



Unmanned Vehicle Systems

Center of Excellence

Triumph Application 2018



November 28, 2018
Honorable Don Gaetz, Chairman
Triumph Gulf Coast, Inc.
Attn: Susan Skelton, Executive Director
P.O. Box 12007
Tallahassee, Florida 32317

Chairman Gaetz:

Please find enclosed Tallahassee Community College's application for funds for the WEI Unmanned Vehicle Systems Center of Excellence. This project will be transformational for our region and is uniquely positioned to help a nascent East Triumph industry to greatly expand, impacting jobs, GDP, and personal income.

Under this project the College will create a Unmanned Aerial Systems Center of Excellence, building upon our existing unmanned aerial system training program. Our goal is to extend the current programs being offered and develop an Associates of Science degree in Unmanned Aerial Systems (UAS A.S.), as well as additional certificate programs. This program will have two tracts, 1. Aviation Training and 2. Aviation Systems Development.

The WEI Unmanned Systems Training will lead to the minimum of the creation of 245 new forms of Employment, \$12 Million of additional GDP, and \$5.2 Million of additional Personal Income. Thus, the project will have a positive impact on the East Triumph (Franklin, Gulf, Wakulla) economy during the period described. The Return on Investment, in terms of additional otherwise unrealized GDP to project investment, will be \$8.12 to 1 as an average of the first six years' implementation. The cost per job is \$10,255.

We appreciate the opportunity to submit this application and are looking forward to providing any additional information.

Sincerely,

Jim Murdaugh, Ph.D.

President

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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 Individual (if applying in individual capacity): N/A

Name of Entity/Organization: The District Board of Trustees of Tallahassee Community College

Background of Applicant Individual/Entity/Organization: Please see Attachment A, Pg. 22

Federal Employer Identification Number: 591141270

Contact Information:

Primary Contact Information: Jim Murdaugh, Ph.D.

Title: President

Mailing Address: 444 Appleyard Dr.

Tallahassee, FL 32304

Phone: 850-201-8660

Email: MURDAUGJ@tcc.fl.edu

Website: www.tcc.fl.edu

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.

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

Total amount of funding requested from Triumph Gulf Coast: \$1,500,000.00

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

☒ Yes ☐ No

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

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

In 2012 TCC was awarded \$4,561,362 in PECO dollars to begin Phase I of the WEI.

In 2014 TCC was awarded \$1,500,000 from the Economic Development

Administration for additional construction costs for Phase I. The first building

opened in 2016.

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

Please see Attachment B, Pg. 22

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

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

Please see Attachment C, Pg. 23

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?

☐ Yes ☒ No

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

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

Eligibility

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):

- ☐ 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.

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.

[Please see Attachment D, Pg. 24](#)

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

[Please see Attachment E, Pg. 28](#)

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

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

[Please see Attachment F, Pg. 29](#)

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

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

[Please see Attachment G, Pg. 31](#)

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

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.)

[Please see Attachment H, Pg. 32](#)

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

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

[Please see Attachment I, Pg. 33](#)

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

Priorities

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

- ☐ Generate maximum estimated economic benefits, based on tools and models not generally employed by economic input-output analyses, including cost-benefit, return-on-investment, or dynamic scoring techniques to determine how the long-term economic growth potential of the disproportionately affected counties may be enhanced by the investment.
- ☐ 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.

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

[Please see Attachment J, Pg. 34](#)

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

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

Please see Attachment K, Pg. 37

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

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

Escambia Santa Rosa Okaloosa Walton Bay Gulf Franklin Wakulla

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

☒ Yes ☐ No

If yes, list all Counties that apply: Wakulla County

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

**Please attach proof of recommendation(s) from each County identified.

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.?

Approval from the President of Tallahassee Community College is required.

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

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.

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

N/A

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

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.

[Please see Attachment L, Pg. 42](#)

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

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.

[Please see Attachment M, Pg. 43](#)

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.

[\\$1,500,000 with 50% available by July 2018 and 50% available by January 2019](#)

(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.)

[The percentage requested is 19%. Please see Attachment N, Pg. 46](#)

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

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

[Please see Attachment O, Pg. 47](#)

(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.

☒ Yes ☐ No

[This award will supplement the previous six million dollars from Phase I,
and the two million dollars being raised by the TCC Foundation for Phase II.](#)

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

A. Project/Program Costs:

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

Construction	\$ _____
Reconstruction	\$ _____
Design & Engineering	\$ _____

Land Acquisition	\$ _____
Land Improvement	\$ _____
Equipment	\$ <u>1,070,000</u>
Supplies	\$ _____
Salaries	\$ <u>450,000</u>
Program Consultants	\$ <u>130,000</u>
Contingency of 10%	\$ <u>200,000</u>

Other (TCC Indirect)	\$ <u>150,000</u>
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Total Project Costs:	\$ <u>2,000,000</u>
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B. Other Project Funding Sources:

Example Funding Sources (Note: Not an exhaustive list of possible Funding Sources.)

City/County	\$ _____
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Private Sources	\$ <u>500,000</u>
-----------------	-------------------

Other (e.g., grants, etc.)	\$ _____
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Total Other Funding	\$ <u>500,000</u>
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Total Amount Requested:	\$ <u>1,500,000</u>
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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.

[Please see Attachment P, Pg. 48](#)

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.

☒ Yes ☐ No

ADDENDUM FOR WORKFORCE TRAINING PROPOSALS

1. Program Requirements

- A. Will this proposal supports 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

[Please see Attachment Q, pg. 50](#)

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

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

- ☒ Increase students' technology skills and knowledge
- ☒ Encourage industry certifications
- ☒ Strengthen career readiness initiatives
- ☒ 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

[Please see Attachment R, Pg. 51](#)

(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.

☒ Yes ☐ No

Yes, the educational and workforce training programs that will be offered
at the Center will cater to multiple employers in the region.

(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.

Wakulla County

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

Please see Attachment S, Pg. 53

(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 supplements but not supplant existing funding sources.

☒ Yes ☐ No

Please see Attachment T, Pg.54

(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.

[Please see Attachment T, Pg. 54](#)

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

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

[Please see Attachment T, Pg. 54](#)

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

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

[Please see Attachment U, Pg. 55](#)

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

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

[Please see Attachment V, Pg. 56](#)

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

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

[Please see Attachment W, Pg. 57](#)

(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

[Please see Attachment X, Pg. 58](#)

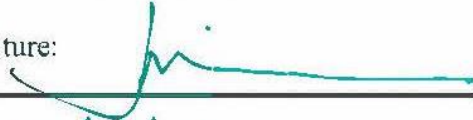
(If additional space is needed, please attach a Word document with your entire answer.)

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: The District Board of Trustees of Tallahassee Community College

Name and Title of Authorized Representative: Jim Murdaugh, Ph.D., President

Representative Signature:



Signature Date:

5/8/18

Attachment A: Applicant Information

Background of Applicant Individual/ Entity/ Organization:

Tallahassee Community College (TCC) is one of the nation's top performing community colleges. Since its inception in 1966, the College has been at the forefront of advancing student success through education, workforce development and certification programs. On April 17, 2012, Governor Rick Scott signed Florida's budget, which included a \$4.5 million investment for TCC to construct the Wakulla Environmental Institute (WEI) in Wakulla County. In 2013, the College purchased 158 acres off of Crawfordville Highway for the WEI and broke ground later that same year. The large, beautiful tract of land features a sinkhole, wetlands and a natural bridge. This property will easily accommodate a world-class facility to fulfill the Institute's three-part mission of education, conservation and recreation. A year later, the Economic Development Administration (EDA) within the United States Department of Commerce awarded a grant of \$1.5 million to TCC for core infrastructure development that enabled the construction of Phase I of the WEI which opened in early 2016. Located in one of North America's top five biodiversity hotspots, the WEI serves as a hub for education (job training), conservation and recreation in Northwest Florida for all environmental issues the State is facing today and in the future. The WEI provides job training in aquaculture and maritime occupations, leads efforts in environmental conservation and restoration and promotes regional tourism and recreation activity to stimulate economic growth across the Big Bend. While the College developed the first phase of the Institute to support the revitalization of industries that collapsed as a result of the Deepwater Horizon oil spill, TCC's work in leading economic development activity in Wakulla County spawned new opportunities and initiatives that we are offering for this region. Leveraging a record of sound financial and environmental stewardship WEI supports the expansion of programming and operations that will catalyze transformational growth along the Gulf Coast. To that end WEI is proposing the creation of the Unmanned Vehicle Systems Center of Excellence. An independent REMI (Regional Economic Models, Inc.) economic analysis forecasted 245 direct and indirect resulting forms of employment, \$12.1 Million in additional GDP, and \$9.7 Million in additional Personal Income from just this project. The anticipated project outcomes are transformational for this region.

Attachment B: Applicant Information

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

Tallahassee Community College is a comprehensive, public community college. The College's assets total \$165.3 million, with \$132.5 million in capital assets and \$37.4 million in operating revenue for the 2016-17 fiscal year.

Attachment C: Applicant Information

EXHIBIT A

THE FLORIDA COLLEGE SYSTEM
COLLEGE OPERATING BUDGET
ANNUAL BUDGET SUMMARY
FISCAL YEAR 2017-18

COLLEGE: Tallahassee Community College

		CURRENT FUNDS - UNRESTRICTED
BEGINNING FUND BALANCE - JULY 1, 2017:		
ESTIMATED AFR FUND BALANCE - JUNE 30, 2017 (IF DEBIT BALANCE USE "MINUS SIGN")		\$9,556,768
ADD AMOUNT EXPECTED TO BE FINANCED IN FUTURE YEARS (USE PLUS SIGN)		0
TOTAL RESERVE AND UNENCUMBERED FUND BALANCE - JULY 1, 2017		\$9,556,768
ADD:	REVENUES	\$57,894,057
	TRANSFERS IN	\$1,000,000
TOTAL RECEIPTS		\$58,894,057
TOTAL ESTIMATED AVAILABLE		\$68,450,825
DEDUCT:	EXPENDITURES	\$60,894,057
	TRANSFERS OUT	\$0
TOTAL DISBURSEMENTS		\$60,894,057
ESTIMATED FUND BALANCE - JUNE 30, 2018:		
TOTAL AVAILABLE LESS DISBURSEMENTS		\$7,556,768
ADD ACCRUED LEAVE EXPENSE (GLC 59300)		\$0
TOTAL ESTIMATED RESERVE AND UNENCUMBERED FUND BALANCE - JUNE 30, 2018		\$7,556,768
LESS ESTIMATED AMOUNT EXPECTED TO BE FINANCED IN FUTURE YEARS (GLC 30800) - JUNE 30, 2018		\$0
TOTAL ESTIMATED FUND BALANCE - JUNE 30, 2018		\$7,556,768
ESTIMATED UNENCUMBERED FUND BALANCE - JUNE 30, 2018		\$4,996,164
(Includes GL's: 30200, 30300, 30400, 30500, 30600, 30700, 30900, and 31100)		
PERCENT OF ESTIMATED UNENCUMBERED FUND BALANCE AS OF JUNE 30 2018, TO ESTIMATED FUNDS AVAILABLE		7.30%

CERTIFY BOARD OF TRUSTEES APPROVAL:


COLLEGE PRESIDENT

6/19/17
DATE

Attachment D: Eligibility Attachment, Question 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.

Wakulla Environmental Institute Unmanned Vehicle Systems Center of Excellence

Unmanned Systems have been established as being the future for growth in the S.T.E.M areas of Industry. No longer for just military uses, drones are now used by First Responders, Law Enforcement for Public Safety, Real Estate Investors, Farmers, Power and Utility Companies, and has applications in Agriculture, Environmental, and Marketing Industries. WEI will focus on three areas as part of our efforts to grow the economy in the rural counties in the gulf region: **Air, Land and Sea.**

Wakulla Environmental Institute Unmanned Aerial Systems Center of Excellence Program - AIR:

The FAA is focused on creating Centers of Excellence for Unmanned Aerial Systems across the U.S. with Community Colleges, and TCC has personally talked with the FAA about bringing a Center of Excellence to WEI. At WEI we are committed to providing an innovative training program which will focus on: **1. Technical Training and Human Performance** and **2. Unmanned Aircraft Systems**

WEI has already established an unmanned aerial system training program consisting of:

- FAA 107 Training
- Intro to Editing
- Intro to Ground Flight School
- How to Build a Drone

Our goal is to extend the current programs being offered and develop an Associates of Science degree in Unmanned Aerial Systems (UAS A.S.), as well as additional certificate programs. This program will have two tracts, 1. Aviation Training and 2. Aviation Systems Development. The mission at WEI for all of our programs is two-fold 1. to provide students with the essentials to further their education by obtaining an advanced degree in related fields and 2. provide the opportunity for them to become an Entrepreneur, starting their own business by obtaining the necessary certifications, and provide the framework of how to build, operate, and design their businesses to address their customer's needs.

The Unmanned Aerial Systems (UAS) Associate Degree program will prepare students for entry level positions in the UAS industry by providing foundational knowledge and skills in UAS

mission planning, applications, maintenance, laws and regulations, data analytics, and project management using UAS platforms. Program content includes an introduction to UAS flight, avionics, sensors, communications systems and selectable paths including Data Analysis and applications such as First Responders, Geographic Information Systems, and Precision Agriculture. Students will prepare for and conduct unmanned flights similar to those commonly performed in the industry observing Federal Aviation Administrations (FAA) regulations that govern UAS operations.

For Aviation Training our students will:

- a. Be able to demonstrate crew performance and coordination in UAS operational environments while applying problem solving skills and an in-depth understanding of the operational, regulatory and safety environment of the National Airspace System.
- b. Be able to demonstrate UAS airmanship commensurate with a Commercial Pilot Certificate with Instrument Rating.
- c. Develop a working knowledge of UAS technologies and their application in governmental and civil operations.
- d. Be able to demonstrate knowledge of legal, ethical, and moral issues related to UAS operations.
- e. Be able to apply management skills to programs and projects in an emerging UAS industry.

For Aviation Systems Development our students will:

- a. Demonstrate an understanding of the science, technology, engineering, and mathematics principles common to UAS operations.
- b. Be familiar with computer technologies and processes associated with UAS operations to include programming, data storage and security, and networking.
- c. Understand, design and develop system interoperability with current and future UAS technologies for Air Traffic Integration, Control and Communication, and Detect and Avoid.

Wakulla Environmental Institute Unmanned Vehicle Systems Program – LAND:

Our focus here will encompass most of what our Aerial Program will provide with the addition of development of different platforms capable of handling FLIR (Forward-Looking Infrared), GIS (Geographic Information Systems) Data Analytics, Lidar (Laser Imaging, Detection and Ranging), and Facial Recognition. We will explore the different S.T.E.M areas to provide training in Robotics, Manufacturing, Computing, and Systems Engineering to name a few.

We will look to establish a program that will focus on developing innovative techniques for small plot farming, vertical farming, geographical surveying and mapping as part of the training that will be provided. Our focus is to provide the basics of constructing platforms using hardware and software engineering principles for innovative methodologies that would deploy autonomous and swarm technologies.

Wakulla Environmental Institute Unmanned Vehicle Systems Program – SEA:

The focus will be to build autonomous underwater drones with the capability to scan and give an accurate detailed account through photography, video and also be flexible enough to provide other details of the underwater environment through observation.

Overall, we will look at developing autonomous drones for air, land and sea-based platforms for use in Agriculture, Public Safety, Surveying and Land Management.

Recruitment and Entrepreneurship:

TCC already has major programs and partnerships in place that will allow us to grow this program exponentially.



Through our SPARK program we currently offer an A.A. degree that focuses on prerequisites on Entrepreneurship in Business

Administration at Florida State University.

- a. Developing your business plan
- b. Marketing
- c. Legal and Human Resources
- d. Finance



TCC was awarded the Veterans Florida Entrepreneurship Program Grant, which has served over 1,000 Veterans statewide and will serve as a recruitment pool for any of our veterans looking to start a business involving drones or many of the other programs we offer here at WEI.



TCC is a Veteran Friendly Campus and was recently awarded the Troops to Teachers Grant for the entire state of Florida. Troops to Teachers is a National Department of Defense Veteran Transition Assistance Program. TCC will seek to train and employ the Veteran population within the Gulf Region and throughout the State of Florida by aligning our recruitment efforts with the Troops to Teachers program we currently manage here at the college. Our recruitment plan will include providing seminars on the available programs for those seeking to enter the Teaching Profession and introduce them to the growing possibilities that exist in the Unmanned Aerial Systems Industry. Currently there are eight bases in the Gulf Region and twenty-one bases statewide. Of the eight bases in the Gulf Region six concentrate on Aeronautics and Aeronautics Training, Eglin

AFB, Hurlburt Field, Tyndall AFB, Pensacola NAS, NTS Corry Station, NAS Whiting Field, and of the twenty-one statewide, five more for a total of eleven statewide. The Troops to Teachers program recruits on average 800 troops per year within the State of Florida and over 4,000 Nationwide. With over 1.4 Million Veterans in the State of Florida we can tap into an underserved population.



We will also be working along Wakulla County Schools to provide training through our existing partnerships. We have already established the Wakulla High School site as a dual enrollment site for Tallahassee Community College and will thus seek to recruit students within the area to encourage them to seek a career in the S.T.E.M's.

Economic Analysis and Impact of Wakulla Environmental Institute Unmanned Aerial Systems Center of Excellence

REMI economic modeling was conducted by the *Apalachicola Regional Planning Council* for this project. The Council found that the WEI Unmanned Systems Training will lead to the minimum of the creation of 245 new forms of Employment, \$12 Million of additional GDP, and \$9.7 Million of additional Personal Income. Thus, the project will have a positive impact on the East Triumph (Franklin, Gulf, Wakulla) economy during the period described. The Return on Investment, in terms of additional otherwise unrealized GDP to project investment, will be \$8.12 to 1 as an average of the first six years' implementation. The cost per job is \$6,108.

The WEI Training Center of Excellence, the second phase of TCC's Wakulla Environmental Institute, will offer the only venue of its kind in Wakulla County and the surrounding region. The Gulf Coast will reap immediate benefits from construction at the WEI through the purchase of building materials and employment of workers from across the region. Long-term, increasing the Institute's footprint and job training programming portfolio will attract job seekers from Wakulla County and across the region, as well as visitors, students, entrepreneurs and investors from outside Wakulla County and the state. The influx in new residents, creation of thousands of new jobs and businesses, visitors and money in this region will be truly transformative. No other project will have the long-term sustainable, and wide-reaching impact than the WEI Training Center of Excellence.

Attachment E: Eligibility Attachment, Question 3

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

This proposed program within the WEI Training Center of Excellence will, by year six, create 245 direct and indirect jobs and add \$12.1 million to the GDP of Wakulla, Gulf and Franklin Counties. The impact of the Center will be transformational and impact generations of workers in this region.

The table below from the Economic Impact Forecast in Appendix A, provided by the Apalachee Regional Planning Council (using REMI modeling) projects that the Phase II project will have tangible positive impacts on the East Triumph economy.

WEI Unmanned Systems Training Program Economic Forecast

This training program provides excellent employment and GDP adds within the East Triumph Region. Compared to averages, by year six, project-enabled GDP gains to Triumph Investment are 8.1 to 1 and cost per job is \$6,108. These higher figures are due to the fact that positive impacts grow over the six-year horizon.

Regional Comparison of Economic Impact (Snapshot at Project Year 6)

<i>Area</i>	<i>Jobs Added</i>	<i>Employ 2026</i>	<i>Jobs Added as % of Total Employ</i>	<i>Cost per Job</i>	<i>GDP Added</i>	<i>GDP to Invest ROI</i>
<i>East Triumph</i>	245	20,829	1.2%	6,108.66	12,177,448	8.1

Attachment F: Eligibility Attachment, Question 4

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

TCC proposes to build upon the success of Phase I of the WEI and the \$6 million procured for the initial creation of the Institute. One-hundred new businesses have been created and 150 new employees hired since 2016 as a result of the WEI's oyster aquaculture program. The **Unmanned Aerial Systems Center of Excellence Program** affords new opportunities for education and workforce training programs that will exponentially add to the impacts it confers on this region.

Specifically, automation continues to be an area affecting traditional employment across all United States sectors. Transportation is no stranger to this, however new roles are opening in fleet building, servicing, and remote piloting where manpower once provided the primary transportation (driver) function. A 2018 Commercial Drone Industry Trends report by Drone Deploy finds that "the fastest growing commercial adopters of aerial data come from the construction, agriculture, and mining industries" – all important sectors of the Northwest Florida economy¹. Furthermore, the real estate industry has witnessed a 118% rise in the use of drone technology. Drones can be utilized for job site risk mitigation, the bid process, quality control & assurance, site planning, and progress tracking. **All this points to the crucial need to equip job-seekers with skills that will complement this highly flexible industry.**

The education programs proposed are approved by the Florida Department of Education. TCC currently enrolls over 12,000 students and is recognized by the *Huffington Post* for being **ranked number 8 in the nation** among community colleges by *SmartAsset.com*. Further, TCC was one of only 150 colleges in the U.S. selected to compete for the *Aspen Prize for Community College Excellence*. The prize recognizes institutions for exceptional student outcomes related to student learning, certificate and degree completion, employment and earnings, and access and success for minority and low-income students.

TCC was ranked among the top schools in *Military Advanced Education* magazine's 2015 Guide to Military-Friendly Colleges and Universities. This year, the College was also designated a military-friendly school by *Victory Media* for the second consecutive year. The College's successful track record ideally positions it to support veterans who are transitioning to civilian work across the region, but are in need of new workforce training opportunities.

TCC is one of 28 members of the Florida College System and has extensive experience in managing large federal, state and private awards and has all of the necessary infrastructure including a Sponsored Program Office, in place to assure successful support and fiscal monitoring of this project. The College has operated for over 50 years and now has seven campus locations in its three-county service district. In addition to the main campus in Tallahassee, the College also has service centers in Gadsden and Wakulla counties, and in downtown Tallahassee. TCC's healthcare professions programs are housed in the Ghazvini Center for Healthcare Education adjacent to

¹ Report: https://dronedeploy-www.cdn.prismic.io/dronedeploy-www%2Fae535fda-dfc9-4bcf-9743-292df714e9fe_dd_2018_trends_report-f.pdf

Tallahassee Memorial Healthcare. The College also operates the Gadsden County-based Florida Public Safety Institute, home to the Pat Thomas Law Enforcement Academy.

TCC has five full-time employees dedicated to managing \$50 million in annual expenditures in federal, state, corporate and foundation grants. The College has the necessary experience to successfully create and manage a project of this scope and size.

Attachment G: Eligibility Attachment, Question 5

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

TCC will leverage three resources to measure the long-term impacts of this project:

1. The College's Office of Institutional Effectiveness (OIE), which is responsible for the systematic and comprehensive analysis of college planning and operations including strategic planning, assessment of institutional effectiveness and accreditation, with emphasis on using data to assess and direct the institution's progress toward meeting its established goals. The OIE's major functions include institutional research, assessment of institutional effectiveness, accreditation leadership and educational research. OIE will track student enrollment, graduations rates and job placements from this project.
2. The Apalachee Regional Planning Council will aid the College in monitoring the economic data of our region including GDP, median household income, average salary and other economic and demographic data that are pertinent to the long-term impact of this project.
3. Partnerships with workforce boards, economic development councils and Chambers of Commerce, and through the use of multiple data sources including the:
 - Florida Department of Education's Division of Career and Adult Education and the *Comprehensive Industry Certifications List*;
 - Agency for Workforce Innovation;
 - Workforce Florida Board;
 - District Three Florida Agency for Workforce Innovation's *Regional Targeted Occupations List*; and
 - Florida Department of Law Enforcement's Criminal Justice Agency Profile Report.

Attachment H: Eligibility Attachment, Question 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.)

This project will be sustained as all other education and workforce training programs are sustained at TCC, through a combination of:

- Tuition*;
- Students fees;
- Activity fees;
- Support from the TCC Foundation;
- Contracts and grants;
- State funding; and
- Corporate partnerships.

*The majority of TCC students receive a combination of financial assistance that includes federal financial aid, scholarships, Veterans Affairs funding, CareerSource funding and Vocational Rehabilitation funding. The aid reduces the financial burden on TCC students and offsets a majority of their out-of-pocket expenses.

Attachment I: Eligibility Attachment, Question 7

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

Formative Evaluation

In addition to the description of measurement provided in Question 5, TCC will also employ a formative evaluation protocol which will analyze relevant data to determine the ongoing success of the project toward achieving its objectives.

Upon analyzing the data, the following formative evaluation questions will be answered:

1. Is WEI making adequate progress towards the long-term impacts listed below in summative evaluation?
2. How can the project be improved?
3. Are the resources and activities adequate to achieve the long-term impacts?
4. How will changes be implemented to ensure that the long-term impacts are realized?

This protocol will afford the WEI the opportunity to address any ongoing concerns.

Summative Evaluation

A summative evaluation will occur at the end of each program year and at completion of the project. Relevant data will be used to analyze whether the following meet the training and placement goals conveyed by Attachment F and Attachment T of this application:

- Student enrollment;
- Program completion rates;
- Job placement rates of program completers;
- Number of new jobs created;
- GDP change for Wakulla, Gulf and Franklin Counties;
- Total Employment change for Franklin, Gulf, and Wakulla counties.

Upon analyzing the data above the following summative evaluation questions will be answered:

1. Were the program objectives met?
2. What was the impact of the program?

This protocol will ensure that this project is achieving the long-term impacts of job growth, GDP growth and changes in household income across the region.

Attachment J: Priorities, Question 2

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

1. Generates maximum economic benefits:

The WEI Training Center of Excellence, Unmanned Systems Program will create high skill individuals who can segue into and augment local employment. More than 245 jobs will be added in Wakulla, Gulf and Franklin Counties that will contribute \$12.1 million to their GDP.

2. Increase household income:

The average salary and household income of residents living in Wakulla County is presented in the chart below.

Current Socio-Economic Snapshot: Wakulla County

Income and Compensation, Wakulla County

Metric	Year	Value
Average Annual Wage Rate	2017	\$24,292
Median Household Income	2016	\$54,078

Data Source: REMI for AACR, ACS for MHI

The Unmanned Systems Program proposed will lead to a higher annual average wage than current levels in Wakulla County. Below is a snapshot for select occupations related to the Unmanned Systems Training Program:

Annual Mean Wages, Florida Occupations 2016

Metric	Year	Value
SOC 53-2012 Commercial Pilots	2017	\$76,340
SOC 53-5021 Captains, Mates, and Pilots of Water Vessels	2017	\$73,860

Data Source: Bureau of Labor Statistics OES 2017

As presented in the above table, all fields pay higher rates than the 2016 average annual

compensation rate. As graduates from the Center secure employment in Wakulla County, they will raise the per capita income of the County and support local housing, retail and public services.

3. *Leverage key regional assets:*

The purpose behind the creation of the WEI was to leverage the key regional asset of Wakulla County: the environment. The region is regarded as one of the top five biodiversity hotspots in all of North America. The Institute property is situated on 158 acres off of Crawfordville Highway and is a large tract of land that features a sinkhole, wetlands and a natural bridge. Another regional asset is the immediate access to the coast in Wakulla County. The coastal waters support the creation of a new industries like oyster aquaculture. Further, the WEI Training Center of Excellence will add programs for many more aquaculture crops than just oysters to its portfolio. Lastly, the greatest asset by far is the people that live in this region - the people of the rural Gulf counties who have lived here for generations and continue to preserve the land and sea. Its mission is to provide new education and workforce opportunities, while embracing all of the regional assets of the natural environment and the extraordinary people that live there.

4. *Partner with local governments:*

TCC has a long and productive partnership with Wakulla County that has existed for over 50 years. As with all of its projects in Wakulla, the College will continue to partner with the County, and takes great pride that this proposal was one of the few that the County has endorsed.

5. *Benefit to environment:*

From the design of the environmentally-conscious building, to the restoration efforts of natural habitats, to the green jobs training and workforce education, and the promotion and tourism of the environment in Wakulla County, everything that the WEI is already doing and proposing to do will benefit the environment.

The WEI's efforts with longleaf pine restoration offers just one examples of the Institutes' positive impact on the environment. Many landowners hesitate to restore their land to longleaf because of a bias by the forest industry for faster growing loblolly and slash pine. Having an outdoor laboratory (like WEI) for landowners to see and experience the process of habitat restoration with longleaf can go a long way toward alleviating fears about restoration cost and time. The Institute would serve as a place for landowners to learn about longleaf establishment and management and obtain information about Farm Bill programs that can help them restore their land. The WEI's campus currently sits on 158 acres of planted pine. The College's hope is to restore the land to a longleaf pine habitat. This property will be used as a living classroom enabling landowners to receive hands-on training in restoration skills. Using drones for the restoration of this effort will be essential to ensure its success.

It is estimated that there are 29 threatened and endangered species associated with the longleaf ecosystem. Restoration of longleaf pine, combined with its ability to sustain regular prescribed burning from 1-year post planting until harvest, is important for the recovery of threatened and endangered species such as red-cockaded woodpeckers,

flatwoods salamanders, quail and gopher tortoises present in the targeted counties. Wakulla County has nearly 8,000 residential parcels that are over one acre, with a average parcel size is 5.67 acres. The Institute serves as a living model as to how land can be restored and the environment protected and nourished so it will be available for future generations. The WEI will continue to be the good and proper steward of the natural resource in the region and continue to offer education and training programs that promote effective environmental restoration and stewardship.

6. *Provide outcome measures:*

The WEI will provide multiple outcome measures including:

- Student enrollment;
- Program completion rates;
- Job placement rates of program completers;
- GDP change for Wakulla, Gulf and Franklin Counties;
- Household annual income change for Wakulla, Gulf and Franklin Counties; and
- Average salary changes for Wakulla, Gulf and Franklin Counties.

7. *Partner with K-20 educational institutions:*

TCC will continue its longstanding partnerships with FSU, FAMU and Wakulla County Schools.

8. *Recommended by the board of county commissioners in Wakulla County:*

This program is on the agenda to be approved by the Wakulla County Board of Commissioners at its December 3rd meeting. As soon as the letter of support is received it will be added to this application as an addendum.

9. *Partner with convention and visitor bureaus:*

The WEI Training Center of Excellence will partner with the Wakulla County Tourist Development Council on the promotion of ecotourism activities like cycling, camping, fishing, hunting, paddling, hiking, birding, visiting scenic byways and other wildlife viewing across the Gulf Coast.

Attachment K: Priorities, Question 3

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

The Wakulla Environmental Institute Training Center of Excellence meets all applicable discretionary priorities identified by the Triumph Gulf Coast Board.

1. *Are considered transformational for the future of the Northwest Florida region.*

The WEI Unmanned Vehicle Systems Center of Excellence will create 245 jobs and add \$12.1 million to the GDP of Wakulla, Gulf and Franklin Counties. This program will be transformational and impact generation of workers in the region.

This project will offer education and workforce training programs that support new industries that previously did not exist. Every dollar invested by Triumph will generate \$8 in return to the local economy. The workforce training opportunities provided by the program will all lead to jobs that pay above average wages not only for this region, but for the entire State of Florida.

2. *May be consummated quickly and efficiently.*

WEI is already offering 4 classes in the Unmanned Systems Program, and is ready to add additional job and educational training programs.

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

It is estimated that over 245 new jobs will be created with this project. Further, the average salary of jobs created will be 209 % higher than the current average salary in Wakulla County (\$75,100 vs. \$24,292) (Data Source: Bureau of Labor Statistics OES 2017).

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

This project aligns with the majority of the regional strategic initiatives, including:

GOAL 1. TALENT

- **1.1 Workforce training for large employers.**

TCC is currently working with many large employers in healthcare, utilities, transportation and advanced manufacturing. The College continues to grow those partnerships, while engaging new partners all the time. TCC is the number one pipeline of talent for employers in the region.

- **1.3, 1.7 Training focused on underemployed and long-term unemployed residents.**

TCC has a successful record of supporting long-term unemployed and underemployed residents with training for in-demand careers. Its workforce programs are specifically designed to recruit and work with this population. Partnering with CareerSource and other community-based partners, the College facilitates collaboration to recruit and create new programs that serve the

community. TCC is an inclusive institution that welcomes all who desire to learn, regardless of wealth, heritage or previous academic experience. The College serves all segments of society by providing an open-door to postsecondary education and training to all. TCC's responsiveness to community needs is demonstrated by its comprehensive programming portfolio. The range of programs that is offered, from short-term skills and adult basic education/ESL to high-demand workforce and transfer programs, fuels the development of both individuals and the community and serves as an engine for economic development.

- **1.5 Expand work-based learning and career exploration opportunities for students.**

The WEI Unmanned Vehicle Systems Center of Excellence will offer certificate and A.S degree programs for Unmanned Systems Programs.

- **1.6 Further leverage the manufacturing academies model to expand the promotion of science, technology, engineering and math (STEM) programs and technical skills.**

At TCC, and by extension the WEI, STEM is imbued in its academic and workforce programs. Within the past several years, TCC was awarded a *National Science Foundation* grant to provide STEM scholarships for students. Through a generous private donation, TCC established the Dr. Lei Wang STEM Center, a multipurpose study space for students majoring in STEM programs. Students can utilize resources in the space and network with other classmates and faculty. At the Center, STEM students enjoy:

- Academic excellence workshops;
- Transfer assistance;
- Internship and scholarship opportunities;
- Study groups; and
- Academic advising and mentoring.

A majority of the education and workforce training programs that will be offered at the WEI Unmanned Vehicle Systems Center of Excellence directly intersect with the STEM disciplines offered at TCC, and will therefore utilize the College's STEM resources.

GOAL 2. BUSINESS VITALITY

- **2.1 Ensure the growth of region's key industry clusters.**

The WEI is focused on creating jobs that support the advancement of employment, wages, innovation and entrepreneurship in the region. To accomplish this, WEI is creating the Unmanned Vehicle Systems Center of Excellence. With the estimated billion dollar impacted of drones on our region combined with the eight bases in the Gulf Region, and the experience of existing and former military members, this is the perfect marriage of need, demand, and resources.

- **2.6 Support the growth of microenterprises and small businesses in the region, particularly in rural areas and minority communities.**

As stated earlier, the WEI not only offers job training, but creates new businesses and new industries. Every student that successfully completes the oyster aquaculture program leaves having started their own new business - a business that as it grows will hire other employees. WEI seeks to ensure that each student becomes a successful small business owner/entrepreneur. This same philosophy in being applied to the Unmanned Vehicle Systems Center of Excellence.

GOAL 4. ENTREPRENEURSHIP AND INNOVATION

- **4.1, 4.5 Develop the region's entrepreneurial hubs and connect them with industry clusters, assets, services, networks, facilities, tools, and expertise.**

As stated above, Unmanned Vehicle Systems Center of Excellence offered at WEI creates a new entrepreneurial hub and leverage partnerships with industry, other colleges and universities, CareerSource and existing relationships with the surrounding counties. These hubs will provide new job opportunities for residents in this region.

5. *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.*

It is estimated that over 245 new direct and indirect jobs will be created as a result of this project. The education and workforce training programs that align with the targeted industries include:

- Aerospace and Defense and Artificial Intelligence, Robotics and Cybersecurity
 - Unmanned vehicle systems (drones, including aerial and submersibles)
 - Unmanned vehicle systems operations

6. *Promote industry cluster impact for unique targeted industries.*

The WEI will contribute to the growth of jobs and careers in aerospace and defense, water transportation, artificial intelligence, cybersecurity, manufacturing and robotics.

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

The average salary of jobs created will be 209 % higher than the current average salary in Wakulla County (\$75,100 vs. \$24,292) (Data Source: Bureau of Labor Statistics OES 2017).

8. *Are located in Rural Area of Opportunity as defined by the State of Florida (DEO).*
Wakulla, Gulf and Franklin Counties are all located in a Rural Area of Opportunity.

9. *Provide a wider regional impact versus solely local impact.*

While the WEI Unmanned Vehicle Systems Center of Excellence is located in Wakulla County, it is creating new jobs and industries across the entire region and recruiting from the entire region. By attracting people from across the region, the Unmanned Vehicle Systems Center of Excellence is further driving economic development for our entire area.

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

As mentioned earlier through our partnerships, especially with Wakulla County Schools, we will become an Unmanned Vehicle Systems hub for growth and development. In addition, we are looking to partner with all the ROTC programs in our region. Further, we are beginning discussions with business developers on new software integration programs, and will work with all of our education partners on the development and coordination of the Unmanned Vehicle Systems program.

11. Enhance research and innovative technologies in the region.

The WEI Training Center of Excellence is enhancing research and innovative technologies in the region. TCC will create a living laboratory where workforce training curricula can be developed and implemented for new and existing occupations and new technologies for drones programs. This will allow the WEI to take cutting-edge research and create programs that teach students and employees how to harness and use these new technologies.

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

The WEI Unmanned Vehicle Systems Center of Excellence is focusing on multiple industry clusters.

- Unmanned vehicle systems (drones, including aerial and submersibles)
- Unmanned vehicle systems operations

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

The WEI Unmanned Vehicle Systems Center of Excellence will create a unique asset that prepares individuals for a career in a high skill, high wage industry.

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

TCC has operated for over 50 years to serve students who invest in programming that provides a better opportunity for their future. The academic and workforce training programs proposed for the Center will be sustained like programs already offered at the College across all seven campus locations, through a combination of:

- Tuition;
- Students fees;
- Activity fees;
- Support from the TCC Foundation;
- Contracts and grants;
- State funding; and
- Corporate partnerships.

15. Leverage funding from other government and private entity sources.

TCC was previously awarded \$6 million for Phase I of the WEI. The state allocated \$4.5 million for its construction and the EDA awarded the College \$1.5 million for infrastructure development at the Institute's campus. This allowed us to create our existing Unmanned Vehicle Systems program.

As state assistance for education wanes and the cost of higher education continues to rise, private support is becoming increasingly necessary for TCC's growth and ability to maintain its standards of excellence as one of the country's preeminent community colleges. To support the College's efforts to implement the WEI Unmanned Vehicle Systems Center of Excellence, the TCC Foundation established a local committee with the singular goal of identifying \$2 million in private funding that will provide additional resources for the Triumph Applications. The funds will be placed in an endowment, to be held in perpetuity, which will provide critical dollars annually that support the Unmanned Vehicle Systems Center of Excellence, scholarships to students from Wakulla County and facility enhancements as programs and enrollment grow at the campus.

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

The WEI will use clear performance metrics that include:

- Student enrollment;
- Program completion rates;
- Job placement rates of program completers;
- Number of new jobs created;
- GDP change for Wakulla, Gulf and Franklin counties;
- Total Employment change within Franklin, Gulf, and Wakulla counties.

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

The initial deliverables will be the documented expenditures related to the creation of the WEI Unmanned Vehicle Systems Center of Excellence.

18. Provide capacity building support for regional economic growth.

The WEI Unmanned Vehicle Systems Center of Excellence is providing capacity building support through the creation of this new program that meets the need for increased employment, wages, innovation and entrepreneurship.

19. Are environmentally conscious and business focused?

The environment in Northwest Florida is the most precious and important resource this region has, and preserving, enhancing and realizing both its economic and intrinsic value is one of the core tenants of WEI Training. From the design of the environmentally-conscious building, to the restoration efforts of natural habitats, to green jobs training and workforce education and the promotion of eco-tourism in Wakulla County and the region, everything that is already being done and is proposed to take place at the Institute will benefit the environment.

20. Include Applicant and selected partners/vendors located in Northwest Florida.

All instructors, partners and vendors will be located in Northwest Florida.

Attachment L: Approvals and Authority, Question 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.

<i>Project Activities</i>	<i>2018 – 2019</i> Year 1	<i>2019 – 2020</i> Year 2	<i>2020 – 2021</i> Year 3
Objective 1: Begin programmatic development of the WEI Unmanned Vehicle Systems Center of Excellence Purchase equipment, develop curriculum, hire, begin recruitment of students:			
1.1 Purchase equipment for submersible drone technology and maintenance	√		
1.2 Developed additional curriculum and educational programs	√		
1.3 Hire Instructors	√		
1.4 Begin recruitment of students:	√		
Objective 2: Begin workforce and academic programs for the WEI Unmanned Vehicle Systems Center of Excellence:			
2.1 Unmanned Vehicle Systems Operations		√	
2.2 Unmanned Vehicle Systems (Drones, including submersibles with sub-category focus on utilities)		√	

Attachment M: Approvals and Authority, Question 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.

TALLAHASSEE COMMUNITY COLLEGE DISTRICT BOARD OF TRUSTEES POLICY

TITLE: Federal, State, and College-Funded Grants	NUMBER: 09-21
AUTHORITY: Florida Statute: 1001.64; 1001.65 Florida Administrative Code: 6A-14.0247	SEE ALSO: <ul style="list-style-type: none">• Administrative Procedure 09-21AP: Federal, State, and College-Funded Grants
DATE ADOPTED: 12/01/1997; Revised 08/01/99; 05/17/10; 02/20/17	

College faculty and staff are encouraged to take advantage of all grants that will assist in their programs and/or help achieve the goals of the College. Also, the College shall pursue vigorously those federal and state grants that will facilitate the efforts of the College in assisting students and in providing equal access/equal opportunity to quality higher education for all who qualify.

The President or designee is authorized to establish and maintain federal, state, and College-funded grant provisions in accordance with Florida Statutes, Federal Regulation, and appropriate rules.

The Vice President for Administrative Services or designee provides assistance and coordination in preparing all grant proposals other than Financial Aid. Each area working with the Vice President has the responsibility of preparing the paperwork necessary for grant application. All work may be reviewed and approved by the Assistant Vice President for Administrative Services or designee before submission. This approval is in addition to all other signatures required by sources of grants.

Grant Awards, primary contracts, and related amendments will be presented to the Board of Trustees for approval at the first regular board meeting after the executed agreement is received. After approval by the Board of Trustees or designee, the Vice President for Administrative Services has the primary responsibility for coordination and administration of all grants submitted by the College.

The College shall participate in Federal and State programs that are appropriate for community college students or that are in the best interest of the College, or where participation is mandated by either Federal or State law.



May 4, 2018

The Honorable Don Gaetz, Chair
Florida Triumph Gulf Coast, Inc.
P.O. Box 12007
Tallahassee, Florida 32317

Dear Senator Gaetz,

I am writing to you today to provide my support for Tallahassee Community College's project for funding for the Wakulla Environmental Institute's (WEI) Phase II Training Center of Excellence from the Florida Triumph Gulf Coast Fund. At Inspired Technologies we provide telecommunication installation and repair services wireless and fiber carriers throughout Florida as well as nationally. We have discernable shortage of qualified employees who can perform the specific services we provide to our customers. We consistently spend an inordinate amount of time, expense, and resource recruiting talent from other states due to the local shortage of qualified applicants. In our search for employees we have located an entity in Arizona that focuses on the education and hands-on training of people specific to our industry. Additionally, this entity cultivates strong numbers of veterans coming into the private workforce specifically trained for the wireless telecommunications field.

With the creation of the Applied and Renewable Energy and Training Institute at WEI, we are excited to see the creation of a laboratory for workforce curriculum with the specialized training needed so my company can hire individuals for these high-wage positions. The technical training that is being proposed is not being offered anywhere else in Florida, and I am extremely excited with the long-term opportunities that will be created because of this project.

Sincerely,

A handwritten signature in black ink, appearing to read 'Craig Coulson'.

Managing Partner
Inspired Technologies, Inc



106 East College Avenue
Suite 800
Tallahassee, FL 32301

o: 850-521-1425
c: 850-544-1997

May 7, 2018

Steven Solomon
Director of Grants and Special Projects
Tallahassee Community College Foundation
444 Appleyard Drive
Tallahassee, FL 32304

Mr. Solomon:

With this letter I convey our support for Tallahassee Community College's (TCC) proposed Electrical Power-Line Installers and Repairers Post-Secondary Adult Vocational (PSAV) program.

This PSAV program will help Duke Energy increase the number of quality graduates from TCC and meet the line worker pipeline needs in the state. Duke Energy commits to working in coordination TCC to provide advising on curriculum, program structure, required certifications, and pre-employment requirements. TCC is poised to meet the increased need for line workers by supplying hands-on, quality instruction and providing students with the opportunity to obtain lifelong careers in an important local industry.

The proposed program will provide the foundational components of the line worker career path and will enable a smooth transition for students into our registered apprenticeship program. This PSAV program will give students valued workforce credentials that will empower them to connect to local and regional employment opportunities.

Please accept this letter as our commitment to working with TCC on the Electrical Power-Line Installers and Repairers PSAV proposal and all associated efforts.

If you have any technical questions, please do not hesitate to contact me. I look forward to working with you and TCC on this exciting program!

Sincerely,

A handwritten signature in black ink, appearing to read "Danny Collins".

Danny Collins
Duke Energy
Government and Community Relations Manager
North Florida

cc: Paula Cobb, Duke Energy
Margaret Spontak, Duke Energy Foundation

Attachment N: Funding and Budget, Question 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.)

Wakulla Environmental Institute Phase I and II Budget

Name of Award	Amount	Percentage
State PECO Phase I	\$4,561,362	56%
EDA Grant Phase 1	\$1,500,000	19%
Triumph Fund for WEI Unmanned Vehicle Systems Center of Excellence	\$1,500,000	19%
Private Local Dollars for Triumph Applications	\$2,000,000 total (25% for this project \$500,000)	6%
Total	\$8,061,362	100%

Attachment O: Funding and Budget, Question 3

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

Proposed Program	Proposed Total Number of Jobs Created over 5 Years
Transportation	
Unmanned Vehicle Systems Operations	175
Unmanned Vehicle Systems (Drones, including submersibles with sub-category focus on Utilities)	75
Total	250

This project will train 250 individuals by year six, with an estimated 75% local employment retention rate. In addition, the average salary will be 209% higher than the current average salary earned in Wakulla County (\$75,100 vs. (\$24,292) (*Data Source: Bureau of Labor Statistics OES 2016*).

Attachment P: Funding and Budget, Question 5C

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

Background

TCC is one of the top performing community colleges in the nation. Since its inception in 1966, the College has been at the forefront of advancing student success through education, workforce development and certification programs. In 2013, TCC began construction of Phase I of the WEI. The Institute site is 158 acres and features a sinkhole, wetlands and a natural bridge. The Institute's three-part mission is centered on education, conservation and recreation for the benefit of Wakulla County and the region.

The table below displays the budget for Phases I and the WEI Unmanned Vehicle Systems Center of Excellence (COE).

Budget Summary by Source

			Phase I	COE
Triumph	\$ 1,500,000		\$ 0	\$ 1,500,000
EDA	\$ 1,500,000		\$ 1,500,000	\$ 0
State PECO	\$ 4,561,362		\$ 4,561,362	\$ 0
TCC Foundation	\$ 2,000,000		\$ 0	\$2,000,000 total (25% for this project \$500,000)
Total	\$		\$ 6,061,362	\$ 2,000,000

Phase I

The first phase of the WEI was constructed with a \$4.5 million investment from the State of Florida, and a \$1.5 million grant from the EDA to construct the initial building and provide infrastructure for future growth. Initially, the WEI established an oyster aquaculture program in an effort to revive the oyster industry. **In just two years since starting the program, Wakulla County is now a national leader in oyster production.**

While the College developed Phase I of the Institute to support the revitalization of industries that collapsed as a result of the Deepwater Horizon oil spill, TCC's work in leading economic

development activity in Wakulla County spawned new opportunities and initiatives that can only be completed with the addition of the WEI Unmanned Vehicle Systems Center of Excellence.

WEI Unmanned Vehicle Systems Center of Excellence

The College seeks \$2 million (\$1.5 million from the Triumph fund, \$500,000 from the TCC Foundation) to support the development of the WEI Unmanned Vehicle Systems Center of Excellence. The WEI Unmanned Vehicle Systems Center of Excellence will be an economic driver for Wakulla County and the surrounding region.

The table below displays the budget for Phase II of the Institute WEI Unmanned Vehicle Systems Center of Excellence.

Budget for Unmanned Vehicle Systems Center of Excellence

Equipment (Drones)	\$860,000
Program equipment and materials	\$210,000
Salaries	\$450,000
Program Consultants	\$130,000
Contingency of 10%	\$200,000
TCC indirect	\$150,000
<i>Total WEI Unmanned Vehicle Systems Center of Excellence</i>	<i>\$2,000,000</i>

Please see Appendix B for Budget Narrative

The development of education and workforce training programs will begin immediately. With the planned education and workforce training programs, the Triumph funds are necessary to ensure there is sufficient equipment and instruction. Leveraging a record of sound financial and environmental stewardship, the proposed WEI Unmanned Vehicle Systems Center of Excellence provides the opportunity for the College to grow its operations at WEI and catalyze transformational growth along the Gulf Coast.

Long-term Impact

The WEI has already created 100 new businesses and 150 new employees in sustainable seafood farming. The proposed training expansion will enhance those initial impacts even further and leverage evolving macroeconomic trends in the Florida aerospace and transportation sectors.

The *Apalachicola Regional Planning Council* conducted a REMI economic analysis, forecasting that by project year 6 over 245 direct and indirect jobs will be created and \$12.1 million added to the GDP of the area including Wakulla, Gulf and Franklin Counties as a result of the WEI Unmanned Vehicle Systems Center of Excellence. The projected return on the Triumph fund investment is \$8.1 for every \$1 funded.

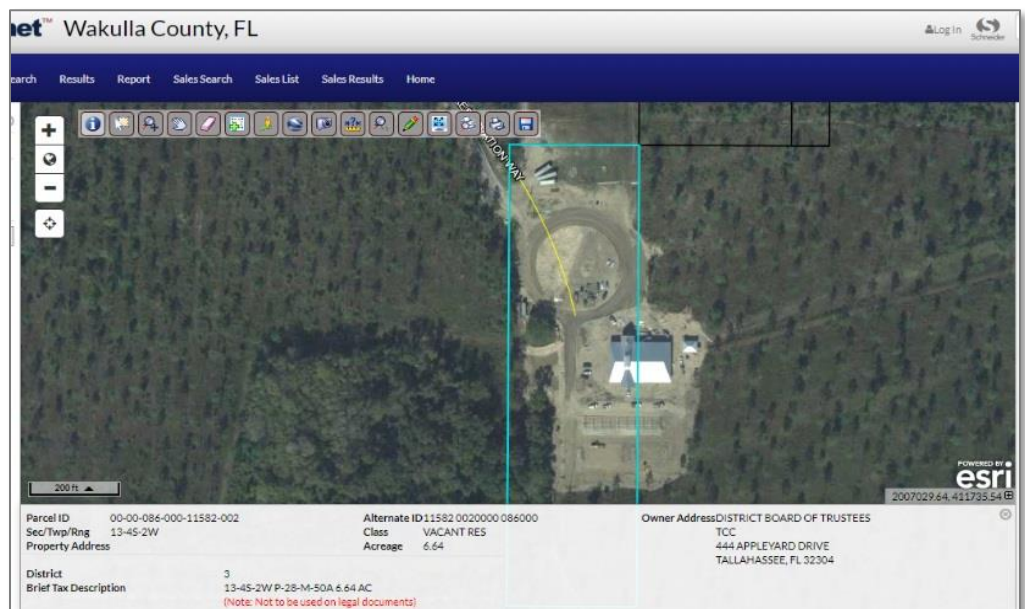
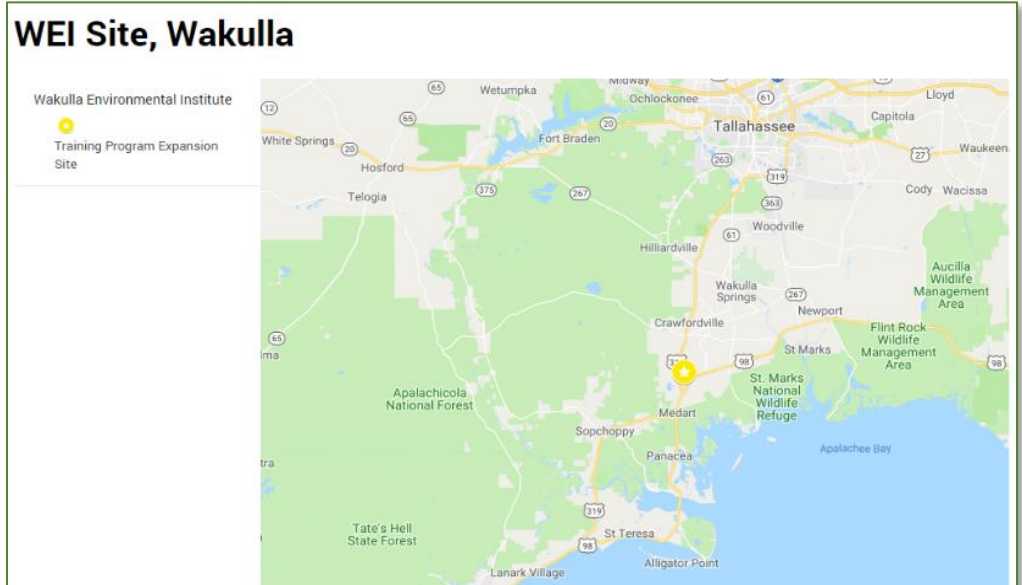
Attachment Q: Addendum for Workforce Training Proposals, Question 1 A

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.

WEI is located in Wakulla County.

WEI provides the region with new industries, employment opportunities and education programs that revolve around the three equal spokes of education (job training), conservation and recreation. The WEI Unmanned Vehicle Systems Center of Excellence will be house at WEI and focus on:

- Aerial drone technology and maintenance;
- Submersible drone technology and maintenance.



Attachment R: Addendum for Workforce Training Proposals, Question 1 B

1. *Increase students' technology skills and knowledge:*

All education and workforce training programs will increase technology skills and knowledge. The curricula developed at the Center will build on the robust portfolio of STEM programs currently operated by the College.

2. *Encourage industry certifications:*

One of the major goals of the educational programming that will be offered at WEI's Unmanned Vehicle Systems Center of Excellence is to increase students' marketable skills and promote the attainment of industry-recognized credentials. These credentials are imbedded in the educational programming and are part of the curricula. In addition, all of the education and workforce training programs will lead to either an AS degree, a College Credit certificate (CCC), a Post-Secondary Adult Vocational Program (PSAV) certificate, and or a Continuing Workforce Education (CWE) certificate.

3. *Strengthen career readiness initiatives:*

The purpose of all education and workforce training programs offered through the Unmanned Vehicle Systems Center of Excellence is to lead to jobs and to ensure that students are career-ready upon completion. All of these programs are applied training programs, not theoretically-based. Students are taught skills that they will need in order to be successful in their chosen careers.

4. *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):*

There are many ways that TCC's WEI can encourage students to pursue postsecondary education. One of the most effective ways is through dual enrollment. The College maintains 14 active dual enrollment agreements with the Gadsden, Leon, Liberty and Wakulla County school districts. It has also developed agreements with nine private and charter schools and works directly with home school students. Dual enrollment accelerates students to certificates and degrees and saves them money by allowing them to take classes at TCC while they are still attending high school.

Students can choose two different dual enrollment tracks:

Early Admission Dual Enrollment Track

Early Admission allows eligible secondary students to enroll in a postsecondary institution on a full-time basis (minimum of 12 credit hours and maximum of 15 credit hours) in courses that are counted toward a high school diploma and college degree.

Career Dual Enrollment Track

Career dual enrollment allows students to earn a high school diploma and complete a career-preparatory certificate program with elective credit.

As reported by the [Tallahassee Democrat](#) on May 4, 2017, Sherry Lohmeyer, assistant principal at Wakulla High School, said she's seeing more students attempting to earn their high school diploma and AA degree at the same time. Six Wakulla high students received their TCC degrees at the same time that they graduated from high school last year. "We are a rural county and a lot of our families benefit from this economically," Lohmeyer said. "It's a good fit because many of our students want to go to TCC when they graduate high school."

Through its dual enrollment program, TCC advisors work closely with schools, guidance counselors, teachers and administrators. Further, access to the WEI and its programming will supplement an already successful dual enrollment option and provide additional accelerated mechanisms to degrees and industry-recognized credentials for area high school students.

Attachment S: Addendum for Workforce Training Proposals, Question 1 E

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

- *Economic recovery,*

The economic analysis performed projects that as a result of the WEI Training Center of Excellence, over 245 direct and indirect jobs will be created that will generate \$12.1 million of new GDP by project year 6. The GDP-to-Project Cost ROI for the project is **\$8.1:\$1**. Therefore, for every dollar Triumph invests in this project, TCC's WEI Training Center of Excellence will generate over \$8 of return into the regional economy. The project is projected to have a transformative impact on the region and will support generations of workers.

- *Economic Diversification,*

The WEI Training Center of Excellence will offer education and workforce training programs that support vastly different fields and access to many different career options. Further, the training programs that are proposed all lead to careers with a higher annual mean wage than the current average earned in Wakulla County.

- *Enhancement of the disproportionately affected counties,*

While the WEI Training Center of Excellence is located in Wakulla County, it is creating new jobs and industries for the Gulf Coast and Northwest Florida. It has established regional partnerships with industry and universities. All of the Institute's education and workforce training programs address workforce and industry needs for the entire region.

- *Enhancement of a Targeted Industry.*

This Center of Excellence training program will develop the Advanced Transportation industry in the East Triumph Region, which is associated with high-skill, high-wage jobs.

Attachment T: Addendum for Workforce Training Proposals, Questions 2
A,B,C,

Question 2 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 supplements but not supplant existing funding sources.

WEI has already established an unmanned aerial system training program consisting of:

- FAA 107 Training
- Intro to Editing
- Intro to Ground Flight School
- How to Build a Drone

Our goal is to extend the current programs being offered and develop an Associates of Science degree in Unmanned Aerial Systems (UAS A.S.), as well as additional certificate-based programs. This Unmanned Vehicle Systems Center of Excellence will afford the opportunity to offer classes more regularly and meet growing demands for these programs.

Question 2 B

Indicate how the training will be delivered (e.g., classroom-based, computer based, other).

Training will be delivered through a combination of hands-on field work, lab work and classroom-based learning. All training programs will be available at the WEI Training Center of Excellence.

Question 2 C

Identify the number of anticipated enrolled students and completers.

It is anticipated that the Institute will enroll 41 students a year and produce 246 industry-recognized certificates and degrees by project year 6.

Attachment U: Addendum for Workforce Training Proposals, Questions 2 D

Indicate the length of the program

Proposed Program	Length of Program
Transportation	
Unmanned Vehicle Systems Operations	6 Semesters
Unmanned Vehicle Systems (Drones, including Submersibles with Sub-category focus on Utilities)	4 Weeks
Unmanned Vehicle Systems: Air-based commercial applications ²	4 Weeks
Unmanned Vehicle Systems: Land-based commercial applications	4 Weeks
Unmanned Vehicle Systems: Sea-based commercial applications	4 Weeks

² The Air, Land, and Sea-based applications will be provided as sub-disciplines of the overall Unmanned Systems Training.

Attachment V: Addendum for Workforce Training Proposals, Questions 2 E

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

This project will be sustained as all other academic and workforce programs are sustained at TCC, through a combination of:

- Tuition;
- Students fees;
- Activity fees;
- Support from the TCC Foundation;
- Contracts and grants;
- State funding; and
- Corporate partnerships.

Attachment W: Addendum for Workforce Training Proposals, Question 2 F

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

Proposed Program	Program Designation <ul style="list-style-type: none">AA or AS DegreeContinuing Workforce Education (CWE)
Transportation	
Unmanned Vehicle Systems Operations	AS
Unmanned Vehicle Systems (Drones, including Submersibles with Sub-category focus on Utilities)	CWE
Unmanned Vehicle Systems: Air-based commercial applications	CWE
Unmanned Vehicle Systems: Land-based commercial applications	CWE
Unmanned Vehicle Systems: Sea-based commercial applications	CWE

Attachment X: Addendum for Workforce Training Proposals, Question 2 G

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

To support the College's efforts to implement the proposed projects for WEI, the TCC Foundation established a local committee with the singular goal of identifying \$2 million in private funding that will provide a sustainable pool of resources for the next phase. These funds will be placed in an endowment, to be held in perpetuity, which will provide critical dollars annually that supports innovative programs for the Institute, scholarships to students from Wakulla County and facility enhancements as programs grow at the campus. Twenty-five percent of the funds raised will be used for this project.

Appendix A: Economic Impact Forecast from Apalachee Regional Planning Council

Context

This memorandum presents outputs from a REMI model scenario of the proposed TCC Unmanned Aerial Systems Training project. The described scenario assesses impacts of an initial ~\$5 Million investment in terms of additional employment, gross domestic product, and personal income brought about by occupational training and resultant higher employment ¹.

Of note – *these outputs do not include positive impacts to the economy brought about by project construction, only the resulting economic activity.* Were construction costs to be included, the impacts to employment, value added (GDP), and personal income shown would be higher.

Table of Outputs

The below table contains outputs describing average improvements in employment, value added, and personal income at year 6 of the project horizon.

Output	Average Change
Employment	+ 146
Gross Domestic Product	+ \$ 7,021,867
Personal Income	+ \$ 5,203,357

Discussion

The above table indicates that positive shocks to the local economy, brought about by an uptick in new hires enabled by this training, will produce ~146 new forms of Employment, \$7 Million of additional GDP, and \$5.2 Million of additional Personal Income. Thus, the project will have a positive impact on the East Triumph (Franklin, Gulf, Wakulla) economy during the period described. The Return on Investment, in terms of additional otherwise unrealized GDP to project investment, will be \$1.4 to 1 as an average of the first six years' implementation. The cost per job will be \$34,184.

¹ Via Mean-Delta ($\mu \Delta$), or average difference between the control and simulation over the variable-input time period.

Methodology & Variable Inputs

For this scenario, input values were provided by TCC, which indicates that as a consequence of \$5,000,000 used to launch this program, direct, indirect, and induced employment will result.

Project Investment: EDA	\$5,000,000
----------------------------	-------------

Model inputs consist of 75% local job placement of trainees each year of training. Inputs are as follows:

Input – Trainee Employment

	2020	2021	2022	2023	2024	2025
Variable 1 Inputs - Employment Education	1.5	1.5	1.5	1.5	1.5	1.5

Outputs – Trainer Employment

Variable 1 - UAV Trainers								Averages, Years 1-6	
	Employment	1.64	1.67	1.67	1.67	1.66	1.65	1.7	
	Personal Income	16.15	17.66	21.22	24.94	28.58	32.03	\$	23,428.17
	GDP	23.92	25.66	26.51	26.80	26.79	26.63	\$	26,052.00

Inputs – Occupational Training

Variable 2 Inputs - Occupational Training							
	2017	2020	2021	2022	2023	2024	2025
Unmanned Arial Systems Operation	50	50	50	50	50	50	50

Outputs – Occupational Training

								Averages, Year 1-6	
Variable 2 - Occupational Training	Employment	0.05	0.17	0.34	0.54	0.75	0.96		0
	Personal Income	-17.65	-39.69	-65.94	-94.78	-126.03	-161.59	\$	(84,277.83)
	GDP	4.23	11.30	20.29	30.32	40.69	50.87	\$	26,281.50

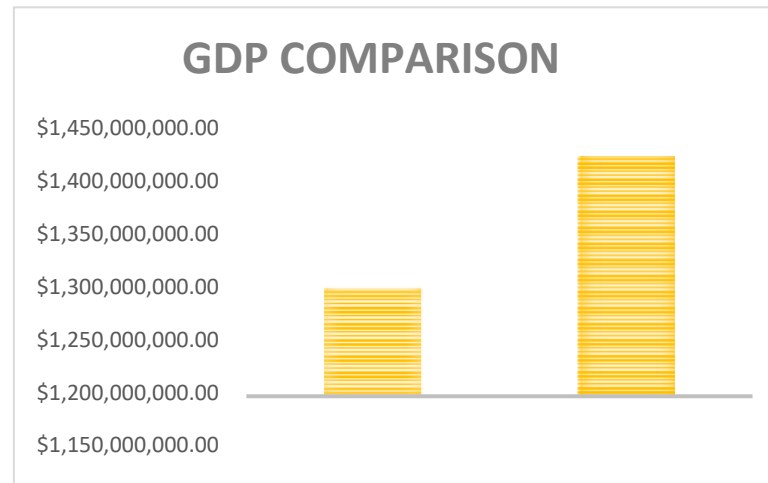
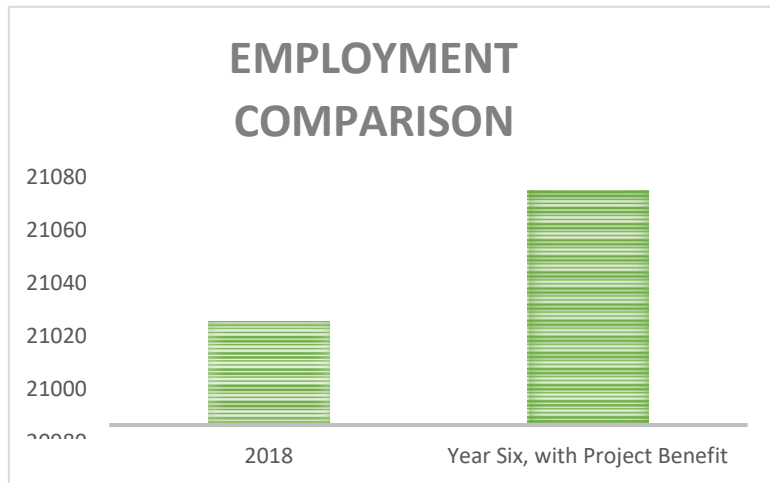
Inputs – Resultant UAV Employment

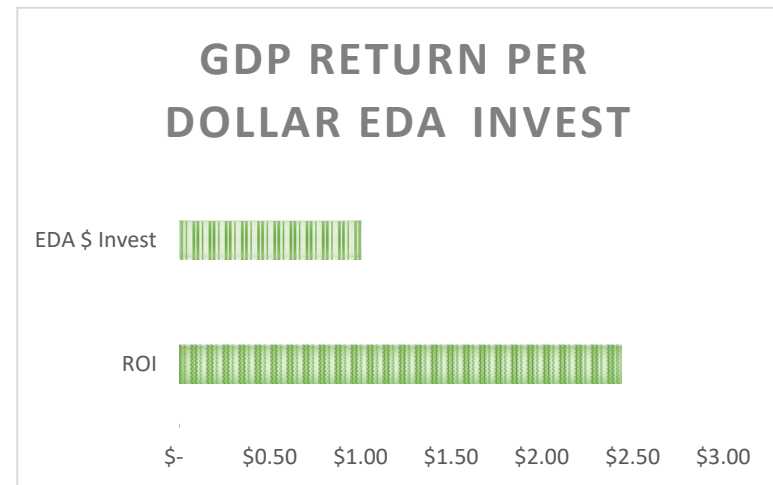
		2017	2021	2022	2023	2024	2025
Variable 3 Inputs - New Employment	Unmanned Arial						
	Systems Operation	37.5	75	112.5	150	187.5	

Outputs – Resultant UAV Employment

							Year 1-6 Averages
Variable 3 - UAV Employment	Employment	46.10	94.37	143.78	193.49	242.94	144
	Personal Income	1317.58	2955.37	4946.23	7242.75	9859.11	\$ 5,264,206.80
	GDP	2091.62	4388.28	6846.95	9420.88	12099.95	\$ 6,969,533.80

The following charts illustrate augmented employment, GDP, and personal income at year six of the project, compared to at year 1.





The GDP to project investment ROI is 1.4 to 1. The cost per job as an average of direct and indirect employment created over the first six years will be \$34,184.

The following attachment provides a spreadsheet overview of inputs and outputs from the REMI model that was used to compile this memorandum's take-aways.

TIC Training Program 2: Unmanned Vehicle Systems Operations Training										
Project Risk	Variable	2019	2020	2021	2022	2023	2024	2025		
\$ 3,010,538.88	Variable 1 - UAV System	Employment	1.64	1.67	1.67	1.67	1.66	1.61	1.7	* Note, variable inputs 1-5 were run as a combined forecast; therefore, the output are identical. This should be added together as it is a reflection of all those affecting the Variable's output/forecast.
		Personal Income	18.15	17.66	21.22	24.84	28.18	32.01	\$ 26,638.17	
		GDP	23.82	25.46	24.51	26.80	28.79	26.41	\$ 26,032.00	\$ 3,010,538.88
	Averages									
Variable 2 - Operational Training	Employment		0.05	0.17	0.34	0.54	0.75	0.90	0	* Note, variable inputs 1-5 were run as a combined forecast; therefore, the output are identical. This should be added together as it is a reflection of all those affecting the Variable's output/forecast.
		Personal Income	-17.65	-39.49	-43.84	-44.78	-426.03	-145.54	\$ (84,077.83)	
		GDP	4.23	11.30	20.29	35.32	45.69	58.87	\$ 26,382.20	\$ 10,676,156.58
	Averages									
Variable 3 - UAV Employment	Employment		40.50	64.37	145.78	155.48	242.84	243.84	1.64	* Note, variable inputs 1-5 were run as a combined forecast; therefore, the output are identical. This should be added together as it is a reflection of all those affecting the Variable's output/forecast.
		Personal Income	137.58	295.37	494.23	724.75	909.41	969.41	\$ 5,264,936.80	
		GDP			2091.62	4388.28	6846.95	9020.88	10099.41	\$ 4,948,533.80
	Averages									
	2018	2019	Sum(Averages_2023)		Sum of Averages by 2025, All Variables					
Employee Data, M40 Control	Frederick	5281.05	5458	Employment 2025		240.55		Net Average Employment		1.64
	Gulf	4002.59	4004.26	Personal Income		9,758,541.00		Net Average Personal Income		\$ 5,682,107.11
	Wetzel	4651.66	955.464	GDP		12,177,488.00		Net Average GDP		\$ 7,921,847.55
				Net GDP 2025 to Project Cost		3.4		Avg GDP per Project Cost		1.4
GDP Rate, M40 Control	Frederick	321689.886	383091.865	Employment % 2018		1.2%		Employment % 2018		0.7%
	Gulf	389887.472	468622.813	Employment % 2025		1.2%		Employment % 2025		0.7%
	Wetzel	542158.458	562429.576	GDP % 2018		1.0%		GDP % 2018		0.6%
				GDP% 2025		0.9%		GDP% 2025		0.5%
				Cost per job		\$		34,186.26		

[illegible]

Context

This memorandum presents outputs from a REMI model scenario of the proposed TCC Unmanned Aerial Systems Training project. The described scenario assesses impacts of an initial ~\$1.5 Million investment in terms of additional employment, gross domestic product, and personal income brought about by occupational training and resultant higher employment ¹.

Of note – *these outputs do not include positive impacts to the economy brought about by project construction, only the resulting economic activity.* Were construction costs to be included, the impacts to employment, value added (GDP), and personal income shown would be higher.

Table of Outputs

The below table contains outputs describing average improvements in employment, value added, and personal income at year 6 of the project horizon.

Output	Average Change
Employment	+ 146
Gross Domestic Product	+ \$ 7,021,867
Personal Income	+ \$ 5,203,357

Discussion

The above table indicates that positive shocks to the local economy, brought about by an uptick in new hires enabled by this training, will produce ~146 new forms of Employment, \$7 Million of additional GDP, and \$5.2 Million of additional Personal Income. Thus, the project will have a positive impact on the East Triumph (Franklin, Gulf, Wakulla) economy during the period described. The Return on Investment, in terms of additional otherwise unrealized GDP to project investment, will be \$8.12 to 1 as an average of the first six years' implementation. The cost per job will be \$10,255.

¹ Via Mean-Delta ($\mu \Delta$), or average difference between the control and simulation over the variable-input time period.

Methodology & Variable Inputs

For this scenario, input values were provided by TCC, which indicates that as a consequence of \$1,500,000 used to launch this program, direct, indirect, and induced employment will result.

Project Investment: TRIUMPH	\$1,500,000
--------------------------------	-------------

Model inputs consist of 75% local job placement of trainees each year of training. Inputs are as follows:

Input – Trainer Employment

	2020	2021	2022	2023	2024	2025
Variable 1 Inputs - Employment Education	1.5	1.5	1.5	1.5	1.5	1.5

Outputs – Trainer Employment

								Averages, Years 1-6	
Variable 1 - UAV Trainers	Employment	1.64	1.67	1.67	1.67	1.66	1.65		1.7
	Personal Income	16.15	17.66	21.22	24.94	28.58	32.03	\$	23,428.17
	GDP	23.92	25.66	26.51	26.80	26.79	26.63	\$	26,052.00

Inputs – Occupational Training

		2017	2020	2021	2022	2023	2024	2025
Variable 2 Inputs - Occupational Training	Unmanned Arial							
	Systems Operation	50	50	50	50	50	50	50

Outputs — Occupational Training

								Averages, Year 1-6	
Variable 2 - Occupational Training	Employment	0.05	0.17	0.34	0.54	0.75	0.96		0
	Personal Income	-17.65	-39.69	-65.94	-94.78	-126.03	-161.59	\$	(84,277.83)
	GDP	4.23	11.30	20.29	30.32	40.69	50.87	\$	26,281.50

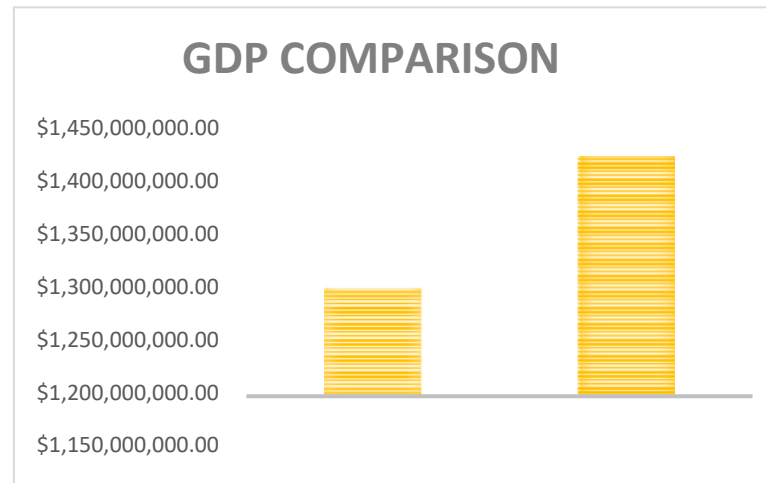
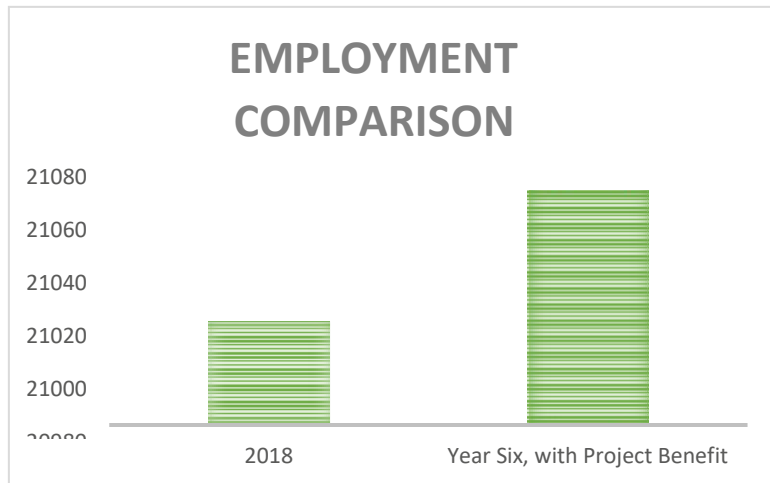
Inputs — Resultant U A V Employment

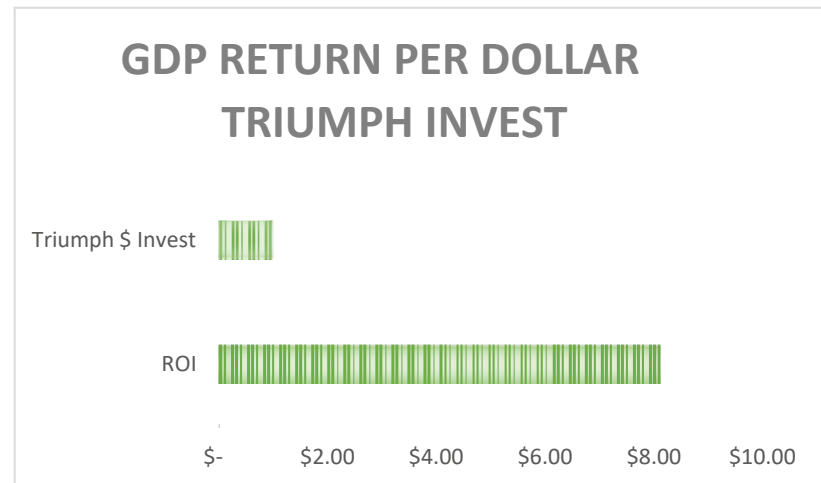
		2017	2021	2022	2023	2024	2025
Variable 3 Inputs - New Employment	Unmanned Arial Systems Operation		37.5	75	112.5	150	187.5

Outputs — Resultant U A V Employment

							Year 1-6 Averages
Variable 3 - UAV Employment	Employment	46.10	94.37	143.78	193.49	242.94	144
	Personal Income	1317.58	2955.37	4946.23	7242.75	9859.11	\$ 5,264,206.80
	GDP	2091.62	4388.28	6846.95	9420.88	12099.95	\$ 6,969,533.80

The following charts illustrate augmented employment, GDP, and personal income at year six of the project, compared to at year 1.





The GDP to project investment ROI is 8.12 to 1. The cost per job as an average of direct and indirect employment created over the first six years will be \$10,255.

The following attachment provides a spreadsheet overview of inputs and outputs from the REMI model that was used to compile this memorandum's take-aways.

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Location 1 (Water & Power)					1.5	1.5	1.5	1.5	1.5	1.5
Location 2 (Electricity & Water)										
Location 3 (Water & Power)										
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Location 65 (Water & Power)										

		2020	2021	2022	2023	2024	2025
Personal Income	Franklin		615,263	5436,645	2,261,689	3501,173	4757,424
	Gulf		369,676	773,023	1,260,849	1868,677	2513,35
	Wakulla		352.0	765,706	1,273.89	1872,899	2568,331

Appendix B: Budget Narrative

Budget for Air = \$484,598

Unmanned Aerial Vehicles

DJI- \$335,998

DJI Matrice Platform - \$256,998 (3)

1. Methane Gas Detection for Utilities Price: ea. @\$35,166.
2. FLIR Price: ea. @ 10,500
3. Telecommunications: ea. @ \$15,000
4. Agriculture: ea. @ \$15,000
5. Utilities: ea. @ \$10,000

DJI Mavic 2 Pro Platform - \$17,000

1. Mavic 2 w/ goggles for Training: ea. @ \$1700.00 (10)

DJI Inspire - \$52,000

1. Inspire 2 Premium: ea. @ \$13,000 (4)

DJI Developer Tools

Multiple \$10,000

YUNEEC - \$39,000

1. Thermal H520-CGOET ea. @ \$5,000 (4)
2. Typhoon H Plus ea. \$1900 (10)

PARROT - \$55,500

1. FLIR ea. @ \$1500 (5)
2. Fixed Wing for Agriculture ea. @ \$4500 (10)
3. Anafi ea. @ \$600 (5)

DRONE BUILD KITS - \$25,000

\$500 ea (50)

AUTEL - \$29,100

1. EVO - \$1200.00 (8)
2. Kestrel Fixed Wing - \$6500 (3)

Land Budget \$200,000

1. 150 Build Kits : ea. @ \$1,000
2. 25 Land Rover Drones - \$2,000

Sea Budget \$175,402

1. Average cost of Submersible - \$6,000 (10)
2. Submersible Build Kit – ea. @ \$3,000 (30)
3. Sensors - \$25,402

Total Drone Equipment Budget = \$860,000

Program Consultants - \$130,000

Software- \$100,000

Curriculum development \$60,000

Salary- \$450,000

1. 2 Professors @ \$75,000 a year for 2 years
2. 1 Program Director @\$75,000 for 2 years

Storage Facility to House Drones -\$50,000

Contingency of 10%- \$200,000

TCC Indirect Costs - \$150,000

Total-\$2,000,000