

Application Score Sheet

Proposed Project: Florida State University, InSPIRE (#312)
Proposed Project/Program County: Bay
Board of County Commission Support: Yes
Rural Area of Opportunity:
Opportunity Zone:

Total Projected Project Cost: \$398,824,571
Match Provided: \$300,370,956
Triumph Funds Requested: \$98,453,615
Triumph Funds Recommended by Staff: up to \$98,453,615

Score: B

ROI: \$10 dollars of increased personal income(in constant dollars) per dollar of Triumph expenditure

Economic Analysis, Impact and Score

The FSU Panama City (FSUPC) proposal describes the Institute for Strategic Partnerships, Innovation, Research, and Education (InSPIRE), which is intended to serve as FSU's applied research and workforce development arm in Northwest Florida. InSPIRE's mission is to accelerate technology innovation, cultivate corporate investment, nurture the growth of new industries, and foster high-skill, high-wage employment opportunities in the region.

The Triumph funding request of up to \$98,453,615 represents 24.7 percent of the total project cost of \$398,824,571. Other funding sources in support of the Institute include grant and contract funded expenditures over the 2024 to 2035 (12 years) period of at least \$235,074,000, and FSU internally-funded expenditures of \$65,296,956 in support of InSPIRE over the 2020 to 2035 period.

Triumph Gulf Coast spending is proposed to occur over the first five years and consists of ~\$81 million in equipment and equipment maintenance, ~\$5.6 million in supplies, and ~\$11.9 million in personnel. Expenditures from grant and contract funding is ~\$103.8 for equipment and equipment maintenance, ~\$27.4 for supplies, ~\$97.6 million for personnel, and ~\$6.3 million for contracted services and utilities. FSU internally-funded expenditures devoted to InSPIRE include ~\$33.6 million in lease rental fees, ~\$12 million in equipment and equipment maintenance, ~\$19.1 million in personnel, and ~\$0.6 million in contracted services and utilities.

All personnel expenditures funded by both Triumph and by match dollars will be for personnel residing in the eight county region whose work assignment is located at FSUPC. The grant and contract spending are monies actually expended on InSPIRE rather than gross grant and contract revenues received. To the extent that indirect cost recovery dollars are expended in direct support of InSPIRE, such dollars may be counted as FSU internally-generated match.

FSUPC states that InSPIRE will establish Northwest Florida as the nation's foremost hub for aerospace and advanced manufacturing, pioneering in demonstration, testing, evaluation, and research and technology development. Further, The mission of InSPIRE is to forge impactful collaborations with industry, government and community partners, attracting new investments and industries to the region, while creating a surge in highly-skilled, high-wage jobs and providing comprehensive workforce training. The goal is to position Northwest Florida as a formidable contender, rivaling Huntsville in terms of expertise and exponential growth within the aerospace and manufacturing sectors.

Finally, the proposal notes that diversifying the economy and creating differentiated employment opportunities and training will have far-reaching generational impact. InSPIRE will create new job opportunities and support existing companies, making the regional economy highly resilient and attractive to the nation's top talent and growing aerospace and advanced manufacturing industries.

The proposal contains a number of suggested metrics, including:

- At least \$225 million in new contract and grant funded expenditures in support of InSPIRE.
- Successful completion of 5,000 industry-recognized, externally-validated certificates across 1000 or more STEM teachers from the region.
- 200 additional accredited science & engineering Bachelor's Degrees, 40 additional accredited science & engineering Master's Degrees, and 15 additional accredited science & engineering PhD Degrees, all awarded through the FSUPC campus.
- Engage at least 40 companies in the region each year to assess their education and technology development needs to inform the InSPIRE partner network and strategic resource investments.
- The addition of nearly 100 new technical and highly skilled new positions in the region including 87 core staff at InSPIRE with an average starting salary of \$104K, and ten new faculty lines at FSU-Panama City with an average salary of \$119K.

The view of Triumph staff is that this project will be transformational for the region. The FSU Center for Economic Forecasting and Analysis calculates that the ongoing personal income impact over the life of the project following completion of construction and other non-recurring expenditures is expected to be \$145 million. The application notes that the impact of the teacher training will be in addition to the afore-mentioned income figures. The income figures are constrained relative to other Triumph projects because much of the equipment spending is likely to be used in purchasing things produced in other parts of the country or world rather than inside the region. Thus, those salaries will be paid in those communities in which that equipment is manufactured.

Following literature regarding differences in seed and early-stage financing among metro areas with business accelerator programs versus those without, these direct impacts are likely to galvanize additional local activity so as to roughly triple investment in this business sector within the Triumph region. Taking these metrics together, the total impact on the region measured is

expected to be in excess of \$10 dollars of increased personal income (in constant dollars) per dollar of Triumph expenditure. For these reasons, Triumph staff rates the project as a “B.”

Project Summary (based on information provided by the applicant)

The Florida State University (FSU) is requesting a \$98,453,615 Triumph grant to establish the Institute for Strategic Partnerships, Innovation, Research & Education (InSPIRE), an applied research and workforce development arm in Panama City. InSPIRE's mission will be to accelerate technology innovation, cultivate corporate investment, nurture the growth of new industries, and foster high-skill, high-wage employment opportunities establishing the region as the nation's foremost hub for aerospace and advanced manufacturing, pioneering in demonstration, testing, evaluation, and research and technology development. Triumph funds will be used for manufacturing and lab equipment, supplies, personnel and contracted services.

Through strategic alliances with industry and the federal government, InSPIRE aims to anchor novel Research & Development (R&D) projects in the region, with a key emphasis on advanced manufacturing and aerospace technology. These R&D initiatives, ranging from Technology Readiness Level (TRL) 3 (proof of concept) to TRL 7 (prototype demonstration in an operational environment), will amplify the region's industrial prowess, reinforce military bases, and drive the emergence of new industrial sectors.

InSPIRE will build unique, innovative, and one-of-a-kind facilities for advanced applied R&D at scales that are crucial for industry – from small to large Original Equipment Manufacturers (OEMs) to the Department of Defense (DOD) with the ability to conduct proprietary, sensitive, and classified applied work with highly efficient turn-around times. Initial areas of focus are industrial scale, prototyping, cutting-edge advanced manufacturing and aerodynamic and hypersonic T&E activities. New areas and capabilities will continue to be added as InSPIRE grows in cadence with the region and its needs.

InSPIRE will introduce new workforce training and education opportunities focused on advanced aerospace and manufacturing to produce the workforce required to attract and retain high-tech companies to the eight-county affected region. By collaborating with educators, employers, and community support resources, InSPIRE will extend outreach and provide relevant career experiences and placements, thereby creating a comprehensive ecosystem for workforce development. The InSPIRE Technology and Training Solutions Center will be unique to Northwest Florida (NWFL).

FSU's Innovation Park in Tallahassee serves as a hub for cutting-edge research, housing notable centers like the National High Magnetic Field Laboratory, the High-Performance Materials Institute, the Florida Center for Advanced Aero Propulsion, and the Center for Advanced Power Systems. The FAMU-FSU College of Engineering, the joint college operated by FSU and the Florida A&M University, is located adjacent to Innovation Park.

Leveraging FSU's existing research programs, InSPIRE seeks to propel NWFL into a new level of competitiveness. The ultimate aim is to serve as the foundation for a thriving ecosystem similar to that in Huntsville, Alabama, the Research Triangle in North Carolina, and the near

billion-dollar Research & Development (R&D) and Testing & Evaluation (T&E) complex at Georgia Tech Research Institute (GTRI) in Atlanta. This will be accomplished by attracting high-skill, high-wage job creators, fostering industry-led research and development, and building cutting-edge facilities and infrastructure within the Panhandle, enabling the transformation of innovative ideas into tangible prototypes and concept demonstrations.

US dependency on foreign suppliers for vital components is a major security concern. With InSPIRE, FSU seeks to become a leader in R&D and testing for advanced defense systems and advanced manufacturing making Northwest Florida central to the nation's ability to compete with China.

To compete, the US must modernize manufacturing systems and processes, using innovative technologies such as advanced aerospace materials and advanced manufacturing. DOD has prioritized development of superior hypersonic systems for defense against near-peer adversaries. InSPIRE will target these key national needs and position the region to provide solutions. To partner with DOD at the highest security levels, the facility will include a SCIF (Sensitive Compartmentized Information Facility), allowing sensitive and secure programs to be housed at the Institute.

To sustain and expand military bases in the region, it is crucial to attract, train, and keep a highly skilled workforce that can rapidly adapt to a changing marketplace and DOD demands. In partnership with DOD, military bases, and federal agencies, InSPIRE will customize workforce development and training programs to cater to the specific needs of regional military installations, address unmet needs in prototyping, testing, and evaluation, and conduct confidential, sensitive, and classified applied research and development.

Diversifying the economy and creating differentiated employment opportunities and training will have far-reaching generational impact. InSPIRE will create new job opportunities and support existing companies, making first Panama City's—and then the regional economy in the eight affected counties—highly resilient and attractive to the nation's top talent and growing aerospace and advanced manufacturing industries.

Regional economic development organizations are actively growing a cluster of commercial and government entities that would be served by InSPIRE and related maintenance and repair operations (MRO) markets. InSPIRE will play a leading role serving as a magnet to attract and incubate new technology-driven companies while serving the needs of existing industry making the region exceptionally desirable for high-skill, high-wage job creators in the region.

A multi-leveled skilled and adaptable workforce, state-of-the-art facilities and industry-responsive resources and policies are attractors for industry to the region. InSPIRE and industry partners will collaboratively design workforce development programs and the R&D and Testing & Evaluation (T&E) services provided in key technical areas in addition to contracting and collaborating with industry partners to meet prototyping, testing, evaluation, research, and development needs.

Expanding on Learning Systems Institute (LSI) and FSU Panama City's relationships with the region's schools, the project seeks to create pathways for students at public schools in all eight counties to recognized industry certifications, accelerated credit, certificate, or degree attainment at the high school level, to promote training and continuous learning opportunities for K-12 teachers, and to provide educational tools and resources ensuring that training standards are exceeded.

Programming will holistically span from K-12 to post graduate continuing education, and thus connect to and complement existing curricula and student success metrics, including those targeted by other Triumph initiatives. InSPIRE will be focused on careers supporting aerospace and advanced manufacturing, especially those requiring undergraduate and graduate engineering degrees.

InSPIRE programs will lead a comprehensive effort across the region to work with educators, employers, and community support resources to extend outreach. It will create and coordinate a network of K-12 teachers who have been trained to deliver programming and support them through content, materials, and regional aspirational connections for student engagement. The network will provide relevant experiences for career paths, relatable mentorship for guidance and supporting success, and assistance in transitioning across education experiences and completions across the continuum and into career placements.

The InSPIRE project is expected to impact the total number of trained teachers in K-12 Education, in addition to middle school and high school students. At least 1,000 teachers will be trained in STEM education, and an assumption is made that only 70 percent of teachers will implement STEM learning/changes in their classroom(s). Given about 5-13 (or an average of 9) students per teacher per year will gain interest in STEM fields, a total of 3,500-9,100 (or an average of 6,300) students will gain interest in STEM in the first year of implementation. Over a five-year period, one can expect approximately 17,500-45,500 (or an average of 31,500) additional students will be interested in the STEM fields.

LSI has been developing and disseminating K-12 STEM education for fifty years, attracting more than \$800M in R&D funding. LSI and FSU Panama City will collaborate on this effort in the eight-county region.

InSPIRE will also work with partner Florida College System (FCS) institutions and technical colleges to develop, promote, recruit, and retain a specialized workforce in Northwest Florida across all levels of industry certifications, certificates, and two-year degrees in STEM.

New programs will be developed by InSPIRE and existing recognized certifications, certificates, and accredited degree programs enhanced through collaboration with regional educational organizations and in consultation with the Florida Department of Education (DOE). This includes FSU improving and expanding existing 2+2 articulation initiatives with regional colleges to provide access for students who wish to pursue a bachelor's degree and beyond. It will include FSU working to embed new certificates and industry certifications in its degree programs and working with local FCS institutions to do the same.

The exposure to innovative industry-led science and technology will prepare students and trainees to become future leaders. InSPIRE's graduates, ingrained with cutting-edge knowledge and skills, will be in high demand.

According to LSI, there is a quantifiable difference in salaries between individuals employed in the STEM field, and an even larger salary differential between those employed in the Science and Engineering field (when compared with non-S&E occupations). Individuals in a STEM field make approximately \$22,000 more than individuals in a non-STEM field. Similarly, science and engineering occupations make approximately \$51,970 more than non-science and engineering occupations.

Other regions in the United States have seen significant benefit from strategic investments in innovation capacity and the infrastructure to connect it to local economic opportunity and national needs. The Research Triangle Institute was founded in 1958 to build the Research Triangle Park (RTP) adjacent to the Raleigh Durham Airport. RTP was created in 1959 to leverage the research programs at Duke University, the University of North Carolina, and North Carolina State University. RTP was envisioned as a means to diversify from traditional industries of agriculture, textiles, and wood furniture then prominent in the state, but lagging in a post WW II economy. RTP struggled into the mid-60's until the state began aggressively recruiting companies to the Park. Since then, the region has become a global leader in technology-based companies serving electronics and computing, engineering, biotechnology, information technology, and advanced manufacturing market sectors. The high density of talent and commercial innovation creates a virtuous cycle for supporting and leveraging education and research programs at surrounding schools. More than 300 companies and 55,000 employees are located in the Park itself, with many more companies in the surrounding twelve county 'Triangle' region now benefiting from the greater ecosystem now in place. Today, RTP's current operating budget is ~\$1B.

The Georgia Tech Research Institute emerged from the Engineering Experiment Station (EES) at the Georgia School of Technology (now Georgia Tech), which was established in 1934 to support translation of technologies to support Georgia's commerce and citizenry. Notable successes in supporting DOD needs through WW II and the space race, including the founding of Scientific Atlanta, grew sustained operations into the 1970's. EES helped Georgia Tech become a designated University-Affiliated Research Center (UARC), which provides closer integration with DOD programs and facilitates stronger research collaborations. In the 1970's when relations with Georgia Tech were restructured to promote better collaboration between the university and EES and create joint appointments of researchers and faculty, operations grew significantly, and EES was renamed GTRI in 1984. Today, GTRI's direct annual funding is more than \$700M, and it is a recognized national resource for technical innovation.

Another example important for InSPIRE is the development of Huntsville (AL) as 'Rocket City,' a capital of US aerospace, in support of the national defense and space programs emerging after WW II. In 1950, the decision to concentrate US jet and rocket development at Redstone Arsenal led to the construction of new test facilities and recruitment of companies to serve emerging needs spanning from military and commercial aircraft to space vehicles. Today, hundreds of aerospace-related companies are located in northern Alabama, all of the large US companies that

serve the aerospace industry have a presence in Rocket City, and the underpinning innovation and workforce base has also led to diverse growth in automotive and biotechnology companies in the region.

Transformational innovation ecosystems tend to be resilient to economic downturns and hardships and thrive on active programs with state and regional community economic developers and education institutions. In Northwest Florida and in the Gulf South, aerospace, aviation, and manufacturing are prime industry targets for economic development opportunities and economic diversification. Due to military installations and geographical proximity to several large OEMs and aviation company headquarters, the region is primed for growth. To gain market-share in the significant aviation and aerospace sector, the region must work to ensure that proper investments are made now to keep pace with the national trends and demands of the sector.

Key labor needs for the greater thirteen Northwest Florida region, including the eight Triumph, were identified in a May 2, 2023 report from Florida's Great Northwest – Labor Supply & Demand Research Analysis Year 2 Update. This report noted that 115,000 of this region's total 650,000 jobs are government-related, and other public sources show that more than 50,000 of those are affiliated with key DOD facilities, such as Eglin Air Force Base and the Naval Surface Warfare Center – Panama City. This report identified engineering positions as an area of need, and this need will increase as InSPIRE creates more opportunities for companies to pursue their development, testing, and prototyping activities in the region. InSPIRE's education programs will not only ensure the existing talent need is met, but that a sufficient number of trained graduates will be prepared for the additional new jobs created.

InSPIRE will support existing programs such as the Aviation Center of Excellence at Northwest Florida Beaches International Airport (ECP) and Project Maple, and help create new opportunities for future similar, and larger, economic development drivers for the region by providing industry-relevant testing, prototyping, and deployment support and extending STEM outreach more actively into the region. New employment opportunities in the Transportation Services Sector, and others that build off advanced manufacturing will be created.

InSPIRE will create ongoing 'business' through its own operations, provide support to existing companies to ensure their success and growth in the region, and recruit customers to locate proximately to the Institute in the region. InSPIRE will serve as a magnet for the region, help grow customers, and with each new successful economic development project, the community will diversify its economy and become more resilient to unforeseen events creating a stabilizing effect to the regional economy making it highly resilient to major disasters, such as Deepwater Horizon, Hurricane Michael, COVID-19.

InSPIRE will be operated by FSU and headquartered in Bay County with an Advisory Board consisting of experts from the community, private and public sectors. What makes FSU's approach different is the commitment and relationships to ensure InSPIRE serves the specific needs of the Triumph Gulf Coast region's industry, defense bases and economy. It is expected that the principal InSPIRE facilities will be at or near the ECP with satellite nodes active at partner locations across the eight affected counties. The facilities will be owned by a public

entity eligible to receive Triumph Gulf Coast project funding (both during and after the terms of the project).

Over the course of ten years, InSPIRE anticipates becoming self-sustainable. By developing infrastructure, facilities, and integrated education programs, InSPIRE will create a long-lasting, positive impact on the disproportionately affected counties in the region.

Project outcomes include \$235M in new contracts and grant funding and expenditures.

Letters of Support

Bay County Board of County Commissioners

Aerosonic

Air Force Research Laboratory (DAF)

Cummins

Danfoss Turbocor

GE Aerospace

L3Harris Technologies

Lockheed Martin

Huntsman

Solvay Composite Materials

Spectral Energies

Starfighters Aerospace

Budget and Funding

See attached

Exhibit B

Project 312, InSPIRE

Budget 398,824,571.23
 Estimated construction start date if applicable 8/1/24
 Estimated education component start date if applicable 1/2/25

	Lease Rental Fees	Equipment & Equipment Maintenance	Supplies	Personnel	Contracted Services and Utilities	Total
Project Total						
Calendar Year 2024 (YR 1)	-	-	-	1,895,000.00	-	1,895,000.00
Calendar Year 2025 (YR 2)	2,929,798.02	15,925,000.00	2,000,000.00	7,036,589.26	150,000.00	28,041,387.28
Calendar Year 2026 (YR 3)	3,017,691.96	16,012,000.00	3,000,000.00	9,518,135.04	405,000.00	31,952,827.00
Calendar Year 2027 (YR 4)	3,108,222.71	29,730,450.00	3,150,000.00	11,573,044.55	710,250.00	48,271,967.26
Calendar Year 2028 (YR 5)	3,201,469.40	29,421,363.50	3,244,500.00	13,213,185.46	731,557.50	49,812,075.86
Calendar Year 2029 (YR 6)	3,297,513.48	17,062,754.41	3,341,835.00	13,040,070.92	753,504.23	37,495,678.03
Calendar Year 2030 (YR 7)	3,396,438.88	15,579,637.04	3,442,090.05	13,669,643.74	776,109.35	36,863,919.06
Calendar Year 2031 (YR 8)	3,498,332.05	17,597,026.15	3,545,352.75	14,058,103.74	799,392.63	39,498,207.32
Calendar Year 2032 (YR 9)	3,603,282.01	20,114,936.93	3,651,713.33	14,458,217.54	823,374.41	42,651,524.23
Calendar Year 2033 (YR10)	3,711,380.47	18,133,385.04	3,761,264.73	14,870,334.76	848,075.64	41,324,440.65
Calendar Year 2034 (YR 11)	3,822,721.88	17,152,386.59	3,874,102.68	15,294,815.49	873,517.91	41,017,544.56
Calendar Year 2035 (YR 12)	-	-	-	-	-	-
Project Total	33,586,850.86	196,728,939.66	33,010,858.55	128,627,140.49	6,870,781.68	398,824,571.23
Triumph						
Calendar Year 2024 (YR 1)	-	-	-	750,000.00	-	750,000.00
Calendar Year 2025 (YR 2)	-	15,425,000.00	747,567.74	2,925,000.00	-	19,097,567.74
Calendar Year 2026 (YR 3)	-	15,497,000.00	1,500,000.00	3,635,385.00	-	20,632,385.00
Calendar Year 2027 (YR 4)	-	23,700,000.00	-	-	-	23,700,000.00
Calendar Year 2028 (YR 5)	-	16,337,500.00	-	-	-	16,337,500.00
Calendar Year 2029 (YR 6)	-	10,000,000.00	3,341,835.00	4,594,327.65	-	17,936,162.65
Calendar Year 2030 (YR 7)	-	-	-	-	-	-
Calendar Year 2031 (YR 8)	-	-	-	-	-	-
Calendar Year 2032 (YR 9)	-	-	-	-	-	-
Calendar Year 2033 (YR10)	-	-	-	-	-	-
Calendar Year 2034 (YR 11)	-	-	-	-	-	-
Calendar Year 2035 (YR 12)	-	-	-	-	-	-
Triumph Total	-	80,959,500.00	5,589,402.74	11,904,712.65	-	98,453,615.39
Grantee						
Calendar Year 2024 (YR 1)	-	-	-	1,145,000.00	-	1,145,000.00
Calendar Year 2025 (YR 2)	2,929,798.02	500,000.00	-	1,867,000.00	150,000.00	5,446,798.02
Calendar Year 2026 (YR 3)	3,017,691.96	515,000.00	-	1,766,610.00	405,000.00	5,704,301.96
Calendar Year 2027 (YR 4)	3,108,222.71	5,000,000.00	-	1,148,297.00	-	9,256,519.71
Calendar Year 2028 (YR 5)	3,201,469.40	3,000,000.00	-	2,320,499.40	-	8,521,968.80
Calendar Year 2029 (YR 6)	3,297,513.48	2,000,000.00	-	1,705,779.62	-	7,003,293.10
Calendar Year 2030 (YR 7)	3,396,438.88	500,000.00	-	1,747,923.53	-	5,644,362.42
Calendar Year 2031 (YR 8)	3,498,332.05	500,000.00	-	1,791,331.77	-	5,789,663.81
Calendar Year 2032 (YR 9)	3,603,282.01	-	-	1,836,042.24	-	5,439,324.25
Calendar Year 2033 (YR10)	3,711,380.47	-	-	1,882,094.04	-	5,593,474.51
Calendar Year 2034 (YR 11)	3,822,721.88	-	-	1,929,527.38	-	5,752,249.27
Calendar Year 2035 (YR 12)	-	-	-	-	-	-
Grantee Total	33,586,850.86	12,015,000.00	-	19,140,104.98	555,000.00	65,296,955.84
Match Source 1						
Calendar Year 2024 (YR 1)	-	-	-	-	-	-
Calendar Year 2025 (YR 2)	-	-	1,252,432.26	2,244,589.26	-	3,497,021.52
Calendar Year 2026 (YR 3)	-	-	1,500,000.00	4,116,140.04	-	5,616,140.04
Calendar Year 2027 (YR 4)	-	1,030,450.00	3,150,000.00	10,424,747.55	710,250.00	15,315,447.55
Calendar Year 2028 (YR 5)	-	10,083,863.50	3,244,500.00	10,892,686.06	731,557.50	24,952,607.06
Calendar Year 2029 (YR 6)	-	5,062,754.41	-	6,739,963.65	753,504.23	12,556,222.28
Calendar Year 2030 (YR 7)	-	15,079,637.04	3,442,090.05	11,921,720.20	776,109.35	31,219,556.64
Calendar Year 2031 (YR 8)	-	17,097,026.15	3,545,352.75	12,266,771.97	799,392.63	33,708,543.51
Calendar Year 2032 (YR 9)	-	20,114,936.93	3,651,713.33	12,622,175.30	823,374.41	37,212,199.98
Calendar Year 2033 (YR10)	-	18,133,385.04	3,761,264.73	12,988,240.72	848,075.64	35,730,966.14
Calendar Year 2034 (YR 11)	-	17,152,386.59	3,874,102.68	13,365,288.11	873,517.91	35,265,295.29
Calendar Year 2035 (YR 12)	-	-	-	-	-	-
Match Source 1 Total	-	103,754,439.66	27,421,455.81	97,582,322.86	6,315,781.68	235,074,000.00