



Act 1131 of 2015
Regional Workforce Implementation Grant

APPLICATION COVER SHEET

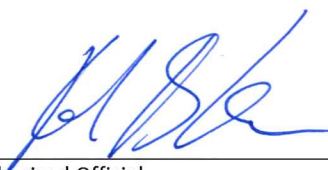
DUE JUNE 1, 2016

To:	Arkansas Department of Higher Education										
Requesting Institution:	University of Arkansas - Fort Smith (UAFS)										
Title of Project:	UAFS Robot Automation Program (formerly Robotics Automation Academy)										
Project Partners:	<table border="0"><tr><td>1. Fort Smith Public Schools</td><td>6. Pernod-Ricard</td></tr><tr><td>2. Greenwood Public Schools</td><td>7. Western Arkansas Planning and Development District</td></tr><tr><td>3. Charleston Public Schools</td><td>8. Western Arkansas Workforce Development Board</td></tr><tr><td>4. ABB</td><td>9.</td></tr><tr><td>5. HSM</td><td>10.</td></tr></table>	1. Fort Smith Public Schools	6. Pernod-Ricard	2. Greenwood Public Schools	7. Western Arkansas Planning and Development District	3. Charleston Public Schools	8. Western Arkansas Workforce Development Board	4. ABB	9.	5. HSM	10.
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Requested Budget:	\$999,065.00										
Date Submitted:	5/31/2016										
Applicant Contact:	Dr. Edward Serna										
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Authorized Signatures for Institution

University of Arkansas - Fort Smith (UAFS)

Lead Institution



Authorized Official

Act 1131 of 2015

Regional Workforce Implementation Grant Application

*Please complete each section of this application and submit to the Arkansas Department of Higher Education by **June 1, 2016**. Applications should be emailed to ADHE.Workforce.Grant@adhe.edu. Please note that only projects that were awarded a planning grant are eligible to apply for an implementation grant.*

SECTION 1 – PROGRAM NEED

20 Points

Proposals will include a thorough description of the labor needs, as determined by the Local Workforce Development Board, and specifically identify the skills gap employers face in the selected region and will continue to face in the future. Entities seeking grant funds must outline the proposed program and/or equipment needed and how creation of the program and/or acquisition of equipment will address those labor needs.

Essential Components:

- Regional data demonstrating the need for action - provide empirical data that illustrates needs of the local workforce, with a particular emphasis on anticipated or future needs.
- Clear linkages between grant activities and local needs- clearly illustrate how the proposed grant project is directly linked to addressing the workforce needs and deficits of the region. Successful applications will provide a thorough description of the region's high-demand and high-skill industrial occupations, and identify how the proposed activity will address job candidate deficits in those areas. **Applicants must also submit letters of support from at least two area employers for the proposal, citing need and outlining benefits for local industry.**
- Alignment with Arkansas economic and workforce goals- describe how the proposed project will increase overall higher education attainment in the region and provide clear linkages between a postsecondary credential and the needs of employers.

Keep the following rubric in mind when completing this section:

	Exemplary	Superior	Adequate	Needs Improvement
Program Need (20 Pts)	Significantly addresses a top 3 workforce need in the region. (18–20 Pts)	Addresses in a more limited way a top 3 workforce need in the region. (15–17 Pts)	Addresses in a limited way a less critical workforce need in the region. (11–14 Pts)	Identified labor need is too narrow or not in a critical area. (0–10 Pts)

Please enter your answer in the box provided below. Feel free to include any necessary charts, graphs or tables.

Regional Data Demonstrating Need for Action

Purpose: The intention of this grant is to launch a program of concurrent credit study in robot automation that meets the existing and emerging need for middle-skill employees in the manufacturing industry within Western Arkansas. By leveraging the expertise of our partners, UAFS developed an industry-driven program that matches the demand for a skilled automation and robotics workforce with a supply of fully-trained candidates. We are confident that the skills we will develop in this program transcend this single sector and provide additional employment opportunities outside of manufacturing.

History: Western Arkansas experienced significant employment loss following the 2008 economic downturn. Organizations who survived the contracture did so by efficiently utilizing their labor resources which included implementation of advanced manufacturing systems. The skills required in these more automated environments have also evolved such that employers seek workers who have advanced technological skills. Additionally, the aging of America's workforce creates additional pressure on the labor ecosystem as well trained and highly knowledgeable individuals from the Baby Boomer generation exit the workforce. Further, this accentuates the shortage of skilled workers. Workers who are underemployed or unemployed, whether they are seasoned workers or high school graduates who desire to enter the workforce, are finding it more and more difficult to land gainful employment. This is part of a larger national trend in many manufacturing and service sectors called technological unemployment. Many companies made capital investments in technology to boost productivity without adding to their existing workforce. The ideal candidate for the advanced manufacturing environment possesses an evolved skillset that includes a propensity towards automation and robotics.

Opportunity exists with projections for significant job creation among middle-skill workers. In their August 2013 report, *Material Handling & Logistics* predicted as many as 1.5 million jobs related to robotics would require a new set of "middle skills." These jobs are defined as those requiring more than a high school diploma but less than a four-year degree. Harvard Business School article by Fuller and Raman (2014) titled "Bridge the gap: Rebuilding America's middle skills" claimed that 25 million jobs or approximately 47% of all new job openings from 2010- 20 will fall into the middle-skills range. Additionally, 73% of employers expect to see their need in this area grow in the next 2-3 years. The authors stated that this not only impacts the competitiveness of US companies but influenced their decision making on where to locate their operations.

For the Western Arkansas regional economy to retain and attract new middle-skill jobs, it is incumbent on our partnership with industry employers, educators, and policymakers to match labor supply with industry demand at the regional level. Our partnership shaped the curriculum to develop a talent pipeline that matches qualified workers with jobs. In order to remain effective, the training provided by UAFS is industry-driven and focuses on jobs that are of strategic importance to regional businesses and provide career opportunities for the employees it serves.

Clear Linkages Between Grant Activities and Local Needs (including letters pledging support from at least two area employers for the proposal, citing need and outlining benefits for local industry)

According to Western Arkansas Planning and Development District in its *Comprehensive Economic Development Strategy: 2014-2019* (2014), the Fort Smith metropolitan area comprised of Sebastian and Crawford counties in Arkansas and Sequoyah County in Oklahoma is home to more than 25,000 residents engaged in manufacturing enterprises in the region. Wages for this population exceed \$800 Million and represent 30% of enterprise payrolls. Per WAPDD, Arkansas Economic Development Commission (AEDC) lists business sectors targeted for growth including Administrative and Support Services, Advanced Food Manufacturing and Packaging, Management of Companies and Enterprises, Distribution and Logistics Services, and Paper and Timber Products – all of which are represented by industries in the region.

A number of initiatives were established by WAPDD to support economic resilience of the region. Included in those efforts is Business Retention and Expansion (BRE) which ultimately seeks to increase the economic viability of the industry in the region. Strengthening the existing labor pool with individuals whose skills are aligned with careers in advanced manufacturing is actionable support of BRE efforts. UAFS Robot Automation supports BRE by providing innovative concurrent technical instruction to high school students to obtain middle skills and in preparation for careers in advanced manufacturing.

Current and Emerging Skill Gaps

As technology continues to evolve and employers require a more skilled labor force to remain competitive, projections call for continued erosion in the traditional manufacturing jobs such as those located in Western Arkansas. Employers in advanced manufacturing enterprises are experiencing two employee-related challenges. First, advancement in technology is displacing workers whose skills are no longer appropriate to the tasks. Second, an estimated 10,000 baby boomers exit the workforce each day taking with them their technical skills and expert knowledge. The lack of existing skilled workers within the enterprise and the exodus of the baby boomers create significant workforce gaps. Such shortage was reported to us during our conversations with Western Arkansas HR Association (WAHRA) members and indicated as a significant threat to the sustainability of their organizations. The skillset most frequently cited by WAHRA members to be in short supply is advanced manufacturing including proficiency in electronics, electricity, PLC, industrial controls and robotics. The shortage in Western Arkansas of job seekers with these skills has forced WAHRA members to seek job applicants outside the region and ultimately puts the viability of local organizations at risk. Additionally, WAHRA members indicated a need to attract females and minorities to this job category.

Recognizing this trend, UAFS worked with its local industry partners to develop a program of study which will produce graduates with skills well-suited to the in-demand occupations. UAFS utilized data from the Arkansas Department of Workforce Services to identify the 10 industry sectors with the largest net employment growth. Leveraging this data, UAFS facilitated a series of robust discussions with local industries in these sectors regarding their current and emerging labor needs. Bearing in mind the changing national labor market landscape and the needs within Western Arkansas, UAFS in partnership with the Western Arkansas Workforce Development Board, the Fort Smith Manufacturing Executives Association, the Fort Smith Regional Chamber of Commerce, and the Western Arkansas Human Resource Association identified a dearth in Robotics and Automation skills.

Robotics and Automation is the use of industrial robots in the automation of industrial processes to achieve organizational objectives that improve efficiency through reduced cost, increased speed, accuracy and consistency, and improved quality and scalability of production. Economists and industry experts alike predict manufacturing will rebound with technology advances creating demand for workers who possess new middle-skill talent in robotics and automation. UAFS Robot Automation Program directly links career education with critical skills for in-demand jobs.

Alignment with Arkansas Economic and Workforce Goals

Working with our industry and K12 partners, UAFS defined cost-effective programming and the necessary equipment to satisfy the educational requirements to provide middle skills to students and connect the student to careers in the advanced manufacturing industry. UAFS identified several programming and equipment elements to leverage in the implementation phase of this program.

By including our corporate and industry partners in the development of industry-driven programs of study, UAFS ensured programming and equipment fully met their requirements for a skilled workforce. The learning environment we developed mirrors existing skill needs while remaining flexible as these needs change and the work environment evolves. We anticipate that this program will address the skilled worker shortage in robotics and automation. Further, skills learned through this program will transcend this particular industry sector to support career options outside of manufacturing. For instance, robot automation is used in transportation and logistics as well as in healthcare and aerospace. The foundational knowledge and skills learned in the UAFS Robot Automation program are transferable to a number of sectors.

Diversity: STEM career paths have long been regarded as the most lucrative for individuals. High regard for STEM employment is expected to continue throughout the foreseeable future as more and more processes are automated and when possible shifted to cyber administration. Unfortunately, efforts to narrow the gender gap in STEM have produced little change. Additionally, some minority populations are underrepresented in STEM careers. By providing access to concurrent credit robot automation education in the traditional high school environment, UAFS through its partner schools has the opportunity to engage females and minority students in a STEM career pathway.

SECTION 2 – PROGRAM PLAN**25 Points**

Program plans must be designed to meet the goals and core requirements of the Regional Workforce Grants program as well as the following Essential Components:

- Detailed project timeline and overview- provide a month-by-month overview of the critical convenings, activities, and actions that will comprise the project.
- Measurable objectives for each phase of the project- detail the metrics utilized throughout the project to track how credentialed job candidates possessing the skills needed by employers will be provided.
- Project governance and accountability plan- clearly describe the plan for governance, meetings, and decision-making structure; identify a project director; and identify members of a project steering committee that will maintain oversight throughout the project period.
- Pathways articulation and support- clearly describe the educational pathway(s) and support services that will be developed, or existing pathways that will be enhanced, to meet the identified workforce needs. Pathways should incorporate all appropriate student outcomes from short-term industry-recognized credentials through the highest certificate or degree programs appropriate to the identified career goals and include career step-out points at the completion of each credential.
- Role of equipment request- required only for those proposals seeking equipment purchases. Outline how equipment purchase will specifically address local labor market needs; provide detailed description of equipment, educational value of equipment in preparing workforce, and justification for purchase.
NOTE: Equipment may not be purchased during the planning phase
- Performance assessment- clearly define measurable outcomes to be achieved through implementation of the plan and strategies to measure and report achievement of those outcomes. Priority will be given to programs which prepare candidates for high wage jobs or which create capacity to move candidates from unemployment to employment.
- Program plans must be designed to meet the goals and core requirements of the Regional Workforce Grants program. At a minimum, the plan must include a detailed project timeline and overview, measurable objectives for each phase of the project, a project governance and accountability plan, pathways articulation and support, the role of any equipment requested, and a performance assessment.

Keep the following rubric in mind when completing this section:

	Exemplary	Superior	Adequate	Needs Improvement
Program Plan (25 Pts)	Plan addresses all goals and core requirements and properly connects all activities to measurable outcomes that address workforce needs. (22–25 Pts)	Plan addresses most goals and requirements and substantially connects activities to measurable outcomes. (18–21 Pts)	Plan addresses many goals and requirements and connects some activities to measurable outcomes. (14–17 Pts)	Plan lacks significant requirements or connections of activities to measurable outcomes are not clear. (0–13 Pts)

Please enter your answer in the box provided below. Feel free to include any necessary charts, graphs or tables.

Section 2- Program Plan

UAFS aligned required programming with a student's prerequisite knowledge and ability-to-benefit as discovered through use of the college-administered entrance exam. UAFS currently administers the COMPASS exam and will begin using Accuplacer in November 2016. Specific course requirements and sequencing was identified with the following plan of study: Fundamentals of Electricity, Robot Automation, Introduction to Electronics Technology, Industrial Electricity, Electrical Circuits and Components, Solid State Components, and Digital Fundamentals.

The program of study is as follows:

	Fall Semester	Spring Semester
Year 1	ELEC1233 Fundamentals of Electricity	ELEC1242 Introduction to Electronics Technology and ELEC290V(1) Introduction to Robot Automation
Year 2	ELEC1263 Industrial Electricity	ELEC1353 Electrical Circuits and Components
Year 3	ELEC1393 Solid State	ELEC1863 Digital Fundamentals

Detailed Project Timeline (month by month overview of critical convenings, activities, etc.)

COMPLETED	Purpose	Participants
Jan 27, 2016	General Planning Meeting: Education Partners	K12 Districts: superintendents, principals, counselors, UAFS: faculty, deans, RWG Director
Jan 27, 2016	Meeting: Focus groups NJHS	FSPS Chaffin Junior High: National Junior Honor Society members (approximately 90 8 th and 9 th graders) UAFS: faculty, RWG Director
Feb 17, 2016	General Planning Meeting: Education Partners	K12 Districts: superintendents, principals, counselors, UAFS: faculty, deans, RWG Director
Mar 2, 2016	Site visits Fort Smith Public Schools	FSPS: Assistant principals, IT coordinator

		UAFS: faculty, RWG Director
Mar 8, 2016	Informational Meeting for Industry Partners	Western Arkansas Human Resource Association members UAFS: dean, RWG Director
Mar 9, 2016	General Planning Meeting: Education Partners	K12 Districts: superintendents, principals, counselors, UAFS: faculty, deans, RWG Director
Mar 18, 2016	Site visit Van Buren	VBS: Superintendent, principal, assistant principal, lead counselor UAFS: deans, RWG Director
Mar 30, 2016	Informational Meeting: Industry Partners	WAHRA members; leaders from industry UAFS: dean, RWG Director
Apr 7, 2016	Budget Meeting: Education Partner Superintendents	K12: District superintendents UAFS: chancellor, provost, dean, RWG Director
Apr 19, 2016	Charleston Site Visit	Superintendent, principal, assistant principal, lead counselor, UAFS Administration
May 1 – 30, 2016	Program Open for Admission and Enrollment at Partner Schools	Education Partner High Schools: Alma, Charleston, FS Northside, FS Southside, Van Buren
May 4, 2016	Greenwood Site Visit	Assistant principal, lead counselor, UAFS faculty and administration
May 15, 2016	MOUs for Education Partners	
May 31, 2016	Implementation Meeting for K12 IT	K12: IT coordinators, principals UAFS: IT, faculty, RWG Director
UPCOMING		
July 1, 2016	Issue Purchase Orders for equipment	
July 15, 2016	RWG Director and Administrative Specialist start date	
Aug 16, 2016	Industry Partner/Mentor Workshop	
Aug 17, 2016	Faculty Retreat/Development	
Aug 22, 2016	Classes begin	
Aug 22, 2016	New Student Orientation (in class)	
Sept 7, 2016	Advisory Board Meeting	
Nov 1 – 30, 2016	Enrollment for Spr17	
Dec 7, 2016	Advisory Board Meeting	
Dec 15, 2016	Classes conclude	
Jan 11, 2017	Faculty Retreat/Development	
Jan 17, 2017	Classes begin	
Mar 1, 2017	Advisory Board Meeting	
May 1 – 31, 2017	Enrollment for Fall17	
May 12, 2017	Classes conclude	
June 7, 2017	Advisory Board Meeting	
Aug 15, 2017	Industry Partner/Mentor Workshop	
Aug 16, 2017	Faculty Retreat/Development	

Aug 21, 2017	Classes begin	
Aug 21, 2017	New Student Orientation (in class)	
Sept 1, 2017	RWG Interim Report Deadline	
Sept 7, 2017	Advisory Board Meeting	
Nov 1 – 30, 2017	Enrollment for Spr18	
Dec 6, 2017	Advisory Board Meeting	
Dec 13, 2017	Classes conclude	
Jan 10, 2018	Faculty Retreat/Development	
Jan 16, 2018	Classes begin	
Mar 7, 2018	Advisory Board Meeting	
May 1 – 31, 2018	Enrollment for Fall18	
May 11, 2018	Classes conclude	

Measurable Objectives for Each Phase of the Project (detail the metrics utilized throughout the project to track how credential job candidate possessing the skills needed by employers will be provided)

Planning milestones:

- Establishment of host schools including execution of MOUs, site preparations, and class scheduling
- Launch of enrollment process including development of student application materials, admission standards, and procedures
- Establishment of two-tiered industry partnerships with letters of support (primary partners) and data collection for career-mapping (primary and secondary partners)
- Equipment inventory consistent with campus robot classroom and lab including acquisition of quotes for budget
- Faculty development including identification of available faculty (recruiting if necessary), ascertainment of credentials, curriculum development and lesson planning

UAFS established a unique tracking code for UAFS Robot Automation participants that enables us to monitor their success throughout their concurrent education as well as when they attend UAFS after high school graduation. The RWG Director will monitor local employment trends via program partners Western Arkansas Planning and Development District (WAPDD), Manufacturing Executive Association (MEA) and the Western Arkansas Human Resource Association (WAHRA). The RWG Director will continue to nurture existing relationships with industry partners through active engagement with mentoring component of the program and cultivate new partnerships. Collectively these efforts will enable the RWG Director to ensure appropriateness of coursework, and adequacy of equipment with respect to employer needs. Upon completion, program graduates will be partnered in their job search with career service professionals for guidance in resume development, practice interviews, and other placement-focused activities.

UAFS strives to maintain contact with our alumnae. This will be true as well for participants and graduates of UAFS Robot Automation. The UAFS Alumni Association is the gatekeeper for this information and will aid in monitoring career milestones of program participants.

Project Governance and Accountability Plan (clearly describe the plan for project governance, meetings, and decision-making structure; identify a project director; and

identify members of a project steering committee that will maintain oversight through the project period)

During the planning stage of UAFS Robot Automation, key education and industry partners were engaged in six meetings hosted at UAFS by the UAFS partner members. Three more meetings are expected prior to program launch (August 22, 2016).

An interim director was appointed and a nationwide search is underway for a permanent director. Anticipated start date for the newly hired director is July 15, 2016.

UAFS engaged an advisory board for planning and oversight to whom the UAFS Robot Automation Program is accountable. The board consists of five K12 school district superintendents, one regional K12 consortium director, two industry representatives and two UAFS deans representing the College of Applied Science and Technology and the College of Science, Technology, Engineering and Math. Advisory Board activities as well as the UAFS Robot Automation program are facilitated by the RWG Director. After program launch, the advisory board will meet quarterly beginning on October 1, 2016.

All efforts of this implementation grant are accountable to the Arkansas Department of Higher Education, the Arkansas Department of Education, Arkansas Department of Career Education, and the Laws of the State of Arkansas.

Pathways Articulation and Support (clearly describe the educational pathways and support service that will be developed, or existing pathways to be enhanced; . . . incorporate all appropriate student outcomes for short-term industry-recognized credentials through the highest certificate or degree programs appropriate . . . and include career step-out points at the completion of each credential)

During the planning period of January 1 to May 1, UAFS developed an automation/robotics program to establish a manufacturing career path for individuals with technical skills, also referred to as middle skills. Our approach for meeting goals and addressing core requirements was to design a comprehensive education framework which awards concurrent credit for program-related courses during a student's high school experience.

Students entering the 10th grade year of high school may enroll in career education courses while they continue to develop basic skills through their standard high school curricula. This delivery format includes instruction at the home high school campus by a university faculty member. This enables students to enjoy the traditional high school experience participating in social activities such as clubs and extracurricular activities while also engaging in concurrent curriculum.

The design is linear with instructional methods that accommodate multiple learning styles. Students will not be penalized for entering and exiting at different times and their accumulated hours will all apply toward the next degree level.

Our design is constructed upon the concept of an education/career ladder to accommodate multiple entry and exit points for students. Successful completion of courses results in the award of college credit and cumulatively moves the student towards degree attainment. Coursework mirrors degree plans for a Technical Certificate in Electronics Technology, Associate of Science in Electronics Technology, Bachelor Degree in Applied Science, and Bachelor Degrees in Electrical Engineering Technology and Organizational Leadership.

Career mapping will be provided to participants by their industry mentors to aid in the student's understanding of career choice with quality of life afforded by different career paths and the education and training necessary for success in such jobs.

UAFS Robot Automation delivers the instructional model with a blend of University faculty, K 12 faculty and staff, and industry-based subject-matter-experts. This collaboration ensures the content is industry driven by current practitioners and the delivery model is tailored to meet the needs of the students. We believe this approach best serves students and lends the flexibility needed to make the program most successful.

Role of Equipment Request (. . . how equipment purchase will specifically address local labor market needs; provide detailed description of equipment, educational value in preparing workforce and justification of purchase)

To effectively teach robot automation, specific hardware must be readily available for use. To that end, UAFS Robot Automation is replicating its robot automation classroom and lab at three regional high schools. The equipment will be of the same brand and model to ensure consistency in program delivery and to create economies of scale where possible. Representative equipment requirements for developing such a capability include laptop computers, soldering kits, PLC trainers, sensors, ABB IRB robots, robot dissector kits and HP laser jet printer.

It is cost prohibitive to purchase a robot for each workstation. Students will work in four cohorts and rotate between stations. This enables the lab to be outfitted with two ABB IRB robots rather than four robots which meets the needs for the learning objectives while being mindful of efficiency and costs.

EQUIPMENT

ABB IRB120 Robots (3 schools with 2 per school)
 Robot table (2 per school)
 Electronic/soldering/tool kit (66 work stations)
 Kit refill/replenish per stations (66 workstations)
 Soldering module (66 workstations)
 Portable Electric Relay Control Troubleshooting (2 per school)
 Portable Electric Relay Control Troubleshooting (1 per school)
 Portable Electronic Sensors Learning System (1 per school)
 High School eLearning Indv Subscription (69 in Yr 1)
 High School eLearning Indv Subscription (135 in Yr 2)
 High School eLearning Indv Subscription (201 in Yr 3)
 Soldering module support materials (66 Level 1 workstations)
 PLC hardware for PLC trainers (1 time fee)
 PLC trainer stations (housing hardware in line above - 2 per school)
 Miscellaneous sensors (1 each per school)
 Robots dissector kits (1 each per school)
 Location tool kit & compressor (3 each per school)

Dell Latitude E5570 Laptops (4 per school)
Dell Latitude E3350 Laptops (22 per school)
LogixPro software (26 per school)
Datamation SafeHarbor2 Laptop networked cart (1 per school)
HP LaserJet M402DN printer (1 per school)
Infrastructure upgrades at UAFS to support UAFS Robot Automation

Performance Assessment (clearly define measurable outcomes to be achieved through implementation of the plan and strategies to measure and report achievement of those outcomes. Priority will be given to those which prepare candidates for high wage jobs or which create capacity to move candidates from unemployed to employed)

Student success is ultimately the measure of program success. Enrollment is anticipated to range from 45 – 66 in year 1. A retention rate of 50% is standard though retention for this program is expected to be considerably higher. Upon graduation from high school, students may seek job placement or matriculation toward degree attainment. UAFS will help students who wish to continue in the program to navigate the enrollment process including help with applications to grants and scholarships as well as with course registration.

SECTION 3 – STRENGTH OF PARTNERSHIP**20 Points**

Proposals are required to address how the program plan incorporates each of the mandatory partners, as identified above, in a meaningful role.

Essential Components:

- Detailed description of role of each partner in implementation of the project- describe how each partner will carry out components of the grant project; provide a description of assigned tasks for each of the mandatory partners; identify specific personnel and the roles they will play throughout the project; describe the integration of each role into the overall project; and describe the process for implementing fully articulated pathways from K-12 through a baccalaureate degree, as appropriate.
- Capabilities of each partner in ensuring project success- discuss the unique strengths of each partner in executing planned proposal; describe how each partner is qualified to participate in the proposed project and how each partners strengthens the overall partnership.
- Consideration of all potential partners in the region – describe the process for identifying each selected partner, including the consideration of regional community colleges, universities, public schools, education service cooperatives, businesses and industries, career and technical education programs, multidistrict vocational centers, and private partnerships.

Keep the following rubric in mind when completing this section:

	Exemplary	Superior	Adequate	Needs Improvement
Strength of Partnership (20 Pts)	Plan includes broad representation and each partner has a defined role with identified critical contributions. (18–20 Pts)	Plan includes broad representation but partner roles are not clearly defined. (15–17 Pts)	Plan lacks one or two important partners or not all partners are critical to success of the plan. (11–14 Pts)	Partner participation is too narrow or some partners do not contribute meaningfully. (0–10 Pts)

Please enter your answer in the box provided below. Feel free to include any necessary charts, graphs or tables.

Detailed Description of Role of Each Partner in Implementation of the Project (describe how each partner will carry out components of the grant project; provide a description of tasks for each of the mandatory partners; identify specific personnel and the roles they will play throughout the project; describe the integration of each role into the overall project; and describe the process for implanting fully articulated pathways from K-12 through a baccalaureate degree, as appropriate)

UAFS Robot Automation is intended to provide a program of study in robotics and automation that meets the existing and emerging need for middle-skill employees in manufacturing industry within Western Arkansas. By leveraging the expertise of our partners, we developed an industry-driven program that matches the demand for a skilled automation and robotics workforce with a supply of fully trained candidates. We are confident that the skills developed by participation in UAFS Robot Automation transcend the advanced manufacturing sector and provides additional employment opportunities outside of manufacturing.

Anticipated Roles for Partner Organizations

UAFS Robot Automation is comprised of four groups or partners: UAFS, Education, Industry and Other. Partners are actively engaged with students and with other partners in delivering the UAFS Robot Automation coursework in an innovative environment utilizing industry experts as mentors. The Regional Workforce Grant (RWG) is implemented by the RWG Director who is an employee of UAFS. Education partners will be the first line of contact in student recruitment using marketing materials supplied by UAFS. UAFS supplies the high school advisors with student packets containing a student guide, application for admission, participation agreement and registration forms to be distributed to interested students. UAFS admits and registers students. UAFS faculty provides instruction to program participants with industry representatives serving as mentors who link classroom instruction to careers.

UAFS Partners

Following the ideation generation of advisory board members and area employer associations, UAFS determined a skills gap in advanced manufacturing was prevalent and warranted an aggressive campaign to boost robotic and automation skills across the region. UAFS assembled a mix of industry and education partners to determine the scope of the program, desired outcomes, and then worked to close the gap between the present labor force and the desired workforce of the future.

UAFS Robot Automation is a collective effort led by the College of Applied Science and Technology with significant support from Student Services (Testing, Admissions, Records, etc.). UAFS presently offers two concurrent programs to high school students: SmartStart which offers general education courses at the high school location and Western Arkansas Technical Center (WATC) which offers technical courses on the UAFS campus (technical courses). For UAFS Robot Automation, existing SmartStart procedures were modified to suit the enrollment of high schools in career tech education courses; existing WATC procedures were modified to suit the delivery of technical courses to the high school campus.

Academic advising for career path choice will exceed standard student advising. This will be accomplished through a team advising approach where UAFS collegiate advisors work in tandem with partnering high schools advisors to ensure efficiency in course enrollment. This will mitigate any unnecessary course work, reduce cost of degree, and shorten time to degree completion. In addition to team advising, UAFS enlisted industry partners for the purpose of mentoring and providing real-world connectivity to classroom topics. Human Resource professionals from industry partners and the Western Arkansas HR Association will aid by providing information about career paths in robots and automation, the benefits of these specialized career tracks, and appropriate workplace behaviors that support a good work ethic.

Education Partners

UAFS Robot Automation experienced resounding support from the region's K12 school districts. As project champions, the education partners aided in rebranding the program from its original title of Automation Academy. Education partners participated in "namestorming" to aid in the search for a more marketable program name; additionally the education partners provided access to students for focus groups. The education partners worked with the RWG Director to identify prerequisite concerns and remap course sequencing to avoid limitations. The education partners accepted responsibility to recruit from their student body, administer the first step of enrollment (forms dissemination and collection) and to support student engagement. The education partners were instrumental in developing a best practice for engagement of college faculty in a K12 environment to better acclimate the faculty to the nuances of today's high school culture which ultimately will allow the faculty to better serve program participants.

Proximity between high schools was used to determine the three schools best suited to engage in UAFS Robot Automation. Charleston, Greenwood and Fort Smith Southside comprise the schools most suitable to faculty commute. School districts engaged in the Guy Fenter Educational Services Cooperative at County Line (Arkansas) were invited to participate if the classes at the three partnering schools are not at capacity. This outreach enables very small school districts to participate with nearby schools should they have student interest and can navigate the logistics of attending.

Courses will be taught at the partnering high schools with the education partners providing classroom, lab and storage space. Two partner schools displaced existing scheduled classes to accommodate UAFS Robot Automation. The third partner school is building a state-of-art addition and has generously assigned an expansive room with a window visible to the staircase through which they anticipate displaying the robots. High school administrators and advisors will continue to be engaged in a supporting role with the students. Local high school advisors are the student's first contact for enrollment in UAFS Cyber Systems and continue to monitor students throughout their high school experience.

Academic leadership at UAFS is working diligently to place diverse faculty in the teaching roles at the high schools participating in UAFS Robot Automation. At this time, no qualified female faculty are available but female faculty are available for co-teaching roles. The faculty search will continue as UAFS anticipates additional faculty needs in year 2.

Industry Partners

Industry partners who have a legacy of supporting UAFS endeavors play core leadership roles in the economic and workforce development needs for the community. The engagement of these organizations ensures that UAFS Robot Automation is industry-driven and will grow the talent pipeline needed to remain competitive. While each industry partner will play a critical role in several areas during the planning and implementation phases of this program, we secured commitments from the following partners to serve our robotics/automation program.

UAFS engaged a number of business and industry partners ("industry partners") in this endeavor. ABB, HSM, and Pernod-Ricard have supported this initiative since the pre-planning stage. Their letters of support are included in this application.

Additionally, Arkansas Air National Guard 188th Wing, Trane, Inc., Walmart Stores, Inc., and Weldon, Williams, and Lick, Inc., have joined as partners.

Industry partners were matched to the three participating partner schools and assigned a regular recurring role of mentor. Professional members (e.g. engineers, technicians) of each organization will provide mentoring to the classes via Skype or Google Hangout or in person when practical. In this capacity, the professionals will review current course subjects and link the topic to real-world practice. Using technology, the mentor can stream live demonstrations in advanced manufacturing practices to students in the classroom. Human Resource professionals from industry partners will mentor students and provide career path metrics to engage students in the comparison of wages earned to anticipated standard of living. Human resource professionals will mentor students on key topics such as work ethics and standards of behavior. Finally, a collective effort is underway to engage female mentors from industry partners when possible.

As with the education partners, the industry partners participated in course selection and endeavored to develop course sequencing befitting of advanced manufacturing while considering the inexperience of potential students. Industry partners are aiding the RWG Director in the career mapping process which includes providing job titles, brief descriptions and salary information to aid program mentors in teaching career path metrics that enable students to project a quality of life to the various career paths. Industry partners will lead the mentoring component meeting with classes at least twice monthly to review their current lessons and demonstrate how the lessons directly relate to activities in the workplace.

Other Partners

Western Arkansas Planning and Develop District (WAPDD) serves as the administrator for this region's Workforce Development Board as required by the State of Arkansas Workforce Investment Act. WAPDD is a catalyst for economic development for the region. UAFS relied upon input from the Western Arkansas Workforce Development Board in developing degree to job "crosswalks". The Manufacturers Executive Association (MEA) of Fort Smith supports this initiative as it directly aligns with their need for a skilled workforce.

Capabilities of Each Partner in Ensuring Project Success (discuss the unique strengths of each partner in executing planned proposal; describe how each partner is qualified to participate in the proposed project and how each partner strengthens the overall partnership.

Education Partners

All three of the school districts who have joined as educational partners are eager to launch the program. All three have identified classrooms that can be secured and have adequate infrastructure to support the equipment and students. The Greenwood school has incorporated a dedicated robot classroom in their new high school addition. Construction plans were modified for the wing's vestibule to add a prominent feature window for permanent robot display. At the time of this application, student registration is underway. Both Charleston and Greenwood report overwhelming student interest with greater than twice the number of the seats available.

Should any of the three partners determine they cannot proceed, three alternate high schools have self-identified. UAFS did not solicit the interest but was approached by the superintendents of the three schools who want to offer UAFS Robot Automation to their students. Clearly interest is significant. This implementation grant will allow UAFS to develop a program of concurrent delivery in a highly marketable course of study. Once proof of concept has been attained, the project – and others similar in objectives – can be replicated. Should that be the case, expanding the service scope to include additional schools may be considered during Implementation II.

Industry Partners: Primary Partners

After conducting an environmental scan, a number of enterprises associated with advanced manufacturing are located in the region. For primary partnership UAFS directed its attention to organizations with a history of strong community leadership. ABB was approached because it manufactures one of the two lines of robotics most commonly purchased including the robots utilized by UAFS. UAFS faculty includes members who have extensive training by ABB on the operation of its robots. Additionally, ABB is an organization with significant community involvement including educational support of K12 and higher education programs. Like ABB, HSM and Pernod-Ricard (formerly Hiram-Walker) are community leaders whose work process is representative of advanced manufacturing environments. Each of these primary partners has committed their people resources to provide mentors for professional technical expertise as well as human resource expertise.



A primary industry partner, **ABB** (dba Baldor) is the industry lead for student recruitment. ABB is a multinational corporation headquartered in Zurich, Switzerland, operating mainly in robotics and the power and automation technology areas. It ranked 158th in the Forbes Ranking (2013). ABB is one of the largest engineering companies as well as one of the largest conglomerates in the world. ABB has operations in around 100 countries, with approximately 150,000 employees. ABB's reported global revenue typically exceeds \$40 billion annually. Baldor Electric Company, a division of ABB, is headquartered in Fort Smith, AR. Baldor markets, designs, and manufactures industrial electric motors, mechanical power transmission products, drives, and generator sets. The company manufactures its products in 19 U.S. locations, 1 in Canada, 2 in China, and 1 in England. Its strategy is to be the highest value provider, focusing on quality, service and time.

ABB (dba Baldor) is a leader in the manufacture of robot technology. Like all branded technology companies, ABB offers its own in-house certification to individuals who have extensive industry experience; faculty from College of Applied Science and Technology (CAST) are credentialed. While students in this program won't gain knowledge and skills equivalent to the industry credential, they will be working under the direction of faculty who have. The engagement of credentialed faculty with

ABB as industry partner ensures that program participants will receive instruction, coaching and mentoring second to none as it pertains to ABB robots. ABB is a local partner in education with the Fort Smith School District. ABB volunteered to be the lead industry partner and mentor with all three schools: Charleston, Greenwood and Fort Smith Southside High Schools.



Primary industry partner **HSM** (formerly Hickory Springs Manufacturing), is an American company globally manufacturing discrete components and integrated solutions for transportation, furniture, bedding and other markets. The company operates 50 plants employing nearly 2,500 workers in 17 states. It also operates a plant in the Guanlan industrial park area of Shenzhen, China, that produces recliner mechanisms. HSM's Fort Smith facility employs approximately 240 people in an advanced manufacturing facility with automation ranging from first generation robots to the current state-of-art ABB IRB120s. HSM's operational leaders are engineers eager to introduce students to the possibilities of robots. Anticipating robot program success, HSM indicated their long-range strategic goals may be shifted to incorporate scholarships directed to high school graduates who complete the UAFS Robot Automation program. At the very least, the leadership team at HSM has expressed their unwavering desire to grow the next generation of skilled workforce for the Fort Smith region to impact the efficiency of their local operation and to increase the viability of their facility. HSM volunteered to be the lead industry partner and mentor for Charleston High School.



Primary industry partner **Pernod Ricard** (formerly Hiram-Walker) is a French company that produces distilled beverages. It employs approximately 19,000 people in 80 countries with annual global revenue typically exceeding \$9 billion. The Pernod Ricard production facility in Fort Smith employees approximately 220 people in spirits blending operations often hailed as one of the most automated facilities in Arkansas. The facility's chief operating and executive officer is an engineer who encourages community leadership at all levels of her organization. The leadership team at Pernod-Ricard volunteered to be the lead industry partner and mentor for Fort Smith Southside and Greenwood High Schools.

Consideration of All Potential Partners in the Region (describe the process of identifying each selected partner, including the consideration of regional community colleges, universities, public schools, education service cooperatives, business and industries, career and technical education programs, multidistrict vocational centers, and private partnerships.

Education Partners (University and K12)

UAFS is located in Sebastian County. Its first obligation is to support the school districts located within the county: Fort Smith and Greenwood. Moving beyond the county, the school district and high school closest to the two county districts is Charleston. As mentioned above, the twenty partner

schools of the Guy Fenter Educational Service Cooperative are invited to participate should interest and space warrant.

Industry Partners

In addition to the primary partners described above (ABB, HSM, and Pernod Ricard), a number of secondary industry partners were solicited to bolster the mentoring teams for each school. During events on March 8 and March 30, industry representatives attended information meetings to learn the scope of the initiative and how the industries can partner to build the workforce of the not-so-distant future. At this time, four additional industry partners, Arkansas Air National Guard 188th Wing, Trane, Inc., Weldon, Williams and Lick, Inc., and Walmart Stores have committed to join the initiative.



Arkansas Air National Guard – 188th Wing, most commonly referred to as the 188th is a unit of the Arkansas Air National Guard, stationed at Fort Smith Air National Guard Station, Fort Smith, Arkansas. If activated to federal service, the Wing is gained by the United States Air Force Air Combat Command. The 188th is a Remotely Piloted Aircraft (MQ-9 Reaper), Space Focused Targeting, and Intelligence, Surveillance and Reconnaissance Unit. The 188th is able to rapidly deploy and support ground forces all over the world. The 188th includes approximately 1000 male and female guardsmen whose duties support intelligence, surveillance, reconnaissance, and attack missions. The leadership team at the 188th agreed to have a mentoring function at all three high schools engaged in the UAFS Robot Automation Program: Charleston, Fort Smith Southside, and Greenwood High Schools.



Trane, Inc., is a world leader in air conditioning systems, services and solutions. Trane systems and services have leading positions in premium commercial, residential, institutional and industrial markets. Trane products are regarded as innovative products that are of high quality and reliable. The company's logistics support a powerful distribution network. Trane has experienced a shift in recent years to the production of large commercial air handlers and does so with lean manufacturing processes. To continue operating their facility in Western Arkansas, it is imperative that they combine their expertise in environmental technology and energy conservation to make a difference in energy efficiency around the globe through the collaborative efforts of a technical workforce. Trane employs 180 at its location in Fort Smith. Trane recently introduced their first robotic operated production process. Trane's leadership team agreed to join the UAFS Robot Automation Program as mentors and will support all three high school. One of the Trane mentors is female.



Walmart Stores, Inc., is an American multinational retail corporation comprised of three segments: Walmart U.S., Walmart International and Sam's Club with total sales of \$482 Billion in FY16. Principal offices are maintained in Bentonville, Arkansas. Walmart stores, Inc., is the top ranked organization by the Fortune group. Walmart Stores, Inc., operates the largest grocery retailer in the US. Walmart employs 2.3 million worldwide. A division of Walmart Stores, Inc., Walmart Technology engages more than 3500 associates in corporate security, financial controls, merchandise replenishment and logistics, using advanced analytics to provide customers with the products they want, when they want them, and for the lowest possible price. Walmart Technology utilizes advanced technologies such as sophisticated networking, advanced cloud and data centers, and support applications and software in a variety of languages (both code and spoken linguistics) to engage customers in a variety of shopping formats. The leadership team at Walmart agreed to have a mentoring function at all three high schools engaged in the UAFS Robot Automation Program: Charleston, Greenwood and Fort Smith Southside High Schools. Two of the three Walmart Mentors are female.



Weldon, Williams, and Lick, Inc., (WW&L) is the industry leader in security printing. WW&L offers a complete array of custom tickets, parking permits, roll tickets, design, packing and distribution services. In order to survive in the American system of free enterprise, WW&L must be flexible and willing to change with times. Basic principles that guide the company, such as honesty in all dealings, industriousness, careful financial management, and service to the customer must be adhered to. WW&L's continued success depends on its willingness to move forward with new products, new technology and a skilled workforce to meet customer needs. As one of the nation's major producers of numbered printing, WW&L acknowledged their continued success hinges on their ability to provide high-integrity printing which requires advanced technical skills, careful inspection and security measures. WW&L actively engages in continued workforce development for their incumbent workers and seeks to add to their team employees with technical skills. WW&L volunteered to mentor at Fort Smith Southside High School.

SECTION 4 – BUDGET PLAN**15 Points**

Proposals will include a detailed financial plan that maximizes efficient use of existing resources and a completed budget template.

Essential Components:

- Clear alignment between funding request and grant activities- detailed discussion of how each component of the grant budget supports the goals and stated outcomes of the program.
- Local match of at least 10% of the total request, with a maximum cap of \$50,000- all proposals will include a plan for local funding to match 10% of the total grant proposal. For example, a grant requesting \$400,000 in funding would be required to provide \$40,000 in matching funds. However, the local match is capped at \$50,000, meaning grants in excess of \$500,000 will have the same match as a \$500,000 project.

Note: With a submitted written commitment and payment guarantee from an industry partner, internship wages paid during the initial twenty-four (24) months of this program may be used to offset the local match amount on a dollar-to-dollar basis. Additionally, wages paid to incumbent workers of the employer while enrolled in academic training may be deducted from the match as well. Any entity wishing to utilize this method of funding the match must include the appropriate documentation with their proposal and, if selected for funding, will be monitored to ensure compliance.

Keep the following rubric in mind when completing this section:

	Exemplary	Superior	Adequate	Needs Improvement
Budget Plan (15 Pts)	Plan identifies efficiencies that take full advantage of existing human and physical resources and all requested resources clearly support the goals of the plan. (13-15 Pts)	Plan includes significant efficiencies from existing resources and all requested resources clearly support the goals of the plan. (10-12 Pts)	Plan includes limited efficiencies from existing resources or includes some questionable resource requests. (7-9 Pts)	Budget includes limited or no existing resources from partners or includes requests deemed unnecessary. (0-6 Pts)

Section 4.1 – Budget Plan Detail

Please provide your detailed financial plan in the box below.

Clear Alignment Between Funding Request and Grant Activities (detailed discussion of how each component of the grant budget supports the goals and stated outcomes of the program)

The budget spreadsheet included in this packet features several categories of expense.

Salary expense refers to the salary of the director and an administrative specialist. It also includes the salary of faculty.

Supplies refers to office supplies such as printer ink, paper, and contract printing.

Equipment expense refers to all essential components to effectively teach robot automation. The purchase is reflective of the inventory necessary to equip the classroom and lab located on the UAFS campus. UAFS Robot Automation utilizes an eLearning Systems subscription service for online coursework rather than traditional hardcopy textbooks. The subscription eLearning service used for UAFS Robot Automation is compatible with smart phones, notebooks and computers which ultimately results in learning on-demand for students regardless of time of day or location.

Operational expense includes marketing activities, workshops, food service and facilities fees.

Travel expense refers to the mileage reimburse paid to faculty who travel from the home station (UAFS campus) to the partner high schools to teach UAFS Robot Automation. It also includes related expenses to attend workforce development conferences such as the one hosted annually by the American Association of Community Colleges.

Financial Aid expense includes \$25 entry exam (COMPASS) per student in lieu of other college admission test or because current admission test scores on file don't meet the admission floor. This is particularly valuable to ninth grade students who have not sat for the ACT or SAT at this point in time but who wish to enroll while seats are available.

Tuition and Fees refers to individual rate of \$695 per student per semester for a three credit hour course. During Year 1, tuition and fees are funded through the grant. In Implementation Year 2, partnering school districts will begin covering part of the tuition and fees at a rate of \$75 per student per semester.

Local Match of at Least 10% of Total Request (with a maximum of \$50,000 – all proposals will include a plan for local funding to match 10% of the total grant proposal)

UAFS	Waived per UAFS federally negotiated rate (52% for indirect)	\$519,513
K12 Partners	132 students at \$75/term	\$19,800
Industry Partners	3 schools at 4 sessions/month; 2 hours of prep and 1 hour of mentor contact per site/month; 8 months duration; @ \$50/hour (12 sessions/month @ 3 hrs each @ \$50/hr for 8 months)	\$14,400
ABB	Equipment donation: 3 PLC Industrial Controllers	\$2,457
Hannah Oil	Equipment donation: Assorted sensors and controls	\$8,000
ABB	Equipment discount: Per ABB Proposal Number: Q16-RPB28226, single station of ABB IRB 120 and related equipment is \$17,798; standard retail price of base unit is \$26,852. Net discount per item is \$9054. Six robots are required for a net savings of \$54,324.	\$54,324
	Total	\$618,494

Section 4.2 – Budget Plan Template

Please complete the budget template below. Totals will calculate automatically based on your input.

Requesting Institution:	University of Arkansas - Fort Smith
Title of Project:	UAFS Robot Automation Program

A. PROGRAM LEADERSHIP SUPPORT COSTS

1. Personnel/Stipend	\$230,545.00
2. Travel	\$50,702.00
3. Other (Explain Below)	\$5,000.00
Briefly Explain Other Costs	

TOTAL PARTNER PARTICIPANT COSTS	\$286,247.00
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B. OTHER DIRECT COSTS

1. Equipment	\$421,298.00
2. Materials and Supplies	\$13,000.00
3. Publication Costs/Documentation/Dissemination	\$0.00
4. Consultant Services	\$0.00
5. Other (Explain Below)	\$278,520.00
0	

TOTAL OTHER DIRECT COSTS	\$712,818.00
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C. TOTAL DIRECT COSTS (A & B)	\$999,065.00
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D. COST SHARING (Minimum 10% of C; up to \$50,000)	\$618,494.00
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Total Implementation Grant Budget	\$1,617,559.00
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Other Notes

Other Partner Participatn Costs: Development Workshops for Partners: \$5000

Other Direct Costs: Scholarship \$278,520

SECTION 5 - SUSTAINABILITY**20 Points**

Proposals will include a commitment and detailed plan for sustaining grant activities beyond the twenty-four (24) month implementation period. Equipment requests will clearly specify how purchased equipment will continue to be linked to addressing labor and workforce needs beyond the grant period.

Essential Components:

- Detailed plan for sustaining the program beyond the twenty-four (24) month implementation grant funding period- describe how the work supported by this grant will continue beyond the grant period; outline the roles and funding sources of each partner after the grant period.
- Detailed plan for maintaining communication and sharing resources among all the program partners beyond the twenty-four (24) month funding period;
- Identify availability of long-term resources to maintain and/or repair any equipment requested.
- Describe plan for redistribution of equipment to meet additional workforce needs once the employer needs addressed by the proposal have been satisfied.

	Exemplary	Superior	Adequate	Needs Improvement
Sustainability (20 Pts)	Identifies existing resources to continue the program with no reduction in services at the end of grant funding period. (18–20 Pts)	Identifies significant resources to continue the program with limited reduction in services at the end of grant funding period. (15-17 Pts)	Identifies limited resources to continue the program or proposes significant reduction in services at the end of grant funding period. (11-14 Pts)	New funding sources must be identified for continuation of program at the end of grant funding. (0-10 Pts)

Please enter your answer in the box provided below. Feel free to include any necessary charts, graphs or tables.

Detailed Plan for Sustaining the Program Beyond the Twenty-Four (24) Month Implementation Grant Funding Period (describe how the work supported by this grant will continue beyond the grant period; outline the roles and funding sources of each partner after grant period)

Current interest in the program is robust. Class sizes are capped at 22 but may be as small as 10. The program is expected to launch successfully and fuel interest of other students. Some attrition is expected; student retention goal is set at 50%. Regardless of attrition, UAFS expects momentum to build. During Year 2 another level of instruction will be added which results in a doubling of potential students. If this pipeline of students is sustained and the concept of instruction is proven, the program will have sufficient activity to warrant it be considered for additional funding during Implementation II.

After the initial capital outlay during Implementation I to equip the classrooms and labs, the cost for classroom sustainability is estimated at \$3500 per school to replenish/replace tools and \$3500 for eLearning access. A total expense per location for equipment and supplies is estimated at \$7000.

Memorandums of Understanding with partner schools articulate a progressive shift of tuition and fees. In Year 1, utilizing grant funds, UAFS will fully cover all tuition and fees (currently \$4695/semester). In Year 2, it is expected that partner schools will contribute 25% of standard concurrent credit tuition which will reduce the UAFS/grant financial burden. Should the Implementation Grant reach a second phase, it is expected that partner schools will increase their contribution by an additional 25% each year until they reach 100% of concurrent credit rates in the year after the second phase expires. It is important to note that UAFS concurrent credit tuition rates are half of standard rates. Thus, once the grant funding has ended, the tuition burden will be shared. 50% of full tuition will be covered by UAFS and 50% of full tuition will be paid by the partner school. All other fees will be waived. This gradual tuition cost shift is an effective plan for sustaining this effort beyond the Regional Workforce Grant's period of performance. Should tuition rates change, the amounts expressed here will be adjusted accordingly.

UAFS Robot Automation is expected to generate full-time equivalency (FTE) as follows:

	Students	Student Generation Credit Hours	FTE Generation
Year 1	45 – 66	270 - 396	18 – 26.4
Year 2	90 – 132	540 - 792	36 – 52.8

Detailed Plan for Maintaining Communication and Sharing Resources Among All Partners Beyond the Twenty-Four (24) Month Funding Period

Effective communication is critical in a project of this size and scope. The program engages a myriad of communication means including email, program webpage, marketing flyers, faculty retreats, and advisory board meetings.

Heavy and frequent communication has occurred throughout the planning process via email. It has proven efficient as **emails** are constructed on demand by the various partners and replies are provided typically within an hour. The timely responses of UAFS staff has enabled questions to be answered swiftly and wait time to be virtually eliminated.

Regular **lunch-and-learn sessions** were provided during the planning stage. Two additional sessions are scheduled for early summer (2016) to bolster the camaraderie of our partner's high school counselors and district IT professionals.

A **webpage** for regional workforce development is in development with launch anticipated by July 15, 2016. The webpage will provide introductory information to the public as well as program information and a list of faculty and staff affiliated with UAFS Robot Automation.

Video marketing was added to the plan in March, 2016, at which time the interim director conducted a variety of interviews with internal and external video production organizations. The cost to produce a video was substantial. A reallocation of planning funds was requested and subsequently grant. However, after site visits to participating schools and encountering the robust reception from students, the need for a marketing video was reprioritized. At this time, video production is tabled.

Marketing **flyers** are under development. Again, the urgency for these has shifted in light of the response from the students. However, flyers are still scheduled for development, production and distribution. To facilitate conversations with parents, flyers are expected to be available for non-native English speakers with first focus on Spanish and second focus on Asian languages.

Faculty **retreats** (aka in-service or professional development) will be conducted twice annually to keep faculty apprised of programmatic and employment news and to conduct formative and summative assessments of courses. Additionally faculty will be engaged in professional development in the courses to which they are assigned.

The UAFS Robot Automation **Advisory Board** meets regularly at the start of each quarter. During the planning phase, board meetings were more frequent and correspondence was heavy. It is anticipated that activity will be more frequent in the first semester as the first cohorts of students navigate the process.

Identify Availability of Long-Term Resources to Maintain and/or Repair Any Equipment Requested

Short-term repairs will be covered under standard warranties. Long-term plans for equipment repairs are reflective of craft worker cultures as well as in technical learning environments. Damaged or obsolete equipment is removed from commission, reworked by tradesmen (i.e. faculty and technology students in academia), and reintroduced to the lab.

Describe Plan for Redistribution of Equipment to Meet Additional Workforce Needs Once Employer Needs Addressed by Proposal Have Been Satisfied

The shortage of technology-skilled workers is anticipated to worsen in the coming years. UAFS Robot Automation isn't expected to completely alleviate the labor shortage. Rather, this program has the potential of producing technology-skilled students for a multitude of careers in a variety of settings.

Given the overwhelming response, we anticipate the program's popularity to continue and student interest to remain high. This program has been crafted so that it is replicable; should a host school choose to withdraw after the initial twenty-four months, an alternate school will be offered Robot Automation.

SUBMIT BY JUNE 1, 2016Email to ADHE.Workforce.Grant@adhe.edu*Applications will only be accepted for projects that were awarded a planning grant.***IMPLEMENTATION GRANT SCORING RUBRIC**

Critical Elements	Exemplary	Superior	Adequate	Needs Improvement	Value
Program Need	Significantly addresses a top 3 workforce need in the region. (18–20 Pts)	Addresses in a more limited way a top 3 workforce need in the region. (15–17 Pts)	Addresses in a limited way a less critical workforce need in the region. (11–14 Pts)	Identified labor need is too narrow or not in a critical area. (0–10 Pts)	20 Pts
Program Plan	Plan identifies efficiencies that take full advantage of existing human and physical resources and all requested resources clearly support the goals of the plan. (13–15 Pts)	Plan includes significant efficiencies from existing resources and all requested resources clearly support the goals of the plan. (10–12 Pts)	Plan includes limited efficiencies from existing resources or includes some questionable resource requests. (7–9 Pts)	Budget includes limited or no existing resources from partners or includes requests deemed unnecessary. (0–6 Pts)	25 Pts
Strength of Partnership	Plan includes broad representation and each partner has a defined role with identified critical contributions. (18–20 Pts)	Plan includes broad representation but partner roles are not clearly defined. (15–17 Pts)	Plan lacks one or two important partners or not all partners are critical to success of the plan. (11–14 Pts)	Partner participation is too narrow or some partners do not contribute meaningfully. (0–10 Pts)	20 Pts
Budget Plan	Plan identifies efficiencies that take full advantage of existing human and physical resources and all requested resources clearly support the goals of the plan. (13–15 Pts)	Plan includes significant efficiencies from existing resources and all requested resources clearly support the goals of the plan. (10–12 Pts)	Plan includes limited efficiencies from existing resources or includes some questionable resource requests. (7–9 Pts)	Budget includes limited or no existing resources from partners or includes requests deemed unnecessary. (0–6 Pts)	15 Pts
Sustainability	Identifies existing resources to continue the program with no reduction in services at the end of grant funding period. (18–20 Pts)	Identifies significant resources to continue the program with limited reduction in services at the end of grant funding period. (15–17 Pts)	Identifies limited resources to continue the program or proposes significant reduction in services at the end of grant funding period. (11–14 Pts)	New funding sources must be identified for continuation of program at the end of grant funding. (0–10 Pts)	20 Pts
Total Points Possible					100 Pts



Fort Smith Manufacturing Executives Association
Mark McCourt, President
P.O. Box 11015
Fort Smith, AR 72917
May 24, 2015

To Whom It May Concern,

The Fort Smith Manufacturing Executives Association is a non-profit organization that exists in order to support the manufacturing industry sector in our region. Our goal is to advance the regional manufacturing environment and promote corporate citizenship through professional development opportunities, policy influence, professional networking, and by fostering economic development for the River Valley.

I am writing this letter to express support for the Regional Workforce Implementation Grant Proposal being submitted by the University of Arkansas-Fort Smith. The Fort Smith MEA feels that the skills being taught in the Robotics/Automation program are in great need by manufacturers in our region. We look forward to the benefit this program will offer to students and the community. Further, we know that this program will be creating a talent pool that supports the high-skill, high-demand, manufacturing positions available in our region.

Please feel free to contact me should you have questions.

Sincerely,

A handwritten signature in black ink that reads "Mark McCourt". The signature is written in a cursive, flowing style.

Fort Smith Manufacturing Executives Association
Mark McCourt, President



A MEMBER OF THE ABB GROUP

Jason Green
Vice President – Human Resources
Baldor Electric Company
5711 R.S. Boreham, Jr. Street
Fort Smith, AR 72903
479-649-5188
www.baldor.com

May 27, 2016

To Whom It May Concern,

Baldor Electric Company is a leading marketer, designer and manufacturer of energy-saving industrial electric motors, mechanical power transmission products, and adjustable speed drives. The company was founded on the premise that a better motor is one that is more efficient, a belief that stands true today.

The company was founded in 1920 in St. Louis, Missouri and was acquired by ABB Ltd of Zurich, Switzerland in 2011. Baldor has been based in Fort Smith, AR since 1967 and employs close to 6,000 employees around the world, with approximately 2,000 of those employees working in the greater Fort Smith region.

I am writing this letter to express support for the Regional Workforce Implementation Grant Proposal being submitted by the University of Arkansas – Fort Smith. For many years, Baldor has partnered with UAFS on many projects and initiatives and has been working collaboratively with UAFS in the conceptual and planning phase of this proposal. We look forward to the increased skills and other benefits the Robotics/Automation program will bring to students and the community. We also know that this process will help meet Baldor's needs by creating a talent pool of individuals whose abilities better align with the demands of our company and the positions we have available.

Best Regards,

A handwritten signature in cursive script that reads "Jason Green".

Jason Green
Vice President – Human Resources

"To be the best as determined by our customers"



Pernod Ricard USA

May 24, 2016

Melissa Hanesworth
PO Box 2409
7401 Hwy 45 South
Fort Smith, AR 72903

To Whom It May Concern,

Pernod Ricard is a global leader in the spirits and wine industry. Our 18,000 employees work in 85 affiliates and 100 production sites around the world. We currently have more than 200 employees in our Fort Smith, Arkansas, production facility. Our decentralized culture is built upon the entrepreneurial spirit of our employees. Attracting and retaining the best talent is crucial to our ongoing success.

I am writing this letter to express support for the Regional Workforce Implementation Grant Proposal being submitted by the University of Arkansas - Fort Smith. We have been working collaboratively with UAFS in the conceptual and planning phases. The skillsets being taught through the Automation/Robotics program are skills that are greatly needed in our company and within other manufacturing companies in our area. We look forward to the enhanced talent pool that will ultimately be created through this effort, and we know that this effort supports the high-skill, high-demand positions that Pernod Ricard has available.

Sincerely,

Melissa Hanesworth
Managing Director



Tradition. Innovation. Performance.

Paul Mosley

4925 State Line Road, Fort Smith, AR 72916 | 479-646-6161 | pgmosley@hsm solutions.com

May 25, 2016

To Whom It May Concern,

HSM is focused on creating diverse solutions for our ongoing furniture and bedding customers, as well as for rapidly growing transportation, healthcare, packaging and government markets. We have decades of experience in the manufacture of foam, metal, wire, converting and fiber to the latest integrated assemblies and systems. Our Fort Smith, Arkansas Metal Plant work force consists of approximately 175 skilled workers who manufacture recreational vehicle entry steps, network power trays, school bus seat frames, industrial electric motor components, furniture components and many other metal parts and robotically welded assemblies.

I'm writing this letter to express support for the Regional Workforce Implementation Grant Proposal being submitted by the University of Arkansas-Fort Smith. We have been working collaboratively with UAFS in the conceptual and planning phases. HSM has a need for employees with the skill sets that are embedded in this Automation/Robotics program of study. Further, we feel that this effort will help create a talent pool that supports the high- skill, high-demand positions that HSM and other like industries in our region have available.

Sincerely,

A handwritten signature in black ink that reads "Paul Mosley". The signature is written in a cursive style with a large, stylized "P" and "M".

Paul Mosley
Manufacturing Engineer



Charleston School District

P.O. Box 188
Charleston, AR 72933
Phone (479) 965-7160
Fax (479) 965-9989

Superintendent
Jeff Stubblefield

Elementary Principal
Bruce Womack

Middle School Principal
Melissa Moore

High School Principal
Shane Storey

Curriculum Specialist /
Federal Coordinator
Susan Brown

Board President
Trey Gage

Board Vice-President
Brian Verkamp

Board Secretary
Joel McDonald

Disbursing Officer
Michele Schmitz

Board Member
Jeff Hayes

August 12, 2015

To Whom It May Concern,

I am writing this letter to express support for the Regional Workforce Planning Grant Proposal being submitted by the University of Arkansas-Fort Smith. We have already been working collaboratively with UAFS in the conceptual phase. We look forward to engaging in the planning process and to the opportunities the Regional Workforce Grant will provide students in the Charleston School District.

With kind regards,

A handwritten signature in black ink that reads "Jeff Stubblefield". The signature is stylized with a large, sweeping "J" and a long, horizontal stroke at the end.

Jeff Stubblefield,
Superintendent

Today... and ...



in the **Future**

Office of the Superintendent

3205 Jenny Lind • P.O. Box 1948
Fort Smith, Arkansas 72902-1948
479-785-2501
Fax: 479-785-1722

August 12, 2015

Dr. Ken Warden, Dean
College of Applied Science and Technology
University of Arkansas - Fort Smith
P.O. Box 3649
Fort Smith, AR 72913-3649

Re: Regional Workforce Planning

Dear Dr. Warden:

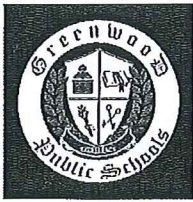
The Fort Smith Public School District is pleased to support the Regional Workforce Planning Grant Proposal being submitted by the University of Arkansas - Fort Smith. This process holds great promise as local school districts and the University of Arkansas - Fort Smith collectively plan to address the needs of our region in supporting job growth and economic development.

This process is a continuation of the relationship which the Fort Smith Public Schools have established in the past as FSPS and UAFS collectively address educational needs PreK-16. FSPS staff members have been working collaboratively with UAFS in the conceptual phase and look forward to engaging in the planning process. The opportunities which this Regional Workforce Grant can help provide for students in our secondary schools and higher education will help build a highly skilled workforce for the region.

Sincerely,

Benny L. Gooden, Ed.D.
Superintendent of Schools

pc; Dr. Barry Owen



Greenwood School District

August 24, 2015

To Whom It May Concern,

I am writing this letter to express support for the Regional Workforce Planning Grant Proposal being submitted by the University of Arkansas-Fort Smith. The Greenwood School District has already been working collaboratively with UAFS during the conceptual phase. We look forward to engaging in the planning process and to the opportunities the Regional Workforce Grant will provide our students.

The member schools of the Western Arkansas Education Service Cooperative have enjoyed a long-standing partnership with the University of Arkansas at Fort Smith. This is evidenced by the success of programs such as the Western Arkansas Technical Center. I am excited about the opportunities this grant will present as we bring various stakeholders together to better align education with the needs of our workforce.

Sincerely,

A handwritten signature in black ink, appearing to read "John Ciesla".

John Ciesla
Superintendent



OFFICE OF THE SUPERINTENDENT
2221 POINTER TRAIL EAST
VAN BUREN, ARKANSAS 72956
479.474.7942 PHONE
479.471.3154 FAX
WWW.VBSD.US

VAN BUREN SCHOOL DISTRICT



August 27, 2015

Dr. Ken Warden, Dean
College of Applied Science and Technology
University of Arkansas - Fort Smith
PO Box 3649
Fort Smith, AR 72913-3649

Re: Regional Workforce Planning

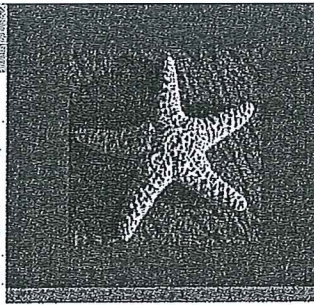
Dear Dr. Warden,

I am pleased to represent the Van Buren School District and express support for the Regional Workforce Planning Grant Proposal being submitted by the University of Arkansas-Fort Smith. We have already been working collaboratively with UAFS in the conceptual phase. We look forward to engaging in the planning process and to the opportunities the Regional Workforce Grant will provide students in the Van Buren School District.

Sincerely,

Dr. Harold Jeffcoat
Superintendent

*Roy Hester, Director
3010 E Hwy 22 Suite A
Branch, Arkansas 72928*



*Phone: 479-965-2191
479-635-5201
Fax: 479-965-2723*

*Guy Fenter
Education Service Cooperative*

August 12, 2015

To Whom It May Concern,

I am writing this letter to express our support for the Regional Workforce Planning Grant Proposal being submitted by the University of Arkansas-Fort Smith. UAFS has played an instrumental role in the Regional planning and development for the workforce in the River Valley Area.

The Guy Fenter Cooperative has been working collaboratively with UAFS in the conceptual phase. We eagerly anticipate engaging further in the planning process and to the outstanding opportunities the Regional Workforce Grant will make available to the students in the Guy Fenter Cooperative Service area.

Sincerely,

A handwritten signature in dark ink, appearing to read "Roy Hester". The signature is fluid and cursive, with a long horizontal stroke extending from the end.

Roy Hester
Director

COLLEGES AND UNIVERSITIES RATE AGREEMENT

EIN: 71-0394794

DATE:08/11/2014

ORGANIZATION:

University of Arkansas at Fort Smith
5210 Grand Avenue
Fort Smith, AR 72913

FILING REF.: The preceding
agreement was dated
05/21/2012

The rates approved in this agreement are for use on grants, contracts and other agreements with the Federal Government, subject to the conditions in Section III.

SECTION I: Facilities And Administrative Cost Rates

RATE TYPES: FIXED FINAL PROV. (PROVISIONAL) PRED. (PREDETERMINED)

EFFECTIVE PERIOD

<u>TYPE</u>	<u>FROM</u>	<u>TO</u>	<u>RATE(%)</u>	<u>LOCATION</u>	<u>APPLICABLE TO</u>
PRED.	07/01/2014	06/30/2018	52.00	On Campus	All Programs
PROV.	07/01/2018	06/30/2020	52.00	On Campus	All Programs

*BASE

Modified total direct costs, consisting of all salaries and wages, fringe benefits, materials, supplies, services, travel and subgrants and subcontracts up to the first \$25,000 of each subgrant or subcontract (regardless of the period covered by the subgrant or subcontract). Modified total direct costs shall exclude equipment, capital expenditures, charges for patient care, student tuition remission, rental costs of off-site facilities, scholarships, and fellowships as well as the portion of each subgrant and subcontract in excess of \$25,000.

ORGANIZATION: University of Arkansas at Fort Smith
AGREEMENT DATE: 8/11/2014

SECTION II: SPECIAL REMARKS

TREATMENT OF FRINGE BENEFITS:

The fringe benefits are specifically identified to each employee and are charged individually as direct costs. The directly claimed fringe benefits are listed below.

TREATMENT OF PAID ABSENCES

Vacation, holiday, sick leave pay and other paid absences are included in salaries and wages and are claimed on grants, contracts and other agreements as part of the normal cost for salaries and wages. Separate claims are not made for the cost of these paid absences.

Equipment Definition -

Equipment means article of nonexpendable, tangible personal property having a useful life of more than 1 year and an acquisition cost of \$5,000 or more per unit.

FRINGE BENEFITS:

FICA	Retirement
Worker's Compensation	Life Insurance
Health Insurance	Disability Insurance
Unemployment Insurance	TIAA/CREF
Tuition Remission	Employee Assistance Program

The next indirect cost rate proposal based on actual costs for the fiscal year ending 06/30/17 is due in our office by 12/31/17.

ORGANIZATION: University of Arkansas at Fort Smith

AGREEMENT DATE: 8/11/2014

SECTION III: GENERAL

A. LIMITATIONS:

The rates in this Agreement are subject to any statutory or administrative limitations and apply to a given grant, contract or other agreement only to the extent that funds are available. Acceptance of the rates is subject to the following conditions: (1) Only costs incurred by the organization were included in its facilities and administrative cost pools as finally accepted; such costs are legal obligations of the organization and are allowable under the governing cost principles; (2) The same costs that have been treated as facilities and administrative costs are not claimed as direct costs; (3) Similar types of costs have been accorded consistent accounting treatment; and (4) The information provided by the organization which was used to establish the rates is not later found to be materially incomplete or inaccurate by the Federal Government. In such situations the rate(s) would be subject to renegotiation at the discretion of the Federal Government.

B. ACCOUNTING CHANGES:

This Agreement is based on the accounting system purported by the organization to be in effect during the Agreement period. Changes to the method of accounting for costs which affect the amount of reimbursement resulting from the use of this Agreement require prior approval of the authorized representative of the cognizant agency. Such changes include, but are not limited to, changes in the charging of a particular type of cost from facilities and administrative to direct. Failure to obtain approval may result in cost disallowances.

C. FIXED RATES:

If a fixed rate is in this Agreement, it is based on an estimate of the costs for the period covered by the rate. When the actual costs for this period are determined, an adjustment will be made to a rate of a future year(s) to compensate for the difference between the costs used to establish the fixed rate and actual costs.

D. USE BY OTHER FEDERAL AGENCIES:

The rates in this Agreement were approved in accordance with the authority in Office of Management and Budget Circular A-21, and should be applied to grants, contracts and other agreements covered by this Circular, subject to any limitations in A above. The organization may provide copies of the Agreement to other Federal Agencies to give them early notification of the Agreement.

E. OTHER:

If any Federal contract, grant or other agreement is reimbursing facilities and administrative costs by a means other than the approved rate(s) in this Agreement, the organization should (1) credit such costs to the affected programs, and (2) apply the approved rate(s) to the appropriate base to identify the proper amount of facilities and administrative costs allocable to these programs.

BY THE INSTITUTION:

University of Arkansas at Fort Smith

(INSTITUTION)

(SIGNATURE)

Darrell R. Morrison

(NAME)

Vice Chancellor for
Finance and Administration

(TITLE)

August 15, 2014

(DATE)

ON BEHALF OF THE FEDERAL GOVERNMENT:

DEPARTMENT OF HEALTH AND HUMAN SERVICES

(AGENCY)

(SIGNATURE)

Arif Karim

(NAME)

Director, Cost Allocation Services

(TITLE)

8/11/2014

(DATE) 7506

HHS REPRESENTATIVE:

Theodore Foster

Telephone:

(214) 767-3261



DEPARTMENT OF HEALTH & HUMAN SERVICES

Program Support Center
Financial Management Portfolio
Cost Allocation Services

1301 Young Street, Room 732
Dallas, TX 75202
PHONE: (214) 767-3261
FAX: (214) 767-3264
EMAIL: CAS-Dallas@psc.hhs.gov

August 11, 2014

Mr. Darrell R. Morrison
Vice Chancellor for Finance & Administration
University of Arkansas at Fort Smith
5210 Grand Avenue
Fort Smith, AR 72913

Dear Mr. Morrison:

A copy of an indirect cost Rate Agreement is being faxed to you for signature. This Agreement reflects an understanding reached between your organization and a member of my staff concerning the rate(s) that may be used to support your claim for indirect costs on grants and contracts with the Federal Government.

Please have the original signed by an authorized representative of your organization and fax it to me, retaining the copy for your files. Our fax number is 214-767-3264. We will reproduce and distribute the Agreement to the appropriate awarding organizations of the Federal Government for their use.

An indirect cost proposal, together with the supporting information, is required to substantiate your claim for indirect costs under grants and contracts awarded by the Federal Government. Thus, your next proposal based on actual costs for the fiscal year ending 06/30/17 is due in our office by 12/31/2017.

Sincerely,

Arif Karim
Director
Cost Allocation Services

Enclosures

PLEASE SIGN AND FAX A COPY OF THE RATE AGREEMENT

OFFICIAL NOTIFICATION
New Procedures for Submitting
College and University Facilities & Administrative Rate Proposals

NAME CHANGE: **From Division of Cost Allocation to Cost Allocation Services (CAS)**

This is to officially notify you that CAS has implemented an automated Document Management and Workflow System (eFlow). The eFlow System is designed to capture Facilities & Administration (F&A) rate proposals (and if applicable, associated fringe rate proposals) along with other supporting documents electronically by email or scanning. CAS implemented this system to enhance the efficiency and productivity of our review process, in compliance with the Paper Reduction Act. Additionally, transitioning to eFlow eliminates barriers associated with paper documents in the new era of electronic transmission.

Effective immediately, all F&A rate proposals together with supporting information should be submitted electronically to your respective regional office at the following email address: CAS-Dallas@psc.hhs.gov. For those organizations not having the capability to submit their proposals electronically, you may submit a hardcopy via mail for scanning into the eFlow System. However, an electronic submission is preferred.

Please note that effective January 2015 all organizations will be required to submit electronically.

The preferred electronic format is two separate PDF files, as follows:

1. Single PDF file titled "Proposal" containing the entire proposal, including the transmittal letter, checklists, required certification, and reconciliation/support schedules. This file should not include the supporting financial data (e.g. audited financial statements, Single Audit, etc.)
2. Separate single PDF file titled "Financial Statements", containing the applicable financial data (e.g. audited financial statements, Single Audit, etc.) upon which the rates are based.

Note: If the organization proposes a fringe benefit rate, it should be submitted as a separate e-mail and separate proposal PDF attachment.

Due to our email server limitations, we cannot receive e-mails exceeding 25MB (including all attachments). Therefore, if the proposal and financial statements together exceed 25 MB, please mail a CD or flash drive containing the electronic files. This is the preferred option for very large proposals.

If you have any questions concerning the next submittal of your F&A rate proposal, or have problems forwarding your documents electronically, please contact us at (214) 767-3261.