

Triumph Gulf Coast Pre-Application Form

Name of Individual/Entity/Organization: Gulf Coast State College

Proposal Title: Sea-X

Amount of Triumph Funds Requested: \$2,561,226

Total Estimated Project Cost: \$5,061,226

Brief Description of Background of Individual/Entity/Organization: Serving the community since 1957, Gulf Coast State College was the first public two-year institution to open after the 1957 Florida Legislature established a statewide network of community colleges. Located in Panama City on Florida's Emerald Coast, Gulf Coast is one of 28 public colleges in the state, all located within commuting distance of 96 percent of the population.

Throughout its history, the College has been committed to providing a first-class education to the students in its service district. This commitment is evidenced by the excellent performance of GCSC graduates who transfer to state universities as well as by consistently high grade point averages and graduation rates that are higher than the Florida college system averages. The College currently serves more than 11,000 credit, non-credit, workforce, and/or continuing education students (enrollment data taken from Summer 2016 – Spring 2017 semesters).

Contact Information:

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Name of co-applicants, partners or other entities, organizations that will have a role in the proposed project or program: Bay, Escambia, Franklin, Wakulla, Walton, Santa Rosa, Okaloosa, and Gulf District Schools; CareerSource Gulf Coast and Escarosa, IHMC, Naval Surface Warfare Center Panama City, NOAA, Pensacola Perdido Bay Estuary Program (PPBEP), Choctawhatchee Bay Estuary Program (CEP), St. Andrew/St. Joseph Bays Estuary Program (SASJBEP) and Florida Fish and Wildlife (FWC) and the Marine Technology Society.

REQUIRED EXECUTIVE SUMMARY:

The 4+2 (high school and state college) career program in automation technician training and ocean robotic deployment, ocean natural resources tech support, and ocean technology will generate skilled high school students coupled into the State College pathway and emerging with career options as advanced technicians in marine resource development. Trained high school graduate automation technicians will be able to support ocean natural resource companies (aquaculture, water quality, and fisheries), coastal science organizations (academic, state, county) and technology and entrepreneurial companies, or further their education into a 2 or 4-year college partner, or feed into active military programs in autonomous systems with above average skills. Simultaneously the State College level automation technology education allows transitioning veterans to position themselves into these new automation and blue

economies. Gulf Coast State College's Sea-X, and the 8 affected county high school partners will identify which courses/programs exist and additions needed to support the technician training for automation to recruit, plant and support an US aquaculture capability in *all of NWFL*. Ocean Natural Resources and blue economy careers conducted between all partners can emerge as the workforce development proceeds. Integrating industry standards and workplace competencies into the curriculum including 21st century skills (<http://www.p21.org>) and employability skills will allow for greater workforce sophistication in these vibrant market areas of aquaculture, automation, robotics, remote operations and ocean tech.

New technologies will be advanced concurrent with the technician training. Technologies such as advanced artificial reefs, aquaculture monitoring, autonomous boats, mapping and surveying technologies for coastal bays and fish populations will all allow for experiential education in ocean and aquaculture automation technology. The Naval Surface Warfare Center in Bay County will use their Education Partnership Agreement with GCSC to partner with this technician training effort by donating automation technology resources and other equipment.

The program will also emphasize training and competency in Remote Technologies and Operations using networking, education automation, and robotics and remote field deployments to provide a leadership opportunity for instruction, learning and operating in the new realities of post Covid-19 pandemic enterprise operations. Technician skills acquired in automation, ocean, robotics, mobile and remote enterprise technologies are transferrable to many other industries and graduates of the program will have broad career options and resiliency in long term employment.

This program will transform Northwest Florida's coast and its ocean resources through training technicians to maintain the technologies that help maintain aquaculture pens and coastal structures, advance cutting edge ocean product development, remote enterprise operations, regional research programs and spur on next gen aquaculture entrepreneurial local businesses.

- i) The amount of funds being sought from Triumph Gulf Coast

The duration of Project is for 4 Years and the amount of funds being sought from Triumph Gulf Coast: \$2,561,226.

- ii) The amount and identity of other sources of funds for the project or program

Other sources of matching funds include Naval Surface Warfare Center (3 unmanned subsurface vehicles): \$ 1,000,000; a GCSC match of \$300,000, Other Sources \$1,200,000 include (NOAA, FWC, 3x NWFL Estuary Programs, IHMC). Does not yet include in kind matches from county school districts- will be included in proposal. The Sea-X project has considerable other matching funds to be used towards distributed facilities, equipment, operations, and staff across the 8 county NWFL region. These matching funds will be disclosed in the overall project budget submitted with the full proposal upon request. The anticipated request to Triumph Gulf Coast for the overall project execution is \$2,561,226 over 4 years.

- iii) The location of the project or program

Location of the project or program: 8 Affected NWFL Counties (Bay, Escambia, Franklin, Wakulla, Walton, Santa Rosa, Okaloosa, and Gulf), Centered at Bay County, Gulf Coast State College.

- iv) Summary description of the proposed program, including how the program will be transformational and promote economic recovery, diversification, and enhancement of the disproportionately affected counties

Sea-X is an 8 County-Wide Technology Education ecosystem development program with a focus on ocean automation technician training supporting the development of NWFL counties aquatic resources and aquaculture. The realized program supports aquaculture in any location in NWFL and to help assist in the sustainability of fisheries and security of the food supply chain. Certifications will be needed for the aquaculture and automation industry in three thematic areas: 1. Shore Side: (distribution, logistics, safety, processing, waste disposal, IT, engineering, drafting); 2. Water Side (AUV Mission Planning, Testing/Training, Command and Control, Deploy/Recover, Repair Warehouse and Data) and 3. Supporting Research. Sea-X will address expansion, support, and long term maintenance technologies for American aqua-farming for fin fish in the 8 counties of NWFL. Other sectors benefiting from automation excellence in the NWFL region include: fisheries, military, environmental science, tourism and waterway transportation. Educational beneficiaries include; teachers through summer enrichment, technicians locally sourced, and High Schools and 8 of the High School districts linked into a novel High School Network. Future Spin Outs anticipated include a Robotic Service and Maintenance Program and Small/Medium Sized Electric Vehicle Repair industry.

- v) A summary of the timeline for the proposed project or program

Anticipated Timeline:

Phase I- Development and implementation of maritime automation instructional content and distributed labs for Shore Side: (distribution, logistics, safety, processing, waste disposal, IT, engineering, drafting); Water Side (AUV Mission Planning, Testing/Training, Command and Control, Deploy/Recover, Repair Warehouse and Data) and Supporting Research. (2022)

Phase II- Recruitment and implementation of maritime automation instructional content across distributed 8 counties in the NWFL affected region (2023-2024)

Phase III- Consortia building in maritime automation and maritime Advanced Technology Accelerator (training, development, and production) co-located at sites along 8 counties in NWFL (2025)

Please Select the Proposal’s Eligibility Category(s)

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.

Updated 5/1/18

2

Please Select the Priorities this Proposal's Outcomes will Achieve

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.