UWF Research for Tomorrow

Triumph Gulf Coast, Inc. Application for Funds

May 2025

Applicant Information

Name of Entity/Organization: University of West Florida (UWF)

Background of Applicant Individual/Entity/Organization: UWF is a regional comprehensive public university located in Pensacola FL. UWF is a member of the State University System of Florida, with an annual enrollment of over 14,000 students.

Federal Employer Identification Number: 59-2976783

Contact Information

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

Center for Computational Intelligence: Institute for Human and Machine Cognition, research topics and scientists will expand current Intelligent System and Robotics PhD program with future joint hires and shared PhD students.

Total amount of funding requested from Triumph Gulf Coast: $32,515,120

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

☐ Yes ☒ No

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

UWF, established in 1963, is a not-for-profit University in the State University System of Florida. UWF currently has 14,000+ students with continued projected enrollment and a strong faculty base with productive research. See financial report attached.

In a separate attachment, please provide financial statements or information that details the financial status of the applicant and any co-applicants or partners.
See the UWF financial report attached. Partner financial reports are not provided as they are collaborators with a pay for service model.

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

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.

Title: UWF Research for Tomorrow

Location: Pensacola Florida

Description: The University of West Florida (UWF) Research for Tomorrow proposal is driven by the Institute for Analytics and Industry Advancement ($(IA)^2$) and The Center for Cybersecurity. $(IA)^2$ is building a next generation workforce and research center of excellence to expand the boundaries and applications of Predictive and Cognitive Analytics, Big Data Analytics, Artificial Intelligence, Machine Learning, Deep Learning, Automation, and Computing. This will be accomplished through cutting-edge computational research, commercialization of applied analytics products, industry and research partnerships. $(IA)^2$ has two relevant distinct components; 1) the Predictive Analytics and Modeling Lab, and 2) the Center for Computational Intelligence (CCI). UWF $(IA)^2$ proposes to establish a Center of Excellence focused on enhancing and expanding work into the cutting-edge fields of Computational Intelligence and providing predictive data analytic services and products to companies, corporations, and universities.

The UWF Center for Cybersecurity (CfC) was established in 2014 with the vision to be the premier regional hub and national exemplar for innovative cybersecurity solutions. The Center is recognized as a leader among peer centers and institutes nationwide, and as a preferred partner in cybersecurity research, workforce education, and professional training across Northwest Florida. CfC's mission is to serve as the regional hub for innovative cyber solutions that integrate multidisciplinary education, research, and community partnerships. Our proposal will provide space and infrastructure critical for the CfC to expand and enhance its footprint in NWFL.

- Education: Develop innovative, multidisciplinary cybersecurity education and training programs that prepare students for the dynamic cybersecurity industry.
- Research: Advance the field of cybersecurity and solve real-world problems through basic and applied research.
- Partnerships: Build mutually beneficial partnerships with commercial, governmental, and academic partners that advance the economic and workforce development of our region and nation.

In the context of this proposal, Computational Intelligence is the theory, design, application, and development of computational models capable of performing complex tasks. As a subset, Predictive Analytics is the development of models with the ability to predict future events or outcomes in terms of product performance or human behaviors (such as the behavior of students, employees, or customers). UWF $(IA)^2$ intently focuses on its goal to significantly advance the collective understanding of computational models in terms of both building and applying models, and consequently, the development of interventions that maximize successful outcomes for organizations.

UWF has invested significant time and resources to begin and enhance the activities of $(IA)^2$ in Northwest Florida. Beginning in 2019, UWF funded the Predictive Analytics and Modeling Lab (PAM Lab), which specializes in developing easy-to-understand analytics for decision-making and data prediction purposes. The lab currently employs UWF students, two part-time software engineers, two full-time data analysts, and a part-time Director. The PAM Lab is currently working in the education sector, transitioning university data to easy-to-use dashboards to improve enrollment, retention, graduation rates, and overall student success. The PAM Lab is the primary commercialization arm of $(IA)^2$, and our goal is to sustain it on a software-for-commercial-service model. This model includes developing customized, in-demand analytics tools, as well as the necessary visualization. As a result, we are building a workforce in high demand, skilled in providing advanced data analytics to universities and businesses. We propose using Triumph funds to expand the PAM Lab capabilities in terms of personnel to accelerate business opportunities and, ultimately, move into industry sectors such as healthcare and energy. The PAM Lab provides descriptive and diagnostic analytics for product performance in the education, health, and product manufacturing sectors. The PAM Lab is in the process of partnering with various universities through contracts to provide dashboards for improving student success, enrollment planning, and financial aid for enrollment and student success.

The purpose of the Center for Computational Intelligence (CCI) is to enable interaction and collaboration between university faculty whose research (basic, applied, or interdisciplinary) is computational in nature. CCI's cutting-edge research will focus on the creation or application of computational models and systems capable of performing complex tasks. The computational technology developed through CCI will be investigated for commercial opportunities by the PAM Lab. Our proposal is to use Triumph funds to develop the CCI into a world-class research center of excellence sustained through grants and contracts, bringing in millions of dollars to the regional economy (NEW funding). We will leverage collaborations to secure grant funding appropriated for the singular purpose of establishing regional innovative ecosystems encompassing researchers (from UWF and IHMC), industries and the community to create solutions with economic and community impacts. Research grant dollars spent locally are well-recognized as having a substantial impact on the local economy. There are numerous avenues for high-impact research collaboration, grant funding, commercial application, and more, that can come from the CCI. Envisioned federal funding agencies and industry partners include the National Institutes of Health, ARPA-H, National Science Foundation (CHIPs), Department of Energy, Air Force Research Labs, Army Research Labs, Office of Naval Research, Defense Advanced Research Projects Agency, Howard Hughes Medical Institute, Air Force Office of Scientific Research, Army Research Office, and Boeing. A partnership with IHMC research scientists provides international funding sources with collaborators involved in the Saudi Vision 2030 initiative to advance AI accessibility/product usage.

Through a Florida Legislature appropriation, UWF has received $21M for a new research wing added to building 4 on its main campus. Building 4 is one of the primary locations for the Hal Marcus College of Science and Engineering (HMCSE). The new research wing will consist of approximately 44,520 gross square feet of research space. CCI and CfC will be in this new space, receiving at least 25,620 gross square feet of space. CCI will also occupy space in building 58C, the Sciences Annex. This building was completed in 2019 and includes state-of-the-art teaching labs for Biology and Chemistry. The building has approximately 7500 square feet of cold shell space. We are proposing to use Triumph funds to expand the new research wing for $(IA)^2$ and CfC and build out this space for research laboratories in areas of computational biology and chemistry.

CCI and CfC currently has 45 participating faculty with research in various areas of computational intelligence and cybersecurity. HMCSE is hiring 10 new faculty who will participate in both center's ongoing research activities. The centers have clusters of computational research in Education, Population Health, Cybersecurity and IoT Systems, Engineering and Environment, and Computational Biology & Chemistry. Specifically, the Center either has expertise in the following subareas or plans to grow into these subareas.

- **(Education) Personalized learning**: This area focuses on developing AI tools for personalized learning, tutoring, and advising while considering ethical issues, potential biases, and privacy concerns.
- **(Education) Educational Data Analytics**: This area focuses on leveraging large educational datasets to predict and identify patterns that can inform decision-making to improve student and institution outcomes.
- **(Population Health) Public Health Predictive Modeling**: Develop statistical models and machine learning algorithms to predict disease outbreaks and public health trends and patterns.
- **(Population Health) Health(care) Data Integration**: Analyzing diverse health data sources, including electronic health records, clinical trial events, wearable devices, and health surveys and available public data (community level vulnerability index, etc.) to advance precision medicine, and to identify environmental and behavioral trends that impact health and disease.
- **(Population Health) Human Performance Optimization**: Use AI and machine learning to analyze warfighter/human performance/athlete data, injury prediction, recovery, training, and performance optimization
- **(Population Health) Data Surveillance System**: This area deals with analysis of systematic and ongoing health related data collection for effective planning, implementation and evaluation of health practices.
- **(Population Health) Health Monitoring: Using** AI tools and techniques for monitoring and caring for the elderly population.
- **(Cybersecurity, AI, and IoT)**: develop AI tools for detection and protection of systems.
- **(Engineering and Environment) Monitoring Systems**: This area focuses on developing machine learning and AI tools for the monitoring of electrical systems, mechanical systems, health structures such as bridges and buildings, environmental sensors, pollution, and climate.
- **(Engineering and Environment) Smart Grid and Energy Management**: This area uses machine learning and AI to provide systems that can predict outages, load, demand, and energy consumption.
- **(Computational Biology) Systems Biology**: This area covers mathematical models and simulations to study complex biological systems such as neuron connections. It also covers the statistical analysis of biological data to predict properties and discover associations.
- **(Computational Biology) Bioinformatics Software and Tools**: Developing computational tools, algorithms, and databases for various aspects of biological data analysis including multidimensional mapping and ML algorithms to understand
- molecular pathobiology, health outcomes, and intervention effects.
- **(Computational Chemistry) ChemInformatics:** Applying informatics methods to solve chemical problems.

- **(Intelligent Systems and Robotics) Embodied Intelligence:** This area focuses on the development of robotic systems that can intelligently interact with the environment around them to effect change. This gives a physical body to AI algorithms, where this embodiment is believed to be a required part of creating the intelligence necessary to perform tasks alongside humans.
- **(Intelligent Systems and Robotics) Personalized Software Agents:** Demonstrating the viability for collaborative, ethnical AI development to facilitate decision making in community-based emergency response situations such as medical, disaster response, law enforcement and policy domains
- **(Intelligent Systems and Robotics) Human-Machine Teamwork:** Enabling people and machines to work effectively on physical and cognitive work to improve productivity, work quality, safety, and quality of life for the people in the workforce.

As an example, our computational scientists have received funding for the following projects over the last 2 years

- Enhancing cyber situational understanding through neuro-symbolic risk-aware deep learning decision-making; $152,928 (United State Army)
- Entropy-based coordinated swarm navigation vehicles in dynamic environments; $50,000 (United States Air Force STTR)
- A data analytics framework for the application of pedestrian dynamics to public health; $131,834 (National Science Foundation)
- A robust automated risk detection and mitigation system for network intrusion detection systems; $375,511 (National Security Agency)

Additionally, the CCI research-active faculty have secured more than $26M in grant/contracts since 2018. CfC currently has $17M in grants/contracts through 2026. This demonstrates the high probability for faculty with reduced teaching loads to secure NEW federal funding/contracts/donations.

The CCI has partnered with Farcast Biosciences and has dedicated research space for Farcast on the main campus of UWF. This research space is a prototype lab for Farcast to continue its ongoing research to capture the complexity of cancer tumor response and resistance to various treatments. The Farcast technology platform generates high quality multimodal data from its advanced anthropic systems. Additionally, the Center is providing data organization, data harmonization across various data sources, and advanced analytics to determine the predictive power of Farcast's data set. The Farcast technology platform is cutting-edge cancer research and the predictive analytics provided by the Center's scientist would be far reaching in potentially improving cancer treatments. The Center and PAM Lab is also listed as a collaborator on an IHMC NSF proposal on building a research institute. $(IA)^2$ will collaborate with IHMC by providing capacity for large-scale data analysis and modeling and the tools and infrastructure necessary to derive actionable insights from complex datasets, and to help develop a central hub/platform for the research community. The Center and PAM Lab also have potential partnerships with various other institutions including Nemours and startup companies. Other partnerships will become possible with an expanded and enhanced PAM Lab and Center.

In summary, the Triumph funds being sought by UWF are to:

- hire data analysts and software engineers,

- research scientists,
- associated research staff,
- build-out computational lab space in building 58C on UWF Pensacola campus,
- expand the research annex to include 25,620 square feet for CCI and CfC, and
- purchase computational research equipment.

These funds for CfC and $(IA)^2$ will allow UWF to enhance and expand commercialization, industry and government partnerships, and research capabilities, bringing millions of dollars to the northwest Florida areas. UWF and its partners are convinced that their collaborations will prove synergistic and will assist in attracting more renowned scientists and researchers.

UWF will also collaborate closely with those regional entities that share a particular focus or need on data analytics within relevant segments of healthcare, biosciences, cybersecurity, engineering, environmental sciences, and education. Its fully expected that these collaborations, and the subsequent innovation, will create spin-off opportunities for UWF and its partners that will further drive the success of the PAM Lab and the Center and create new submarkets that will mature to have sustained impact.

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.

UWF $(IA)^2$ and CfC provide a unique approach to establishing a computational research cluster and expand cutting edge cybersecurity growth aimed at leveraging the diverse resources of Northwest Florida's research, defense, and private sectors. The CfC's 10-year success combined with the seeding of $(IA)^2$ will provide the personnel and technology necessary for an unprecedented approach to expanding cybersecurity infrastructure and support, computational research, and commercialization of analytics, whether predictive, prescriptive, or cognitive.

Santa Rosa and Escambia County, and the entire Northwest Florida community, are perfectly positioned to incorporate existing military, Department of Defense, and other federal assets to expand, diversify, and transform the region by attracting new federal spending to the region. CfC's 10-year success demonstrates this potential and compliments these efforts in $(IA)^2$.

Computational research is represented by UWF and IHMC in the Northwest Florida area. However, computational technology development and commercialization is currently not present in any consolidated manner in the greater Northwest Florida area. The PAM Lab and the CCI will establish the cluster necessary to create new opportunities and new potential spin off entities focusing on predictive data analytics and other areas of computational intelligence.

UWF has a significant stake in $(IA)^2$ and is incentivized by its achievement. The PAM Lab and CCI will capitalize on the relationship between UWF and its current and future collaborators, as well as the partners' respective assets and resources, and ultimately grow new technology spanning from advanced data analytics. Creating an enhanced and expanded $(IA)^2$ that establishes an industry cluster for partners, and new entrants to the space, with a common goal of conducting leading-edge research and creating jobs and opportunities for growth of a new economic industry ecosystem will be truly transformational.

CfC moving on UWF's main campus provides opportunities for more collaboration with HCMSE faculty and staff. The additional space also provides room for growth.

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

UWF has a record of successfully obtaining federal and state grants and contracts. CfC has secured more than $21.4 million since 2020. $(IA)^2$ is now expanding those successes from general science and engineering to a focus in computational intelligence which includes applications of Predictive and Cognitive Analytics, Big Data Analytics, Artificial Intelligence, Machine Learning, Deep Learning, Automation, and Computing. UWF and $(IA)^2$ have already been successful in attracting talent for the PAM Lab and talent in the areas represented by Computational Intelligence. The PAM Lab and the CCI will allow UWF to expand its analytics services and computational research portfolio and target significant grants and contracts requiring the type of equipment and facilities the CCI will contain.

UWF has already begun targeting, pursuing, and winning new grants/contracts that will benefit from an expanded and enhanced $(IA)^2$. In addition, with the Triumph Gulf Coast grant funds, $(IA)^2$ will be able to target and win contracts/grants that it currently cannot target without the necessary personnel and the equipment and facilities necessary to conduct the research. Having $(IA)^2$ will allow UWF to bring significantly more new federal spending to the region.

Specifically, the data or information available to demonstrate the viability of expanding and enhancing $(IA)^2$ and CfC are:

- grants and/or contracts awarded in areas of computational intelligence and cybersecurity
- contracts awarded to PAM Lab for data analytic services
- partnerships with businesses or research centers obtained for proposed collaborative work in areas of computational intelligence and cybersecurity
- research specialty of faculty currently being hired in Hal Marcus College of Science and Engineering

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

$(IA)^2$ will generate new federal and industry research funding related to applications of Predictive and Cognitive Analytics, Big Data Analytics, Artificial Intelligence, Machine Learning, Deep Learning, Automation, and Computing. $(IA)^2$ will encompass a wide array of research and data analytics services to encourage divergent thinking to take computational research to the next level.

The aim of the $(IA)^2$ effort is to develop a Computational Intelligence cluster in Northwest Florida resulting in the significant infusion of new federal spending and the resulting economic impact to the region impacted by the BP Oil Spill. The economic benefit of this effort include:

- NEW external dollars coming into our region that would not otherwise exist; not supplanting other state or regional funds.
- The amplification of both Triumph Gulf Coast funding, and federal and state investment occurring when federal investment serves as a complement to the Triumph investment. That

is, Triumph investment in $(IA)^2$ and CfC will allow UWF to hire more scientists and then enable those scientists to propose on and win additional new federal, state, industry, or foundation programs, thus increasing spending for R&D in our region.

- Increases to federal and state investment to our area will improve productivity/output in the longer term. Spending on highly skilled personnel, equipment and facilitates, and education helps develop and expand a skilled workforce; and spending on R&D promotes innovation.
- High wage job creation: New professionals to the area. Examples: Research Scientists, Data Analysts, and Software Engineers.
- New intellectual property and technology transfer opportunities as well as the potential for associated spin-off companies. $(IA)^2$ will serve as a hub for new business development in a growth industry.
- Advanced defense-related partnerships/collaborations through tailored computational model design and implementation
- CfC will provide transformative impact and benefits to the region, including:
    - Innovative and scalable workforce development for current and emerging work roles, including AI, cybersecurity, and critical infrastructure security.
    - Increased number of qualified professionals who have attained industry certifications and digital credentials to enter the workforce.
    - Filling of high-paying technology jobs across sectors, including defense industrial base, energy, financial services, healthcare, and state and local government.
    - Significant economic impact to the region through grants and contracts revenue.
    - Increase in private sector investment and expansion in the region through job expansion and collaborative education and research projects.
    - Incubation of innovative technologies and start-ups that could drive future economic expansion in the region.
    - Significant economic impact to the region through revenue generated via job fairs, cybersecurity competitions, and conferences.

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.)

Triumph Gulf Coast funding will be utilized heavily in the first five years with a sustainable decrease during years six through ten, split between personnel, build out of computational and CfC space between two buildings, and equipment needed to conduct specialized computational research.

CCI and CfC will sustain itself primarily through federal, state, industry, and foundation grant and contract funding, data analytics services, and through the commercialization of analytics and software creation. Future job creation sustainability will develop as significant new funding and business opportunities flow into the area via services, commercialization projects, and research at CfC and $(IA)^2$. Expanding and enhancing CfC and $(IA)^2$, with its state-of-the-art facilities and equipment, will enable both areas to pursue and win more contract/grant funding awards. Additional job creation is expected to occur in the local private sector community via the growth of existing business and research partners as well as the possible creation of spin-off companies.

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

Primary measurement will be NEW grant and contract funding proposed and awarded to UWF associated with the CfC and $(IA)^2$. Specific metrics are:

- Performance Metric #1: Successful award and expenditures of a minimum of $83 Million Dollars ($83,021,010) in competitively awarded research grant proposals or industry contracts or workforce training grants or other appropriations focused on the broader objectives of the CfC and $(IA)^2$ within 10 years of the first disbursement of grant funds.
- Performance Metric #2: Expenditures from non-grant funding sources of $14.5M ($14,524,350) focused on $(IA)^2$ and the CfC
- Performance Metric #3: The addition of fifty-nine (59) net new FTE positions by the start of year 6 of Triumph funds.
- Performance Metric #4: The addition of forty-two (42) additional net new FTE positions by the end of year 10 of Triumph funds.

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.
- ☒ 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.

Research for Tomorrow will generate maximum estimated economic benefit via the infusion of NEW federal, state, industry, and foundation funding to the Northwest Florida region. CfC and $(IA)^2$ will enable UWF to recruit new research and support staff bringing new computational and cybersecurity expertise to our region and enhancing our region's ability to attract new talent and further new funding successes.

CfC and $(IA)^2$ will leverage and enhance current key regional assets to ensure the success and sustainability of the program. These assets include:

- UWF's experience, resources, and operational infrastructure
- Northwest Florida's large regional military footprint and associated government contracting industry
- Existing momentum in cybersecurity research and workforce skills, computational research and commercialization efforts in predictive analytics

As described in Section 7 above, the proposal has considerable target metrics providing very specific outcome measure for the Triumph Gulf Coast to track and measure.

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

Considered Transformational for the future of the Northwest Florida region -Research for Tomorrow (CfC and $(IA)^2$) will utilize Triumph Gulf Coast funds to expand and enhance cybersecurity's footprint as well as predictive analytics and computational intelligence via the establishment of programming (and the associated job creation) for research and education, as well as the buildout of space and the necessary research equipment. CfC has driven change in NWFL as well the country and will continue to expand that success with more available space and resources. $(IA)^2$ will drive transformational change via the seeding of an analytics and computational intelligence cluster. Both CfC and $(IA)^2$ will drive economic recovery through new federal investment via grants and contracts (and the associated ripple effect), commercialization of analytics products, new job creation, spin off opportunities, and improved productivity. The impacted counties (Santa Rosa and Escambia) will be significantly enhanced and recognized with the establishment of $(IA)^2$, creating new synergies and collaborations with other entities and commercial companies to allow increased expansion of efforts.

May be consummated quickly and efficiently – CfC has a proven track record and will only gain momentum by moving to campus. $(IA)^2$ is poised and ready (and already has a track record) to hire senior computational researchers, buy-out current computational faculty, and hire UWF students with a background in analytics or software development.

Promote net-new jobs in the private sector with an income above regional average household income – The establishment of $(IA)^2$ will provide growth opportunities for existing partners and it is highly expected that technology developed at $(IA)^2$ will provide significant potential for private sector spin-off entities to be formed. CfC's growth provides opportunities to expand workforce skills course offerings, research, industry certifications, and educational opportunities for both the undergraduate and graduate levels.

Align with Northwest Florida FORWARD, the regional strategic initiative for Northwest Florida economic transformation – Northwest Florida FORWARD's five aspirational goals that serve as the key focus areas for future economic vitality and growth for the region – Talent, Business Vitality, Infrastructure, Entrepreneurship & Innovation, and Quality of Place – are all met by the expansion and enhancement of CfC and $(IA)^2$.

Create net-new jobs in targeted industries to include: aerospace and defense... -

With Triumph funds, $(IA)^2$ will immediately create net-new jobs in a high wage industry and drive future job creation via growth and associated economic impact to the region. Additional growth will occur with the creation and growth of new start up organizations focused on cybersecurity, analytics and computational intelligence. The proposed areas overlap with defense-related priorities that have not traditionally supported research in the local area.

*Promote industry cluster impact for unique targeted industrie*s – One of the primary goals for the enhancement of $(IA)^2$ is to seed the establishment of a PAM Lab and Center for Computational Intelligence cluster in a unique industry that has massive potential and is not easily replicated. Collaborating with entrepreneurial/technology transfer organizations will help ensure all opportunities to increase the speed, scope, and impact of $(IA)^2$ are achieved. The CfC will expand its current footprint to capitalize on opportunities currently not available due to space and resources limitations.

Create net-new jobs with wages above national average wage – The vast majority (if not all) of net-new jobs created by CfC and $(IA)^2$ will surpass the current national average wage.

Provide a wider regional impact versus solely local impact – CfC's designation as an NSA National Center of Academic Excellence in Cybersecurity (NCAE-C) and lead for the National Cybersecurity Workforce Development Program provides a framework of support at the state level. The CfC will build on this foundation to expand workforce development for private industries and government agencies located in Florida. $(IA)^2$ will have an immediate impact on both Santa Rosa and Escambia counties. In addition, due to the large number of military installations in the impacted region, the CCI plans to collaborate across the region as these military installations request support and research from the Center. There will also be opportunities for collaboration with Florida State University in Panama City.

Enhance research and innovative technologies in the region – The CfC has established itself as the anchor for cybersecurity in the southeast area. $(IA)^2$ will be the anchor for the commercialization of computational research and innovation are built upon within the region.

Enhance a targeted industry cluster or create a Center of Excellence unique to Northwest Florida – The CfC is a well-established Center of Excellence. $(IA)^2$ will expand computational research to become the Computational Intelligence Center of Excellence driving substantial growth and success in our region.

Create a unique asset in the region that can be leveraged for regional growth of targeted industries – $(IA)^2$ will quickly become recognized as the go-to asset for computational research and the commercialization of analytics products – regionally, state-wide, and nationally. CfC is already the go-to for cybersecurity needs for the region and state.

Demonstrate long-term financial sustainability following Triumph Gulf Coast, Inc. funding – The Triumph Gulf Coast funds will act as seed funding for $(IA)^2$ and expansion funding for CfC. Through commercialization products, and grants and contracts, $(IA)^2$ will be self-sustaining and will

be able to leverage its assets, including talent and equipment, to drive and grow federal funding and start-up entities long into the future. The CfC's expansion will continue to be self-sustaining.

Provide clear performance metrics over duration of project or program – As identified in Section 7 above, both $(IA)^2$ and CfC have clear performance metrics and through these metrics, will show substantial targets of success.

Include Applicant and selected partners/vendors located in Northwest Florida – CfC and $(IA)^2$ are located in Northwest Florida and in counties significantly impacted by the BP Oil Spill.

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

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.?** No additional approvals are required for UWF to execute an agreement with Triumph Gulf Coast Inc.

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:**
N/A

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.**

The UWF Research for Tomorrow plan was strategically designed to build a strong foundation on which growth will be sustainable. Year 1 includes expanding the current PAM Lab and Workforce capability, building/renovating space for both the CfC and CCI, and hiring administrative/support personnel for all three areas. Each subsequent year builds on this foundation to hire new STEM research scientists/faculty, post-doctoral scientists, graduate students (PhD and MS), as well as

support business/marketing/grant support personnel. The project will result in expansion of the Center of Excellence Center for Cybersecurity and a transformative, sustainable Center of Excellence Center for Computational Intelligence, and commercialized applied analytics products. $(IA)^2$ will create a new economic industry ecosystem to seed personnel and technology resources into Northwest Florida with 32 net personnel to be hired by year 5. The Table below outlines the annual sustainable metrics and the key personnel through year 6. The majority of Triumph funding will be used to expand the CfC and establish the CCI during years 1-7. The project will continue through and beyond year 10 and UWF will cover all costs starting in year 8.

	Year 1 Milestones	Year 2 Milestones	Year 3 Milestones	Year 4 Milestones	Year 5 Milestones	Year 6-10 Milestones
Center for Cybersecurity	• Build space • Purchase equipment • Hire personnel • $2.5M in NEW funding	• Build space • Purchase equipment • $2-2.5M in NEW funding	• $2-2.5M in NEW funding	• $2.5M in NEW funding	• $3M in NEW funding	• $3-5M in NEW funding
Center for Computational Intelligence	• Establish CCI with personnel • Renovate/build/rent space • Purchase equipment • $2M in NEW funding	• Renovate/build space • Purchase equipment • $2-2.5M in NEW funding • Hire personnel	• Hire personnel • $2-2.5M in NEW funding	• Hire personnel • $2.5M in NEW funding	• $3-5M in NEW funding	• $5-7M in NEW funding
PAM Lab	• Hire personnel	• Increase number of projects to pay for service contracts	• Increase number of projects to pay for service contracts	• Increase number of projects to pay for service contracts	• Sustain projects	• Sustain projects

NEW Key Personnel	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
Research Scientists/ Faculty	20	2	2	4	0	6	4	2	2	0	**44**
Data Analysis/ Software Engineer	2	0	1	2	2	2	2	2	2	0	**13**
Post Docs	0	1	0	2	0	2	0	2	0	0	**7**
Graduate Students	0	8	4	4	0	2	4	0	6	0	**28**
*Support Personnel	2	0	1	1	1	2	1	1	0	0	**9**
Total Key Personnel	**24**	**11**	**8**	**13**	**3**	**14**	**11**	**7**	**10**	**0**	**101**

*Web designer, grants management, marketing, coordinator, account manager, server admin manager, admin specialists

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.**

Provost Kuhl, the primary contact, has the authority to make decisions on behalf of Academic Affairs under which research falls.

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.**
   $(IA)^2$ and the CfC are requesting $32,515,120 over years 1-10 of the project where 65% of the funding is requested in years 1-3 to support expanding the new research building ($15,000,000) and renovations ($3,000,000) of the current building 58C,
   The balance of the funds will be used to purchase equipment and hire administrative, support and technical experts critical to the project's success. Please see budget below.

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 total project costs are $130,204,292. UWF's contribution to this cost is $97,689,172 (75%).The request for Triumph Gulf Coast is $32,515,120 (25%)

   UWF Contribution includes the following, see term sheet for annual amounts:
   - $21M towards the construction of the research annex for the CfC and CCI
   - $76,939,172 in personnel salaries
   - $18,250,000M in equipment purchases
   - $2.5M for renovations to research labs for new CCI faculty

   Cost share covered by UWF

Cost Share	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
UWF	65%	24%	38%	74%	83%	88%	95%	99%	99%	99%
Triumph	35%	76%	62%	26%	17%	12%	5%	1%	1%	1%

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

Job Type	Number	Average Wage
Administrative: Director to manage CCI	1	~$200K
Research Scientists/Faculty	44	~$200K
Data Scientists/Software Engineers	13	~100K
Post-Doctorial Scientists	7	~$80K
Graduate Students (PhD/MS)	28	~40K/~20K
Support Personnel	9	~$50-90K

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

The existing award allows UWF to expand the current PAM Lab branch of $(IA)^2$ and well-known Center for Cybersecurity and establish the Center for Computational Intelligence (CCI). Significant expansion and establishing CCI as a Center of Excellence is not feasible without Triumph Gulf Coast funding. The CfC will not be able to move on campus without Triumph Gulf Coast funding.

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

A. Project/Program Costs:
B. Other Project Funding Sources:

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

Please see the Milestone table for the timeline, annual benchmarks, and personnel hiring plan associated with achieving the project metrics.

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 INFRASTRUCTURE PROPOSALS:

1. Program Requirements

   A. Is the infrastructure owned by the public?
   ☐ Yes ☐ No

   B. Is the infrastructure for public use or does it predominately benefit the public?
   ☐ Yes ☐ No

   C. Will the public infrastructure improvements be for the exclusive benefit of any single company, corporation or business entity?
   ☐ Yes ☐ No

   D. Provide a detailed explanation of how the public infrastructure improvements will connect to a broader economic development vision for the community and benefit additional current and future businesses.

   _____

   _____

   _____

   (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 public infrastructure project will promote:
   - Economic recovery,
   - Economic Diversification,
   - Enhancement of the disproportionately affected counties,
   - Enhancement of a Targeted Industry.

   _____

   _____

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

2. Additional Information

   A. Is this project an expansion of existing infrastructure project?
   ☐ Yes ☐ No

   B. Provide the proposed beginning commencement date and number of days required to complete construction of the infrastructure project.

   _____

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

C. What is the location of the public infrastructure? (Provide the road number, if applicable.)

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

D. Who is responsible for maintenance and upkeep? (Indicate if more than one are applicable.)

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

E. What permits are necessary for the infrastructure project?

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

Detail whether required permits have been secured, and if not, detail the timeline for securing these permits. Additionally, if any required permits are local permits, will these permits be prioritized?

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

F. What is the future land use and zoning designation on the proposed site of the Infrastructure improvement, and will the improvements conform to those uses?

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

G. Will an amendment to the local comprehensive plan or a development order be required on the site of the proposed project or on adjacent property to accommodate the infrastructure and potential current or future job creation opportunities? If yes, please detail the timeline

☐ Yes ☐ No

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

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

☐ Yes ☐ No

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

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

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

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

_____

_____

(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
Provide rigorous, alterative 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

☐ 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

_____

_____

(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

(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.

(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.

(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

(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.

_____

_____

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

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

_____

_____

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

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

_____

_____

(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.

_____

_____

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

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

_____

_____

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

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

☐ Yes ☐ No

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

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

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

ADDENDUM FOR AD VALOREM TAX RATE REDUCTION:

1. Program Requirements

   A. Describe the property or transaction that will be supported by the ad valorem tax rate reduction.

   _____

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

   B. Provide a detailed explanation of how the ad valorem tax rate reduction will connect to a broader economic recovery, diversification, enhancement of the disproportionately affected counties and/or enhancement of a targeted industry.

   _____

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

   C. Provide a detailed description of the quantitative evidence demonstrating how the proposed ad valorem tax reduction will promote:
      - Economic recovery,
      - Economic Diversification,
      - Enhancement of the disproportionately affected counties,
      - Enhancement of a Targeted Industry.

   _____

   _____

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

2. Additional Information

   A. What is the location of the property or transaction that will be supported by the ad valorem tax rate reduction?

   _____

   _____

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

   B. Detail the current status of the property or transaction that will be supported by the ad valorem tax rate reduction and provide a detailed description of when and how the ad valorem tax rate reduction will be implemented.

   _____

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

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

☐ Yes ☐ No

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

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

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

ADDENDUM FOR LOCAL MATCH REQUIREMENTS OF SECTION 288.0655, FLORIDA STATUTES

1. Program Requirements

   A. Describe the local match requirements of Section 288.0655 and the underlying project, program or transaction that will be funded by the proposed award.

   _____

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

   B. Provide a detailed explanation of how the local match requirements and the underlying project or program will connect to a broader economic recovery, diversification, enhancement of the disproportionately affected counties and/or enhancement of a targeted industry.

   _____

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

   C. Provide a detailed description of, and quantitative evidence demonstrating how the proposed local match requirements will promote:
      - Economic recovery,
      - Economic Diversification,
      - Enhancement of the disproportionately affected counties,
      - Enhancement of a Targeted Industry.

   _____

   _____

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

2. Additional Information

   A. What is the location of the property or transaction that will be supported by the local match requirements?

   _____

   _____

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

B. Detail the current status of the property or transaction that will be supported by the local match requirement and provide a detailed description of when and how the local match requirement will be implemented.

_____

_____

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

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

_____

_____

_____

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

ADDENDUM FOR LOCAL ACTION PLAN

1. Program Requirements

   A. Describe how the proposed award will establish and maintain equipment and trained personnel for local action plans of response to respond to disasters.

   B. Describe the type and amount of equipment and trained personnel that will be established or maintained by the proposed award.

   C. Identify the specific local action plans (*e.g.*, Coastal Impacts Assistance Program) that will benefit from the proposed award.

   D. Provide a detailed explanation of how the proposed award will connect to a broader economic recovery, diversification, enhancement of the disproportionately affected counties and/or enhancement of a targeted industry.

   _____

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

   E. Provide a detailed description of the quantitative evidence demonstrating how the proposed will promote:
      - Economic recovery,
      - Economic Diversification,
      - Enhancement of the disproportionately affected counties,
      - Enhancement of a Targeted Industry.

   _____

   _____

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

2. Additional Information

   A. What is the location of the local action program that will be supported by the proposed award?

   _____

   _____

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

   B. Detail the current status of the local action plans (*e.g.*, new plans, existing plans, etc.) that will be supported by the proposed award and provide a detailed description of when and how the proposed award will be implemented.

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

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

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

ADDENDUM FOR ADVERTISING/PROMOTION

1. Program Requirements

A. Is the applicant a tourism entity crated under s. 288.1226, Florida Statutes?
☐ Yes ☐ No

B. Does the applicant advertise and promote tourism and Fresh From Florida? If yes, provide details on how it advertises and promotes tourism and Fresh From Florida.
☐ Yes ☐ No

_____

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

C. Does the proposed award promote workforce and infrastructure on behalf of the disproportionately affected counties? If yes, describe how workforce and infrastructure is promoted on behalf of the disproportionately affected counties.
☐ Yes ☐ No

_____

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

D. Provide a detailed explanation of how the proposed award will connect to a broader economic recovery, diversification, enhancement of the disproportionately affected counties and/or enhancement of a targeted industry.

_____

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

E. Provide a detailed description of the quantitative evidence demonstrating how the proposed will promote:
- Economic recovery,
- Economic Diversification,
- Enhancement of the disproportionately affected counties,
- Enhancement of a Targeted Industry.

_____

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

2. Additional Information

A. Describe the advertising and promotion mediums and locations where the advertising and promotion will occur.

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

B. Detail the current status of the advertising and promotion (*e.g.*, new plans, existing plans, etc.) that will be supported by the proposed award and provide a detailed description of when and how the proposed award will be implemented.

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

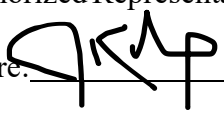
C. Provide any additional information or attachments to be considered for this proposal.

(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: Jaromy Kuhl

Name and Title of Authorized Representative: Jaromy Kuhl, Provost and Senior Vice President

Representative Signature: 

Signature Date: 5/26/2025