

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

Triumph Gulf Coast, Inc. (“Triumph Gulf Coast”) has created a pre-application process to provide initial consideration of eligibility for potential ideas of projects or programs that may seek an award of funding. Applicants are required to participate in the pre-application process.

Notwithstanding the response from Triumph Gulf Coast on the pre-application form, an Applicant may still elect to submit an application.

### **APPLICANT INFORMATION**

**Name of Individual/Entity/Organization:** Florida State University

**Proposal Title:** Accelerating Economic Development in the Florida Panhandle: Florida State University’s Collaborative Center for Manufacturing & Aerospace Technology, Training & Education- *C<sup>2</sup>MAT<sup>2</sup>E*  
(Pronounced “Sea Mate”)

**Amount of Triumph Funds Requested:** \$100,000,000

**Total Estimated Project Cost:** \$300,000,000

**Brief Description of Individual/Entity/Organization:** Florida State University (FSU) is a R-1 Doctoral granting institution and a member of the State University System of Florida (SUS). The university has two comprehensive campuses in Florida: Tallahassee and Panama City. The College of Medicine has regional campuses across the state, including Pensacola.

### **Contact Information**

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**Proposed Project:** We anticipate attracting and partnering with a variety of Tier 1-3 original equipment manufacturers (OEMs) and suppliers and other entities across northwest Florida in the eight-county area who will increase their footprint in the targeted region. Based on our team’s expertise, existing collaborations, and the significant resources and capacity added through this project we expect a very robust ecosystem of partners. The following is a representative list of potential educational, US Department of Defense (DOD), industry, and community partners:

<b>FSU Colleges and Research Centers</b>	<ul style="list-style-type: none"><li>● Florida Center for Advanced Aeropropulsion (FCAAP)</li><li>● High-Performance Material Institute (HPMI)</li><li>● FSU Learning Systems Institute</li><li>● FAMU-FSU College of Engineering ● College of Arts and Sciences</li><li>● College of Applied Studies and FSU Panama City</li><li>● College of Business ● Jim Moran College of Entrepreneurship</li></ul>
<b>State Public School Districts</b>	<ul style="list-style-type: none"><li>● Bay County Public Schools ● Escambia County Public Schools</li><li>● Santa Rosa County Public Schools ● Okaloosa County Public Schools</li><li>● Walton County Public Schools ● Gulf County Public Schools</li><li>● Franklin County Public Schools ● Wakulla County Public Schools</li></ul>
<b>Florida College System and Technical Colleges</b>	<ul style="list-style-type: none"><li>● Tallahassee Community College ● Gulf Coast State College</li><li>● Northwest Florida State College ● Pensacola State College</li><li>● Community College of the Air Force ● Haney Technical College</li></ul>

<b>Defense &amp; Military Bases</b> <b>Government Agencies</b>	<ul style="list-style-type: none"> <li>● Eglin Air Force Base ● Tyndall Airforce Base</li> <li>● Naval Air Station Pensacola ● NASA (Kennedy &amp; Marshall Space Flt Ctr)</li> <li>● US Naval Surface Warfare Center, Panama City Division</li> </ul>
<b>Industry (Large, Mid-Small)</b>	<ul style="list-style-type: none"> <li>● Danfoss Turbocor ● Lockheed Martin ● Northrup Grumman ● Boeing</li> <li>● Siemens ● Solvay ● Keysight ● Spectral Energies ● Aerosonic ● M4</li> <li>● ULA ● SpaceX ● Blue Origin</li> </ul>
<b>Economic Development Organizations</b>	<ul style="list-style-type: none"> <li>● Bay Economic Development Alliance ● Florida's Great Northwest</li> <li>● Bay Defense Alliance ● Enterprise Florida ● CareerSource Florida</li> <li>● Department of Economic Opportunity ● FloridaMakes</li> <li>● Space Florida ● Other EDA's across Northwest Florida</li> </ul>

**REQUIRED EXECUTIVE SUMMARY**

In a maximum of two (2) pages, please describe the proposed project or program and anticipated outcomes including (i) the amount of funds being sought from Triumph Gulf Coast; (ii) the amount and identity of other sources of funds for the proposed project or program; (iii) the location of the project or program; (iv) summary description of the proposed program, including how the program will be transformational and promote economic recovery, diversification, and enhancement of the disproportionately affected counties, and (v) a summary timeline for the proposed project or program.

- (i) **Amount of Funds:** Florida State University respectfully requests a catalyst investment of \$100 Million from Triumph Gulf Coast Inc.
- (ii) **Other Sources of Funding:** Requested Triumph funding will be matched in part by state, federal, and private contracts and grants; state and federal budget allocations; private donations; student tuition and fees; and FSU funding. The anticipated total match is at least \$200 Million in the first 10 years. C<sup>2</sup>MAT<sup>2</sup>E impact is well beyond 10 years and the ROI will be an additional 3x-5x.
- (iii) **Location:** The initial location will be in Bay County; however, we will partner with other State University System (SUS) institutions, state colleges and K-12 Districts to locate workforce and training facilities throughout the eight-county Triumph Gulf Coast area.
- (iv) **Summary of the program:** See below.
- (v) **Timeline:** Project will begin in the academic semester following funding and span 10 years to mature to robust self-sustainability. The regional impact of C<sup>2</sup>MAT<sup>2</sup>E will continue into the foreseeable future.

**A Proposal to Accelerate Economic Development in the Florida Panhandle Florida State University's Collaborative Center for Manufacturing & Aerospace Technology, Training & Education- C<sup>2</sup>MAT<sup>2</sup>E**

**Background & Motivation** - US dependency on foreign suppliers for vital components is a major security concern and represents a significant threat to our nation's economic and technological leadership position. The US leadership in advanced defense systems has been crucial for national and global security, but is increasingly challenged on the world stage. The pandemic highlighted compromised domestic manufacturing capabilities and the war in Ukraine underscores the importance of maintaining robust and advanced defense capabilities as an effective deterrent.

To address supply-chain and domestic manufacturing shortfalls, OEMs and suppliers are accelerating vertical integration and seeking domestic sources – if they can be found. Modernizing manufacturing systems and processes is essential to this effort, and must utilize cutting-edge technologies such as advanced aerospace materials and additive manufacturing. Furthermore, the US DOD has prioritized developing superior hypersonic systems for defense against near-peer adversaries. Hypersonic flight allows for quick response to time-critical situations, such as imminent missile attacks on deployed forces. Such capabilities are also increasingly sought by

potential adversaries.

Florida is one of the nation's fastest-growing states with significant growth in the Panhandle. Florida's manufacturing and aerospace industries need qualified workers, but have been unable to attract the next generation to these high-quality jobs in 21st century manufacturing that require strong STEM backgrounds (4 of 5 students in China choose STEM, compared to 1 of 10 in the US). There is a clear need and a unique opportunity to help develop a thriving innovation economy in the Panhandle region focused on the development of advanced manufacturing and aerospace defense technology. The proposed project will leverage the world-class talent, resources, and expertise at FSU, a top twenty public research and preeminent university. FSU is uniquely positioned to serve the Panhandle and accelerate advanced defense systems that leverage Florida's military assets, develop spin-off technologies for the commercial markets, and nurture an innovation culture that supports sustainable economic growth.

**Opportunity** - C<sup>2</sup>MAT<sup>2</sup>E, will effectively and sustainably address the key challenges in 21st century Manufacturing and Defense - not only in technology and products, but the workforce that is essential to the sustained health of our nation, our state, and the Florida Panhandle. C<sup>2</sup>MAT<sup>2</sup>E will be powered by FSU's recognized leadership in research and workforce development and will focus on the following principal thrusts:

- *Aerospace: High Speed Aerodynamics & Hypersonics*
- *Advanced Aerospace Materials and Additive Manufacturing*
- *Workforce Training and Education in STEM*

The unique facilities and expertise at C<sup>2</sup>MAT<sup>2</sup>E will make it one of the premier destinations for Research & Development (R&D), Test & Evaluation (T&E), and Workforce Training to serve the following missions:

1. Establish an advanced industry-scale innovation, testing, and evaluation capability for the Panhandle, regional military installments, and Florida's larger manufacturing and aerospace industry.
2. Accelerate the deployment of new aerospace, defense, and manufacturing industry in the Panhandle region at all scales – from large OEMs to small businesses.
3. Expand the K-20 workforce pathways in STEM by accelerating advanced training and education of Panhandle residents and military personnel, especially in engineering, advanced manufacturing, simulation, aviation, and aerospace technology.
4. Develop industry partners to establish and grow the industrial footprint in leading-edge technology, integration and test facilities, advanced materials and manufacturing, advanced simulations, and AI-informed discovery, thus ensuring sustainable growth in the region.

**Outcomes** - Many manufacturers, especially small to mid-size, lack access to robust solutions-oriented research capabilities to address challenges at the leading edge of aviation, aerospace, and additive manufacturing using advanced-customized materials, informed by data-driven processes. C<sup>2</sup>MAT<sup>2</sup>E will help address these shortfalls on multiple fronts – innovative technology development and transition, manufacturing-production, and skilled workforce. FSU will collaborate with local, regional, state, and national economic development partners to stand up the most advanced facilities for R&D and T&E at scales that are highly attractive to industry and military defense bases and labs. C<sup>2</sup>MAT<sup>2</sup>E will be one of its kind in Florida and a nationally recognized leader in its focus areas. It will be a magnet for well-resourced, productive collaborations, attracting industry to the region at all levels of the supply chain.

The center will leverage existing, nationally renowned research centers at FSU – the High-Performance Materials Institute (HPMI) and the Florida Center for Advanced Aero-Propulsion (FCAAP). Both are state-wide Centers of Excellence with a combined nearly three-decade long record of attracting talent and resources for innovative research and industry driven technology development. They are at the forefront of developing new talent in the

most advanced engineering and applied sciences areas of practice. The K-12 component of the STEM pipeline growth will be led by FSU's Learning Systems Institute (LSI), which has been providing innovative solutions in education and training for over 50 years. LSI is also home to the Florida Center for Research in Science, Technology, Engineering, and Mathematics (FCR-STEM), the state's official center for STEM in K-12. LSI will partner with FSU Panama City which has conducted similar activities through the ASCENT project funded by Triumph.

C<sup>2</sup>MAT<sup>2</sup>E will be built to conduct advanced applied research, prototyping and cutting-edge additive manufacturing for the defense and commercial marketplace. It will be designed to conduct proprietary, sensitive, and classified applied research and development, at industry appropriate scales with highly efficient turn-around times – from idea generation, to modeling and simulation, to advanced testing and prototyping. C<sup>2</sup>MAT<sup>2</sup>E will therefore attract industry partners – from OEMs to secondary and tertiary sub-contractors, and investors to establish co-located facilities for ventures that translate into commercial products and services. The center's affiliation with FSU and with other SUS institutions will also help address the critical regional and national need for a STEM trained workforce.

**New Entity Formation** - C<sup>2</sup>MAT<sup>2</sup>E will be formed and operated by FSU with an Advisory Board made up of experts from the private and public sectors. In partnership with the Florida Department of Education (FLDOE), FSU will initiate market and sponsor-partner assessments to develop a well-delineated business plan for C<sup>2</sup>MAT<sup>2</sup>E. The project will initially begin with FSU's investment and will significantly accelerate once Triumph Gulf Coast funding is approved. Corporate partnerships will be built in as milestones for a staged roll-out of the center.

FSU is requesting funds for operating costs during the first ten-year period. The budget request includes a capital investment for advanced facilities; equipment; lease costs; workforce development, education, and training; and community outreach. C<sup>2</sup>MAT<sup>2</sup>E will be an exemplar for the future of manufacturing training and innovation and is planned to be robustly self-sustaining after the 10th year.

**Benefit to the Industry, Florida, and the Florida Panhandle** - C<sup>2</sup>MAT<sup>2</sup>E's collaborative network and access to innovative technology, facilities, and talent will lead to new opportunities for the community of companies across the Panhandle. C<sup>2</sup>MAT<sup>2</sup>E is designed to support classified and proprietary projects under cooperative agreements with individual companies, state and federal government agencies, and the regional military establishments. This mix of collaborative problem-solving, with leading edge facilities, shared services, talent development, aerospace-aviation and defense focused manufacturing, R&D, and innovation will nearly guarantee the economic resiliency of the impacted counties and ensure for continued growth and attraction to the region.

C<sup>2</sup>MAT<sup>2</sup>E will be a magnet for the flow of R&D and T&E funding and collaboration opportunities from global manufacturers to Florida. A robust pipeline of manufacturing talent will also attract capital investment in R&D and applied solutions facilities to the state; thus serving as a catalyst for Florida's leadership position as a 21st century manufacturing leader.

C<sup>2</sup>MAT<sup>2</sup>E will implement a regional approach to K-20 education in advanced manufacturing and aerospace technology, partnering with schools to attract the next generation to high-quality jobs in 21st century manufacturing and STEM careers while also providing professional development and training to the existing workforce. FSU has a strong record of delivering such programs and has secured endorsements from the (FLDOE) to review and refine existing frameworks, scale access to certifications, and coordinate training for a qualified talent pipeline.

## **IMPORTANT NOTICE**

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

**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.

**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.