporator, for the purpose of forming a Florida not-for-profit corporation, hereby adopts the following Articles of Incorporation:

#### Article I

The name of the corporation is: HSU FAMILY EDUCATIONAL FOUNDATION, INC.

Article II

The principal place of business address: 709 ANCHORS STREET NW FORT WALTON BEACH, FL. 32548

The mailing address of the corporation is: 709 ANCHORS STREET NW FORT WALTON BEACH, FL. 32548

Article III

The specific purpose for which this corporation is organized is: MISSION OF THE E HSU FAMILY EDUCATIONAL FOUND, NCE IN EDUCATION AND ENCOURAGE

#### Article IV

The manner in which directors are elected or appointed is: AS PROVIDED FOR IN THE BYLAWS.

#### Article V

The name and Florida street address of the registered agent is: SON NEGRON JASON NEGRON 3 PLEW AVE SHALIMAR, FL. 32579

I certify that I am familiar with and accept the responsibilities of registered agent.

Registered Agent Signature: JASON NEGRON





### Article VI

The name and address of the incorporator is: JASON NEGRON 3 PLEW AVE

#### SHALIMAR, FL 32579

#### Electronic Signature of Incorporator: JASON E. NEGRON

I am the incorporator submitting these Articles of Incorporation and affirm that the facts stated herein are true. I am aware that false information submitted in a document to the Department of State constitutes a third degree felony as provided for in s.817.155, F.S. I understand the requirement to file an annual report between January 1st and May 1st in the calendar year following formation of this corporation and every year thereafter to maintain "active" status.

Article VII The initial officer(s) and/or director(s) of the corporation is/are:

RS STREET 'ON BEACH, FL. 32548 FREET BEACH, FL. 32548

T. SUITE A

#### Article VIII

The effective date for this corporation shall be: 10/08/2015



# Advanced Technology Center of Excellence Partnership Signing Ceremony

This memorandum of intent is the culmination of collaboration for an extraordinary public/private partnership among Hsu Educational Foundation, Northwest Florida State College, and Crestview Technology Air Park LLC (CTAP) for purposes of workforce talent development and creation of a pathway for Okaloosa and Walton County citizens to careers in Advanced Technologies.

The Advanced Technology Center of Excellence will offer training and student development opportunities for high wage careers in aircraft maintenance, industrial maintenance, robotics and logistics. NWF State College will work collaboratively with the foundation to identify potential opportunities for exposing K-12 students to STEM applications matching with future workforce needs. We will work together to align the interests of young students with workforce degrees. The center will become a catalyst for economic development in STEM areas by developing a homegrown workforce for industry and innovation.

Signed on August 23, 2018:

Dr. Devin Stephenson President, Northwest Florida State College

Dr. Paul Hsu Founder, Hsu Educational Foundation Owner, Crestview Technology Air Park LLC

Amanda Negron Executive Director, Hsu Educational Foundation



# SCHOOL DISTRICT OF OKALOOSA COUNTY

SUPERINTENDENT OF SCHOOLS MARY BETH JACKSON

ATTORNEY TO THE BOARD C. JEFFREY McINNIS, Esq.



BOARD MEMBERS TIM BRYANT DEWEY DESTIN MELISSA THRUSH RODNEY L. WALKER LAMAR WHITE

June 13, 2018

The Boeing Company Emmanuel Tormes Senior Manager, Government Operations 100 Boeing Way Titusville, FL 32780

Dear Mr. Tormes:

As Superintendent of Schools in Okaloosa County, I am excited about an opportunity that the district has to collaborate with the Paul HSU Educational Foundation to bring additional STEM opportunities to our elementary students. Specifically, the Foundation is seeking to provide resources and activities involving Unmanned Aerial Vehicles (UAVs) for our students which would be highly engaging and would inspire interest in and develop greater understanding of STEM concepts.

Through the support of Boeing, more students can have hands-on experience with emerging technologies, whether through interactive field trips, UAV kits for schools or even competitive drone teams. Our county has a strong military and technology presence among its workforce, and this initiative would be very well received. Too, I am excited that many of our teachers will be given the opportunity to attend professional development in this area, which could create a bridge for more real-world STEM initiatives in our classrooms.

Okaloosa students continue to be among the best in the State, and it is due in large measure to our teachers, staff and families. I am thankful for partnerships with outstanding organizations such as the HSU Educational Foundation and companies like Boeing that often provide the extra spark that helps students reach their fullest potential.

Thank you for your support!

ncerelv rv son ident of Schools per hte

cc: Ingrid Piedrahita, Boeing Global Engagement

ADMINISTRATION COMPLEX-120 LOWERY PLACE S.E.-FORT WALTON BEACH, FLORIDA 32548 TELEPHONE (850) 833-3100 FAX (850) 833-3436

CARVER HILL ADMINISTRATION COMPLEX-461 W. SCHOOL AVENUE-CRESTVIEW, FLORIDA 32536 TELEPHONE (850) 689-7117 FAX (850) 689-7121





June 15, 2018

Paul S. Hsu, PhD, President HSU Educational Foundation 70 Ready Avenue NW Fort Walton Beach, FL 32548

Dear Dr. Hsu:

The Economic Development Council of Okaloosa County is honored to submit this letter of support for the HSU Educational Foundation's 'HSU Innovation Institute' grant proposal to the Triumph Gulf Coast Board of Directors.

Throughout your exceptional career, you have remained a staunch supporter of forward-leaning initiatives designed to cultivate our region's future talent supply, and the HSU Innovation Institute is a natural progression of your long-standing commitment in this arena. The good work that the HSU Foundation is currently doing in Okaloosa County to facilitate STEM enrichment opportunities for teachers and students in grades K-12 is one very meaningful example. The STEM-based camps, workshops and afterschool programming currently offered by the HSU Educational Foundation is proving to be transformative in the lives of so many young people who might not otherwise have considered a STEM-related career path.

In short, the Economic Development Council of Okaloosa County believes that the HSU Innovation Institute as presented in your Triumph Gulf Coast proposal will serve to carry your STEM-focused educational initiatives to new heights, while expanding the impact exponentially to the include the entirety of the Triumph Gulf Coast Region.

Sincerely,

Kim Wintner Chairman

A. Har Marke

Nathan Sparks, CEcD Executive Director

P.O. Box 4097, Fort Walton Beach, FL 32549 (850)362-6467 (800)995-7374 (850)362-6471 fax www.florida-edc.org

