



**Act 1131 of 2015**  
**Regional Workforce Continuation Grant**

**APPLICATION COVER SHEET**

*DUE JUNE 1, 2018*

<b>To:</b>	Arkansas Department of Higher Education	
<b>Requesting Institution:</b>	National Park College	
<b>Title of Project:</b>	Innovative Technologies Center	
<b>Project Partners:</b>	1. Arkansas Career Training Institute 2. Greater Hot Springs Chamber of Commerce/Hot Springs Metro Partnership 3. Craft Manufacturing & Tool, Inc. 4. Berry Global 5. Alliance Rubber 6. Southern Arkansas University 7. Henderson State University 8. Hot Springs School District 9. West Central Arkansas Planning & Development District 10. Triumph Airborne Structures 11. Arkansas Economic Development and Manufacturing Solutions	
<b>Requested Budget:</b>	\$890,280	
<b>Date Submitted:</b>	May 24, 2018	
<b>Applicant Contact:</b>	Kelli Albrecht	
<b>Applicant's Information:</b>	101 College Drive Hot Springs, AR 71913 501-760-4349 kalbrecht@np.edu	

**Authorized Signatures for Institution**

**National Park College**

Lead Institution



Authorized Official

## Act 1131 of 2015

### Regional Workforce Continuation Grant Application

*Please complete each section of this application and submit to the Arkansas Department of Higher Education by **June 1, 2018**. Applications should be emailed to [ADHE.Workforce.Grant@adhe.edu](mailto:ADHE.Workforce.Grant@adhe.edu). Please note that only projects that were awarded an implementation grant are eligible to apply for a continuation 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 continuation 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
<b>Program Need (20 Pts)</b>	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.*

### **Overview**

National Park College (NPC) is committed to the continued success of the Innovative Technologies Center (ITC). Established as a strategic initiative in 2015 by President Dr. John Hogan, the vision of the ITC to become a workforce and economic development strategy for the West Central Region is becoming a reality. The ITC has created a space that brings together local industry partners, students of all ages, and members of the community for the purpose of aligning workforce development and academic programs with regional economic development strategies thereby meeting the needs of employers while encouraging growth in the manufacturing industry sector. It is also developing into a tool that K-12 students and college students use to augment standard curriculum and provides a space for the community to engage with industry partners in an innovative and collaborative educational environment.

The Innovative Technologies Center opened in March 2017 and has experienced tremendous gains in awareness and usage. Since opening, the ITC has delivered 11 custom industry classes with 89 participants, hosted a variety of camps and activities with over 1,000 K-12 students, participated in and hosted campus activities with over 400 participants, and presented a variety of community classes and events with almost 200 participants. In total, the ITC has touched over 1,500 Garland County residents in just over one year.

The ITC staff looks forward to developing even more opportunities with industry partners, building additional educational programming for K-12 and college students, and identifying numerous ways to further engage in our community.

### **Grant Objectives – The Big Picture**

The primary objectives of the Continuation Grant will continue to focus on:

- Aligning workforce and academic programs with regional economic development strategies
- Identifying and meeting the needs of local and regional employers through training and educational programming
- Preparing the regional workforce with the skills to be competitive in the 21<sup>st</sup> century workplace
- Developing partnerships and pathways between the K-12 education system, NPC, and local industry partners.

In the Implementation Grant, the ITC was able to forge relationships with industry and establish basic workforce programming, such as CNC Machining Technology, which was widely needed. Industry partners are now looking to the ITC to take this programming to the next level and establish more advanced training programs that will augment the skillsets of employees and provide them the training they need to further enhance their organizational outcomes. Likewise, employers are seeing the value of providing current and future employees with a space to explore new technologies and collaborate on innovative projects. Therefore, we are introducing the concept of a Makerspace in this Continuation Grant.



Continuation of exceptional programs, enhancements of programs established for NPC and K-12 students, community outreach, and industry training are all encompassed in our project plan that is discussed in Section 2 of this application.

### Employment Needs

#### Arkansas Economic and Workforce Goals

According to a report from the Arkansas Economic Development Commission, manufacturing accounts for nearly 14% of the total gross state product (see below). Manufacturing careers offer above state average pay and often require less than a four year degree. National Park College partners with the Office of Skills Development to provide grant funding for manufacturing partners that need customized training for employees. These contracts account for approximately 80% of the overall training programs offered through the Community & Corporate Training department at NPC.

Manufacturers around the state continue to automate processes, which often requires significant upskilling of current employees. NPC's ability to adapt and deliver training provides regional employers an affordable option. The ITC can quickly develop and deploy training to meet the needs of industry partners. These efforts help close the skills gap while meeting the needs of manufacturing partners statewide who require highly skilled workers at their facilities. Additionally, NPC provides relevant workforce training through its Associate Degrees and Technical Certificates as well as partnerships with four year universities.

Manufacturing Output and Firms		Employment and Compensation	
Total Manufacturing Output (\$billions, 2016) (Percent share of total gross state product)	\$17.35 14.4%	Manufacturing Employment (2016) (Percent share of nonfarm employment)	153,700 12.5%
Manufacturing Firms in Arkansas (2015)	2,310	Average Annual Compensation (Manufacturing, 2016) (Nonfarm Businesses, 2016)	\$56,728 \$39,201
Sources: U.S. Bureau of Economic Analysis and the U.S. Census Bureau			

#### West Central Arkansas Region

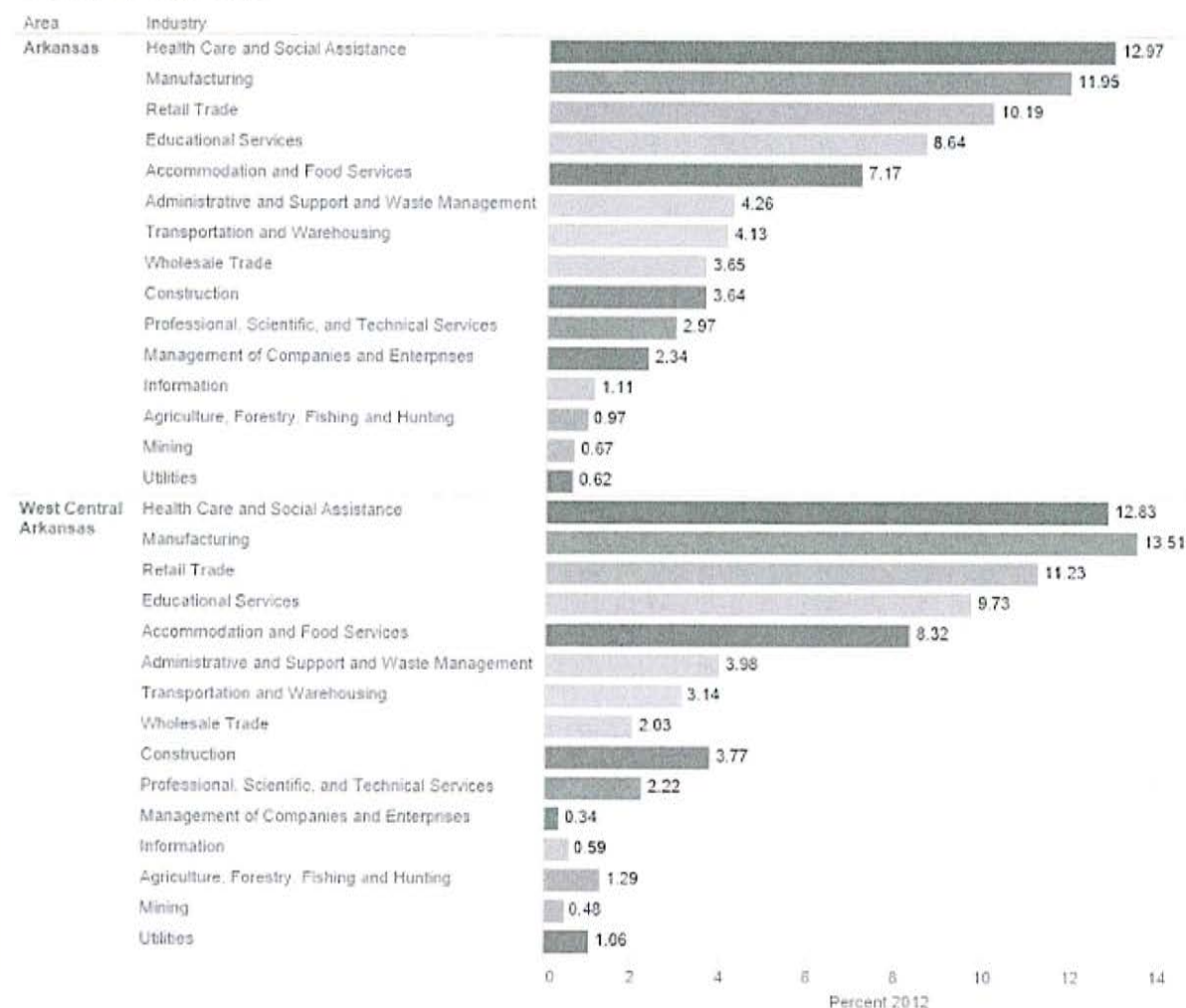
According to a recent article by Winrock International, the West Central region is experiencing a slight population growth. In Garland County, there have been 3,000 primary jobs added and an economic investment of \$30 million into the region. Neighboring counties have also experienced an increase in jobs and investments, with even more on the horizon. Workforce development is a primary economic focus for the region and industry leaders understand that they must leverage educational assets to establish and maintain an employee pipeline both now and in the future. This is why NPC has established industry-focused workforce programming and developed strong partnerships with area universities such as Arkansas Tech University and Southern Arkansas University. Likewise, NPC, College of the Ouachitas, and Henderson State University are partners in the Southern Arkansas Regional Alliance (SARA). This alliance further deepens the commitment to work together to create value for employers by educating and developing a workforce that meets the needs of regional employers.

The West Central Arkansas Planning & Development District (WCAPDD) is comprised of ten counties: Clark, Conway, Garland, Hot Spring, Johnson, Montgomery, Perry, Pike, Pope and Yell. According to



the Arkansas Research Center's data on the West Central Region, manufacturing employs the 13.5% of West Central workers compared to 11.95% overall in Arkansas (see graphic below).

#### Jobs by Industry 2012



Source: <http://arkansasresearchcenter.org/arc/index.php?cid=154>

Long term employment projections show a 6.26% change in growth for manufacturing in our region through 2022 (see graphic on next page). As industries move toward advanced automation, robotics, and programmable controllers, the need for highly skilled entry level employee increases. Likewise, existing workers will be required to adapt and advance their skills in order to maintain productivity with new equipment and machinery. Companies in the West Central region are already making advancements toward robotic welding and highly automated manufacturing processes. It will be imperative for NPC and the ITC to stay on the cutting edge of technology to ensure that employees, both current and future, have a place to gain the skills needed to remain competitive in the workplace of the future.

## Long-Term Employment Projections

### Projected Industry Growth 2012-2022

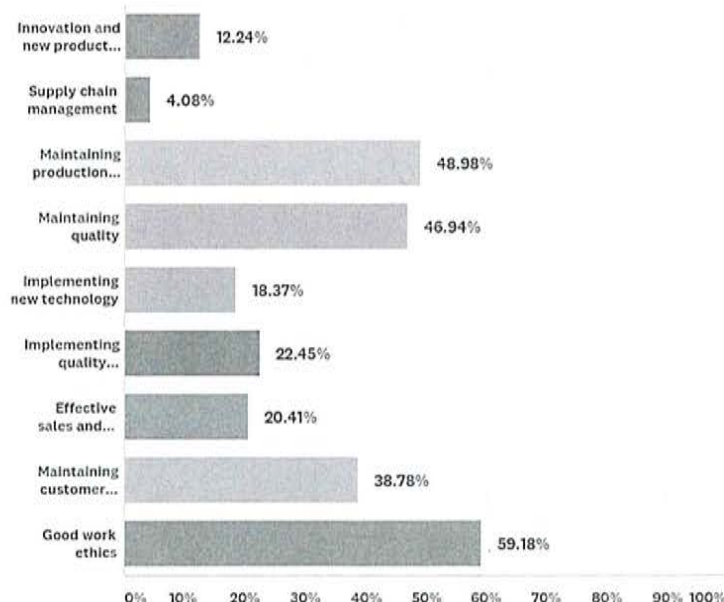
Industry	Estimated Employment	Projected Employment	Numeric Change	Percent Change
Total Employment, All Jobs	122,369	137,302	14,933	12.20
Natural Resources and Mining	2,174	2,437	263	12.10
Construction	4,614	5,046	432	9.36
Manufacturing	16,526	17,561	1,035	6.26
Trade, Transportation, and Utilities	21,370	22,614	1,244	5.82
Information	724	705	-19	-2.62
Financial Activities	4,189	4,674	485	11.58
Professional and Business Services	7,999	9,064	1,065	13.31
Education and Health Services	27,614	33,319	5,705	20.66
Leisure and Hospitality	12,044	14,740	2,696	22.38

Source: [www.discoverarkansas.net](http://www.discoverarkansas.net)

### Regional Workforce Industry Survey Data

NPC and the Hot Springs Metro Partnership conducted a Regional Workforce Industry Survey in March/April 2018. Sixty respondents completed the survey. The full results of this survey can be found in Appendix A. The feedback received from local industry (and shown below) reinforced our assumptions that employers are still having difficulty finding qualified employees that have both the technical skills and the soft skills needed to be successful.

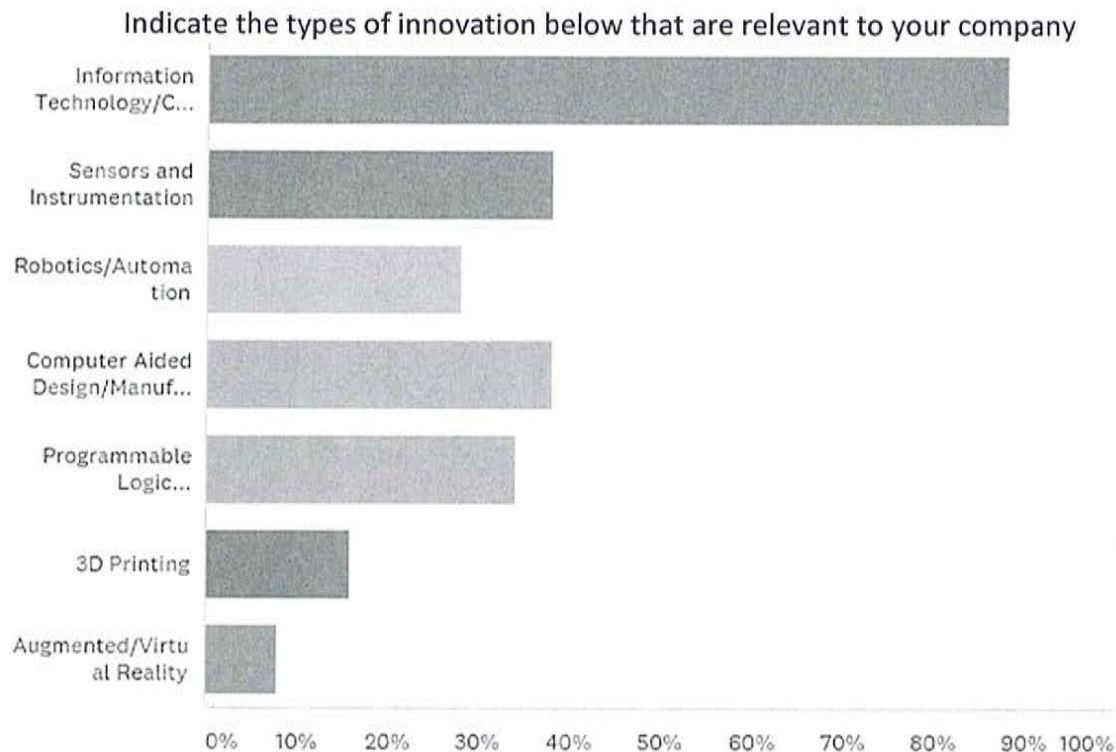
Q11 In which areas has your company experienced difficulty due to local workforce shortage or employee skill deficiencies? (check all that apply)



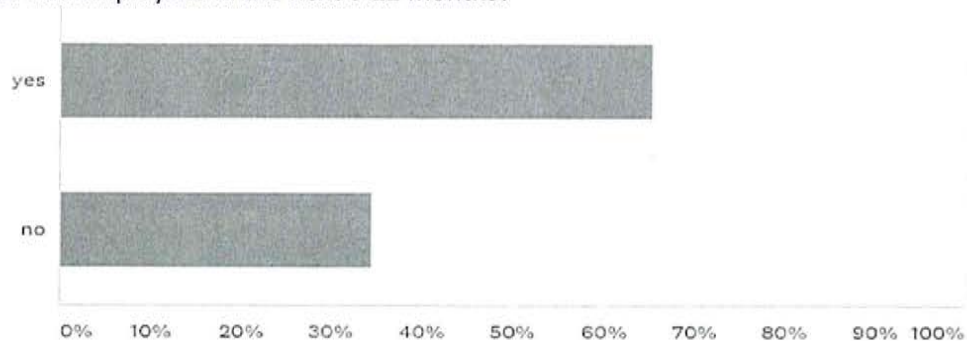
The focus areas of the Innovative Technologies Center align with the primary needs of our industry partners, including advanced manufacturing, industrial automation, and computer coding. Many of these employers cited a need for employees skilled in areas such as manufacturing, engineering, CNC



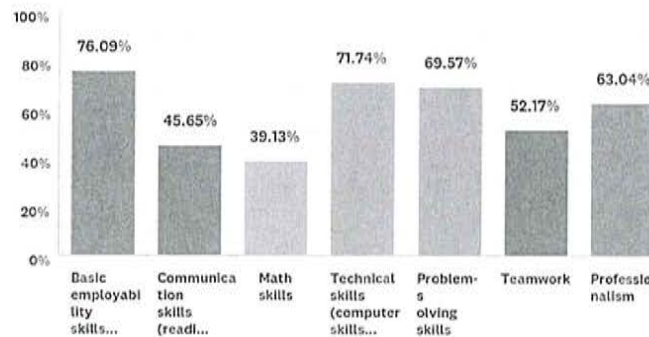
machining/programming, engineers, and process technicians. Sixty-six percent of the survey respondents stated they would be hiring additional staff in the next 6-12 months. This information reinforces the need for enhanced training in the areas that are outlined in this grant. Almost 40% of respondents cited a need for skilled production workers, with the next highest need in engineers and 88% of the respondents stated a need for employees with computer skills. The graphics below provide data that were used in developing the program planning for this grant.



Do you plan to add employees in the next 6-12 months?



Q14 Do your current employees struggle with any of the following? (check all that apply)



### Growing Partnerships

The ITC staff continues to build strong relationships with current industry partners and is developing new industry partnerships every day. Regular meetings with industry partners provide opportunities to gain input on programming and the types of equipment to purchase. This input has allowed development of educational labs that meet the needs of industry, the current workforce, and the future workforce.

#### Greater Hot Springs Chamber of Commerce/Hot Springs Metro Partnership

The Greater Hot Springs Chamber of Commerce and the Hot Springs Metro Partnership continue to play an integral part in the planning and execution of initiatives at the ITC. The Business Retention Team was established last year and includes representatives from the Chamber and Metro Partnership, NPC and the ITC, Henderson State University – Downtown Hot Springs, and the Arkansas Small Business & Technology Department. This committee meets quarterly to discuss economic initiatives that affect the region. Additionally, the Chamber established the Information Technology/Broadband Committee to address the needs of broadband and IT workers in the region.

The Chamber recently launched *Thermal Fusion*, an incubator site for entrepreneurs and is working with the ITC to set up a referral network in between the two entities. The ITC Makerspace will provide a location for inventors/entrepreneurs to develop products and ideas, while *Thermal Fusion* will provide wrap around business services (i.e., copying, legal advice, accounting services) and office space at a low cost for upstart companies.

#### Hot Springs Aerospace Alliance

NPC and the ITC continues to deepen existing partnerships with our area aerospace companies. During the December 2017 Aerospace Alliance meeting held at NPC, employers determined that there needs to be a greater emphasis on getting students from grades 8-12 interested in the local aerospace industry. As a result, the Hot Springs School District partnered with industries and NPC to produce a marketing video for our local companies. The EAST program at Hot Springs World Class High School is working to finalize the video, which will be shown to students at all area school districts at multiple grade levels. Additionally, NPC hosted an Aerospace Day on campus in spring and 500+ students who attend National Park Technical Center visited with all five major employers about careers in aerospace. Finally, NPC will launch a high school aerospace program in Fall 2019 and has already received contingent approval from the Arkansas Department of Career Education to move forward, making it the first high school aerospace program of its kind in Arkansas. The ITC will



provide resources and a space for young students interested in aviation and aerospace a place to experiment with emerging technologies that are relevant in the industry such as CNC Machining Technology.

#### Advanced Manufacturing Partnerships

NPC and the ITC meet regularly with regional manufacturing companies to identify and create relevant training programs for existing and future employers. These partnerships were instrumental in developing the CNC Machining Technology program and continue to be important as the program grows and expands. Several manufacturing employers have assisted in the development of the automation program. For example, Berry Global donated a PLC 1400 conveyer with AB drives, controls, and inspection system. This donation allows the ITC to install an advanced manufacturing cell that will be featured in our automation program, advanced PLC training, and instrumentation outlined in the program plan in Section 2.

#### Commitment to Increasing Retention and Attainment Rates in Arkansas

According to the United States Census Bureau's Quick Facts on Garland County, Arkansas, 18.7% of the local population lives in poverty. With almost one-fifth of the local population in poverty, the ITC is a place where students, the community, and local business and industry partners converge to stimulate new entrepreneurial opportunities that attract new industry to the region. A fundamental purpose of this collaboration is to create opportunities and encourage investment in the region. Students of all ages benefit by interacting with companies in this space because they see opportunities that they did not know existed, which could encourage them to pursue new ideas and achieve their career goals. The ITC is more than a workforce training center. It is a space where creativity, ingenuity, and entrepreneurship can converge.

National Park College, as a whole, is committed to student success and provides several resources for students in need through Student Affairs operations. For example, the College participates in the TRiOs Student Support Services, Upward Bound, and Career Pathways programs that provide support for first generation and impoverished students. The College also provides counseling referral services through an onsite licensed Social Worker. NPC also serves the needs of veterans through an active Veterans' Affairs office, which provides a private lounge where veterans can socialize and study. In addition to these services, the National Park Adult Education Center, with three locations, has witnessed significant growth and is currently serving nearly 1,000 students, all of whom are hoping to improve their situation and find employment that will help them provide for their families.

As evidence of this commitment to attainment rates, NPC recently reported a 34.78 percent increase in credentials awarded to 25.48 percent more graduates in the 2017-18 academic year. The college has earned a reputation for dependable service because of the success in serving the population of Hot Springs, Garland County, and surrounding counties. As a result, numerous business and industry partners, the local chamber, and the school districts support the College's plan to implement an Innovative Technologies Center of Excellence.

#### Building a pipeline for the future

The Big Idea of the ITC is to provide an opportunity for students to interact with companies to gain a greater understanding of the incredible career opportunities in our region. The ITC provides a creative space to share ideas and build relationships that can lead to lifelong learning and career opportunities. Since opening in 2017, we have seen students engage in problem solving projects with

industry partners and develop new ideas that launch entrepreneurial pursuits. The ITC provides a place where emerging technologies are readily available for both academic and lifelong learning pursuits. NPC and the ITC want to continue developing programming that affords students, industry, and the community the ability to continue to learn, grow, and develop. These initiatives are described in more detail in Section 2 of this proposal.



## 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.
- Performance assessment- clearly define measurable outcomes to be achieved through continuation 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:

	<b>Exemplary</b>	<b>Superior</b>	<b>Adequate</b>	<b>Needs Improvement</b>
<b>Program Plan (25 Pts)</b>	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.

### **Innovative Technologies Center Vision**

The program plan is based upon a vision for the ITC to align workforce development and academic programs with regional economic development strategies to meet the skilled workforce needs of local and regional employers; and to create opportunities for K-12 students, NPC students, and the community to engage in a highly innovative and educational environment. The ITC is a place for knowledge exchange and entrepreneurial experimentation. It serves as a gathering space for teaching, learning, sharing, and doing. The ITC will continue to deliver short term training and serve as an augmented learning environment for teachers in secondary and post-secondary institutions. The ITC has the flexibility to rapidly meet the emerging training needs of local industry and business partners.

### **Project Timeline**

A project timeline for the Continuation Grant is provided in Appendix B. This timeline includes activities that are planned in the Makerspace as well as activities and classes for students, industry, and the community. Additionally, a list of known advisory and committee meetings and scheduled conferences is provided. While this detailed list includes many of the planned activities, it is not all-inclusive. A certain amount of improvisation and fluidity are required due to the nature of an innovation center. Many times during the Implementation Grant, opportunities arose from interactions, classes, and meetings that we could not have anticipated. These opportunities led to additional partnerships, classes, and donations of equipment.

### Noted Events and Activities

Several major events are planned for the Continuation Grant period, including additional industry classes that have been requested by our industry partners. We are also planning monthly events in the Makerspace to attract community, industry, and students and demonstrate the value of an interactive environment where they can explore, create, and innovate. Summer STEM camps will also be expanded due to increased demand.



## **Committees/Meetings**

### **Advisory Groups**

The efforts of the ITC are guided primarily by our Advisory Groups that meet every three to six months. These groups define needs, review curriculum, provide input into the training methods, donate materials for classes, refer subject matter experts, recruit students into the programs, and hire graduates. There are four primary groups that will direct the ITC activities during the continuation grant period. These groups are:

- ITC Stakeholder Group
- CNC Machining Technology Advisory Group
- Automated Manufacturing Simulation (AMS) Advisory Group
- Makerspace Advisory Group

### **Conferences and Meetings**

Representatives from the ITC attend and sometime present at a variety of events aimed at raising awareness of the programming available at the ITC. Some of these conference include:

- Aerospace & Defense Alliance Annual Summit and quarterly meetings
- Arkansas STEM Coalition Annual Conference and quarterly meetings
- NPC/ChildCare Aware Annual STEAM Conference
- AR Community Colleges Annual Conference and workforce training group
- Hot Springs Technology Institute (HSTI) Conference

### **Service Channels**

The ITC currently meets local needs through three primary service channels: Industry training programs, secondary and post-secondary classroom enrichment offerings, and community events and classes. The ITC Makerspace will provide a unifying arena that enhances each of these service channels in the Continuation Grant. These service channels are explained in greater detail below.

## **Industry Training Programs**

During the implementation grant period, the ITC initiated industry training programs for regional manufacturers. Several more programs are under development and will be implemented during the continuation grant period.

### **Computer Numerical Control (CNC) Machining Technology Program**

Computer numerical control is the automation of machine tools by means of computers executing pre-programmed sequences of machine control commands. In May 2017, the ITC launched its nine-month, 160-hour evening CNC Machining Technology Program for industry partners. Students are completing a series of classes that include Machining Fundamentals, CNC Mill Setup and Operations, CNC Programming, and CNC Lathe. These classes provide students with the entry level skills to work as a CNC Operator or CNC Programmer. Several employers enrolled existing workers in the evening classes. In spring 2018, the daytime fast track program was launched. The goal was to reach individuals that were underemployed or unemployed in order to create a pool of qualified people for industry to choose from when hiring. The daytime fast track program can be completed in 16 weeks and prepares students to enter the field at many of the regional manufacturing companies. To date,



the ITC has held nine classes with a total of 77 participants. While this is a great beginning, there is still much work needed to provide enough trained workers to meet the demands of industry. The program has gained attention not only from regional employers but also from employers around the state, including Galley Support Innovations (GSI). Gina Radke, President of GSI, has expressed a growing need for workers with CNC skills. Local employers not only train existing workers but have hired new employees directly from the program.

At a recent stakeholder meeting, employers provided support for the program but expressed the need for additional, advanced CNC training. The ITC staff is currently developing this training that will be tailored to meet the specific needs of regional industry. Advanced CNC training will be a primary focus during the continuation grant, which will require additional materials and equipment. With significant industry support, the ITC will make the development of this training a primary initiative during the continuation grant period.

The ITC staff anticipates that the CNC Machining Technology Program and the Advanced CNC classes will train at least 50-75 students that complete training. These students will represent a combination of existing employees and students who are new to the field of CNC Machine Operation and Programming.

#### Automated Manufacturing Simulation (AMS) Program

Manufacturers are using machine automation and controls to produce quality products faster and more efficiently. These automated systems also provide critical information to help managers make good business decisions. The ability to produce a product while providing data is an important part of automation. Businesses need skilled people to design, build and maintain systems that integrate multiple technologies. Our goal is to prepare people for those high-tech careers. NPC currently offers a Technical Certificate in Industrial Technology. The ITC staff is currently developing an Automated Manufacturing Simulation program that will provide those graduates as well as industry employees with advanced automation training.

Automated manufacturing relies on the use of computerized control systems to run equipment in a facility where products are produced. The equipment does the work autonomously, as ordered by control systems. These systems utilize complex software that can schedule manufacturing tasks and run diagnostic tests on equipment that appear to be malfunctioning. Cameras and sophisticated software can be used to monitor product quality, the speed of the assembly line, and so forth. Workers are involved primarily in troubleshooting problems and maintenance of the equipment and programming of the control systems. The Arkansas workforce must adapt to these technological changes and be trained on maintaining equipment, troubleshooting and programming the control systems. The ITC's AMS Program will be used to deliver the training.

Manufacturers have indicated that their maintenance employees need to enhance their skills in order to keep pace with the increased amount of automation. In the AMS Program, students will learn about electronics, computers, control systems, programming, robotics, fluid power, sensors, Proportional Integral Derivative (PID) loops, Variable Frequency Drives (VFD) and more. Students will develop the skills needed to install, program, design, troubleshoot, and repair automated systems. The classes will be offered in a flexible format that accommodates industry's production schedule. This will allow existing employees to participate in training that minimizes their time away from the workplace. Weekly classes will cover all of the different elements mentioned above.



Berry Global recently donated a conveyer system and NPC has used Implementation Grant funds to acquire simulation trainers. The next step is to put all the components together and network them via Ethernet. A local electrical contractor has offered to donate their time to help accomplish this task. A key element to the success of the AMS program is locating a qualified instructor with the appropriate skills and abilities. Identifying and hiring this instructor is a high priority of the Continuation Grant.

The goal of the AMS program is to recruit at least ten new and incumbent workers who complete the training and achieve industry certifications during the grant period. It is expected that at least nine students will either get a job or receive a pay increase. We anticipate that hiring the right instructor, with the industry knowledge needed is the key to make this program successful. In the future, local and regional demand should generate significant growth in Automated Manufacturing.

### 3D Modeling (CAD/CAM) and CMM Inspection

Local manufacturing companies have expressed the increased demand for higher skilled and trained employees to Model Based Definition (MBD) and Digital Product Definition (DPD) requirements. These requirements include all of the design and engineering definitions that are not only the "build-to" but also the "inspect-to" criteria. In order to ensure all products and features are produced correctly and within the specified tolerance, the inspection is also performed digitally and compared with compatible software. This process requires the full understanding of digital requirements by those employees that utilize Computer Aided Drafting (CAD) and Computer Aided Manufacturing (CAM) to perform the programming, manufacturing, and inspections. Equipment used to perform these inspections are Coordinate Measuring Machines (CMM) that are required for 3D and close tolerance requirements that often include Geometric Dimensioning and Tolerances (GD&T). Also, in order to do this type of manufacturing and inspections with digital data, specific approvals are required by Original Equipment Manufacturers (OEMs) and 3<sup>rd</sup> party accreditations. This includes the proper receipt and data verifications, programming (CAD), manufacturing (CAM), and digital inspections. A highly trained workforce is key to this complete process.

Most local manufacturers receive 3D CAD models and data that they are required to use when building and inspecting parts they produce. Their customers expect the parts to meet specific quality requirements. Therefore, manufacturers require the ability to easily verify the quality of the parts they produce by performing 3D inspections, tool certifications, CAD comparisons, and dimensional analysis. This inspection process is often completed by using a CMM. The CMM is a sophisticated piece of equipment that requires specific training to use. Industry has expressed that there is a lack of people with these skills not only in our local area but across the state. Therefore, there is a need to train workers on the use of a CMM and the appropriate 3D software to ensure conformance to the original 3D design.

Spectra Technologies, a new industry partner, recently donated a CMM to the ITC. The next steps in developing a CMM class are to evaluate and purchase the software used by industry and to hire a qualified instructor.

A hand held 3D scanner will also enhance this program. It is a device that analyzes a real-world object or environment to collect data on its shape, location, and appearance (e.g. color). The collected data can then be used to construct digital 3D models that are dimensionally accurate.



Collected 3D data is useful for a wide variety of applications. Common applications of this technology include industrial design, orthotics and prosthetics, reverse engineering and prototyping, quality control/inspection, and the digitization of cultural artifacts.

The goal of the 3D Modeling and CMM classes is to have at least ten new and incumbent workers complete the training and achieve industry certifications during the grant period. It is expected that at least nine students will either get a job or receive a pay increase.

#### Additional Training

The ITC will remain flexible to meet the needs of our industry partners. Although there are several industry training programs in place or being developed, we anticipate that additional opportunities will arise during the Continuation Grant period. The existing equipment and supplies available at NPC and the ITC, along with the anticipated future purchases, will position the college to provide a wide array of training programs as needed by our industry partners in the short term and in the future.

#### **ITC Makerspace**

The ITC Makerspace includes NPC students, K – 12 students (including EAST and home school students), the community at large, and our industrial partners. It offers an alternative way to learn new technologies and skills, as well as an arena to test new ideas in an environment conducive to productivity.

The Makerspace not only focuses on developing and improving skills, but gives exposure to new technologies, thought processes, and ideas. One of the outcomes of the Makerspace is that the participants gain an understanding how to incorporate these technologies and experiences to enhance fabrication skills, product development, educational experience, and life skills.

Surveying groups of ITC visitors over the past year has given insight into the benefit and practicality of launching a Makerspace within the ITC. In fact, several Maker events have already taken place involving EAST students, home school students, and some of the students sent for training by ITC industrial partners. Feedback from these groups has been overwhelmingly positive. One ITC visitor commented, “I’m really interested in the whole idea of learning everything I could at the Makerspace. I wanna make electronics. I wanna learn to program. I wanna build robots. (More than anything.) ..... I feel like the makerspace is an awesome idea. You can’t find this kind of experience without learning from a job itself. But you can’t get the job without some sort of experience. This would be a great way to get that experience.” Excerpt of an email from G. Talbert, Timber Automation.

Specifically regarding High School and NPC students, it is anticipated that the Makerspace will play a significant role in student recruitment, retention, and success. Paraphrased from an anonymous High School student who visited the college on Senior Day, *‘I have had the EAST program for most of my school career...what’s next? What does college offer that is like it (EAST)?’* Just as with EAST, students will have the opportunity to participate in collaborative skill building activities that facilitate a greater understanding of how concepts learned in their traditional courses are related.

According to a study done by Purdue University and another led by the University of Chicago, being able to visualize a STEM concept can make the difference between fundamental versus superficial understanding. Further, offering projects designed to enhance skills employers are looking for allow the students a chance to practice these skills among peers. The collaborative inquiry based learning environment not only promotes greater problem solving skills, it also provides a social environment



that improves interpersonal relationships, intrinsic motivation and expectations of success, and positive attitudes (soft skills).

Because the ITC has developed deeply rooted contacts with local industry, we will be able to offer activities that will give students (and community participants) specific skills that will give them an advantage when entering the work force. A few (non-inclusive) examples of these skills are: i) coding/computer skills, ii) basic electronics knowledge, iii) understanding of instrumentation, iv) safety practices, v) CNC (3D Printer, Router, Laser Cutter), vi) basic knowledge of hand and power tools, and vii) soft skills (from interpersonal relations). In addition, there may be skills that are very specific to each of our industrial partners. These will be determined through discussion and action will be taken to facilitate opportunities to learn and practice these skills for the appropriate participants. The Makerspace will conduct open maker events where participants can work on “pre-planned” projects created by the ITC staff that are designed to teach skill sets that build upon one another. The hands-on projects can range from simple woodworking or just making a 3D print to fabricating and programming an aerial drone. It is not the project itself, but the experience and skills learned during the completion of the activity that is most important. Participants will have the opportunity to select the projects that interest them, recommended to them to gain skill sets, or they can design and implement their own unique project. The pre-designed activities will be a mix of guided and self-guided projects, as well as a mix of individual and group projects.

The ITC Makerspace will also offer a number of hands-on, non-credit short courses and classes designed to teach specific skill sets and topics both for interest based learning and to better prepare for the workforce. A few examples of class topics are: basic electronics, soldering, robotics, Arduino, power supplies, solar power, how to use instruments, 3D Printing, CNC router, and Laser Cutter. Other courses include custom courses for clubs, organizations, industry, and home school groups. Based upon the feedback from the two home school short courses taught so far, it has come to light that there is a strong desire for these class opportunities.

Because of the inherent structure of a Makerspace, we will mostly be able to determine from the activities of and discussions with the participants how to move forward in the most appropriate direction in the short term. For longer term planning, key volunteers from industry, the community, K-12, and NPC will make up a more structured advisory council. This will allow optimization of the ITC Makerspace for each of these key groups.

The progression of the types of projects and activities completed at the ITC by participants will allow some assessment of success. For more qualitative data, we will rely on surveys, comment cards, and course evaluations. For students and incumbent employees, we will attempt to track the academic progress trend before, during and after using the Makerspace resources. For those who are seeking to enter the workforce, we will perform tailored surveys completed by the potential employees before and after employment has been achieved. We will determine success of classes designed for specific industries and employers with a surveys completed by the employers.

The Makerspace utilizes many of the same elements of the other ongoing grant components such as but not limited to: 1) 3D CAD software, 2) CNC Router, 3) 3D printers and scanner, 4) Electronics setups, and 5) an assortment of shop tools. This allows the sharing of resources and gives the unique opportunity to reduce the cost of what would traditionally be an expensive endeavor for an effort this inclusive.



## **NPC Students and K-12 Collaborations**

### **NPC Students**

As the ITC enters its second phase, more robust opportunities for partnerships with current programs at the college exist. The creation of a Makerspace provides a resource intensive hands-on lab space for our engineering students. For example, those students now use wood and glue to demo designed structures, such as bridges, towers, and arches. With the ITC, these students will be able to use CAD design software to create interlocking pieces in the 3D print lab and fabricate these structures. Additionally, they will be able to reverse engineer products using the 3D scanner. The possibilities are endless with the equipment available to them through the ITC.

The ITC staff anticipates collaborations with most if not all of the departments. A few collaborations that are currently in progress are: creating instrumentation for Biology and Chemistry, fabricating visual aids for Mathematics, setting up a computer hacking kiosk in partnership with computer science, and sharing resources with the National Park Technology Center (NPTC). We are also consulting with the NPC Library to set up a small-scale Makerspace so that we have a presence on campus before our new onsite facility is completed. The ITC has also hired Work Study students to assist with daily operation and promote the Center on campus.

The ITC has invested in state-of-the art virtual reality software (VR) and equipment. These investments can immediately impact our computer science credit programs in a positive manner. In the past year, the NPC has partnered with Southern Arkansas University to develop four new computer science 2+2 transfer programs, including game design and cyber security pathways. Access to the virtual reality equipment will allow students to experiment in game design, security, and even networking in new ways. In addition, there are other possible health care opportunities. More and more testing in health care is based upon VR game design models. As that technology develops, many simulation possibilities are envisioned in which students interact and diagnose VR patients. These are exciting prospects that rely on the continued funding of the ITC.

During the summer, the Arkansas Career Training Institute (ACTI) hosts students from around the state for a six week workshop. During five of these weeks last summer, the ITC held classes on 3D Printing, CNC, and Drones for these students. This summer the ITC will offer these same classes. Each of these classes is designed to expose the students to these technologies and demonstrate how these technologies could lead to a career path. The students are also given information on how to effectively pursue careers in these fields, such as what classes they should focus on in High School and what skills they should develop to maximize success.

ITC staff is in discussions with the University of Arkansas about being a host site for their annual Arkansas Drone/Unmanned Aircraft Systems Summit which is typically scheduled in the fall of the year. During this exciting event, attendees will learn about existing drone platforms and also see exciting drone footage. Topics such as Federal Aviation Administration compliance, cybersecurity, research and current projects are typically covered by subject matter experts. Another possible partner in this event is the University of Arkansas – Fort Smith (UAFS). UAFS recently rolled out the first courses on unmanned aircraft systems (UAS). These partnerships provide the ITC students access to cutting edge technologies in unmanned aerial systems and augments the ITC's existing coursework in drone systems. UAS classes have been extremely popular at the ITC during the Implementation Grant phase, and it is anticipated that opportunities will greatly expand with these new partnerships. Our anticipated timeline is fall 2019 to be a host site for the statewide forum or a regional host site in spring 2020.



### K-12 Students

The ITC staff has been strengthening their relationships with local public schools, the local public school EAST programs, ACTI, and regional home school groups. We have accomplished this by visiting the schools, attending events, hosting specialized maker sessions, creating and implementing classes for public and home school groups, and through our summer STEM camps. Just as we expand our summer camp offerings each year based upon feedback, we are working to expand the resources offered public and home schools. This includes recruiting volunteers, work study students, offering internships, hiring a full-time employee and exponentially growing the ITC Makerspace. With the additional help and facilities, we will have the means to offer many more classes, maker sessions, and partnerships with K-12.

During the past year, we have strategically purchased equipment and supplies that benefit the growth of the Makerspace and that enhance industrial training potential. The ITC is utilizing many of these Makerspace resources to develop and implement programs specifically for K-12 students. We have also invited EAST students to use the ITC as a meeting space both during and outside of school hours where they can work on their projects uninterrupted for extended periods of time. This also allows the students access to equipment and expert resources that the schools do not have. Another example how we are expanding to other K-12 programs and initiatives is the partnership with Mt. Pine School District. This involves an after school program geared toward hands-on computer coding and is slated to become part of their regular curriculum as the program grows.

The ITC staff is currently meeting with organizations that host statewide competitions, such as, VEX Robotics, First Robotics, etc. about hosting regional competitions as qualifying rounds which would help offset funding needs for the ITC. We plan to host competitions such as a regional robotics competitions including VEX Robotics and First Robotics.

Our goal is for the ITC to become an extended resource for all areas of K-12, including the educators and administrators. Building relationships with the students, faculty, and administrations of the local schools will help build a pipeline of students who understand the vast opportunities to work in emerging technologies in our region. Employers from all industry sectors are excited about NPC and the ITC taking a leadership role in ensuring that there is a clear path for students to move from K-12 to college and then to work in our region. Employers understand that the ITC helps builds students desire for inquiry while also establishing fundamental workforce skills such as teamwork, critical thinking, and conflict resolution.

### **Community Collaboration and Events**

The ITC staff has established excellent partnerships with industry and K-12 partners. Our goal in the Continuation Grant is to create stronger partnerships within the community. We intend to direct some of our efforts toward other entities such as: Mid America Science Museum, (Boy and Girl) Scouts of America, 4H Club, Future Farmers Association (FFA), Future Business Leader of America (FBLA), and the NPC Chapter of the American Chemical Society (ACS). Establishing partnerships with the Innovation Hub in North Little Rock, A State Innovate in Jonesboro, and the FAB LAB in Fayetteville are also opportunities we hope to explore. Several community-based initiatives we plan to establish or continue are provided below.



### Open Enrollment Classes

The Community & Corporate Training Division at NPC publishes an open enrollment continuing education schedule every fall and spring. The ITC was highlighted on the cover in fall 2016 and spring 2017, and the ITC has offered many open enrollment classes. These core classes are developed based upon the feedback we receive from community members. During the Continuation Grant, scheduled classes will continued to be offered but will be augmented by the ITC also establishing on-demand offerings. For instance, a schedule of classes will be posted on the website, social media, via email to NPC students and K-12 educators, and in print at the ITC and NPC, and then offered if the minimum enrollment is achieved. A complete list of possible classes will also be posted by the same means so that groups and organizations can coordinate with the ITC to schedule a class date/time. We will seek continuous feedback regarding what additional classes we can add to our catalog. Below are a few examples of subjects that have been popular in the past and also some that have been requested for future classes: basic electronics, soldering, robotics, aerial drones, Arduino, power supplies, solar power, how to use instruments, troubleshooting techniques, 3D Modelling, Virtual Reality Modeling (VRM), 3D Printing, CNC router, and CNC Laser Cutter, basic woodworking, material selection and handling, tool specific training, etc.

### Tech Talks

Tech Talks are community based seminars with relevant topics suggested by the community. The ITC has hosted two Tech Talks so far in Cell Phone Security and 3D Printing. The next Tech Talk is scheduled for fall 2018 and the subject will be Virtual, Augmented, and Mixed Reality. This is a trending technology and as costs continue to decrease it is becoming affordable, which makes it more accessible to the general public. A representative from CAE, Inc. will be our featured speaker. CAE, Inc. is a Canadian owned company with an office in Sherwood, Arkansas. Little Rock Air Force Base in Jacksonville is one of its primary customers. CAE, Inc. is a world-class training systems integrator that offers integrated Live-Virtual-Constructive (LVC) training solutions across air, naval, land, and public safety. Additional topics that are currently being explored for future Tech Talks include Artificial Intelligence and Robotics. We plan to continue offering Tech Talks two to three times per year and hope to build a strong following in the community.

### Maker Space Open Hours/Monthly Maker Events

After the Grand Opening of the ITC Makerspace, set hours of operation will allow community members to utilize the ITC resources at their convenience. The ITC staff, work study students, and volunteers will facilitate projects such as the monthly maker events. The monthly maker events will be themed based upon a holiday or season beginning that falls during that month. For instance, February would have a Valentine's Day theme, October would have a Halloween theme, and June would have a summer theme. It is anticipated during particular months we will host competitions where winners are determined by participant votes.

Additionally, the ITC staff is creating a catalog of projects that visitors can select in order to gain and practice skills for a number of motivations. The ITC will keep supplies for each of the cataloged projects on hand for visitors to purchase. They can select to do their project as a group or individually. Visitors will also be able to work on projects of their own design after consulting with ITC staff. In this scenario, they would be allowed to bring in their own supplies and use the facilities to create their project.



### **Project Governance and Accountability**

Project governance and accountability will be managed through the administrative structure of National Park College. NPC has a fully-integrated, college-wide decision making model that includes Academic Affairs, Fiscal Affairs, Accreditation, and Quality Improvement. Oversight for this initiative is provided by National Park College's President, the Vice President for Academic Affairs, and the Vice President for Workforce and Strategic Initiatives. Additional oversight will be provided through quarterly meetings of the aforementioned committees on a regular basis. Project management and fiscal oversight will be managed by the ITC Director in conjunction with the Vice President for Workforce and Strategic Initiatives, the Vice President for Finance and Administration, the Controller, and additional business office staff.

### 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 continuation of the project- describe how each partner will continue to 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 continuing the implemented project; describe how each partner is qualified to continue to participate in the 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:

	<b>Exemplary</b>	<b>Superior</b>	<b>Adequate</b>	<b>Needs Improvement</b>
<b>Strength of Partnership (20 Pts)</b>	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.*

#### Overview

National Park College has an established reputation of partnering within its regional service area to meet the needs of local business and industry. The partnerships include other educational entities, local government agencies, and industry partners. The Innovative Technologies Center has been able to build upon these relationships and create additional linkages through its services and course offerings.

A variety of unique collaborations with business and industry partners, educators from K-12 to college, and regional economic developers have been formed to assist in the development and deployment of the Innovative Technologies Center. These partners can envision how the Innovative Technologies Center can benefit students of all ages, companies, entrepreneurs, and the community. The National Park Technology Center (NPTC) provides high school technical programs on the NPC campus and serves approximately 700 students from all of the Garland County school districts and surrounding region. The NPTC prepares students with a number of skills that lead to college credit and careers, including pre-Engineering, Wood Technology, Machine Tooling, Mobile Applications, Graphic Design, and starting in fall 2019 Aerospace Fabrication. The ITC has already partnered with several of the programs to augment classroom activities and plans to grow in that space in the coming years. Faculty see the benefits of having students incorporate innovation in their projects, which enhances learning.

Relationship building is a cornerstone for success at the ITC. Continued success in nurturing current relationships and building additional ones will ensure that goals are achieved during the continuation period and beyond.

#### Support Letters from Regional Partners

Support letters from grant partners are provided in Appendix C. A list and brief description of supporters follows:

Arkansas Career Training Institute – Jonathan Bibb and his team and ACTI have been extremely supportive of the ITC and understand the importance of having this resource in their region. For two years we have hosted the ACTI Summer Transition students at the ITC and provided training in CNC Machining, 3D Printing, and Drone technology. Because ACTI works with students with disabilities from all over Arkansas, it is critical for them to have access to the technologies and opportunities that the ITC can provide their students.

Alliance Rubber – The leadership team at Alliance Rubber has been instrumental in assisting with the development of our automated work cell training and CAD training at the ITC. Because Alliance has a spirit of innovation themselves, they completely understand and support the need for the Makerspace. They are integral partners in our advisory groups, support our efforts with students, and continue to provide leadership and resources to our efforts.

Berry Global – Berry Global was a primary partner in the Planning and Implementation grants in addition to other grants at NPC. Berry Global has long supported NPC's efforts to increase our academic offerings for manufacturing. They were instrumental in launching our Industrial Technology program as well as the CNC Machining Technology Program. Berry Global continues to support



students in the CNC Machining Technology program and is working us to determine the feasibility of starting a Plastics Program in the future.

Greater Hot Springs Chamber of Commerce/Hot Springs Metro Partnership – NPC has long supported the business expansion and recruiting efforts of the Metro Partnership and considers the Chamber as a primary partner in the ITC. We are lockstep in our commitment to show area students that there are great opportunities to learn and earn in Garland County, and support one another's efforts to raise awareness of the unique offerings that are available. The Chamber is currently developing an Incubator, which will complement our ITC efforts by offering a space for entrepreneurs to office.

CMT, Inc. – The regional aerospace companies have long supported NPC, and we are fortunate that they continue their support through the ITC. CNC Machining Technology is a skill that all of our manufacturers need, especially our aerospace partners. Through Tom Butler's leadership, we have been able to implement the CNC program that meets their needs and continues to help us build upon that success to create advance training for CNC. Through generous donations of other partners, we will be able to add much needed training in other technologies for our aerospace companies.

Hot Springs School District – While the ITC is working with all area school districts in some capacity, our greatest achievements thus far have been with the students at the Hot Springs School District. The EAST facilitators at HSSD have allowed students to participate in activities and projects, and the middle school EAST student even co-facilitated a session at the Arkansas STEM Coalition Conference in 2018. Now more than ever, students need the opportunity to tinker and explore, and also to understand that great opportunities are available in manufacturing through building skills offered at the ITC.

Henderson State University – The ITC has hosted several events for the HSU faculty and also the Resident Assistants. We work closely with the HSU Career Coach and also the Director of the Downtown Center in Hot Springs. Partnerships with universities like Henderson provide younger students the ability to see the importance of higher education while it provides college students the opportunity to work with younger students on projects and activities.

Southern Arkansas University – The ITC has developed excellent relations with the College of Engineering and Science at SAU. With the implementation of 2+2 degrees we hope that SAU students will utilize the resources at the ITC to augment project based learning. SAU will be partnering with NPC on several computer science degrees. Providing a space and the resources to work on projects will be crucial to students' success in these areas.

Triumph Group – Triumph Group is another significant aerospace partner that has utilized the resources and courses available at the ITC. Leaders from Triumph support NPC and the ITC through equipment donations, subject matter experts, and by sponsoring students in our summer STEM camps. They used the ITC equipment to prototype a part for a Delta regional jet. Additionally, they serve on advisory committees, helped launch the CNC Machining Technology program, and will be instrumental in developing the high school aerospace program.

West Central Arkansas Planning & Development District – NPC and the ITC is fortunate to have the support of our local planning district in all of our endeavors. WCAPPD provides data on emerging trends in the region to assist NPC and the ITC in determining where we should focus energy to develop new workforce training programs.



Arkansas Economic Development Commission Manufacturing Solutions (AEDC-MS) – The ITC Director has developed a strategic partnership with AEDC-MS, who recently awarded the ITC a new sub-recipient agreement. AEDC-MS has committed \$70,000 towards the Automated Manufacturing Simulation project or other projects that directly serves regional manufacturers. AEDC-MS works closely with many public and private organizations to bring world-class resources to Arkansas manufacturers. AEDC-MS previously developed formal partnership agreements with four state universities, the state economic development agency a non-profit quality organization. In addition, they work with community colleges and local economic development organizations to ensure local resources are utilized in delivering assistance to manufacturers.

## 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.
- Institutions may request up to \$1 million over two years that will provide resources to continue approved Phase 2 projects.
- 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:

	<b>Exemplary</b>	<b>Superior</b>	<b>Adequate</b>	<b>Needs Improvement</b>
<b>Budget Plan (15 Pts)</b>	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.*

### BUDGET SUMMARY

#### Program Leadership Support Costs

##### **Personnel**

The current staff the ITC include the Director and one Program Coordinator. An additional Program Coordinator is requested in the Continuation Grant due to the increased demand for advanced CNC training, additional programming for robotics and automation, and the increased activities due to the addition of the Makerspace.

The Program Coordinators will each have specific responsibilities but will also support and assist one another in all projects and initiatives. The activities will be divided based upon skills and abilities. The goal is to identify a new Program Coordinator with extensive experience in industrial technologies such as automation and robotics.

There is a tremendous amount of preparation that will be required for maker events and short classes delivered by the Makerspace. Additionally, each event will require multiple people to be trained and available to assist attendees with equipment, supplies, questions, suggestions, etc. A number of volunteers will be recruited, trained, and organized in order to make events successful.

Part-time instructors will provide assistance in curriculum development, equipment set-up, and instructional capabilities. We anticipate a tremendous increase in classes for industry, K-12, and the community in addition to the increase of visitors to the Makerspace. These additions will allow the Director more time to market the ITC to sponsors and partners that will provide the resources to make the ITC sustainable after the Continuation Grant period ends. While the Director will continue to be extensively involved in the day to day activities, growing partnerships and sustainability of the ITC will be a primary focus.

##### **Travel**

The travel budget includes funding that will allow the ITC staff to collaborate with other higher education institutions, further develop instructional staff, participate in benchmarking trips with other Centers around the region, and attend technology conferences. The ITC staff is currently researching travel opportunities that would have the greatest impact while ensuring cost effectiveness. Additional requests from industry to add more advanced CNC classes and to add CMM inspection training requires that instructors complete specific certification training.

#### Other Direct Costs

##### **Equipment**

During the Implementation Grant period, the vast majority of the capital equipment needed to outfit the industrial fabrication area and the materials and supplies needed for K-12 and community classes were purchased. The only equipment request in the Continuation Grant is a 3D Scanner that will be used to support our CMM industry training and in the Makerspace.



A hand held 3D scanner is a device that analyses a real-world object or environment to collect data on its shape and possibly its appearance (e.g. color). The collected data can then be used to construct digital 3D models. Collected 3D data is useful for a wide variety of applications. These devices are used extensively by the entertainment industry in the production of movies and video games, including virtual reality. This application will be relevant to K-12 students and also NPC students in a variety of projects. Other common applications of this technology include industrial design, orthotics and prosthetics, reverse engineering and prototyping, quality control/inspection, and the digitization of cultural artifacts. The Hot Springs Cultural Alliance and the Hot Springs National Park have already expressed an interest in partnering with the ITC to scan items of cultural significance.

As companies continue adding to their 3D scanning and digital modeling capabilities, engineering and design exists more and more in the digital world. It is essential for the classroom to reflect the reality of today's business. 3D scanners are incredibly powerful tools to teach our next generation of engineers, designers, inventors, artists, and entrepreneurs the measurement and digitization technology they will need to succeed. There are numerous applications for our industry partners such as, 2D to 3D CAD conversion, CAD based inspection, product design, and tool building to name a few. Industry projects involve tooling, alignment, part inspection, or surface analysis and by having their employees enhance their 3D scanning skills it helps them complete these projects, increase productivity and part quality.

### **Materials & Supplies**

The materials and supplies budget includes small equipment, tools, additional software licenses, software updates/maintenance, curriculum, miscellaneous project supplies, and consumables needed to offer the programs described in the program plan. Additionally, we will procure and install a 4<sup>th</sup> axis for the CNC Mill and sensors, encoders, and instrumentation for the AMS program.

### **Publication Costs**

In order to create that pipeline of skilled workers for industry and to encourage community members and students to engage in the Makerspace, the ITC must enhance its marketing strategy. The low cost marketing plan that was included in the Implementation Plan did not have the reach that was anticipated. After conducting interviews with current students, community members, and industry partners, all agreed that the ITC lacks name/brand recognition and believe this is crucial to achieve long term sustainability.

The overarching message from our industry partners is they lack applicants that possess the skills needed to fill current job openings. Through development of industry training at the ITC, we are now poised to help industry close the skills gap. However, identifying students to enter these programs is a challenge with such low unemployment in the region. This means that our marketing and recruitment efforts must be comprehensive and attractive to potential students. NPC's marketing team has established an effective marketing strategy that the ITC hopes to emulate. This plan will include a greater presence in social media, print media, and radio.

The ITC is located on a high traffic thoroughfare, however the building sits back from the street and current signage is often overlooked. The ITC will take advantage of our high traffic location and purchase billboards in close proximity to our location. ITC will also purchase additional and larger signage that will be placed closer to the road and will change the message on a regular basis.



The ITC staff will continue to participate in NPC recruiting events and numerous other community and area school events. We also plan to purchase promotional items to strategically distribute to students and other members of the community in order to enhance name recognition for the ITC. This is a critical component for the ITC to create the buzz needed to propel our programs to a high level of sustainability.

#### **Other**

The recurring and non-recurring costs associated with the ITC are included in other costs. This amount includes rent of the facility, utilities, security, and other associated costs for the Center.

#### **Cost Sharing (Local Match)**

The grant requirement for Local Matching funds is met through a combination of contributing partners as follows:

<b>Partner</b>	<b>Contribution</b>	<b>Match amount</b>
NPC	Admin Assistant to ITC	\$12,000
NPC	VP Strategic Initiatives	\$10,000
AEDC-MS	Salaries and/or equipment	\$70,000
H & H Electric	Electrical services	\$2,000
Various local industries	Raw material donations	\$2,000
<b>Total Match</b>		<b>\$96,000</b>

**Section 4.2 – Budget Plan Template**

Please complete the budget template below. Totals will calculate automatically based on your input. Institutions may request up to \$1 million in grant funding for Phase 3 Projects.

<b>Requesting Institution:</b>	National Park College
<b>Title of Project:</b>	Innovative Technologies Center

**A. PROGRAM LEADERSHIP SUPPORT COSTS**

1. Personnel/Stipend	\$512,505.00
2. Travel	\$22,752.00
3. Other (Explain Below)	\$0.00
Briefly Explain Other Costs	

<b>TOTAL PARTNER PARTICIPANT COSTS</b>	<b>\$535,257.00</b>
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**B. OTHER DIRECT COSTS**

1. Equipment	\$26,050.00
2. Materials and Supplies	\$191,260.00
3. Publication Costs/Documentation/Dissemination	\$44,613.00
4. Consultant Services	\$0.00
5. Other (Explain Below)	\$93,100.00
Briefly Explain Other Costs	

<b>TOTAL OTHER DIRECT COSTS</b>	<b>\$355,023.00</b>
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<b>C. TOTAL DIRECT COSTS (A &amp; B)</b>	<b>\$890,280.00</b>
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<b>D. COST SHARING (Minimum 10% of C; up to \$50,000)</b>	<b>\$50,000.00</b>
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<b>Total Continuation Grant Budget</b>	<b>\$940,280.00</b>
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*Other Notes*

The "Other" line item represents the recurring costs for the ITC offsite location, including rent, utilities, security, and other costs associated with the Center.

The total "Direct Costs" have been reduced by the amount outlined on the Spend Down Report that was previously submitted.



## SECTION 5 - SUSTAINABILITY

20 Points

Proposals will include a commitment and detailed plan for sustaining grant activities beyond the twenty-four (24) month continuation 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 continuation 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.

	<b>Exemplary</b>	<b>Superior</b>	<b>Adequate</b>	<b>Needs Improvement</b>
<b>Sustainability (20 Pts)</b>	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.*

### **Overview**

NPC is committed to sustaining the ITC after the Continuation Grant ends in August 2020. The College recently updated its Facilities Master Plan, which included new construction of a Student Commons building and a new Marine Technology building. Construction of the two new buildings opens up space in existing buildings. The Board of Trustees has allocated space in existing buildings for the ITC programs, so all ITC operations will move to campus in 2020. Furthermore, the College has budgeted to cover the cost of all renovations of these areas to ensure they are suitable for program needs.

The Makerspace will be located in the space that is currently occupied by the Campus Bookstore in the Gerald Fisher Building. This building is in close proximity to the new Student Commons and our academic programs buildings and will also have great visibility and accessibility, with ample parking nearby and main road frontage. The new Student Commons building will have conference center that seats approximately 400, providing the ITC with a nearby space for Technology conferences and other events. NPC is also expanding its food service capabilities in the Student Commons, which will provide greater food accessibility for students and for catering events.

The existing Marine Technology building will be converted to a lab space for the CNC Machining Technology program and the Automated Manufacturing Simulation Program. This building is in close proximity to our existing workforce programs such as Industrial Technology, Welding, and Aerospace and also to our high school technology programs such as Pre-Engineering, Wood Technology, and Machine Tooling. This location provides great accessibility for students who want to use the equipment or take additional classes.

NPC is further committing to this programming by establishing a Center for Apprenticeship and Skilled Trades (CAST). This initiative will establish pathways from high school to credit and non-credit programs that will provide students with exceptional opportunities for employment in the region. This initiative will provide students with a variety of options to choose from in the skilled trades and apprenticeship programs. For example, a student might begin taking the high school Aerospace program, then decide to transition to the for-credit Industrial Technology program. Once that program is completed they may want to return and achieve advanced certifications in Automation or CNC. There will also be articulation agreements to universities should a student decide to pursue a Bachelor's degree. NPC staff and faculty are working on finalizing the CAST initiative and hope that the official rollout will be fall 2019.

The Innovative Technologies Center is designed to be a long term technology resource for Garland County and the entire region. It is anticipated that as industry grows so will the demands for new and innovative technologies and related skillsets. For example, automation will continue to increase in the manufacturing industry which will present unique challenges to current and future employers. A tremendous opportunity presents itself for our existing manufacturers to upgrade skills of their current workforce and for us to invest in advanced training for the workforce pipeline. Additionally, the need for injection molding skills is growing and the ITC is well suited to create a workforce program which will provide instruction from mold design (3D modeling/analysis) through equipment setup and operation (automation). NPC and the ITC are in the planning stages of working with our local industry and other partners to develop such a program.



The ITC's plan for sustainability is three-fold. First, NPC has committed to continue support for the ITC as evidenced by the Facilities Master Plan and the new CAST initiative. Second, the ITC will continue to seek out additional grant funding opportunities. There are many organizations that will provide technology grants to entities like the Makerspace. Third, the ITC will begin to charge fees for its services. Customized workforce classes and open enrollment classes will follow the model established by the Community & Corporate Training Division. The ITC Makerspace will establish a fee structure that is similar to other innovation centers around the state, and has begun benchmarking those during the Implementation Grant.

- National Park College – NPC has a long-term commitment to the ITC and anticipates that some of the required funding for sustainability will eventually come from the E&G budget.
- NPC Foundation – The NPC Foundation has established a variety of fundraising events to assist students with scholarships for programs and also funding for equipment and major purchases. The Innovative Technologies Center will be another opportunity for giving at the College.
- Memberships – Some funding will come from community members and industry partners that want to join the ITC as members. The membership levels are beginning to take shape and will be firmly established after the results of our survey to industry, education and community partners are evaluated.
- Customized training fees – NPC already has an established revenue stream from customized training through Workforce Development. The ITC will provide additional opportunities to deliver more advanced training to business and industry. CNC Machining Technology Programming and Robotics/Automation are two areas in which our industry partners have expressed the need for us to offer more training and we are ramping up to do so.
- Sponsorships – Suppliers and other ITC partners could host special events at the ITC for a nominal fee to showcase new equipment, new products, and/or services to business and industry in the region.
- K-12 Lab/Classroom (i.e., Home Schools, EAST, PLTW, etc.) – There is a need in the area for students to have a space to complete hands on projects, both during school hours and after school hours. The ITC has already developed a reputation as that place and we have begun laying the groundwork for expectations for a fee structure to be put into place.
- Summer STEM Camps – NPC and the ITC have already established a variety of summer camps for students from 5<sup>th</sup> to 9<sup>th</sup> grade. Based on community feedback, there are many additional to offer summer camps for students. Additionally, there is interest among adults for summer camps as well.
- Regional Competitions – We have been meeting with organizations that host statewide competitions, such as, VEX Robotics, First Robotics, etc. about the ITC hosting regional competitions as qualifying rounds which would help offset funding needs for the ITC.

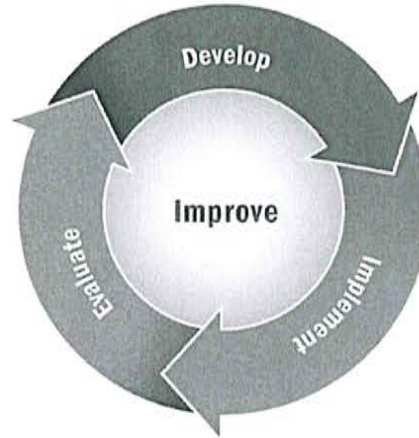
### Sustainability Action Plan

In order to build and maintain sustainability, a Sustainability Action Plan will be established. The Plan will include the following elements:

- Establish a Continuous Improvement (CIP) Team – ITC staff will assemble a mix of NPC faculty and staff, administrators, and external stakeholders from K-12, industry, and the local community to serve as the planning team. This planning team will review services, programs, and activities of the ITC and make recommendations for improvement.
- Develop a strategic plan – The ITC will develop and deploy a strategic plan that aligns with NPC's strategic planning process. The plan will include short, medium, and long term outcomes including efforts to achieve sustainability. A clear plan will help define the vision of the Center and unit all stakeholders in achieving sustainability.
- Conduct sustainability assessment – The planning team and other stakeholders will review sustainability assessment tools. Additionally, the Venture Center will be contacted to see if they can offer in-kind advice and support to help the ITC achieve sustainability.
- Determine if programs need to be scaled down or discontinued – The ITC initiatives are ambitious, so ongoing assessment of activities will be crucial to attaining sustainability. Consideration will be given to those activities that prove more beneficial than others. As an Innovative Technologies Center, it is expected that the activities and programs will evolve as technology changes.
- Prioritize the areas of sustainability capacity to address first – There will be certain areas that are crucial to meet the needs of business and industry. We will give first priority to programs that are required to develop a skilled workforce.
- Develop an action plan with specific steps to strengthen and build program's sustainability capacity – This Action Plan will strengthen and build the ITC's sustainability capacity.
- Implement action plan – Implementing the Action Plan will take time and commitment. This plan will help guide the ongoing management of the ITC and help determine specific activities. Program feedback and continuous improvement will be key components to the Action Plan.
- Reassess sustainability capacity annually – The ITC will embrace the Continuous Quality Improvement Cycle as part of its sustainability plan. To ensure that programs are meeting the needs of ITC constituents, programs will be developed, implemented, and then evaluated. Each year, the planning team will review the Continuous Quality Improvement Plan and make recommendations for changes and enhancements.



### Continuous Quality Improvement Cycle



### Plan for Communication and Sharing Resources

Communication with constituents and stakeholders will be vital to the ongoing success of the ITC. Whether filling industry classes, staffing a lecture series or sparking the imagination of a child the free flow of creative ideas will be the life blood of the ITC. The marking plan noted above in the program planning section will provide necessary communication and sharing of resources.

The ITC staff will continue to have Stakeholders meetings and advisory committee meetings on a regular basis after the Continuation Grant period. Additionally, staff will continue to meet one-on-one with ITC stakeholders to continue developing relationships while maintaining engagement. There will also be ongoing efforts, using personal visits, to continue to bring in new industry and community partners which will increase funding opportunities.

### Resources to Maintain Equipment

The resources necessary to maintain equipment and provide supplies will come from the revenue streams noted above. As noted, it is expected that the equipment purchased under this grant will persist through the foreseeable future. CMT, an important industry partners, has generously agreed to donate time of their top maintenance person to repair ITC equipment on an as needed basis. Current staff has the ability to make minor repairs on much of the equipment that has been purchased. Other industrial partners have also volunteered to assist with equipment maintenance as needed.

## SUBMIT BY JUNE 1, 2018

Email to [ADHE.Workforce.Grant@adhe.edu](mailto:ADHE.Workforce.Grant@adhe.edu)

*Applications will only be accepted for projects that were awarded an implementation grant.*

### CONTINUATION GRANT SCORING RUBRIC

Critical Elements	Exemplary	Superior	Adequate	Needs Improvement	Value
<b>Program Need</b>	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
<b>Program Plan</b>	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)	25 Pts
<b>Strength of Partnership</b>	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
<b>Budget Plan</b>	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
<b>Sustainability</b>	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
<b>Total Points Possible</b>					<b>100 Pts</b>



## Q1 Local Company Information

Answered: 71 Skipped: 0

ANSWER CHOICES	RESPONSES	
Contact Name:	100.00%	71
Company:	95.77%	68
Address:	97.18%	69
Address 2:	0.00%	0
City/Town:	98.59%	70
State:	100.00%	71
ZIP:	97.18%	69
Country:	0.00%	0
Email Address:	94.37%	67
Phone Number:	94.37%	67

#	CONTACT NAME:	DATE
1	Gina Mayberry	5/16/2018 11:23 AM
2	Scott Green	4/13/2018 2:19 PM
3	jason akins	4/10/2018 12:25 PM
4	Robert Raines	4/7/2018 10:46 AM
5	Rita Kenney	4/6/2018 8:30 AM
6	Kerrigan Ambers	4/6/2018 7:59 AM
7	Richard McGrew	4/6/2018 2:22 AM
8	Matt Edwards	4/5/2018 7:59 PM
9	Steve Strauss	4/5/2018 6:51 PM
10	MJ Sherer	4/5/2018 4:36 PM
11	Tim Stockdale	4/5/2018 3:44 PM
12	Bobby Brown	4/5/2018 2:51 PM
13	Cheryl Morrison	4/5/2018 11:12 AM
14	Jennifer Bassett	4/5/2018 10:35 AM
15	Kelly Thomason	4/5/2018 10:30 AM
16	Aaron	4/5/2018 10:20 AM
17	Anthony Houston	4/5/2018 10:19 AM
18	Nancy Beck	4/5/2018 10:17 AM
19	Matt Carley	4/5/2018 10:01 AM
20	Bob Pfautz	4/5/2018 10:00 AM
21	Lee Murphy	4/5/2018 9:59 AM
22	Stuart Fleischer	4/5/2018 9:55 AM

## Regional Workforce Industry Survey

23	Don Gooch	4/5/2018 9:47 AM
24	Courtne Maness	4/5/2018 9:42 AM
25	Agnes Galecka	4/5/2018 9:27 AM
26	Neal Gladner	4/5/2018 9:20 AM
27	Jonathan Bibb	4/5/2018 9:18 AM
28	Deborah Brown	4/5/2018 9:16 AM
29	Christina Farewell	4/5/2018 9:15 AM
30	Mandy Lovell	4/5/2018 9:15 AM
31	Gene M. Cannon III	4/5/2018 9:12 AM
32	Tiffany Rogers	4/5/2018 9:11 AM
33	Jim Miller	4/5/2018 9:10 AM
34	Chris Arrison	4/5/2018 9:09 AM
35	Benjamin Baker	4/5/2018 9:07 AM
36	Karen Kitchens	4/5/2018 9:06 AM
37	Chuck Overton	4/3/2018 8:30 AM
38	Laura Brody	4/2/2018 9:16 AM
39	Karen McDonald	3/30/2018 11:48 AM
40	Tom Butler	3/30/2018 10:17 AM
41	GABRIEL PERET	3/30/2018 7:47 AM
42	Benjamin VanWagner	3/20/2018 6:13 PM
43	Stephani Davis	3/20/2018 2:30 PM
44	Mike Dugan	3/19/2018 10:44 AM
45	Johann Vidanage	3/19/2018 8:16 AM
46	Darren Green	3/16/2018 12:51 PM
47	Richard Foster	3/16/2018 12:25 PM
48	James Bridges	3/16/2018 12:00 PM
49	Neal Harrington	3/16/2018 11:18 AM
50	Cryst	3/16/2018 11:16 AM
51	Denton Burchett	3/16/2018 11:11 AM
52	Chuck Launius	3/16/2018 11:09 AM
53	Trevor Hamilton	3/16/2018 10:53 AM
54	Justin Vik	3/16/2018 10:43 AM
55	Lori Wozniak	3/16/2018 10:33 AM
56	Lisa Hudson	3/16/2018 10:21 AM
57	Greg Diehl	3/16/2018 10:04 AM
58	Greg Hess	3/16/2018 9:44 AM
59	Dr. Stephanie Nehus	3/16/2018 9:34 AM
60	Newton	3/16/2018 9:20 AM
61	Dana DeWitt	3/16/2018 9:09 AM
62	Joe Jackson	3/15/2018 1:07 PM
63	Ray Reed	3/15/2018 11:49 AM



## Regional Workforce Industry Survey

64	Carol Hansen	3/15/2018 11:17 AM
65	Buck Bunn	3/15/2018 11:01 AM
66	Vic Gandolph	3/15/2018 10:54 AM
67	Greg Ferringier	3/15/2018 10:49 AM
68	Ralph Carter	3/15/2018 10:35 AM
69	Christie Tackett	3/15/2018 9:56 AM
70	Gary Troutman	3/14/2018 4:09 PM
71	Mark Sorrell	3/14/2018 3:10 PM
#	COMPANY:	DATE
1	Vickers Tank Company	5/16/2018 11:23 AM
2	Hot Springs Mall: Management	4/13/2018 2:19 PM
3	triumph precision components	4/10/2018 12:25 PM
4	The Gangster Museum of America	4/7/2018 10:46 AM
5	Motility MLK - Prosthetics	4/6/2018 8:30 AM
6	United Rentals	4/6/2018 7:59 AM
7	McGrew Companies	4/6/2018 2:22 AM
8	Weyerhaeuser	4/5/2018 7:59 PM
9	Superior Senior Care	4/5/2018 4:36 PM
10	Garland County Treasurer	4/5/2018 3:44 PM
11	Bobby Brown Private Wealth Advisors	4/5/2018 2:51 PM
12	Lake Hamilton Realty	4/5/2018 11:12 AM
13	Home Instead Senior Care	4/5/2018 10:35 AM
14	Team Thomason	4/5/2018 10:30 AM
15	The Roland Agency	4/5/2018 10:20 AM
16	CHI St. Vincent Hot Springs	4/5/2018 10:19 AM
17	Catherine's Landing RV RESort	4/5/2018 10:17 AM
18	Paradise Cove Marina	4/5/2018 10:01 AM
19	Mid-south Engineering	4/5/2018 9:59 AM
20	Hot Springs National Park Dental Group	4/5/2018 9:55 AM
21	Arvest Bank	4/5/2018 9:47 AM
22	Ablution Day Spa	4/5/2018 9:42 AM
23	Kolleeve Coffee+Tea	4/5/2018 9:27 AM
24	US Stations LLC	4/5/2018 9:20 AM
25	Arkansas Career Training Institute	4/5/2018 9:18 AM
26	Mountain Valley Visitor Center	4/5/2018 9:16 AM
27	Stockton Medical Group	4/5/2018 9:15 AM
28	Temperance Hill Security Storgae	4/5/2018 9:15 AM
29	Arkansas Stave and Lumber, LLC	4/5/2018 9:12 AM
30	Henderson State University	4/5/2018 9:11 AM
31	Mid-America Science Museum	4/5/2018 9:10 AM
32	The Waters Hotel	4/5/2018 9:09 AM

## Regional Workforce Industry Survey

33	Regions	4/5/2018 9:06 AM
34	Berry Global	4/3/2018 8:30 AM
35	Berry Global	4/2/2018 9:16 AM
36	Keith Smith Co., Inc.	3/30/2018 11:48 AM
37	CMT Inc	3/30/2018 10:17 AM
38	MID SOUTH ENGINEERING	3/30/2018 7:47 AM
39	Oaklawn Jockey Club	3/20/2018 6:13 PM
40	Bishop Aviation	3/20/2018 2:30 PM
41	MERRITT WHSLE DIST INC	3/19/2018 10:44 AM
42	Peter's Flooring & Paint	3/19/2018 8:16 AM
43	Triumph Precision Components	3/16/2018 12:51 PM
44	Flavor Source, Inc.	3/16/2018 12:25 PM
45	Reynolds Customer Products	3/16/2018 12:00 PM
46	Express Employment Professionals	3/16/2018 11:18 AM
47	Hot Springs School District	3/16/2018 11:16 AM
48	Berry Global, Inc.	3/16/2018 11:11 AM
49	Resort TV Cable	3/16/2018 11:09 AM
50	Alliance Rubber	3/16/2018 10:53 AM
51	Triumph Precision Components - Fabrications	3/16/2018 10:43 AM
52	Timber Automation	3/16/2018 10:33 AM
53	Instrument & Supply Inc	3/16/2018 10:21 AM
54	Timber Automation	3/16/2018 10:04 AM
55	Airtech Supply	3/16/2018 9:44 AM
56	Hot Springs School District	3/16/2018 9:34 AM
57	Instrument and Supply, Inc.	3/16/2018 9:20 AM
58	Lockheed Martin	3/16/2018 9:09 AM
59	Alliance Rubber	3/15/2018 1:07 PM
60	Triumph	3/15/2018 11:49 AM
61	Dan's Whetstone Co., Inc.	3/15/2018 11:17 AM
62	SBI metal buildings	3/15/2018 11:01 AM
63	St. Luke's Day School	3/15/2018 10:54 AM
64	Triumph Precision Hot Springs	3/15/2018 10:49 AM
65	Jessieville School District	3/15/2018 10:35 AM
66	Triumph Airborne Structures	3/15/2018 9:56 AM
67	HS Metro Partnership	3/14/2018 4:09 PM
68	AIRTECH SUPPLY INC	3/14/2018 3:10 PM
#	ADDRESS:	DATE
1	201 Vickers Pl	5/16/2018 11:23 AM
2	4501 Central Ave, STE 100	4/13/2018 2:19 PM
3	1923 central ave	4/10/2018 12:25 PM
4	510 Central	4/7/2018 10:46 AM



## Regional Workforce Industry Survey

5	120 Hill Street	4/6/2018 8:30 AM
6	513 Airport Rd	4/6/2018 7:59 AM
7	507 Hobson	4/6/2018 2:22 AM
8	810 Whittington Avenue	4/5/2018 7:59 PM
9	3001 Veazey Terrace, NW apt. 1332	4/5/2018 6:51 PM
10	715 W Grand	4/5/2018 4:36 PM
11	501 Ouachita Ave., Suite 102	4/5/2018 3:44 PM
12	2360 Malvern Ave., Ste. E	4/5/2018 2:51 PM
13	4425 Central Avenue	4/5/2018 11:12 AM
14	300 Ouachita Ave	4/5/2018 10:35 AM
15	120 Alta Vista St.	4/5/2018 10:30 AM
16	3935 Central Ave.	4/5/2018 10:20 AM
17	1700 Shady Grove Rd	4/5/2018 10:17 AM
18	1300 Airport Road	4/5/2018 10:01 AM
19	127 Bay Ridge Loop	4/5/2018 10:00 AM
20	1658 Malvern Ave	4/5/2018 9:59 AM
21	307M Carpenter Dam Road	4/5/2018 9:55 AM
22	400 Ouachita	4/5/2018 9:47 AM
23	4904 Central Ave, Suite A	4/5/2018 9:42 AM
24	110 Central Ave	4/5/2018 9:27 AM
25	125 Corporate Terrace	4/5/2018 9:20 AM
26	105 Reserve Street	4/5/2018 9:18 AM
27	150 Central Avenue	4/5/2018 9:16 AM
28	1 Mercy Lane, Ste 403	4/5/2018 9:15 AM
29	170 Temperance Hill Road	4/5/2018 9:15 AM
30	10912 Hwy. 270	4/5/2018 9:12 AM
31	201 Market St.	4/5/2018 9:11 AM
32	500 Mid America Blvd.	4/5/2018 9:10 AM
33	340 Central Avenue	4/5/2018 9:09 AM
34	3825 N Highway 7	4/5/2018 9:07 AM
35	302 Malvern Ave	4/5/2018 9:06 AM
36	106 Delta Place	4/3/2018 8:30 AM
37	106 Delta Place	4/2/2018 9:16 AM
38	Box 3800	3/30/2018 11:48 AM
39	7152 Central Ave	3/30/2018 10:17 AM
40	1658 MALVERN AVE	3/30/2018 7:47 AM
41	2705 Central Ave	3/20/2018 6:13 PM
42	506 Jack Mountain Road	3/20/2018 2:30 PM
43	626 OUACHITA AVENUE	3/19/2018 10:44 AM
44	1217 Malvern Ave	3/19/2018 8:16 AM
45	1923 Central Ave	3/16/2018 12:51 PM

## Regional Workforce Industry Survey

46	174 Sylvan Hills Rd.	3/16/2018 12:25 PM
47	I330 HWY 270	3/16/2018 12:00 PM
48	1702 Malvern Ave., Ste B	3/16/2018 11:18 AM
49	703 Emory Street	3/16/2018 11:16 AM
50	106 Delta Place	3/16/2018 11:11 AM
51	410 Airport Rd, Suite H	3/16/2018 11:09 AM
52	210 Carpenter Dam Road	3/16/2018 10:53 AM
53	1923 Central Ave	3/16/2018 10:43 AM
54	400 Aviation Plaza	3/16/2018 10:33 AM
55	141 Technic Circle	3/16/2018 10:21 AM
56	400 Avaition PL	3/16/2018 10:04 AM
57	3058 Hwy 290	3/16/2018 9:44 AM
58	400 Linwood Ave	3/16/2018 9:34 AM
59	PO Box 1679	3/16/2018 9:20 AM
60	210 Carpenter Dam RD	3/15/2018 1:07 PM
61	115 Nevada	3/15/2018 11:49 AM
62	418 Hilltop Road	3/15/2018 11:17 AM
63	114 trooper dr	3/15/2018 11:01 AM
64	228 Spring St	3/15/2018 10:54 AM
65	1923 Central Avenue	3/15/2018 10:49 AM
66	P. O. box 4	3/15/2018 10:35 AM
67	115 Centennial Dr	3/15/2018 9:56 AM
68	659 Ouachita Ave.	3/14/2018 4:09 PM
69	3058 Highway 290	3/14/2018 3:10 PM

#	ADDRESS 2:	DATE
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There are no responses.

#	CITY/TOWN:	DATE
1	Hot Springs	5/16/2018 11:23 AM
2	Hot Springs	4/13/2018 2:19 PM
3	hot springs	4/10/2018 12:25 PM
4	Hot Springs	4/7/2018 10:46 AM
5	Hot Springs	4/6/2018 8:30 AM
6	HOT SPRINGS	4/6/2018 7:59 AM
7	Hot Springs	4/6/2018 2:22 AM
8	Hot Springs	4/5/2018 7:59 PM
9	Washington	4/5/2018 6:51 PM
10	Hot Springs	4/5/2018 4:36 PM
11	Hot Springs	4/5/2018 3:44 PM
12	Hot Springs	4/5/2018 2:51 PM
13	Hot Springs	4/5/2018 11:12 AM
14	Hot Springs	4/5/2018 10:35 AM



## Regional Workforce Industry Survey

15	Hot Springs	4/5/2018 10:30 AM
16	Hot Spring	4/5/2018 10:20 AM
17	Hot Springs	4/5/2018 10:17 AM
18	Hot Springs	4/5/2018 10:01 AM
19	Hot Springs	4/5/2018 10:00 AM
20	Hot Springs	4/5/2018 9:59 AM
21	Hot Springs	4/5/2018 9:55 AM
22	Hot Springs	4/5/2018 9:47 AM
23	Hot Springs	4/5/2018 9:42 AM
24	Hot Springs	4/5/2018 9:27 AM
25	Hot springs	4/5/2018 9:20 AM
26	Hot Springs	4/5/2018 9:18 AM
27	Hot Springs	4/5/2018 9:16 AM
28	Hot Springs	4/5/2018 9:15 AM
29	Hot Springs	4/5/2018 9:15 AM
30	MALVERN	4/5/2018 9:12 AM
31	Hot Springs	4/5/2018 9:11 AM
32	Hot Springs National Park	4/5/2018 9:10 AM
33	Hot Springs	4/5/2018 9:09 AM
34	Hot Springs Village	4/5/2018 9:07 AM
35	Hot Springs	4/5/2018 9:06 AM
36	Hot Springs	4/3/2018 8:30 AM
37	Hot Springs	4/2/2018 9:16 AM
38	Hot Springs	3/30/2018 11:48 AM
39	Hot Springs	3/30/2018 10:17 AM
40	HOT SPRINGS	3/30/2018 7:47 AM
41	Hot Springs	3/20/2018 6:13 PM
42	HOT SPRINGS	3/20/2018 2:30 PM
43	HOT SPRINGS	3/19/2018 10:44 AM
44	Hot Springs	3/19/2018 8:16 AM
45	Hot Springs	3/16/2018 12:51 PM
46	Hot Springs	3/16/2018 12:25 PM
47	Malvern	3/16/2018 12:00 PM
48	Hot Springs	3/16/2018 11:18 AM
49	Hot Springs	3/16/2018 11:16 AM
50	Hot Springs	3/16/2018 11:11 AM
51	Hot Springs	3/16/2018 11:09 AM
52	Hot Springs	3/16/2018 10:53 AM
53	Hot Springs	3/16/2018 10:43 AM
54	Hot Springs	3/16/2018 10:33 AM
55	Hot Springs	3/16/2018 10:21 AM

## Regional Workforce Industry Survey

56	Hot Springs	3/16/2018 10:04 AM
57	Hot Springs	3/16/2018 9:44 AM
58	Hot Springs	3/16/2018 9:34 AM
59	Hot Springs	3/16/2018 9:20 AM
60	Camden	3/16/2018 9:09 AM
61	Hot Springs	3/15/2018 1:07 PM
62	Hot Springs	3/15/2018 11:49 AM
63	Pearcy	3/15/2018 11:17 AM
64	Hot springs	3/15/2018 11:01 AM
65	Hot Springs	3/15/2018 10:54 AM
66	Hot Springs	3/15/2018 10:49 AM
67	Jessieville	3/15/2018 10:35 AM
68	Hot Springs	3/15/2018 9:56 AM
69	Hot Springs	3/14/2018 4:09 PM
70	HOT SPRINGS	3/14/2018 3:10 PM
#	STATE:	DATE
1	AR	5/16/2018 11:23 AM
2	AR	4/13/2018 2:19 PM
3	AR	4/10/2018 12:25 PM
4	AR	4/7/2018 10:46 AM
5	AR	4/6/2018 8:30 AM
6	AR	4/6/2018 7:59 AM
7	AR	4/6/2018 2:22 AM
8	AR	4/5/2018 7:59 PM
9	DC	4/5/2018 6:51 PM
10	AR	4/5/2018 4:36 PM
11	AR	4/5/2018 3:44 PM
12	AR	4/5/2018 2:51 PM
13	AR	4/5/2018 11:12 AM
14	AR	4/5/2018 10:35 AM
15	AR	4/5/2018 10:30 AM
16	AR	4/5/2018 10:20 AM
17	AR	4/5/2018 10:19 AM
18	AR	4/5/2018 10:17 AM
19	AR	4/5/2018 10:01 AM
20	AR	4/5/2018 10:00 AM
21	AR	4/5/2018 9:59 AM
22	AR	4/5/2018 9:55 AM
23	AR	4/5/2018 9:47 AM
24	AR	4/5/2018 9:42 AM
25	AR	4/5/2018 9:27 AM



## Regional Workforce Industry Survey

26	AR	4/5/2018 9:20 AM
27	AR	4/5/2018 9:18 AM
28	AR	4/5/2018 9:16 AM
29	AR	4/5/2018 9:15 AM
30	AR	4/5/2018 9:15 AM
31	AR	4/5/2018 9:12 AM
32	AR	4/5/2018 9:11 AM
33	AR	4/5/2018 9:10 AM
34	AR	4/5/2018 9:09 AM
35	AR	4/5/2018 9:07 AM
36	AR	4/5/2018 9:06 AM
37	AR	4/3/2018 8:30 AM
38	AR	4/2/2018 9:16 AM
39	AR	3/30/2018 11:48 AM
40	AR	3/30/2018 10:17 AM
41	AR	3/30/2018 7:47 AM
42	AR	3/20/2018 6:13 PM
43	AR	3/20/2018 2:30 PM
44	AR	3/19/2018 10:44 AM
45	AR	3/19/2018 8:16 AM
46	AR	3/16/2018 12:51 PM
47	AR	3/16/2018 12:25 PM
48	AR	3/16/2018 12:00 PM
49	AR	3/16/2018 11:18 AM
50	AR	3/16/2018 11:16 AM
51	AR	3/16/2018 11:11 AM
52	AR	3/16/2018 11:09 AM
53	AR	3/16/2018 10:53 AM
54	AR	3/16/2018 10:43 AM
55	AR	3/16/2018 10:33 AM
56	AR	3/16/2018 10:21 AM
57	AR	3/16/2018 10:04 AM
58	AR	3/16/2018 9:44 AM
59	AR	3/16/2018 9:34 AM
60	AR	3/16/2018 9:20 AM
61	AR	3/16/2018 9:09 AM
62	AR	3/15/2018 1:07 PM
63	AR	3/15/2018 11:49 AM
64	AR	3/15/2018 11:17 AM
65	AR	3/15/2018 11:01 AM
66	AR	3/15/2018 10:54 AM

# Regional Workforce Industry Survey

67	AR	3/15/2018 10:49 AM
68	AR	3/15/2018 10:35 AM
69	AR	3/15/2018 9:56 AM
70	AR	3/14/2018 4:09 PM
71	AR	3/14/2018 3:10 PM
#	ZIP:	DATE
1	71913	5/16/2018 11:23 AM
2	71913	4/13/2018 2:19 PM
3	71901	4/10/2018 12:25 PM
4	71901	4/7/2018 10:46 AM
5	71901	4/6/2018 8:30 AM
6	71913	4/6/2018 7:59 AM
7	71913	4/6/2018 2:22 AM
8	71901	4/5/2018 7:59 PM
9	20008	4/5/2018 6:51 PM
10	71913	4/5/2018 4:36 PM
11	71901	4/5/2018 3:44 PM
12	71901	4/5/2018 2:51 PM
13	71903	4/5/2018 11:12 AM
14	71901	4/5/2018 10:35 AM
15	71913	4/5/2018 10:30 AM
16	71913	4/5/2018 10:20 AM
17	71901	4/5/2018 10:17 AM
18	71913	4/5/2018 10:01 AM
19	71901	4/5/2018 10:00 AM
20	71901	4/5/2018 9:59 AM
21	71901	4/5/2018 9:55 AM
22	71901	4/5/2018 9:47 AM
23	71913	4/5/2018 9:42 AM
24	71901	4/5/2018 9:27 AM
25	71913	4/5/2018 9:20 AM
26	71902	4/5/2018 9:18 AM
27	71901	4/5/2018 9:16 AM
28	71913	4/5/2018 9:15 AM
29	71913	4/5/2018 9:15 AM
30	721046595	4/5/2018 9:12 AM
31	71901	4/5/2018 9:11 AM
32	71913	4/5/2018 9:10 AM
33	71901	4/5/2018 9:09 AM
34	71909	4/5/2018 9:07 AM
35	71901	4/5/2018 9:06 AM



## Regional Workforce Industry Survey

36	71913	4/3/2018 8:30 AM
37	71913	4/2/2018 9:16 AM
38	71914	3/30/2018 11:48 AM
39	71913	3/30/2018 10:17 AM
40	71901	3/30/2018 7:47 AM
41	71901	3/20/2018 6:13 PM
42	71913	3/20/2018 2:30 PM
43	71901	3/19/2018 10:44 AM
44	71901	3/19/2018 8:16 AM
45	71901	3/16/2018 12:51 PM
46	71901	3/16/2018 12:25 PM
47	71901	3/16/2018 11:18 AM
48	71901	3/16/2018 11:16 AM
49	71913	3/16/2018 11:11 AM
50	71913	3/16/2018 11:09 AM
51	71901	3/16/2018 10:53 AM
52	71901	3/16/2018 10:43 AM
53	71913	3/16/2018 10:33 AM
54	71901	3/16/2018 10:21 AM
55	71913	3/16/2018 10:04 AM
56	71913	3/16/2018 9:44 AM
57	71913	3/16/2018 9:34 AM
58	71902	3/16/2018 9:20 AM
59	71711	3/16/2018 9:09 AM
60	71901	3/15/2018 1:07 PM
61	71913	3/15/2018 11:49 AM
62	71964	3/15/2018 11:17 AM
63	71913	3/15/2018 11:01 AM
64	71901	3/15/2018 10:54 AM
65	71901	3/15/2018 10:49 AM
66	71949	3/15/2018 10:35 AM
67	71913	3/15/2018 9:56 AM
68	71901	3/14/2018 4:09 PM
69	71913-8610	3/14/2018 3:10 PM

#	COUNTRY:	DATE
---	----------	------

There are no responses.

#	EMAIL ADDRESS:	DATE
1	vickerstankco@aol.com	5/16/2018 11:23 AM
2	manager@hotspringsmall.com	4/13/2018 2:19 PM
3	jakins@triumphgroup.com	4/10/2018 12:25 PM
4	director@tgmoa.com	4/7/2018 10:46 AM

## Regional Workforce Industry Survey

5	MotilityMLK@outlook.com	4/6/2018 8:30 AM
6	kambers@ur.com	4/6/2018 7:59 AM
7	rmcgrew@mcgrewelectric.com	4/6/2018 2:22 AM
8	matt.edwards@weyerhaeuser.com	4/5/2018 7:59 PM
9	straussnyc@verizon.net	4/5/2018 6:51 PM
10	mj.sherer@superiorseniorcare.com	4/5/2018 4:36 PM
11	tstockdale@garlandcounty.org	4/5/2018 3:44 PM
12	bobby.brown@raymondjames.com	4/5/2018 2:51 PM
13	morrisoncheryla@hotmail.com	4/5/2018 11:12 AM
14	jennifer.bassett@homeinstead.com	4/5/2018 10:35 AM
15	realtorkelly101@yahoo.com	4/5/2018 10:30 AM
16	droland@farmersagent.com	4/5/2018 10:20 AM
17	nbeck@rvcoutdoors.com	4/5/2018 10:17 AM
18	paradisecovehs@gmail.com	4/5/2018 10:01 AM
19	bob@yourhotsprings.com	4/5/2018 10:00 AM
20	lmurphy@mseco.com	4/5/2018 9:59 AM
21	hotspringsdental@sbcglobal.net	4/5/2018 9:55 AM
22	dgooch@arvest.com	4/5/2018 9:47 AM
23	fou.beau@yahoo.com	4/5/2018 9:42 AM
24	agnes@kollektivecoffeetea.com	4/5/2018 9:27 AM
25	ngladner@usstations.com	4/5/2018 9:20 AM
26	jonathan.bibb@arkansas.gov	4/5/2018 9:18 AM
27	hs@stocktonmedgroup.org	4/5/2018 9:15 AM
28	mandy@arkansassecuritystorage.com	4/5/2018 9:15 AM
29	gcannon@arkansasstave.com	4/5/2018 9:12 AM
30	rogerst@hsu.edu	4/5/2018 9:11 AM
31	jimm@midamericamuseum.org	4/5/2018 9:10 AM
32	chrisa@thewatershs.com	4/5/2018 9:09 AM
33	Karen.Kitchens@Regions.com	4/5/2018 9:06 AM
34	charlesoverton@berryblobal.com	4/3/2018 8:30 AM
35	laurabrody@berryglobal.com	4/2/2018 9:16 AM
36	tbutler@cmtair.com	3/30/2018 10:17 AM
37	gperet@mseco.com	3/30/2018 7:47 AM
38	bvanwagner@oaklawn.com	3/20/2018 6:13 PM
39	sales@bishopaviation.com	3/20/2018 2:30 PM
40	mduganmerritt@yahoo.com	3/19/2018 10:44 AM
41	johann@petersflooringandpaint.com	3/19/2018 8:16 AM
42	dgreen@triumphgroup.com	3/16/2018 12:51 PM
43	richard@texamerican.com	3/16/2018 12:25 PM
44	James.bridges@reynoldsbrands.com	3/16/2018 12:00 PM
45	neal.harrington@expresspros.com	3/16/2018 11:18 AM



## Regional Workforce Industry Survey

46	myersc@hssd.net	3/16/2018 11:16 AM
47	dentonburchett@berryglobal.com	3/16/2018 11:11 AM
48	claunius@wehco.com	3/16/2018 11:09 AM
49	thamilton@alliance-rubber.com	3/16/2018 10:53 AM
50	jvik@triumphgroup.com	3/16/2018 10:43 AM
51	lori.wozniak@timberna.com	3/16/2018 10:33 AM
52	lhudson@isiequip.com	3/16/2018 10:21 AM
53	greg.diehl@timberna.com	3/16/2018 10:04 AM
54	greghess@airtechsupply.com	3/16/2018 9:44 AM
55	nehuss@hssd.net	3/16/2018 9:34 AM
56	nwhite@isiequip.com	3/16/2018 9:20 AM
57	dana.dewitt@lmco.com	3/16/2018 9:09 AM
58	jjackson@alliance-rubber.com	3/15/2018 1:07 PM
59	rereed@triumphgroup.com	3/15/2018 11:49 AM
60	carolhdanswhetstone.com	3/15/2018 11:17 AM
61	bbunn@sbimetalbuildings.com	3/15/2018 11:01 AM
62	vgandolph@stlukeshs.org	3/15/2018 10:54 AM
63	gjferringer@triumphgroup.com	3/15/2018 10:49 AM
64	ralph.carter@jsdlions.net	3/15/2018 10:35 AM
65	jctackett@triumphgroup.com	3/15/2018 9:56 AM
66	gary.troutman@growinghotsprings.com	3/14/2018 4:09 PM
67	msorrell@airtechsupply.com	3/14/2018 3:10 PM
#	PHONE NUMBER:	DATE
1	501-623-4211	5/16/2018 11:23 AM
2	5017013798	4/13/2018 2:19 PM
3	501-622-4309	4/10/2018 12:25 PM
4	501-318-1717	4/7/2018 10:46 AM
5	501-620-4800	4/6/2018 8:30 AM
6	5015257222	4/6/2018 7:59 AM
7	5016232481	4/6/2018 2:22 AM
8	501-624-8192	4/5/2018 7:59 PM
9	501 623-7767	4/5/2018 4:36 PM
10	5016223650	4/5/2018 3:44 PM
11	501-463-4020	4/5/2018 2:51 PM
12	501-520-1100	4/5/2018 11:12 AM
13	5016253133	4/5/2018 10:35 AM
14	501-538-4370	4/5/2018 10:30 AM
15	501 701 8042	4/5/2018 10:20 AM
16	262-914-1792	4/5/2018 10:17 AM
17	501-767-4144	4/5/2018 10:01 AM
18	501-620-9991	4/5/2018 10:00 AM

## Regional Workforce Industry Survey

19	501.321.2276	4/5/2018 9:59 AM
20	5016243323	4/5/2018 9:55 AM
21	501-538-1355	4/5/2018 9:47 AM
22	5018023414	4/5/2018 9:42 AM
23	3102663166	4/5/2018 9:27 AM
24	5015259700	4/5/2018 9:20 AM
25	501-701-6310	4/5/2018 9:18 AM
26	5012468017	4/5/2018 9:16 AM
27	5013197963	4/5/2018 9:15 AM
28	501-525-3535	4/5/2018 9:15 AM
29	7132992753	4/5/2018 9:12 AM
30	8708303953	4/5/2018 9:11 AM
31	5017673461	4/5/2018 9:10 AM
32	5013210001	4/5/2018 9:09 AM
33	5012763641	4/5/2018 9:07 AM
34	501-625-9494	4/5/2018 9:06 AM
35	501-760-4597	4/3/2018 8:30 AM
36	501-760-4551	4/2/2018 9:16 AM
37	5015250268	3/30/2018 10:17 AM
38	501-321-2276	3/30/2018 7:47 AM
39	5015258228	3/20/2018 2:30 PM
40	501-623-6633	3/19/2018 10:44 AM
41	5016231800	3/19/2018 8:16 AM
42	501-622-4236	3/16/2018 12:51 PM
43	5016237013	3/16/2018 12:25 PM
44	501.844.2216	3/16/2018 12:00 PM
45	501-520-0333	3/16/2018 11:18 AM
46	5014631512	3/16/2018 11:16 AM
47	501-760-4528	3/16/2018 11:11 AM
48	501781-3724	3/16/2018 11:09 AM
49	501-262-2700	3/16/2018 10:53 AM
50	501-622-4257	3/16/2018 10:43 AM
51	5016517575	3/16/2018 10:33 AM
52	5012623282	3/16/2018 10:21 AM
53	5016514527	3/16/2018 10:04 AM
54	501-525-7707 ext 110	3/16/2018 9:44 AM
55	5016243372	3/16/2018 9:34 AM
56	501 262 3282	3/16/2018 9:20 AM
57	870-574-3543	3/16/2018 9:09 AM
58	501-262-8135	3/15/2018 1:07 PM
59	5016224294	3/15/2018 11:49 AM

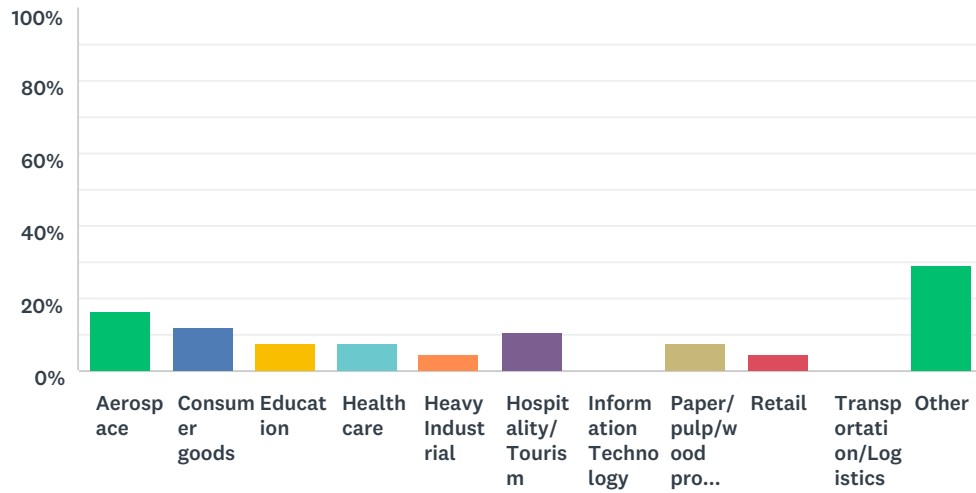


## Regional Workforce Industry Survey

60	501-767-1616	3/15/2018 11:17 AM
61	5012620600	3/15/2018 11:01 AM
62	501623-1653	3/15/2018 10:54 AM
63	5016224262	3/15/2018 10:49 AM
64	5012095651	3/15/2018 10:35 AM
65	501-767-7121	3/15/2018 9:56 AM
66	5013211700	3/14/2018 4:09 PM
67	5015257707	3/14/2018 3:10 PM

## Q2 What is your company's primary industry cluster?

Answered: 66 Skipped: 5



ANSWER CHOICES	RESPONSES	
Aerospace	16.67%	11
Consumer goods	12.12%	8
Education	7.58%	5
Healthcare	7.58%	5
Heavy Industrial	4.55%	3
Hospitality/Tourism	10.61%	7
Information Technology	0.00%	0
Paper/pulp/wood products	7.58%	5
Retail	4.55%	3
Transportation/Logistics	0.00%	0
Other	28.79%	19
<b>TOTAL</b>		<b>66</b>

#	OTHER (PLEASE SPECIFY)	DATE
1	manufacturing	5/16/2018 11:23 AM
2	Rental	4/6/2018 7:59 AM
3	and retail / commercial investment	4/5/2018 6:51 PM
4	Referral Agency for Non-medical In Home Care	4/5/2018 4:36 PM
5	County Government	4/5/2018 3:44 PM
6	Finance/Wealth Management/Investments	4/5/2018 2:51 PM
7	Housing	4/5/2018 11:12 AM
8	Real Estate	4/5/2018 10:30 AM
9	Insurance	4/5/2018 10:20 AM



## Regional Workforce Industry Survey

10	Full Service Marina	4/5/2018 10:01 AM
11	Real Estate Sales and Property Management	4/5/2018 10:00 AM
12	Financial Services	4/5/2018 9:47 AM
13	Beauty & Health	4/5/2018 9:42 AM
14	broadcasting/marketing	4/5/2018 9:20 AM
15	Hospitality and Museum	4/5/2018 9:16 AM
16	Self stoage and U-Haul renatls	4/5/2018 9:15 AM
17	Also Education/Science Museum	4/5/2018 9:10 AM
18	Finance	4/5/2018 9:06 AM
19	Food Processing	3/16/2018 12:25 PM
20	Staffing Agency	3/16/2018 11:18 AM
21	Education	3/16/2018 11:16 AM
22	Broadband Communications Video	3/16/2018 11:09 AM
23	Water/Wastewater Managment	3/16/2018 10:21 AM
24	Water and Wastewater Treatment Equipment	3/16/2018 9:20 AM
25	Industrial/Medical/Dental,Sporting Goods/	3/15/2018 11:17 AM
26	ED entity	3/14/2018 4:09 PM

## Q3 What is your primary product or service in Hot Springs?

Answered: 69 Skipped: 2

#	RESPONSES	DATE
1	Septic systems, grease traps, concrete products	5/16/2018 11:23 AM
2	We own the Hot Springs Mall. Offering real estate for many things including retail.	4/13/2018 2:19 PM
3	Aerospace Aluminum & Titanium Sheet Metal components & assemblies	4/10/2018 12:25 PM
4	history	4/7/2018 10:46 AM
5	Prosthetics (artificial limbs)	4/6/2018 8:30 AM
6	Construction Equipment Rental	4/6/2018 7:59 AM
7	Electric service and property manamagment	4/6/2018 2:22 AM
8	Administrative Regional Office	4/5/2018 7:59 PM
9	retail / commercial space in Class B property	4/5/2018 6:51 PM
10	Caregivers being referred to clients	4/5/2018 4:36 PM
11	Banking	4/5/2018 3:44 PM
12	Investment Management	4/5/2018 2:51 PM
13	Listing and selling homes	4/5/2018 11:12 AM
14	Provide Seniors with Caregivers in the home or at Assisted Living facilities	4/5/2018 10:35 AM
15	Real Estate	4/5/2018 10:30 AM
16	Our primary product is providing insurance coverage for clients in Hot Springs and servicing those accounts.	4/5/2018 10:20 AM
17	Tertiary acute care Level II Trauma and multispecialty 140+ provider integrated healthcare delivery system	4/5/2018 10:19 AM
18	Overnight accomodations	4/5/2018 10:17 AM
19	Boat Rental - Slip Storage - Storage - Shop - Fuel	4/5/2018 10:01 AM
20	Residential and Commercial Real Estate	4/5/2018 10:00 AM
21	Consulting engineering services.	4/5/2018 9:59 AM
22	General Dentistry	4/5/2018 9:55 AM
23	Financial Services	4/5/2018 9:47 AM
24	Massage therapy and Salon	4/5/2018 9:42 AM
25	Coffee shop, tea house and restaurant	4/5/2018 9:27 AM
26	radio - advertising	4/5/2018 9:20 AM
27	Career and technical education of people with disabilities.	4/5/2018 9:18 AM
28	Water	4/5/2018 9:16 AM
29	Opioid Dependence	4/5/2018 9:15 AM
30	Self Storage - U-Haul rentals & moving supplies	4/5/2018 9:15 AM
31	Wine and Bourbon barrel staves, Cross ties and Lumber	4/5/2018 9:12 AM
32	Education	4/5/2018 9:11 AM
33	State of the art science facility for families and visitors to Hot Springs.	4/5/2018 9:10 AM
34	Hotel and Restaurant	4/5/2018 9:09 AM

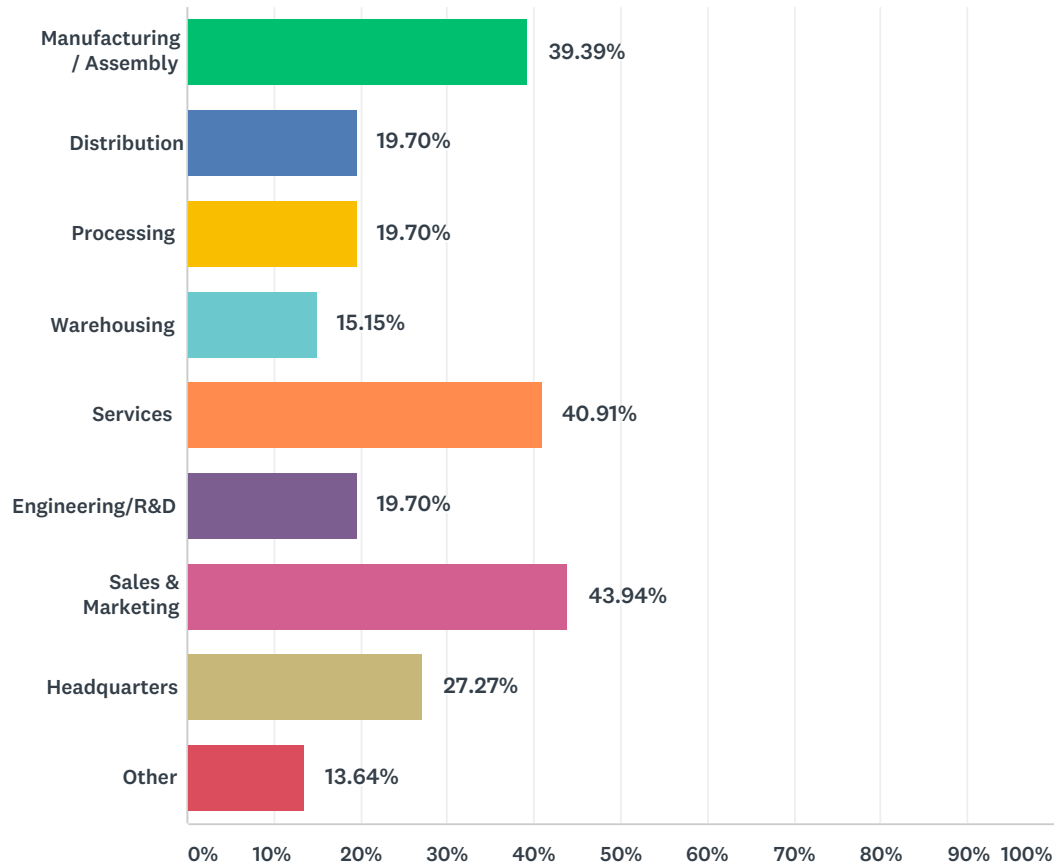
## Regional Workforce Industry Survey

35	Resale of donated products to support Habitats mission.	4/5/2018 9:07 AM
36	Commercial Lending	4/5/2018 9:06 AM
37	Plastic Manufacturing	4/3/2018 8:30 AM
38	We manufacturing containers and closures.	4/2/2018 9:16 AM
39	Broiler Hatching Eggs	3/30/2018 11:48 AM
40	Aircraft Parts and Assemblies, Special Processes	3/30/2018 10:17 AM
41	Engineering Services	3/30/2018 7:47 AM
42	Entertainment	3/20/2018 6:13 PM
43	Aircraft Lighting and Components	3/20/2018 2:30 PM
44	Wholesake	3/19/2018 10:44 AM
45	Flooring and Paint	3/19/2018 8:16 AM
46	Aerospace sheet metal manufacturing	3/16/2018 12:51 PM
47	Seasonings	3/16/2018 12:25 PM
48	Foil	3/16/2018 12:00 PM
49	Helping people find jobs and companies find good people to meet their goals.	3/16/2018 11:18 AM
50	Providing public education	3/16/2018 11:16 AM
51	Injection molding of plastic material	3/16/2018 11:11 AM
52	Cablelynx Broadband, Cablelynx Phone and Cable TV	3/16/2018 11:09 AM
53	Rubber band manufacturing	3/16/2018 10:53 AM
54	Complex Sheet Metal Details and Assembly for both Military and Commercial Aircraft	3/16/2018 10:43 AM
55	Manufacture equipment for sawmills and lumber yards.	3/16/2018 10:33 AM
56	Water/Wastewater Management equipment sales	3/16/2018 10:21 AM
57	Log and Lumber equipment	3/16/2018 10:04 AM
58	PK-12 Education	3/16/2018 9:34 AM
59	Water and Wastewater Treatment Equipment and Controls	3/16/2018 9:20 AM
60	Rubber bands	3/15/2018 1:07 PM
61	Aerospace detail parts	3/15/2018 11:49 AM
62	Manufacture natural abrasive sharpening stones from Novaculite material quarried in Garland County AR.	3/15/2018 11:17 AM
63	Metal buildings and metal roofing	3/15/2018 11:01 AM
64	Educating Children	3/15/2018 10:54 AM
65	Aerospace parts	3/15/2018 10:49 AM
66	k-12 School District	3/15/2018 10:35 AM
67	Repair Station	3/15/2018 9:56 AM
68	Hospitality/Tourism	3/14/2018 4:09 PM
69	Aerospace parts	3/14/2018 3:10 PM



## Q4 What functions are located at your Hot Springs facility? (check all that apply)

Answered: 66 Skipped: 5



ANSWER CHOICES		RESPONSES
Manufacturing / Assembly	39.39%	26
Distribution	19.70%	13
Processing	19.70%	13
Warehousing	15.15%	10
Services	40.91%	27
Engineering/R&D	19.70%	13
Sales & Marketing	43.94%	29
Headquarters	27.27%	18
Other	13.64%	9
Total Respondents: 66		

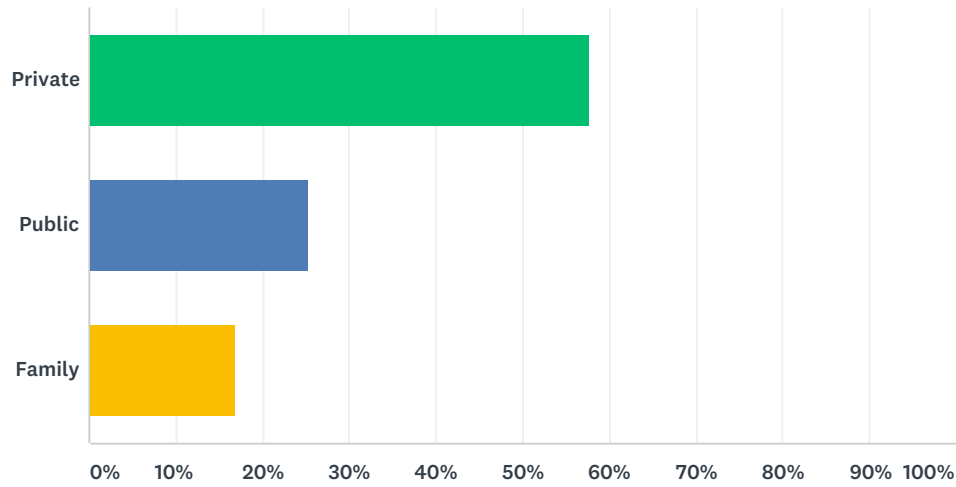
#	OTHER (PLEASE SPECIFY)	DATE
1	Mostly retail at this point	4/13/2018 2:19 PM

## Regional Workforce Industry Survey

2	edumentertainment	4/7/2018 10:46 AM
3	Rental Yard	4/6/2018 7:59 AM
4	Full Service Investment Firm	4/5/2018 2:51 PM
5	Acute hospital and multiple outpatient clinics; senior services; prevention services	4/5/2018 10:19 AM
6	Lending, Treasury Mgt, Retail, Merch Svcs, Wealth Management	4/5/2018 9:47 AM
7	Restaurant	4/5/2018 9:09 AM
8	Employment	3/16/2018 11:18 AM
9	Education	3/16/2018 9:34 AM
10	Education of k-12 students	3/15/2018 10:35 AM

## Q5 What is your company's ownership status?

Answered: 71 Skipped: 0

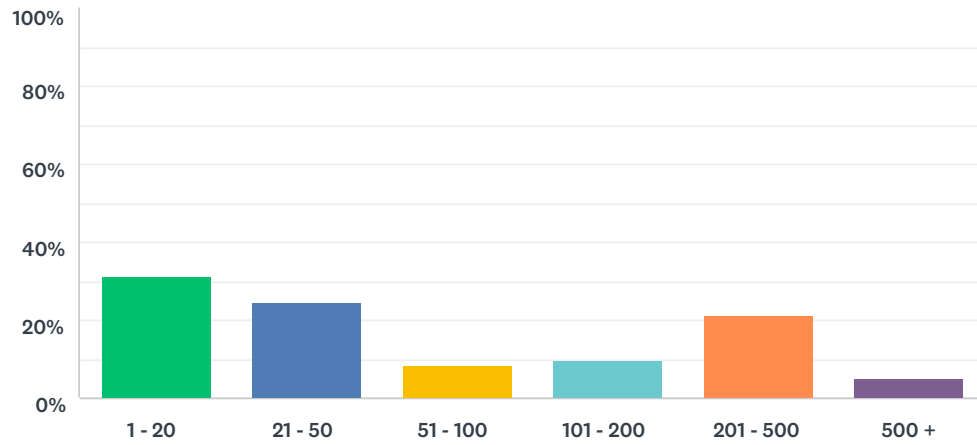


ANSWER CHOICES	RESPONSES	
Private	57.75%	41
Public	25.35%	18
Family	16.90%	12
TOTAL		71



## Q6 What is the total number of employees at your Hot Springs facility?

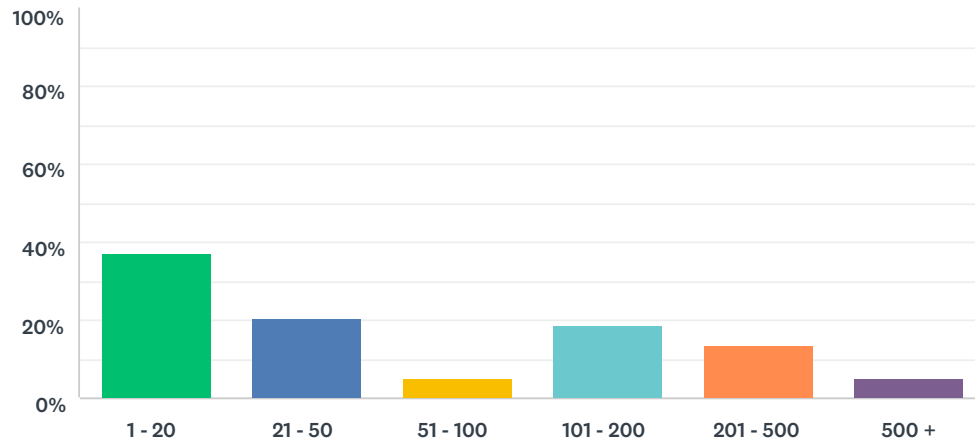
Answered: 61   Skipped: 10



ANSWER CHOICES	RESPONSES	
1 - 20	31.15%	19
21 - 50	24.59%	15
51 - 100	8.20%	5
101 - 200	9.84%	6
201 - 500	21.31%	13
500 +	4.92%	3
TOTAL		61

## Q7 How many of these employees are "direct" or "touch" labor force?

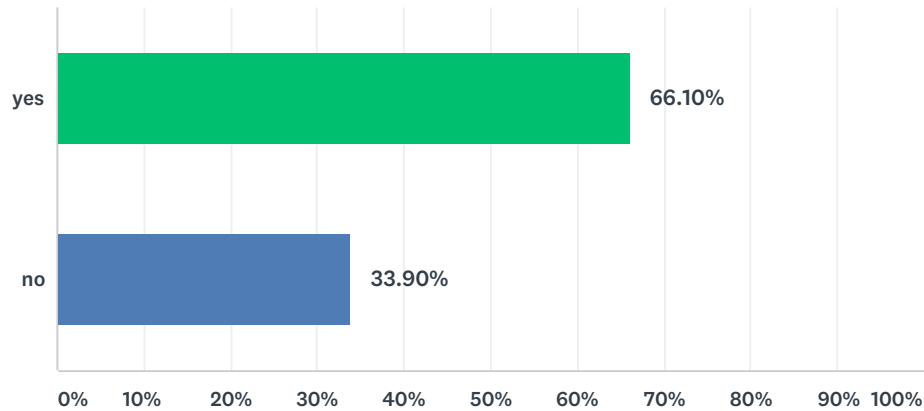
Answered: 59   Skipped: 12



ANSWER CHOICES	RESPONSES	
1 - 20	37.29%	22
21 - 50	20.34%	12
51 - 100	5.08%	3
101 - 200	18.64%	11
201 - 500	13.56%	8
500 +	5.08%	3
TOTAL		59

## Q8 Do you plan to add additional staff in the next 6-12 months?

Answered: 59   Skipped: 12



ANSWER CHOICES	RESPONSES	
yes	66.10%	39
no	33.90%	20
TOTAL		59

#	IF YES, PLEASE LIST THE POSITION TITLES AND NUMBER OF ANTICIPATED OPENINGS.	DATE
1	Driver and labor	5/16/2018 11:28 AM
2	positions are subject to contract award but would range from sheet metal to assembly mechanics and/or machine operators	4/10/2018 12:33 PM
3	tour guide 2-3	4/7/2018 10:55 AM
4	Technician	4/6/2018 8:33 AM
5	Financail Advisors-2 / Sales Assistant-1	4/5/2018 2:54 PM
6	Caregivers	4/5/2018 10:39 AM
7	Agency Licensed Producer 3-5	4/5/2018 10:23 AM
8	Nurses, physicians, technicians	4/5/2018 10:21 AM
9	housekeeping 1 front desk 1 maintenance 1	4/5/2018 10:20 AM
10	We are making an acquisition of another bank	4/5/2018 10:10 AM
11	2 - 4 openings	4/5/2018 10:06 AM
12	Real Estate Agents-Three	4/5/2018 10:05 AM
13	Designers and engineering technicians, 5 positions	4/5/2018 10:03 AM
14	Skilled Trades-6, Residential Care Technicians-8, Security Officers-3, Administrative support-3	4/5/2018 9:23 AM
15	Customer service rep 1	4/5/2018 9:20 AM
16	Sawyers, Laborer, Millwright	4/5/2018 9:16 AM
17	10	4/5/2018 9:12 AM
18	Production	4/3/2018 8:35 AM
19	Currently 30 entry level positions open.	4/2/2018 9:20 AM
20	CNC Programmer, CNC Machinist. Painter	3/30/2018 10:26 AM

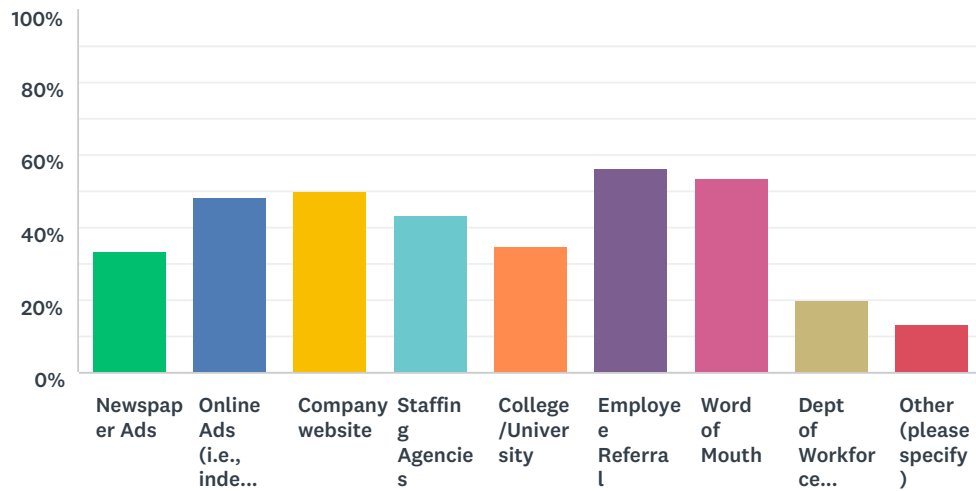


## Regional Workforce Industry Survey

21	Designers, Drafters 2	3/30/2018 7:51 AM
22	Programming and Assembly (1-2 each)	3/20/2018 2:36 PM
23	Not Sure	3/16/2018 12:54 PM
24	Sales, R&D and Production	3/16/2018 12:29 PM
25	Various	3/16/2018 11:42 AM
26	Process Technician	3/16/2018 11:16 AM
27	2 - Broadband Installers	3/16/2018 11:12 AM
28	laborer	3/16/2018 11:00 AM
29	Assembly Mechanics (10), CNC Operators (2), Program Manager (1)	3/16/2018 10:52 AM
30	Engineers, welders, construction management	3/16/2018 10:37 AM
31	Machinist	3/16/2018 10:07 AM
32	Quality Engineer, Contract Admin and Direct Manufacturing labor	3/16/2018 9:47 AM
33	Journey Electrician to build control panels and receive training toward a Master Electrician's License	3/16/2018 9:23 AM
34	assembly and production mechanics / 5-10 positions	3/15/2018 11:54 AM
35	Mechanics	3/15/2018 10:52 AM
36	10 Sheet Metal Mechanics	3/15/2018 10:00 AM
37	1 - TBD	3/14/2018 4:13 PM
38	General Shop Labor and Operators	3/14/2018 3:20 PM

## Q9 What are the primary ways you recruit for employees? (check all that apply)

Answered: 60 Skipped: 11



ANSWER CHOICES	RESPONSES	
Newspaper Ads	33.33%	20
Online Ads (i.e., indeed.com)	48.33%	29
Company website	50.00%	30
Staffing Agencies	43.33%	26
College/University	35.00%	21
Employee Referral	56.67%	34
Word of Mouth	53.33%	32
Dept of Workforce Services (Employment Office)	20.00%	12
Other (please specify)	13.33%	8
Total Respondents: 60		

#	OTHER (PLEASE SPECIFY)	DATE
1	Hot Springs manager handles this.	4/5/2018 6:52 PM
2	Recruiting through relationships	4/5/2018 2:54 PM
3	Job Fairs	4/5/2018 10:39 AM
4	Internal recruiter	4/5/2018 10:10 AM
5	on the radio	4/5/2018 9:23 AM
6	Bill Board	3/16/2018 12:29 PM
7	Job Boards	3/16/2018 10:37 AM
8	Social media	3/14/2018 4:13 PM

## Q10 How do you rate the following dimensions of your local workforce?

Answered: 60 Skipped: 11

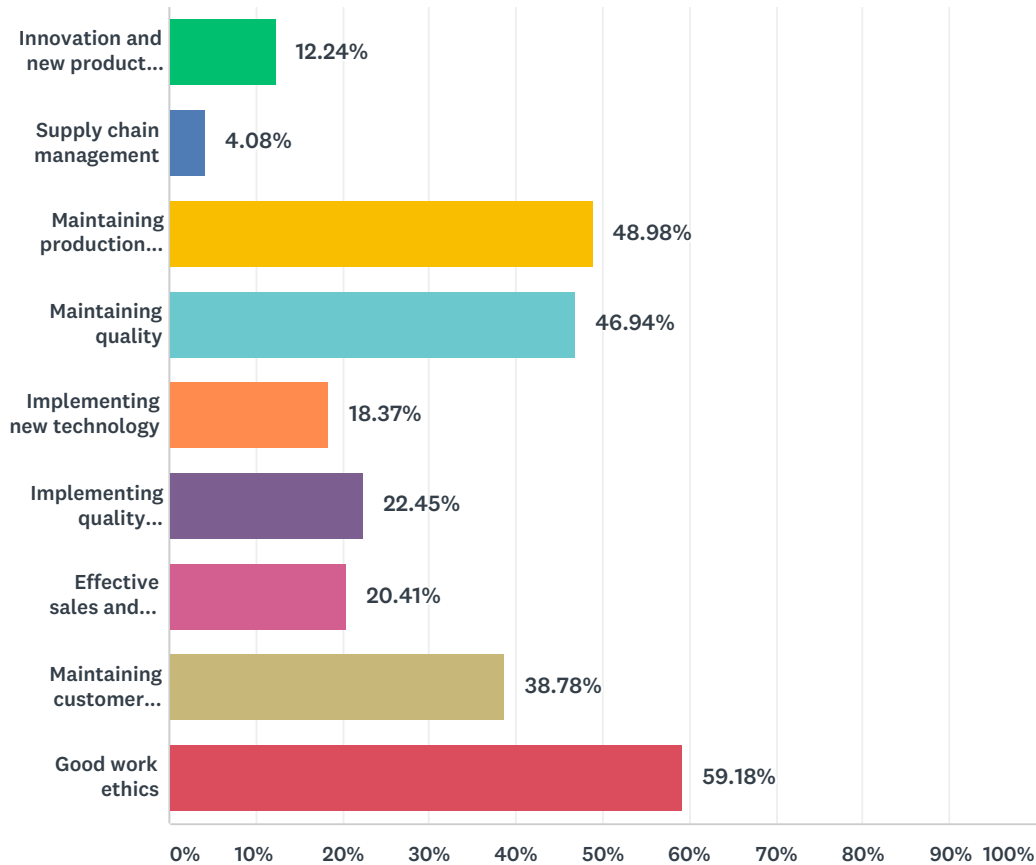


	POOR	FAIR	GOOD	EXCELLENT	TOTAL
Availability / Recruitment	21.67% 13	51.67% 31	21.67% 13	5.00% 3	60
Quality	12.50% 7	46.43% 26	30.36% 17	10.71% 6	56
Stability	8.47% 5	45.76% 27	33.90% 20	11.86% 7	59
Retention	3.64% 2	36.36% 20	47.27% 26	12.73% 7	55



## Q11 In which areas has your company experienced difficulty due to local workforce shortages or employee skill deficiencies? (check all that apply)

Answered: 49 Skipped: 22



ANSWER CHOICES		RESPONSES
Innovation and new product development	12.24%	6
Supply chain management	4.08%	2
Maintaining production levels	48.98%	24
Maintaining quality	46.94%	23
Implementing new technology	18.37%	9
Implementing quality improvement	22.45%	11
Effective sales and marketing	20.41%	10
Maintaining customer service satisfaction	38.78%	19
Good work ethics	59.18%	29
Total Respondents: 49		

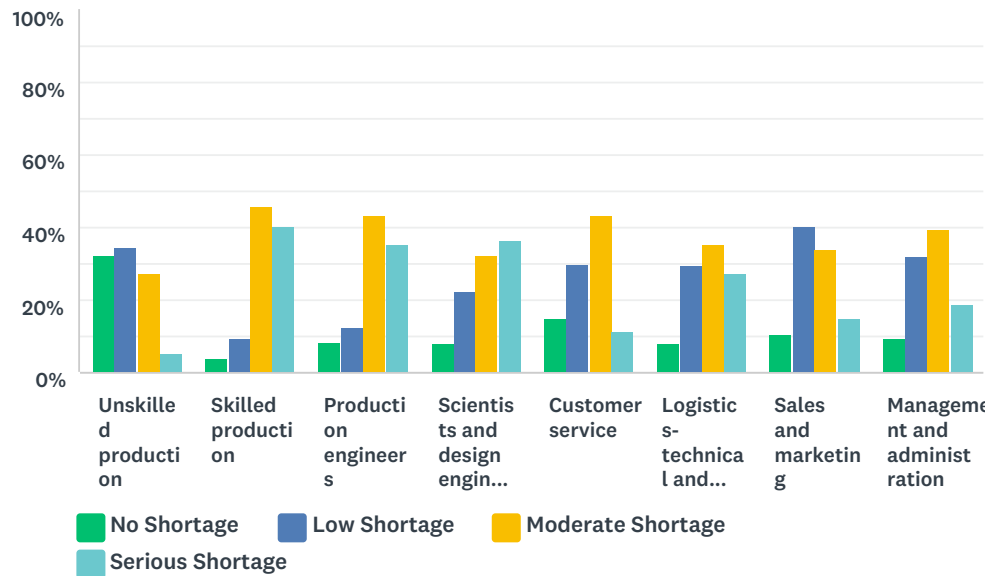
#	OTHER (PLEASE SPECIFY)	DATE
1	It seems so many are on drugs and unreliable	4/6/2018 8:33 AM

## Regional Workforce Industry Survey

2	N/A	4/5/2018 3:47 PM
3	Good morals & professionalism	4/5/2018 2:54 PM
4	None	4/5/2018 10:32 AM
5	Oral and Written Communication Skills	4/5/2018 10:10 AM
6	Drugs, attendance	4/5/2018 9:16 AM
7	Skill Crafts, Engineering	3/16/2018 12:04 PM
8	There is a lack of skilled labor in our market, but not impossible to find if a competitive wage is paid. Also, the lack of work ethic and soft skills in our workforce is problematic.	3/16/2018 11:42 AM
9	None	3/16/2018 11:12 AM
10	Job specific skills - experienced welders, drafters and engineers	3/16/2018 10:37 AM
11	N/A	3/16/2018 9:36 AM
12	Hiring Good People to Stay	3/15/2018 10:57 AM
13	Finding completely certified teachers	3/15/2018 10:38 AM

## Q12 What best describes your perception of the availability of qualified workers for the following workforce segments.

Answered: 60 Skipped: 11

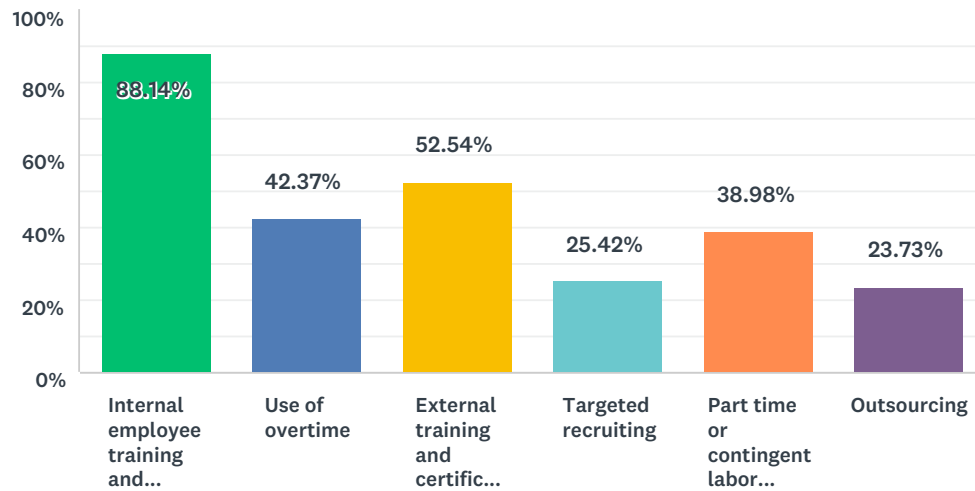


	NO SHORTAGE	LOW SHORTAGE	MODERATE SHORTAGE	SERIOUS SHORTAGE	TOTAL
Unskilled production	32.73% 18	34.55% 19	27.27% 15	5.45% 3	55
Skilled production	3.85% 2	9.62% 5	46.15% 24	40.38% 21	52
Production engineers	8.33% 4	12.50% 6	43.75% 21	35.42% 17	48
Scientists and design engineers	8.16% 4	22.45% 11	32.65% 16	36.73% 18	49
Customer service	15.09% 8	30.19% 16	43.40% 23	11.32% 6	53
Logistics- technical and support	7.84% 4	29.41% 15	35.29% 18	27.45% 14	51
Sales and marketing	10.64% 5	40.43% 19	34.04% 16	14.89% 7	47
Management and administration	9.43% 5	32.08% 17	39.62% 21	18.87% 10	53



## Q13 Which methods do you currently use to mitigate existing skill gaps? (check all that apply)

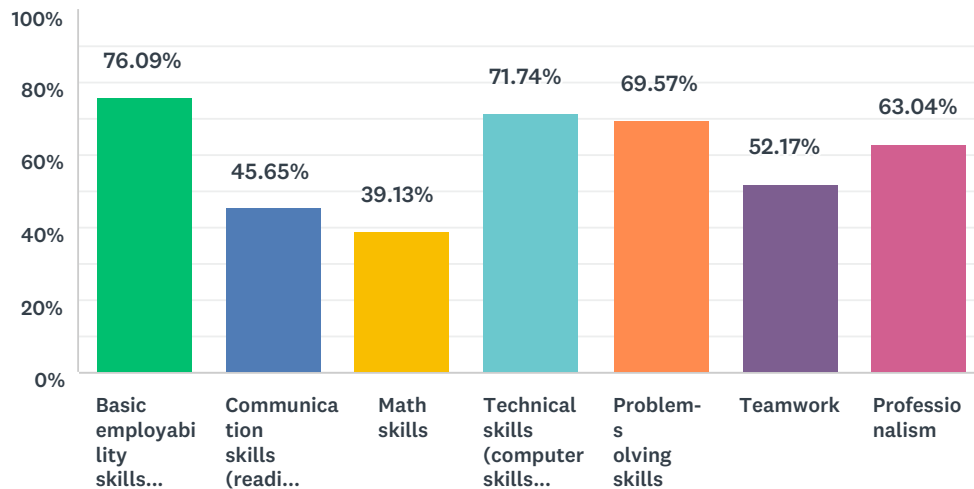
Answered: 59   Skipped: 12



ANSWER CHOICES	RESPONSES	
Internal employee training and development programs	88.14%	52
Use of overtime	42.37%	25
External training and certification programs	52.54%	31
Targeted recruiting	25.42%	15
Part time or contingent labor (staffing agencies, etc.)	38.98%	23
Outsourcing	23.73%	14
Total Respondents: 59		

## Q14 Do your current employees struggle with any of the following? (check all that apply)

Answered: 46 Skipped: 25

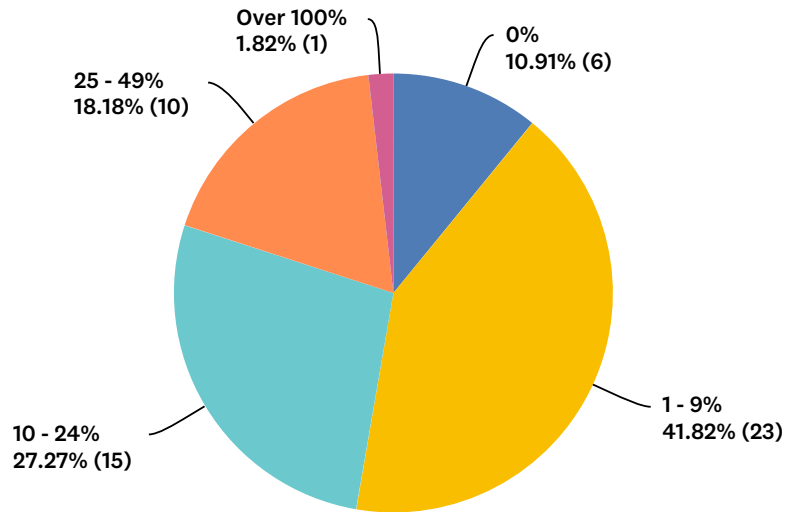


ANSWER CHOICES	RESPONSES	
Basic employability skills (attendance, timeliness, work ethic, etc.)	76.09%	35
Communication skills (reading & writing)	45.65%	21
Math skills	39.13%	18
Technical skills (computer skills, industry certification or vocational training)	71.74%	33
Problem-solving skills	69.57%	32
Teamwork	52.17%	24
Professionalism	63.04%	29
Total Respondents: 46		

#	OTHER (PLEASE SPECIFY)	DATE
1	Question 14 answered with newer employees in mind. If employees do not become proficient at a majority of these skills over time then they will not make it long term.	4/10/2018 12:33 PM
2	Start out okay but soon deteriorate due to drug use	4/6/2018 8:33 AM
3	None	4/5/2018 3:47 PM
4	Especially Writing skills	4/5/2018 10:10 AM
5	Drugs	4/5/2018 9:16 AM
6	No all, of course, but we see these a lot.	4/2/2018 9:20 AM
7	Sense of urgency	3/30/2018 10:26 AM
8	None	3/16/2018 11:12 AM
9	n/a	3/15/2018 10:38 AM
10	Some technology gaps we cover with in house training.	3/14/2018 3:20 PM

## Q15 What is your projected sales growth in the next year at this facility?

Answered: 55    Skipped: 16

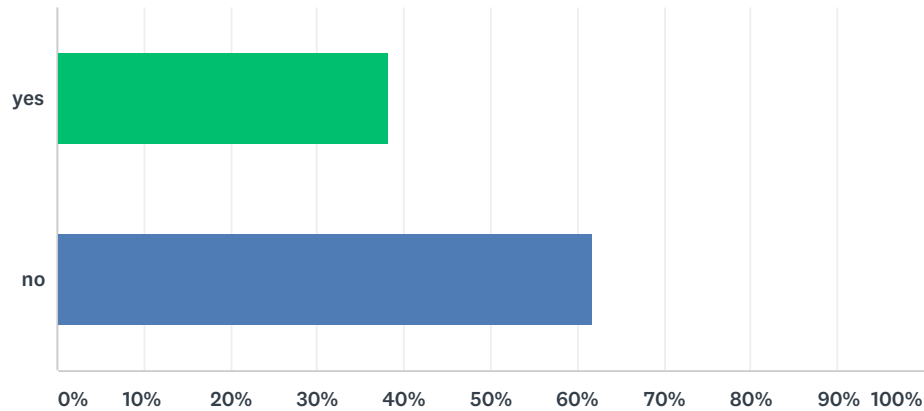


ANSWER CHOICES	RESPONSES	
Declining	0.00%	0
0%	10.91%	6
1 - 9%	41.82%	23
10 - 24%	27.27%	15
25 - 49%	18.18%	10
50 - 99%	0.00%	0
Over 100%	1.82%	1
TOTAL		55



## Q16 Is your facility currently expanding or planning to expand?

Answered: 55 Skipped: 16

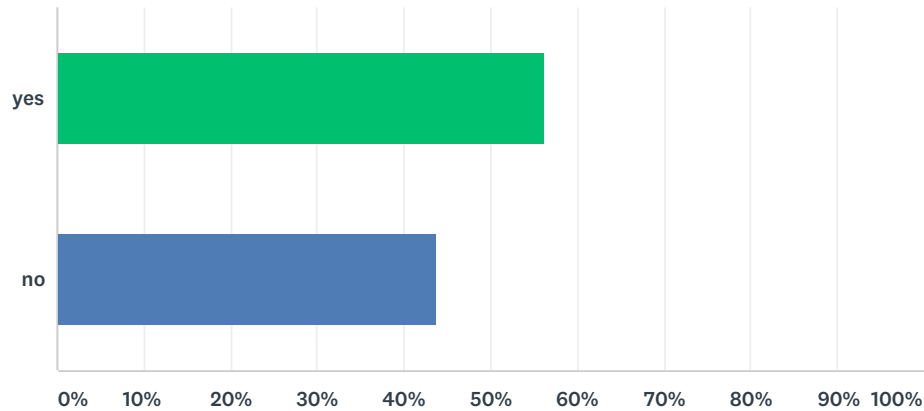


ANSWER CHOICES	RESPONSES	
yes	38.18%	21
no	61.82%	34
TOTAL		55

#	IF YES, PLEASE DESCRIBE.	DATE
1	other locations around the country	4/7/2018 10:55 AM
2	We are frustrated with Hot Springs and opening an office in Springfield, MO. At this time we plan to keep both offices going with the awareness that most of our business will grow out of Missouri instead of Arkansas.	4/6/2018 8:34 AM
3	We are growing as opportunities present themselves.	4/5/2018 2:55 PM
4	We plan to acquire larger office space to accommodate new staff members.	4/5/2018 10:23 AM
5	Increasing rv sites and cottages by 75%	4/5/2018 10:20 AM
6	we are acquiring another bank here in town.	4/5/2018 10:10 AM
7	Adding two new production lines.	4/5/2018 9:18 AM
8	In works to develop a rooftop bar and lounge that will significantly increase our number of employees	4/5/2018 9:13 AM
9	More customers, more machines.	4/2/2018 9:20 AM
10	Equipment yes, building space - no	3/30/2018 10:27 AM
11	We typically spend 1 million dollars each year on broadband plant extensions and headend/control center expenditures	3/16/2018 11:14 AM
12	Have process with US government in the works now	3/16/2018 11:01 AM
13	Workforce and Equipment	3/16/2018 10:55 AM
14	Expanding services and expect to fill 50 additional positions.	3/16/2018 10:46 AM
15	We are transitioning to K-6 elementary buildings, along with a junior high and high school. We are building two new buildings and hope to increase student enrollment.	3/16/2018 9:37 AM

## Q17 Do you currently face or anticipate any barriers to growth?

Answered: 55 Skipped: 16



ANSWER CHOICES	RESPONSES	
yes	56.36%	31
no	43.64%	24
TOTAL		55

#	IF YES, PLEASE DESCRIBE.	DATE
1	foreign competition	4/10/2018 12:36 PM
2	"Good ol' boy network" in Hot Springs makes it challenging to break in and get referrals. Case workers in medical offices seem more concerned about getting donuts than good patient care. We can't get referrals regardless of our patient satisfaction rating, quality of product (very customized and top of the world equipment & service.) They don't seem to care, can't make any changes to the way it has always been done, etc. Arkansas is just a very frustrating place to try to do business. People dig in with stubbornness and lack any interest in new technology, new ideas, or new people.	4/6/2018 8:43 AM
3	Meeting qualified candidates for our product and service.	4/5/2018 10:25 AM
4	Workforce in nursing and physician supply	4/5/2018 10:23 AM
5	marketing - we are still unknown even in hot springs	4/5/2018 10:22 AM
6	Competent people to help fill our positions. We love to promote from within, but we need solid well-educated people with a desire to continue improving themselves. This desire to improve seems to be lacking.	4/5/2018 10:19 AM
7	Restrictions of City Government and restrictions of City supply water meters to the county!	4/5/2018 10:10 AM
8	Skilled employees, specifically designers and cad operators	4/5/2018 10:06 AM
9	Limited funding for improvements to facilities.	4/5/2018 9:26 AM
10	Competitive environment in Hot Springs for thrift stores.	4/5/2018 9:13 AM
11	We need more employees with the knowledge, ability and willingness to do the work.	4/2/2018 9:28 AM
12	Ability to gain productivity from new genetic lines (that produce more efficient broiler)	3/30/2018 11:54 AM
13	Workforce availability	3/30/2018 10:30 AM
14	availability of Designers and Drafters	3/30/2018 7:54 AM
15	labor	3/20/2018 6:18 PM

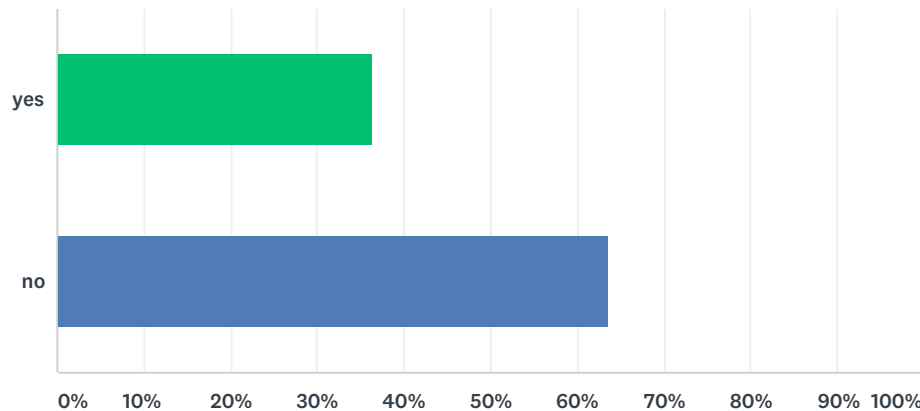
## Regional Workforce Industry Survey

16	Solid production workers who have good ethics and come to work	3/16/2018 12:33 PM
17	Qualified Process Technicians	3/16/2018 11:19 AM
18	Garland County Demographics lend to a slower adoption rate of broadband due to specifically age and social economics.	3/16/2018 11:16 AM
19	import products	3/16/2018 11:04 AM
20	Experienced, quality welders, drafters and finding engineers who are the right fit for our industry. Significant need for PLC Programmers and CNC Machinist who know how to use manual equipment.	3/16/2018 11:02 AM
21	Getting trained assemblers. Need 10 additional currently.	3/16/2018 11:00 AM
22	School choice can limit our growth.	3/16/2018 10:40 AM
23	Personnel. We find that people do not take their job seriously enough to listen and follow procedures. They do not ask questions if an instruction is not clear.	3/15/2018 2:29 PM
24	skilled workforce in a timely manner	3/15/2018 11:57 AM
25	Public Schools have Pre-K programs now	3/15/2018 10:59 AM
26	Based on student growth	3/15/2018 10:42 AM
27	Finding skilled labor.	3/15/2018 10:02 AM
28	Inventory of ready product	3/14/2018 4:17 PM



## Q18 Do you anticipate any federal, state, or local legislative changes which will adversely affect your business in the next five years?

Answered: 55 Skipped: 16



ANSWER CHOICES	RESPONSES	
yes	36.36%	20
no	63.64%	35
TOTAL		55

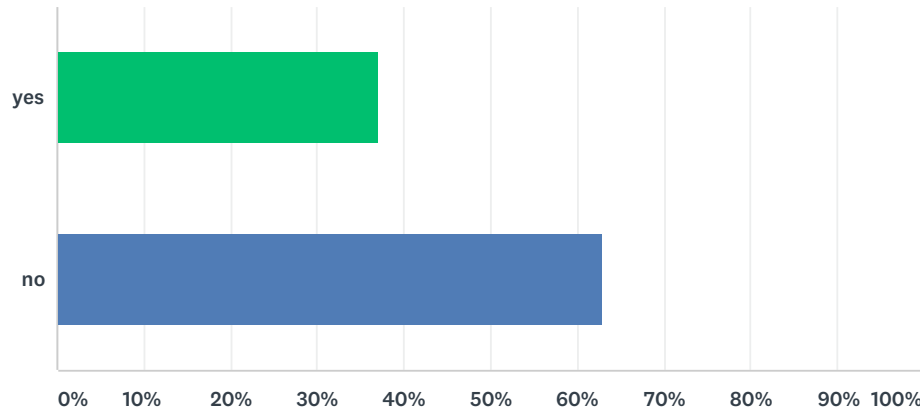
#	IF YES, PLEASE DESCRIBE.	DATE
1	changing school attendance patterns and homophobic bathroom laws	4/7/2018 11:02 AM
2	Insurance billing is a continued fight. Prosthetics in particular are quick to be denied and a good deal of time is spent trying to collect. Patients who are poor or under-privileged can receive only the most basic of prosthetic devices and even then we are paid barely enough to cover costs, so very little incentive to care for these folks, even though we go to their homes and see the destitute situations in which they live. We hope changes to medical insurance improves for patients and that govt regulations support providers - however, every indication is things are going in the other direction. Providers continue to leave the market and immigrants fill the spot as they are willing to deal with the lower revenue and the continually mounting levels of paperwork required.	4/6/2018 8:43 AM
3	Yes. The continued allowance of raw timber to be exported to China. We need legislation to level the playing field.	4/5/2018 12:08 PM
4	New CMS law that passed Medicare Advantage plans eligible to receive reimbursement for Personal Care at home.	4/5/2018 10:42 AM
5	Any repeal of ACA will dramatically hurt our business	4/5/2018 10:23 AM
6	I only say yes because this area represents such an unknown. Regulatory reform may be around the corner, or we may see increased regulatory burden?	4/5/2018 10:19 AM
7	How the legislature is dealing with healthcare for the poor!!	4/5/2018 9:59 AM
8	I believe when people realize that the donations they have made in the past will no longer help on their taxes it may have an impact on our ability to source product.	4/5/2018 9:13 AM
9	"Not sure" wasn't an option. We are watching closely to see how changes will affect us.	4/2/2018 9:28 AM
10	Yes, additional regulation	3/30/2018 11:54 AM
11	The federal government always tends to overstep and over react. Regulatory agencies enact an average of 3,500 new rules per year.	3/16/2018 11:50 AM
12	anti dumping law suit	3/16/2018 11:04 AM

## Regional Workforce Industry Survey

13	The approval of 529 monies to be utilized for private school education.	3/16/2018 10:40 AM
14	Small business is becoming bogged down with many regulations.	3/15/2018 2:29 PM
15	Continuing to channel funding to charter and private schools rather than public schools	3/15/2018 10:42 AM

## Q19 Do you anticipate any federal, state, or local legislative changes which will benefit your business in the next five years?

Answered: 54 Skipped: 17



ANSWER CHOICES	RESPONSES
yes	37.04% 20
no	62.96% 34
TOTAL	54

#	IF YES, PLEASE DESCRIBE.	DATE
1	As stated above, hopefully federal and state legislation will step in to support better patient care, require insurance companies cover a minimum level of care for all patients. For example, a new amputee who has good insurance can qualify for a prosthesis with a highly efficient knee and/or foot. A lower income patient receives a very low dynamic knee/foot that is not very efficient but is low cost (ie, each foot.)	4/6/2018 8:43 AM
2	Really hard to determine, but there is some current legislation that should benefit us.	4/5/2018 10:19 AM
3	New lower Federal Tax Laws	4/5/2018 10:10 AM
4	More Opioid Dependence awareness	4/5/2018 9:18 AM
5	Same as #18.	4/2/2018 9:28 AM
6	Lower income tax	3/30/2018 11:54 AM
7	Increased defense spending	3/30/2018 10:30 AM
8	More military spending is anticipated.	3/20/2018 2:42 PM
9	The federal government is slowly retracting some restrictions on small businesses. The tax cuts will help stimulate growth.	3/16/2018 11:50 AM
10	Work force training and apprenticeship programs	3/16/2018 11:19 AM
11	waiting on anti dumping ruling	3/16/2018 11:04 AM
12	tax law changes	3/16/2018 10:27 AM
13	Small businesses cannot afford to offer employee benefit programs that the federal government is advocating.	3/15/2018 2:29 PM
14	Current administration placing US economy first	3/15/2018 11:57 AM
15	Military	3/15/2018 10:55 AM

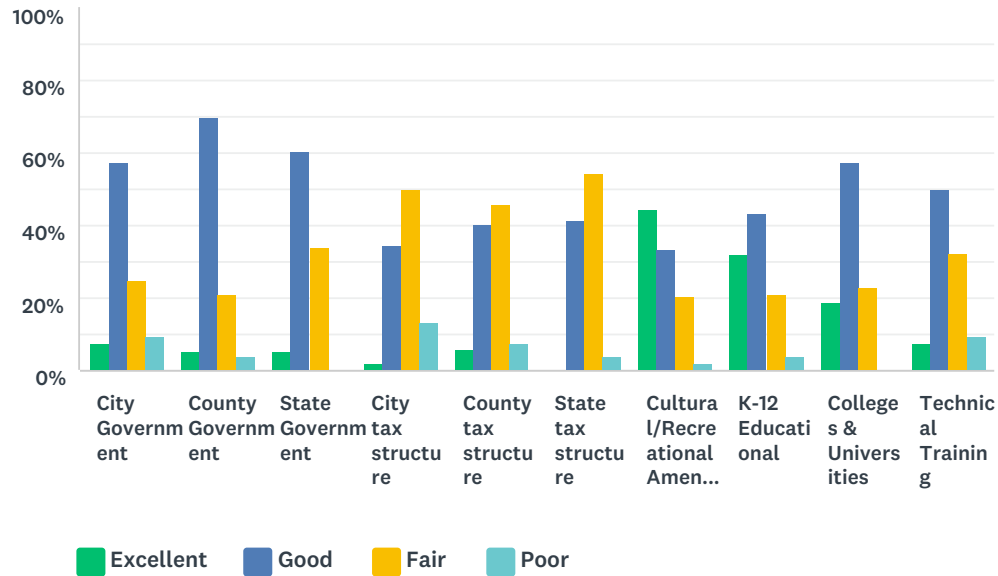
## Regional Workforce Industry Survey

16	The current administration has already proven to be very business-friendly. Would only expect that to continue with increased and enhanced programs.	3/14/2018 4:17 PM
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## Q20 Please rate your level of satisfaction as it relates to the following aspects of the Hot Springs business environment.

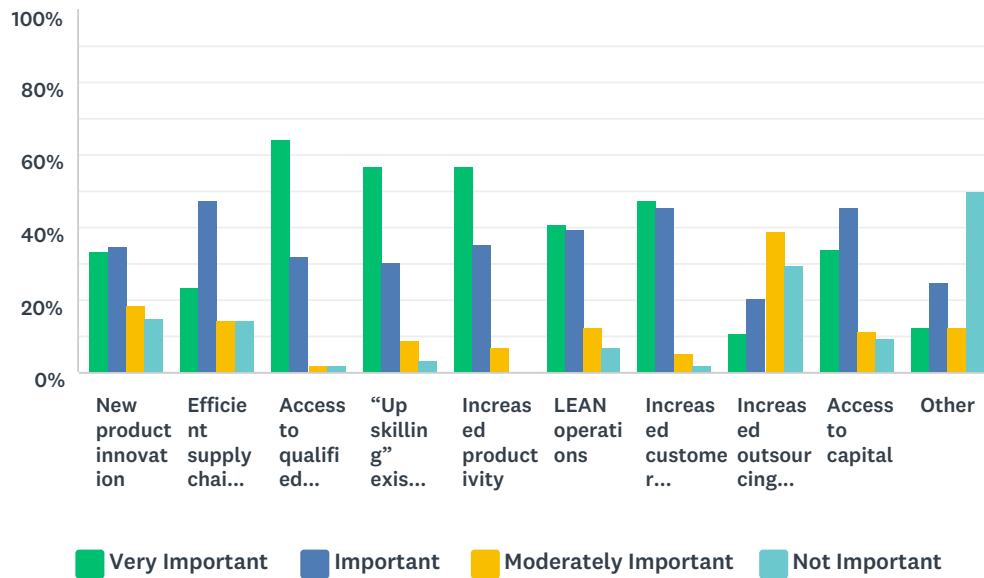
Answered: 54 Skipped: 17



	EXCELLENT	GOOD	FAIR	POOR	TOTAL
City Government	7.69% 4	57.69% 30	25.00% 13	9.62% 5	52
County Government	5.66% 3	69.81% 37	20.75% 11	3.77% 2	53
State Government	5.66% 3	60.38% 32	33.96% 18	0.00% 0	53
City tax structure	1.92% 1	34.62% 18	50.00% 26	13.46% 7	52
County tax structure	5.77% 3	40.38% 21	46.15% 24	7.69% 4	52
State tax structure	0.00% 0	41.51% 22	54.72% 29	3.77% 2	53
Cultural/Recreational Amenities	44.44% 24	33.33% 18	20.37% 11	1.85% 1	54
K-12 Educational	32.08% 17	43.40% 23	20.75% 11	3.77% 2	53
Colleges & Universities	19.23% 10	57.69% 30	23.08% 12	0.00% 0	52
Technical Training	7.69% 4	50.00% 26	32.69% 17	9.62% 5	52

## Q21 Please indicate the level of importance to your company's future success.

Answered: 56 Skipped: 15



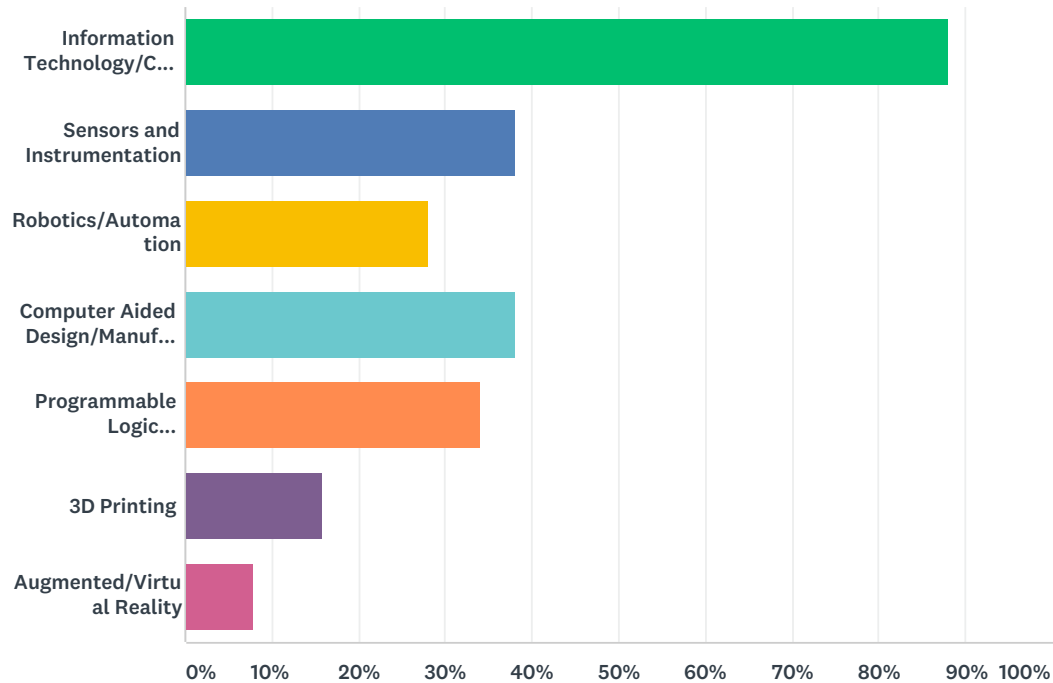
	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT	TOTAL RESPONDENTS
New product innovation	33.33% 18	35.19% 19	18.52% 10	14.81% 8	54
Efficient supply chain integration/managment	23.64% 13	47.27% 26	14.55% 8	14.55% 8	55
Access to qualified applicants/employees	64.29% 36	32.14% 18	1.79% 1	1.79% 1	56
"Up skilling" existing workforce	57.14% 32	30.36% 17	8.93% 5	3.57% 2	56
Increased productivity	57.14% 32	35.71% 20	7.14% 4	0.00% 0	56
LEAN operations	41.07% 23	39.29% 22	12.50% 7	7.14% 4	56
Increased customer service orientation	47.27% 26	45.45% 25	5.45% 3	1.82% 1	55
Increased outsourcing of select functions and/or operations	11.11% 6	20.37% 11	38.89% 21	29.63% 16	54
Access to capital	33.96% 18	45.28% 24	11.32% 6	9.43% 5	53
Other	12.50% 1	25.00% 2	12.50% 1	50.00% 4	8

#	OTHER (PLEASE SPECIFY)	DATE
1	Hot Springs City needs to be more pro business!	4/5/2018 10:10 AM

## Q22 Indicate the types of innovation below that are relevant to your company. (check all that apply)

Answered: 50 Skipped: 21



ANSWER CHOICES	RESPONSES	
Information Technology/Computers	88.00%	44
Sensors and Instrumentation	38.00%	19
Robotics/Automation	28.00%	14
Computer Aided Design/Manufacturing	38.00%	19
Programmable Logic Controllers	34.00%	17
3D Printing	16.00%	8
Augmented/Virtual Reality	8.00%	4
Total Respondents: 50		

## Q23 Please list what job titles in your company utilize these innovative technologies

Answered: 28 Skipped: 43

#	RESPONSES	DATE
1	Methods Engineer, CNC Programmer, Assembly/Robotic Operator, CNC Operator	4/10/2018 12:37 PM
2	all	4/7/2018 11:03 AM
3	Certified Prosthetist, Certified Technician	4/6/2018 8:44 AM
4	various	4/5/2018 8:07 PM
5	Chief Deputy Treasurer and Bookkeeper	4/5/2018 3:49 PM
6	Millwright/Maintainence	4/5/2018 12:09 PM
7	Owner	4/5/2018 10:35 AM
8	All 29 sales agents and 3 employees	4/5/2018 10:11 AM
9	Design department and certain engineering disciplines	4/5/2018 10:06 AM
10	All	4/5/2018 9:22 AM
11	Maintenance	4/3/2018 8:39 AM
12	Engineers (Automation, Mechanical, Electrical)	4/2/2018 9:28 AM
13	CNC Machinist, CNC Programmer, Manufacturing Engineer	3/30/2018 10:31 AM
14	Engineering	3/20/2018 2:43 PM
15	Maintenance Supervisor, Operations Manager	3/16/2018 12:34 PM
16	Technology will always change the way we do business. We have and could place more CAD and PLC skilled associates if they were available.	3/16/2018 11:53 AM
17	PLC Programmers, Drafters, Engineers	3/16/2018 11:02 AM
18	IT, CNC Programming, Engineering, CMM Inspection	3/16/2018 11:01 AM
19	Administrators and Teachers	3/16/2018 10:40 AM
20	Control panel builders	3/16/2018 10:28 AM
21	Engineering and Operations	3/16/2018 9:49 AM
22	welding	3/16/2018 9:12 AM
23	CNC, Engineering, Estimating	3/15/2018 11:58 AM
24	CNC, CMM	3/15/2018 10:56 AM
25	IT director; computer teachers, secreteries	3/15/2018 10:43 AM
26	All Employees use computers, CNC	3/15/2018 10:03 AM
27	All	3/14/2018 4:17 PM
28	Computer Programming	3/14/2018 3:25 PM



## Q24 If you would like to receive a copy of the final survey results, please provide your name and e-mail below.

Answered: 42    Skipped: 29

ANSWER CHOICES	RESPONSES	
Name	100.00%	42
E-mail	100.00%	42

#	NAME	DATE
1	Jason Akins	4/10/2018 12:38 PM
2	Rita Kenney	4/6/2018 8:44 AM
3	Kerrigan Ambers	4/6/2018 8:06 AM
4	Matt Edwards	4/5/2018 8:08 PM
5	Tim Stockdale	4/5/2018 3:50 PM
6	Gene M. Cannon III	4/5/2018 12:11 PM
7	Kandy Gould	4/5/2018 10:43 AM
8	Kelly Thomason	4/5/2018 10:35 AM
9	Don Gooch	4/5/2018 10:31 AM
10	Aaron	4/5/2018 10:25 AM
11	Anthony Houston	4/5/2018 10:23 AM
12	nancy beck	4/5/2018 10:22 AM
13	Bob Pfautz	4/5/2018 10:12 AM
14	Matt Carley	4/5/2018 10:12 AM
15	Lee Murphy	4/5/2018 10:07 AM
16	Jonathan Bibb	4/5/2018 9:26 AM
17	Mandy Lovell	4/5/2018 9:23 AM
18	Chris Arrison	4/5/2018 9:15 AM
19	Ben Baker	4/5/2018 9:14 AM
20	Chuck Overton	4/3/2018 8:40 AM
21	Laura Brody	4/2/2018 9:28 AM
22	Tom Butler	3/30/2018 10:31 AM
23	Stephani Davis	3/20/2018 2:43 PM
24	Mike Dugan	3/19/2018 10:58 AM
25	Richard Foster	3/16/2018 12:34 PM
26	James Bridges	3/16/2018 12:08 PM
27	Neal Harrington	3/16/2018 11:53 AM
28	Denton Burchett	3/16/2018 11:20 AM
29	Chuck Launius	3/16/2018 11:17 AM
30	Trevor Hamilton	3/16/2018 11:05 AM

## Regional Workforce Industry Survey

31	Lori Wozniak	3/16/2018 11:02 AM
32	Justin Vik	3/16/2018 11:01 AM
33	Lisa Hudson	3/16/2018 10:28 AM
34	Greg Hess	3/16/2018 9:50 AM
35	Newton White	3/16/2018 9:27 AM
36	Carol Hansen	3/15/2018 2:31 PM
37	Ray Reed	3/15/2018 11:59 AM
38	Vic Gandolph	3/15/2018 11:00 AM
39	Greg Ferringer	3/15/2018 10:56 AM
40	Christie Tackett	3/15/2018 10:04 AM
41	Gary Troutman	3/14/2018 4:18 PM
42	Mark Sorrell	3/14/2018 3:26 PM
#	E-MAIL	DATE
1	jakins@triumphgroup.com	4/10/2018 12:38 PM
2	MotilityMLK@outlook.com	4/6/2018 8:44 AM
3	kambers@ur.com	4/6/2018 8:06 AM
4	matt.edwards@weyerhaeuser.com	4/5/2018 8:08 PM
5	tstockdale@garlandcounty.org	4/5/2018 3:50 PM
6	gcannon@arkansasstave.com	4/5/2018 12:11 PM
7	Kandy.gould@homeinstead.com	4/5/2018 10:43 AM
8	realtorkelly101@yahoo.com	4/5/2018 10:35 AM
9	dgooch@arvest.com	4/5/2018 10:31 AM
10	droland@farmersagent.com	4/5/2018 10:25 AM
11	anthonyhouston@stvincenthealth.com	4/5/2018 10:23 AM
12	nbeck@rvcoutdoors.com	4/5/2018 10:22 AM
13	bob@yourhotsprings.com	4/5/2018 10:12 AM
14	paradisecovehs@gmail.com	4/5/2018 10:12 AM
15	lmurphy@mseco.com	4/5/2018 10:07 AM
16	jonathan.bibb@arkansas.gov	4/5/2018 9:26 AM
17	Mandy@arkansassecuritystorage.com	4/5/2018 9:23 AM
18	chrisa@thewatershs.com	4/5/2018 9:15 AM
19	bbaker@garlandcountyabitat.org	4/5/2018 9:14 AM
20	charlesovertton@berryglobal.com	4/3/2018 8:40 AM
21	laurabrody@berryglobal.com	4/2/2018 9:28 AM
22	tbutler@cmtair.com	3/30/2018 10:31 AM
23	sales@bishopaviation.com	3/20/2018 2:43 PM
24	mduganmerritt@yahoo.com	3/19/2018 10:58 AM
25	richard@flavorsource.com	3/16/2018 12:34 PM
26	James.Bridges@ReynoldsBrands.com	3/16/2018 12:08 PM
27	neal.harrington@expresspros.com	3/16/2018 11:53 AM
28	dentonburchett@berryglobal.com	3/16/2018 11:20 AM

## Regional Workforce Industry Survey

29	claunius@wehco.com	3/16/2018 11:17 AM
30	thamilton@alliance-rubber.com	3/16/2018 11:05 AM
31	lori.wozniak@timberna.com	3/16/2018 11:02 AM
32	jvik@triumphgroup.com	3/16/2018 11:01 AM
33	lhudson@isiequip.com	3/16/2018 10:28 AM
34	greghess@airtechsupply.com	3/16/2018 9:50 AM
35	nwhite@isiequip.com	3/16/2018 9:27 AM
36	carolh@danswhetstone.com	3/15/2018 2:31 PM
37	rereed@triumphgroup.com	3/15/2018 11:59 AM
38	vgandolph@stlukeshs.org	3/15/2018 11:00 AM
39	Gjferringer@triumphgroup.com	3/15/2018 10:56 AM
40	jctackett@triumphgroup.com	3/15/2018 10:04 AM
41	gary.troutman@growinghotsprings.com	3/14/2018 4:18 PM
42	msorrell@airtechsupply.com	3/14/2018 3:26 PM

# Innovative Technologies Center Continuation Grant Timeline

<u>Month/Year</u>	<u>Activity</u>					
Jul-18	CNC Classes		Summer STEM Camps	ACTI Classes	Establish Makerspace Advisory Committee and volunteer group and schedule first meetings	
Aug-18	CNC Classes		Open Enrollment Classes	Homeschool partnership meeting	Makerspace Open House 8/31 (10am - 6pm)	
Sep-18	CNC Classes	AMS Advisory Committee Meeting	Open Enrollment Classes	ITC Stakeholder Meeting	Maker Event/Class	
Oct-18	CNC Classes	AMS Classes	Open Enrollment Classes	Tech Talk/Innovation Showcase	Maker Event/Class	AR Community Colleges Conference UAS Summit
Nov-18	CNC Classes	AMS Classes AMS Advisory Committee Meeting	Open Enrollment Classes		Maker Event/Class	
Dec-18	CNC Classes   CNC Advisory Committee Meeting	Robotics Class	Open Enrollment Classes		Maker Event/Class	
Jan-19	CNC Classes			Homeschool partnership meeting	Maker Event/Class	Arkansas STEM Conference
Feb-19	CNC Classes	AMS Classes	Open Enrollment Classes		Maker Event/Class Makerspace Advisory Committee Meeting	NPC/CCA STEAM Conference
Mar-19	CNC Classes Advanced CNC Classes	AMS Classes	Open Enrollment Classes		Maker Event/Class	Robotics Competition EAST Conference AADA Summit



# Innovative Technologies Center Continuation Grant Timeline

Apr-19	CNC Classes Advanced CNC Classes	AMS Classes	Open Enrollment Classes	Tech Talk/Innovation Showcase	Maker Event/Class	
May-19	CNC Classes	AMS Classes	Open Enrollment Classes		Maker Event/Class	
Jun-19	CNC Classes CNC Advisory Committee Meeting		Summer STEM Camps	HSTI Conference		Economics Arkansas Summit
Jul-19	CNC Classes		Summer STEM Camps	Homeschool partnership meeting	Makerspace Advisory Committee meeting	
Aug-19	CNC Classes	AMS Classes	Open Enrollment Classes	Launch High School Aerospace Program	Maker Event/Class	
Sep-19	CNC Classes	AMS Classes AMS Advisory Committee Meeting	Open Enrollment Classes	ITC Stakeholder Meeting	Maker Event/Class	Robotics Competition
Oct-19	CNC Classes Advanced CNC Classes	AMS Classes	Open Enrollment Classes	Tech Talk/Innovation Showcase	Maker Event/Class	AR Community Colleges Conference UAS Summit
Nov-19	CNC Classes Advanced CNC Classes	AMS Classes	Open Enrollment Classes		Maker Event/Class	
Dec-19	CNC Classes CNC Advisory Committee Meeting				Maker Event/Class	
Jan-20	CNC Classes			Homeschool partnership meeting	Maker Event/Class	Arkansas STEM Conference

# Innovative Technologies Center Continuation Grant Timeline

Feb-20	CNC Classes	AMS Classes	Open Enrollment Classes		Maker Event/Class Makerspace Advisory Committee Meeting	NPC/CCA STEAM Conference
Mar-20	CNC Classes	AMS Classes	Open Enrollment Classes		Maker Event/Class	Robotics Competition
Apr-20	CNC Classes	AMS Classes	Open Enrollment Classes	Tech Talk/Innovation Showcase	Maker Event/Class	Regional UAS Symposium
May-20	CNC Classes	AMS Classes	Open Enrollment Classes		Maker Event/Class	
Jun-20	CNC Classes	AMS Classes	Summer STEM Camps	HSTI Conference		Economics Arkansas Summit
Jul-20	CNC Classes	AMS Classes	Summer STEM Camps		Makerspace Advisory Committee meeting	

# STATE OF ARKANSAS



Appendix C

Asa Hutchinson  
*Governor*

**Department of Career Education**  
*Arkansas Rehabilitation Services*  
Alan McClain, *Commissioner*

Charisse Childers, Ph.D.  
*Director*

May 16, 2018

Dr. Maria Markham:

The Arkansas Career Training Institute supports National Park College's application for a Regional Workforce Grant to continue development of its Innovative Technologies Center.

The center would provide the region with highly skilled workers in four broad advanced technology areas:

- 1) Advanced Manufacturing
  - CNC Machining
- 2) Automation
  - Sensors & Instrumentation
  - Programmable Logic Controllers
  - Robotics
- 3) Computer Coding
  - Computer Aided Drafting/Computer Aided Manufacturing
  - Coordinate Measuring Machine Software
  - Other TBD
- 4) Maker Space
  - Research & Development
  - Industry Prototyping

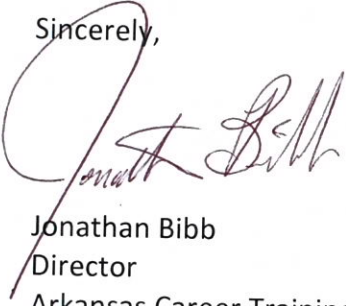
Advanced manufacturing is a growing industry sector that requires highly skilled workers now and in the future. We support National Park College's efforts to ensure that current and future workers have the opportunity to learn the technical skills needed to be successful.

NPC's Innovation Technologies Center programming aligns well with workforce needs as indicated by labor market information for the West Central region and Arkansas in general. Last summer, the President and CEO of Galley Support Innovations visited ACTI. They explained their need for CNC operators and how manufacturers in multiple sectors would have need for skilled workers in advanced manufacturing in the four areas listed above.

ACTI has utilized the Innovation Technologies Center to provide enhanced training opportunities for students with disabilities. This has been a great collaboration and has been vital to optimizing the competitive integrated employment for the people we serve.

Business and industry require employees equipped with 21<sup>st</sup> century technology skills. This Innovative Technologies Center will support core needs of business and industry in the West Central Arkansas region. For these reasons, I support this plan, as it is both timely and relevant to the local workforce needs.

Sincerely,

A handwritten signature in dark ink, appearing to read "Jonathan Bibb", is written over a large, stylized, light-colored circular mark.

Jonathan Bibb

Director

Arkansas Career Training Institute

501-701-6310

[jonathan.bibb@arkansas.gov](mailto:jonathan.bibb@arkansas.gov)



May 21, 2018

Dr. Maria Markham:

The Arkansas Economic Development Commission and Manufacturing Solutions (AEDC-MS) supports National Park College's application for a Regional Workforce Grant to continue to develop its Innovative Technologies Center.

The center would provide the region with highly skilled workers in four broad advanced technology areas:

- 1) Advanced Manufacturing
  - CNC Machining
- 2) Automation
  - Sensors & Instrumentation
  - Programmable Logic Controllers
  - Robotics
- 3) Computer Coding
  - Computer Aided Drafting/Computer Aided Manufacturing
  - Coordinate Measuring Machine Software
  - Other TBD
- 4) Maker Space
  - Research & Development
  - Industry Prototyping

AEDC-MS serves over three hundred manufacturing clients a year providing training, consultative and other services. We are the MEP center (Manufacturing Extension Partnership) for the state of Arkansas. Over the last two years we have surveyed over 1500 Arkansas manufacturers and the most critical need is for skilled workers, both entry level and existing employees skill upgrades. One of the four pillars of our practice is Industry 4.0 and you can view a video at the bottom of the landing page on our website ([www.mfgsolutions.org](http://www.mfgsolutions.org)). AEDC-MS consider the work being done at National Park Community College as vital and consistent with existing needs and future advanced manufacturing capabilities that will be important for the company and our state.

I support this plan as it is both timely and relevant to the local workforce needs.

Sincerely,



Daniel L. Curtis  
Senior Manager and MEP Center Director



Alliance Rubber Company is in support of National Park College's application for a Regional Workforce Grant to continue the development of the Innovative Technologies Center.

Alliance Rubber has a partnership with ITC that we hope to continue and grow. At this time we have associates involved in the Advanced Manufacturing CNC Machining training program expanding their knowledge in this area, and it will be beneficial for Alliance in the future as we expand our factory automation as we grow. The ITC is also a great place to host technical seminars.

Other areas that we have interest in is the automated work cell training that ITC is in the process of putting together for training in areas such as sensors, instrumentation, PLC programming and troubleshooting, and robotics these skill areas will be instrumental for Alliance's future growth.

Some other areas of needed training are in Computer skills such as CAD (computer aided drafting) CAM (computer aided Manufacturing) software's. In the makers space they offer training to aid in R&D processes and prototyping, these will as well be instrumental for industry growth.

Advanced manufacturing skills are needed for industry as a whole without automation skills training American industry cannot grow and thrive due to fact that we compete every day in the market place with overseas labor. National park College's ITC is helping to bridge this gap for industry.

Maintenance Manager

Joe Jackson

A handwritten signature in black ink that reads "Joe Jackson". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

210 Carpenter Dam Road • P.O. Box 20950 • Hot Springs, AR 71903-0950  
501.262.2700 • 800.626.5940 • [www.rubberband.com](http://www.rubberband.com)



Always Advancing to Protect What's Important

May 15, 2018

Dr. Maria Markham:

Berry Global supports National Park College's application for a Regional Workforce Grant to continue to develop its Innovative Technologies Center.

The center would provide the region with highly skilled workers in four broad advanced technology areas:

- 1) Advanced Manufacturing  
Specifically Plastics Manufacturing
- 2) Automation  
Sensors & Instrumentation, Programmable Logic Controllers, Robotics
- 3) Computer Coding  
Computer Aided Drafting/Computer Aided Manufacturing, Coordinate Measuring Machine Software
- 4) Research & Development

Advanced manufacturing is a growing industry sector that requires highly-skilled workers now and in the future. We support National Park College's efforts to ensure that current and future workers have the opportunity to learn the technical skills needed to be successful.

The Berry Global Hot Springs Plant has worked with NPC for many years to ensure that the necessary training is available for our employees. We worked with the teams there to help develop a Manufacturing Technology curriculum that has proven to be very effective. While manufacturing basics are important, we also need a local source of instruction on plastics manufacturing. Currently I am forced to recruit from out-of-state colleges in an effort to retain the skills necessary to run our business.

Business and industry require employees equipped with 21<sup>st</sup> century technology skills. This Innovative Technologies Center will support core needs of business and industry in the West Central Arkansas region. We need to further develop this center now. We should not wait and potentially lose momentum. We support this plan as something the local workforce desperately needs.

Sincerely,

A handwritten signature in blue ink that reads "Laura Brody". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Laura Brody  
Human Resources Manager

May 15, 2018

Dr. Maria Markham:

The Greater Hot Springs Chamber of Commerce supports National Park College's application for a Regional Workforce Grant to continue to develop its Innovative Technologies Center. The center would provide the region with highly skilled workers in four broad advanced technology areas:

- 1) Advanced Manufacturing  
CNC Machining
- 2) Automation  
Sensors & Instrumentation  
Programmable Logic Controllers  
Robotics
- 3) Computer Coding  
Computer Aided Drafting/Computer Aided Manufacturing  
Coordinate Measuring Machine Software  
Other TBD
- 4) Maker Space  
Research & Development  
Industry Prototyping

Advanced manufacturing is a growing industry sector that requires highly-skilled workers now and in the future. We support National Park College's efforts to ensure that current and future workers have the opportunity to learn the technical skills needed to be successful.

Through the Hot Springs Chamber's business retention and expansion efforts in Garland County, workforce issues remain the most relevant obstacle that local employers face. The Chamber applauds any effort to modernize the education system through innovative technologies to provide today's skills for today's workforce.

Business and industry require employees equipped with 21<sup>st</sup> century technology skills. This Innovative Technologies Center will support core needs of business and industry in the West Central Arkansas region. For these reasons, we support this plan as it is both timely and relevant to the local workforce needs.

Sincerely,



Gary Troutman  
President & CEO  
Greater Hot Springs Chamber of Commerce





7152 CENTRAL AVENUE  
HOT SPRINGS, ARKANSAS 71913  
PHONE (501) 525-0268  
FAX (501) 520-0472

May 16, 2018

Attn: Dr. Maria Markham

Ref: National Park College – Innovative Technologies Center

Dear Dr. Maria Markham,

We at CMT Inc. strongly support National Park College's application for a Regional Workforce Grant to extend the operations of its Innovative Technologies Center.

The center has provided the region with baseline training for skilled workers, specifically in CNC Machining and CAD/CAM Manufacturing applications. There is a serious shortage of persons in the area who have training to support them transitioning into these types of jobs. The center has developed training programs that support the region's needs, at a baseline level. The next steps in the development of these programs should be to extend the depth and the breadth of the training courses in order be even more effective. CMT will continue to support this effort, and ADHE will need to continue support also.

CMT Inc. and other manufacturing and aerospace related businesses in our area have a need for employees skilled in the subjects provided by this program. We need to be able to hire people who have training in these areas, so we can compete globally and grow our business. More specifically, we utilize the following equipment and processes at CMT in our aerospace parts production business:

CNC Machining – CNC Milling and CNC Turning  
CAD / CAM – Using MasterCam, Catia, and Verisurf software.

Virtually every part we make is impacted by machinery or systems that require maintenance and operation related to the core technologies covered by this NPC program. NPC's Innovative Technologies Center will allow CMT to interface with other companies, students, suppliers, and community members in an environment that is currently not available in our region. Interacting with students in this environment will also allow companies an opportunity to strengthen relationships between education and industry in our region.

This Innovative Technologies Center will support core needs of business and industry in the West Central Arkansas region. For these reasons, I support this plan as it is both timely and relevant to the local workforce needs.

Sincerely,

Tom Butler  
President  
Craft Manufacturing and Tooling, Inc



May 14, 2018

Dr. Maria Markham:

Hot Springs School District supports National Park College's application for a Regional Workforce Grant to continue to develop its Innovative Technologies Center.

The center would provide the region with highly skilled workers in four broad advanced technology areas:

- 1) Advanced Manufacturing - CNC Machining
- 2) Automation - Sensors & Instrumentation, Programmable Logic Controllers, Robotics
- 3) Computer Coding - Computer Aided Drafting/Computer Aided Manufacturing, Coordinate Measuring Machine Software, Other TBD
- 4) Maker Space - Research & Development, Industry Prototyping

Advanced manufacturing is a growing industry sector that requires highly-skilled workers now and in the future. We support National Park College's efforts to ensure that current and future workers have the opportunity to learn the technical skills needed to be successful.

Hot Springs School District is a proud partner of National Park College. Our students deserve the opportunity to interact with instructors and equipment as they explore careers for their future. Our E.A.S.T programs have gained incredible experiences through this partnership that we look to grow. Career and technical opportunities are in high need in our industries in this area.

Business and industry require employees equipped with 21st century technology skills. This Innovative Technologies Center will support core needs of business and industry in the West Central Arkansas region. For these reasons, I support this plan as it is both timely and relevant to the local workforce needs.

Sincerely,

Dr. Stephanie Nehus  
Superintendent



**HENDERSON**  
STATE UNIVERSITY

1100 HENDERSON STREET ARKADDELPHIA, AR 71999-0001 WWW.HSU.EDU

May 8, 2018

Dr. Maria Markham:

Henderson State University supports National Park College's application for a Regional Workforce Grant to develop its Innovative Technologies Center.

The center would provide the region with highly skilled workers in four broad advanced technology areas:

- 1) Advanced Manufacturing  
CNC Machining
- 2) Automation  
Sensors & Instrumentation  
Programmable Logic Controllers  
Robotics
- 3) Computer Coding  
Computer Aided Drafting/Computer Aided Manufacturing  
Coordinate Measuring Software  
Other TBD
- 4) Maker Space (The MakeDo Lounge)  
Research & Development  
Industry Prototyping

Advanced manufacturing is a growing industry sector that requires highly-skilled workers now and in the future. We support National Park College's efforts to ensure that current and future workers have the opportunity to learn the technical skills needed to be successful.

The opportunity for collaboration between Henderson State University and National Park College is critical to the development of our students. The Innovation Technologies Center offers a unique chance for our students to strengthen the possibility of success while learning hands on skills and increasing their value to potential employers. As one example, our entrepreneurship classes realize the potential of the center as a place where experimentation and creativity can take place while developing ideas into products. Prototypes can be created, tested, and modified within a learning environment.

Business and industry require employees equipped with 21<sup>st</sup> century technology skills. This Innovative Technologies Center will support core needs of business and industry in the West Central Arkansas region. For these reasons, I support this plan as it is both timely and relevant to the local workforce needs.

Sincerely,

Steve Adkison  
Provost  
Henderson State University  
Arkadelphia, AR 71999



Dr. Maria Markham:

The College of Science and Engineering at Southern Arkansas University supports National Park College's application for a Regional Workforce Grant to develop its Innovative Technologies Center. The center would provide the region with highly skilled workers in four broad advanced technology areas of:

- 1) Advanced Manufacturing  
CNC Machining
- 2) Automation  
Sensors & Instrumentation, Programmable Logic Controllers, and Robotics
- 3) Computer Coding  
CAD/Computer Aided Manufacturing, Coordinate Measuring Software
- 4) Maker Space  
Research & Development, and Industry Prototyping

Advanced manufacturing is a growing industry sector that requires highly-skilled workers now and in the future. The above skills are highly sought after by employers in Southwest Arkansas, including major aerospace defense contractors. We support National Park College's efforts to ensure that current and future workers have the opportunity to learn the technical skills needed to be successful.

Southern Arkansas University recently partnered with National Park College to create a pathway for NPC graduates of Associate of Science Degree to transfer to Southern Arkansas University for the completion of a Bachelor of Science in the area of Computer Science as a first step. We are very interested in a more comprehensive partnership that will increase graduation rates in the much needed area of Engineering and Technology. If NPC graduates learn the hands on skills sought after by potential employers, and provided by Maker Space, it will strengthen the possibility of their transition into a four year degree and their success in the job market thereafter.

Business and industry require employees equipped with 21<sup>st</sup> century technology skills. This Innovative Technologies Center will support core needs of business and industry in the West Central Arkansas region. For these reasons, I support this plan as it is both timely and relevant to the local workforce needs.

Sincerely,

*Abdel G Bachri*

Abdel Bachri, PhD

Dean of Science and Engineering College

Chair of Physics and Engineering

Southern Arkansas University

Office: 870-235-4283. Email: [agbachri@saumag.edu](mailto:agbachri@saumag.edu)





May 1, 2018

Dr. Maria Markham:

Triumph Airborne Structures supports National Park College's application for a Regional Workforce Grant to continue to develop its innovative Technologies Center.

The center would provide the region with highly skilled workers in four broad advanced technology areas:

- Advanced Manufacturing  
CNC Machining
- Automation  
Sensors & Instrumentation  
Programmable Logic Controllers  
Robotics
- Computer Coding  
Computer Aided Drafting/Computer Aided Manufacturing  
Coordinate Measuring Machine Software  
Other skills to be determined
- Industrial Development  
Research & Development  
Industry Prototyping

Advanced manufacturing is a growing industry sector that requires highly-skilled workers now and in the future. We support National Park College's efforts to ensure that current and future workers have the opportunity to learn the technical skills needed to be successful.

As one of the community's most desired employers, it is important for Triumph Airborne Structures future for the local college to continue to provide the needed education and training to our future workers to bridge the skills gap that we are experiencing.

Business and industry require employees equipped with 21<sup>st</sup> century technology skills. This Innovative Technologies Center will support core needs of business and industry in the West Central Arkansas region. For these reasons, I support this plan as it is both timely and relevant to the local workforce needs.

Sincerely,

*Allison Ramsey*

Allison Ramsey

Director of Human Resources

Triumph Airborne Structures



## West Central Arkansas Planning & Development District, Inc.

Dwayne Pratt  
Executive Director

May 9, 2018

Dr. Maria Markham  
Arkansas Department of Higher Education  
423 Main St., Suite 400  
Little Rock, AR 72201

Dr. Markham:

West Central Arkansas Planning and Development District supports National Park College's application for a Regional Workforce Grant to continue to develop its Innovative Technologies Center.

The center would provide the region with highly skilled workers in four broad advanced technology areas:

- 1) Advanced Manufacturing  
CNC Machining
- 2) Automation  
Sensors & Instrumentation  
Programmable Logic Controllers  
Robotics
- 3) Computer Coding  
Computer Aided Drafting/Computer Aided Manufacturing  
Coordinate Measuring Machine Software  
Other TBD
- 4) Maker Space  
Research & Development  
Industry Prototyping

Advanced manufacturing is a growing industry sector that requires highly-skilled workers now and in the future. We support National Park College's efforts to ensure that current and future workers have the opportunity to learn the technical skills needed to be successful.

NPC is an active partner in the region's economic development activities. Their leadership and programs are consistently responsive to the workforce needs of our local business and industry labor force requirements.

Business and industry require employees equipped with 21<sup>st</sup> century technology skills. This Innovative Technologies Center will support core needs of business and industry in the West Central Arkansas region. For these reasons, I support this plan as it is both timely and relevant to the local workforce needs.

Sincerely,

A handwritten signature in cursive script that reads "Dwayne Pratt".

Dwayne Pratt  
Executive Director

1000 Central Avenue  
PO Box 6409  
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Serving the Counties of: Clark,  
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## Regional Workforce Continuation Grant

	YR 1	YR 2	
<b>A. PROGRAM LEADERSHIP SUPPORT COSTS</b>	<b>243,507</b>	<b>291,750</b>	<b>535,257</b>
1. Personnel	233,755	278,750	512,505
Salary	177,352	212,500	389,852
-Director	55,668	68,000	123,668
-Program Coordinator (Maker Space)	44,834	55,000	99,834
-Program Coordinator (Automation/Robotics)	38,500	44,500	83,000
-Part-Time Instructors	38,350	45,000	83,350
Fringe	56,403	66,250	122,653
-Director	20,240	24,000	44,240
-Program Coordinator (Maker Space)	16,498	19,500	35,998
-Program Coordinator (Automation/Robotics)	13,775	16,000	29,775
-Part-Time Instructors	5,890	6,750	12,640
2. Travel	9,752	13,000	22,752
3. Other (Explain Below)			
<b>B. OTHER DIRECT COSTS</b>	<b>203,073</b>	<b>151,950</b>	<b>355,023</b>
1. Equipment	26,050		26,050
Cap Equip - 3D Scanner	26,050		26,050
2. Materials and Supplies	111,810	79,450	191,260
Hand Tools & Accessories	8,860	14,000	22,860
Electronic Supplies & Instruments	5,000	10,000	15,000
Consumables & Project Supplies	17,000	35,000	52,000
Makerspace Storage	7,800		7,800
Sensors & Instrumentation	20,000	10,000	30,000
Verisurf software for FARO Arm (10 license + instruct training	14,200		14,200
A axis (4th axis for CNC Mill)	14,000		14,000
Software updates/maintenance	10,450	10,450	20,900
Additional Mastercam licenses	10,000		10,000
Electrical wiring (4th axis CNC mill & Automated Mfg Simulation In	3,000		3,000
Computer/Projector	1,500		1,500
3. Publication Costs/Documentation/Dissemination	22,113	22,500	44,613
Social Media/Print Media/Radio	9,608	11,000	20,608
Billboard	5,105	6,500	11,605
Signage/Display	2,400		2,400
Promotional Items	5,000	5,000	10,000
4. Consultant Services			
5. Other (Explain Below)--Recurring Rent/Utilities	43,100	50,000	93,100
<b>C. TOTAL DIRECT COSTS (A &amp; B)</b>	<b>446,580</b>	<b>443,700</b>	<b>890,280</b>
<b>D. COST SHARING (Minimum 10% of C; up to \$50,000)</b>			<b>\$50,000</b>
<b>Total Continuation Grant Budget</b>			<b>940,280</b>