Budget

Tri-Rivers (065268) - Marion County - 2016 - Straight A Fund - Rev 0 - Straight A Fund - Application Number (49)

U.S.A.S. Fund #: 466
Plus/Minus Sheet (opens new window)

Object Code / Purpose Code	Salaries 100	Retirement Fringe Benefits 200	Purchased Services 400	Supplies 500	Capital Outlay 600	Other 800	Total
Instruction	0.00	0.00	0.00	0.00	850,000.00	0.00	850,000.00
Support Services	0.00	0.00	112,500.00	0.00	0.00	0.00	112,500.00
Governance/Admin	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Prof Development	0.00	0.00	37,500.00	0.00	0.00	0.00	37,500.00
Family/Community	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Safety	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Facilities	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transportation	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indirect Cost						0.00	0.00
Total	0.00	0.00	150,000.00	0.00	850,000.00	0.00	1,000,000.00
						Adjusted Allocation	0.00
						Remaining	-1,000,000.00

Application

Tri-Rivers (065268) - Marion County - 2016 - Straight A Fund - Rev 0 - Straight A Fund - Application Number (49)

Please respond to the prompts or questions in the areas listed below in a narrative form.

A) APPLICANT INFORMATION - General Information

1. Project Title:
RAMTEC Statewide Advanced Manufacturing Replication- Vantage Career Center / Warren County Vocational School District Consortia

2. Project Summary: Please limit your responses to no more than three sentences.
Replicate RAMTEC best practices to expand advanced manufacturing Career Technical learning opportunities for 6th-16th graders

This is an ultra-concise description of the overall project. It should only include a brief description of the project and the goals it hopes to achieve.

3. Estimate of total students at each grade level to be directly impacted each year.

*This is the number of students that will receive services or other benefits as a **direct result** of implementing this project. This does not include students that may be impacted if the project is replicated or scaled up in the future. It excludes students who have merely a tangential or indirect benefit (such as students having use of improved facilities, equipment etc. for other uses than those intended as a part of the project). The Grant Year is the year in which funds are received from the Ohio Department of Education. Years 1 through 5 are the sustainability years during which the project must be fiscally and programmatically sustained.*

Grant Year

Pre-K Special Education	K	1	2	3
4	5	175 6	175 7	175 8
175 9	175 10	141 11	102 12	

Year 1

Pre-K Special Education	K	1	2	3
4	5	210 6	210 7	210 8
210 9	210 10	141 11	102 12	

Year 2

Pre-K Special Education	K	1	2	3
4	5	245 6	245 7	245 8
245 9	245 10	141 11	102 12	

Year 3

Pre-K Special Education	K	1	2	3
4	5	280 6	280 7	280 8
280 9	280 10	141 11	102 12	

Year 4

Pre-K Special Education	K	1	2	3
4	5	315 6	315 7	315 8
315 9	315 10	141 11	102 12	

Year 5

Pre-K Special Education	K	1	2	3
4	5	350 6	350 7	350 8

350 9	350 10	141 11	102 12

4. Explanation of any additional students to be impacted throughout the life of the project.
This includes any students impacted or estimates of students who might be impacted through future scale-ups or replications that go beyond the scope of this project.

RAMTEC consortium will establish advanced manufacturing career pathways for grades 6-16, with students earning high skilled, high demand industrial certifications in the areas of robotics programming , robotic welding, integrated PLC's, CNC machining and industrial maintenance which meet many of the significant shortages that exist in manufacturing. The statewide partnerships provide opportunities for students to earn "stackable" certificates and college credits while in high school. Each student will have the ability to authenticate their learning and multiple articulations agreements have been formed between the JVSD's and multiple community colleges. Current research shows that students who graduate high school having already obtained college credit increase their chance of graduating from college by over 30%. Not all careers in advanced manufacturing requires a 4-year degree or more, but most require some type of post-secondary attainment.

5. Lead applicant primary contact: - Provide the following information:

First and last name of contact for lead applicant
Charles Speelman

Organizational name of lead applicant
Tri Rivers Career Center

Address of lead applicant
2222 Marion-Mt Gilead Rd. Marion OH 43302

Phone Number of lead applicant
7403612910

Email Address of lead applicant
cspeelman@tririvers.com

Community School Applicants: After your application has been submitted and is in Authorized Representative Approved status an email will be sent to your sponsoring entity automatically informing the sponsor of your application.

6. Are you submitting your application as a consortium? - Select one checkbox below

☑ Yes

☐ No

If you are applying as consortium, please list all consortium members by name on the "Consortium Member" page by clicking on the link below. If an educational service center is applying as the lead applicant for a consortium, the first consortium member entered must be a client district of the educational service center.

Add Consortium Members

7. Are you partnering with anyone to plan, implement, or evaluate your project? - Select one checkbox below

☑ Yes

☐ No

If you are partnering with anyone, please list all partners (vendors, service providers, sponsors, management companies, schools, districts, ESCs, IHEs) by name on the "Partnering Member" page by clicking on the link below.

Add Partnering Members

B) PROJECT DESCRIPTION - Overall description of project and alignment with goals

8. Describe the innovative project: - Provide the following information

The response should provide a clear and concise description of the project and its major components. The following questions will address specific outcomes and measures of success.

a. The current state or problem to be solved; and

There is critical education and workforce challenge facing Ohio. Currently, the latest workforce numbers show we have a shortage of over 60,000 manufacturing workers for the advanced manufacturing jobs available today (www.ohiohired.org). To further compound the challenge many of these new STEM based careers are also listed amongst the fastest growing careers. To be prepared for Ohio's advanced manufacturing workforce, students need access to academic and career technical programs that integrate industry recognized credentials and certifications in advanced manufacturing. The key to student achievement innovation in this model is a focus on individual competency mastery, rather than typical "seat time". High school students who graduate with these credentials will have greater post-secondary attainment and skills to compete/thrive in new high skilled STEM jobs that exist in these needed and expanding advanced manufacturing careers. Ohio's existing infrastructure of career centers successfully trains Ohio's students to compete in a myriad of career fields, but many have not been able to adequately keep pace with changing technology and high tech industrial equipment required to train students for high

paying, high skilled jobs in the manufacturing industries. Currently 75% of these STEM based manufacturing careers don't require a 4-year college degree, but they all require some type of specialized post-secondary training. These are the advance technicians that program and keep the automation equipment running within high tech manufacturing facilities. When we begin to purposefully connect the wide range of STEM/CTE career pathways that link industry sectors, these pathways will help create project-based, real-world applications for rigorous and relevant curriculum and instruction that will allow students to thrive within these new and expanded STEM/CTE related careers.

b. The proposed innovation and how it relates to solving the problem or improving on the current state.

National Association of Manufacturers states 88% of manufacturers have difficulties finding qualified candidates. Ohio Association of Community Colleges believes industry recognized credentials are a part of the solution. RAMTEC, funded in Straight A Round 2, received statewide attention for fostering statewide engagement & supporting a holistic approach to economic/ workforce development by allowing students to demonstrate mastery of skills on equipment identical to that used in Ohio manufacturing industries. RAMTEC collaborates with Ohio Department of Higher Education, Ohio Department of Education, Career & Technical Education, Adult Education, Ohio Office of Workforce Transformation, Ohio ACTE, Ohio Manufacturer's Association, JobsOhio, and many others. Tri-Rivers will further replicate RAMTEC in these 2 CTC to reach and credential future workers for advanced /specialized manufacturing jobs and provide related career exploration in grades 6-16. Tri-Rivers CC will lead consortia districts to expand 6th-8th grade career exploration & develop 9-10th grade PLTW "Project Lead the Way" manufacturing programs using e-learning & "hands-on" activities aligned to Ohio's Learning Standards. Teachers in grades 6-10 will learn to use online digital electronics & Vex Robotics hands on projects/curriculum to expose students to Advanced Manufacturing further driving students to enroll in RAMTEC certification programs. Tri-Rivers will coordinate equipment purchases and facilitate instructor training to re-design 11-12th grade experiences into a competency based curriculum model tied to advanced manufacturing certifications that includes STEM based activities & connecting them to students participating in all Ohio RAMTEC programs. Each district will replicate the same best practices of Ohio's current 9 operational RAMTEC centers to ensure efficiency, effectiveness & strong student outcomes. At the same time, local industry needs drive curriculum development, equipment selection and instructional personnel-keeping everything current with local workforce needs. Current research shows students who graduate HS having already obtained college credit have 30% greater chance of graduating from college compared to peers who have not earned college credit before graduation. Tri-Rivers supports districts to transition to "College Now" practices so students in RAMTEC programs can earn stackable credentials under National Association of Manufacturers (NAM) - endorsed Manufacturing Competency Based Skills Certification System. Students can earn up to 30 hours of college credit (no cost to families) at partner post-secondary institutions leading to an Associate's Degree in a manufacturing pathway. Instructional/organizational changes include: expansion of competency-based and blended instruction where teachers more effectively use e-learning materials, real life simulators and authentic activities including hands-on learning to build & operate robots, design & build parts and share these ideas across Ohio RAMTEC centers. CTC instructors will be cross trained so RAMTEC can be integrated into Welding, Engineering & Advanced Manufacturing, Precision Machining, and Computer Networking. JVSD's will enhance existing programs by utilizing RAMTEC equipment to cross train students so they can earn new stackable certifications and post-secondary college credits. CTE advisory programs will include new partners to meet state/ local requirements and correlate local job markets. TRCC requests $1,000,000 for implementation and will have $1,500 in sustainable costs per year (per new RAMTEC district) for increased electricity/property insurance costs for a total of $7,500 for the sustainable years. TRCC will not have any additional costs as the lead district. The other consortia districts will reduce supply costs $1,500/year since program supplies can be purchased through the grant. There will be no net cost for any consortia district.

9. Select which (up to four) of the goals your project will address. For each of the selected goals, please provide the requested information to demonstrate your innovative project. - (Check all that apply)

☑ a. Student achievement

i. List the desired outcomes.
Examples: fewer students retained at 3rd grade, increase in graduation rate, increased proficiency rate in a content area, etc.

RAMTEC consortium will increase student achievement in the following areas: Post-Program Placement Baseline: new RAMTEC schools Post-Program Placement (FY2015 Report Card) Short Term: By 6/30/2017, new RAMTEC schools will have plan to ensure each school exceeds Ohio's Post-Program Placement benchmark Long Term: By 6/30/2022, new RAMTEC schools Post-Program Placement (FY2022 Report Card) will increase annually Industry Credential Baseline: new RAMTEC schools # Industry Credentials (FY2015 Report Card) Short Term: By 6/30/2017, new RAMTEC schools will have a plan to ensure each school exceeds Ohio's Industry Credential benchmark Long Term: By 6/30/2022, the # Industry Credentials receive new RAMTEC schools (self reported) will increase by 50% Dual Enrollment/College Credit Plus Baseline: % students new RAMTEC schools who participated in dual enrollment (2015 Report Card) Short Term: By 6/30/2017, new RAMTEC schools will have a plan to ensure each school exceeds Ohio's dual enrollment benchmark (ODE benchmark) Long Term: By 6/30/2022, new RAMTEC schools will meet or exceed Ohio's dual enrollment benchmark as defined by ODE. PLTW Baseline: set 2016 - # students participating in gr 9-10 CTE funded PLTW programs By 2017: new RAMTEC schools have plan to expand CTE funded PLTW programs By 2022: Increase baseline by 20% the # of 9-10 graders earned credits in CTE funded PLTW Career Exploration Baseline: : set 2016 - # students participating in gr 6-8 STEM/CTE career pathway exploration By 2017: Provide all MS with career exploration curriculum, software and opportunity to enhance programs through the use of the RAMTEC workshops. By 2022: Increase by 50% # 6-8th grade students exposed to STEM/CTE career pathways through CTE funded programs being offered at the local district level.

ii. What assumptions must be true for this outcome to be realized?
Examples: early diagnosis and intervention are needed to support all children learning to read on grade level; project-based learning results in higher levels of student engagement and learning, etc.

Assumption 1: Ohio continues to need advanced manufacturing workforce. Research: According to JobsOhio website (11/2015) Ohio has the 3rd largest manufacturing workforce in America and 52 of the state's 88 counties are heavily dependent on manufacturing, according to JobsOhio (October 2015). Advanced manufacturing is one of the key industries driving innovation and job creation in Ohio. New technologies, materials and manufacturing processes have led to a resurgence in Ohio manufacturing. A report released in February by Deloitte Institute declared that 3.4 million new U.S. manufacturing positions will need to be filled in the next decade. However, it also identified that the current capacity to train workers for these careers is only 1.5 million over the same time period. Assumption 2: RAMTEC model helps address local workforce need to increase advanced manufacturing training. Research: RAMTEC model-because it's cutting-edge, competency-based learning-is recognized by SME Foundation, Ohio Economic Development Association, Governor Kasich, and the Ohio Department of Education. Students graduate with industry recognized credentials/certifications & college credits in advanced manufacturing that lead to postsecondary attainment & ensures academic rigor to compete/thrive with the demand of these new high

skilled jobs. When the Kasich administration toured Tri-Rivers to evaluate RAMTEC effectiveness, Lt. Governor Taylor stated, "We want to make sure every kid in Ohio has this kind of opportunity'. Gov. Kasich said, "We need kids interested in what they're doing,"(Marion Star, 2014). In March 2015, Dr. Susan Tave-Zelman, Executive Director of the Straight-A Fund stated, "RAMTEC was attractive to the Straight-A Fund because it's a customizable approach. Participants can build local partnerships and take local needs into account. The department is hoping to see it expand beyond the nine centers into other geographic areas and industries," (Crain, 2015).

iii. Describe any early efforts you have made to test these assumptions (pilot implementation, etc), or how these are well-supported by the literature.

With replication of RAMTEC we can quickly build upon the successes of the existing Tri-Rivers Consortium. The assumptions that were established in round 2 have been met or exceeded allowing us to build replication sites very quickly. Competency Based Skills Certifications have been established, tested and proven with Industry leading companies. 250+ students earned certifications in the areas of Robotics, CNC Machining, Industrial Maintenance and Welding. Over 80% of those students continued their education the following year at a postsecondary institution. RAMTEC Tri-Rivers has also worked to complete correlations to the Ohio Career & Adult Education content standards for Advanced Manufacturing and Engineering Technologies. This has enabled our high school students to meet and exceed all graduation demands set forth by the Ohio Department of Education. The Instructional staff at RAMTEC Tri-Rivers has been certified to teach the relevant certifications needed and have been allowed to pass those certifications on to the students resulting in direct placement into internships and jobs. The instructors have also been approved to run a train the trainer program allowing the certifications to be passed onto new RAMTEC partner instructors. These steps are imperative in order for students to meet the graduation requirements, be recognized by Industry for job placement and meet the need for College Credit Plus articulations. RAMTEC has also established a recruitment program to allow middle school students to be exposed to Advanced Manufacturing careers. The VEX robotics programs has allowed over 300 students and parents to experience project based learning activities to better help them understand that the "NEW" manufacturing jobs of today are not the "OLD" dirty, dangerous and low skilled jobs of the past. The new high skilled advanced manufacturing career opportunities are here to stay as well as keep Ohio competitive with a trained workforce. It is very important to understand that it took Tri-Rivers three years to establish the first RAMTEC center but only 9 months to replicate 8 additional centers through Straight A Round 2. While the Round 2 funding nudged Ohio forward to meet the manufacturing workforce needs, it is imperative that Ohio continue to address the 60,000 manufacturing work shortage. The consortia districts included in this application were targeted specifically because they serve communities with a great Advanced Manufacturing workforce need. Given the past success, RAMTEC Tri-Rivers can assist and dramatically speed up the training for Advanced Manufacturing workers through this replication grant. As a result of RAMTEC Round 2 teachers transformed the way they teach because their students now use the same equipment that actual manufacturing facilities in Ohio use. Curriculum has already been designed to meet State Standards in Career and Adult Education pathways, and is directly linked to Industry needs so students learn skills they need to successfully gain employment post graduation. The Manufacturing programs in Robotics, Welding, CNC Machining, Industrial Maintenance and Additive Manufacturing (3D Printing) are collaborating to make sure the students have a blended knowledge throughout all manufacturing skill sets. These skill sets are better preparing our students for post-secondary programs as well as direct employment through internships. Instructors can also track/grade each competency so students stay on track.

iv. List the specific indicators that you will use to measure progress toward your desired outcome.
These should be measurable changes, not merely the accomplishment of tasks. Example: Teachers will each implement one new project using new collaborative instructional skills, (indicates a change in the classroom) NOT; teachers will be trained in collaborative instruction (which may or may not result in change).

Formative Indicators to measure progress teacher participation in training/earn credentials # industry credentials offered # college courses offered equipment purchases partners interested in hosting student intern/apprentices # home schools offering advanced manufacturing CTE courses # students participating in middle school career exploration # students enrolled in advanced manufacturing program cost savings and reallocation per FIT Summative Indicators to measure progress new RAMTEC schools Post-Program Placement (FY2022 Report Card) will increase annually # Industry Credentials receive new RAMTEC schools (self reported) will increase by 50% new RAMTEC schools will meet or exceed Ohio's dual enrollment benchmark as defined by ODE. Increase baseline by 20% the # of 9-10 graders earned credits in CTE funded PLTW Increase by 50% # 6th-8th grade students exposed to STEM/CTE career pathways through CTE funded programs being offered at the local district level. Briefly demonstrate that budget is aligned with and is reasonable based on the student impact, outcomes and lasting value and any cost saving is credible. This project is revenue neutral. The schools will sustain grant through reallocation of supply funds to pay for the increase in costs of electricity and property insurance estimated at $1,500 per year (new RAMTEC schools only) from the changes within the programs that are being added to the curriculum.

v. List and describe pertinent data points that you will use to measure student achievement, providing baseline data to be used for future comparison.

List and describe pertinent data points for student achievement SMART Goal from Q9 (iv). teacher participation in training/earn credentials # industry credentials offered # college courses offered equipment purchases partners interested in hosting student intern/apprentices # home schools offering adv manufacturing CTE courses # students participating in MS career exploration # students enrolled in adv manufacturing program cost savings and reallocation per FIT RAMTEC schools Post-Program Placement Ohio's dual enrollment (college credit plus) benchmark as defined by ODE. # of 9-10 graders earned credits in CTE funded PLTW

vi. How are you prepared to alter the course of your project if assumptions prove false or outcomes are not realized?

Since Tri-Rivers is leading the work, and has successfully incubated 9 RAMTEC centers, it is highly unlikely that assumptions will prove false or outcomes will not be realized. A key factor in ensuring success is the active involvement of the RAMTEC leadership team in guiding processes. This team, Chuck Speelman (Tri-Rivers), John Burkhart (IST), and Ritch Ramey (RAMTEC), will bring on board the superintendent and director of each consortia career tech center to create the consortia leadership team. Together they will review relevant data bi-monthly as available. Annual staff and industry partner surveys will include questions that can help identify where recalibration or options may need to be expanded. This team will work with META Solutions to create a more in depth evaluation plan that has target percentages (formative/summative data) and specific plans to adjust training/support if targets are missed. The budget is reasonable and based on the student impact. As the outcomes and lasting value along with cost saving are credible and proven. Tri Rivers is contracting with an META external evaluator at $75,000 which is 7.5% of project budget. This amount is a great value and below industry standard (10%). Tri Rivers believes external evaluation is essential to ensure the project monitors and reports on fidelity of implementation, student achievement outcomes and cost savings. This outside support will also provide additional value because the evaluator will be able to recommend mid-course adjustments to improve results if needed.

b. Spending reductions in the 5 year forecast

i. List the desired outcomes.
Examples: lowered facility cost as a result of transition to more efficient systems of heating and lighting, etc.; or cost savings due to transition from textbook to digital resources for teaching.

ii. What assumptions must be true for this outcome to be realized?
Example: transition to "green energy" solutions produce financial efficiencies, etc.; or available digital resources are equivalent to or better than previously purchased textbooks.

iii. Describe any early efforts you have made to test these assumptions (pilot implementation, etc), or how these are well-supported by the literature.

iv. List the specific indicators that you will use to monitor progress toward your desired outcome.
These should be specific dollar savings amounts. THESE MUST MATCH THE COST SAVINGS AS PROJECTED IN THE FINANCIAL IMPACT TABLE (FIT).

v. List and describe pertinent data points that you will use to measure spending reductions, providing baseline data to be used for future comparison.

vi. How are you prepared to alter the course of your project if assumptions prove false or outcomes are not realized?

c. Utilization of a greater share of resources in the classroom

i. List the desired outcomes.
Example: change the ratio of leadership time spent in response to discipline issues to the time available for curricular leadership.

ii. What assumptions must be true for this outcome to be realized?
Examples: improvements to school and classroom climate will result in fewer disciplinary instances allowing leadership to devote more time to curricular oversight.

iii. Describe any early efforts you have made to test these assumptions (pilot implementation, etc), or how these are well-supported by the literature.

iv. Please provide the most recent instructional spending percentage (from the annual Ohio School Report Card) and discuss any impact you anticipate as a result of this project.
Note: this is the preferred indictor for this goal.

v. List any additional indicators that you will use to monitor progress toward your desired outcome. Provide baseline data if available.
These should be specific outcomes, not just the accomplishment of tasks. Example: fewer instances of playground fighting.

vi. How are you prepared to alter the course of your project if assumptions prove false or outcomes are not realized?

d. Implementing a shared services delivery model

i. List the desired outcomes.
Examples: increase in quality and quantity of employment applications to districts; greater efficiency in delivery of transportation services, etc.

ii. What assumptions must be true for this outcome to be realized?
Example: neighboring districts have overlapping needs in administrative areas that can be combined to create efficiencies.

iii. Describe any early efforts you have made to test these assumptions (pilot implementation, data analysis etc), or how these are well-supported by the literature.

iv. List the specific indicators that you will use to monitor progress toward your desired outcomes.
These should be measureable changes, not the accomplishment of tasks.
Example: consolidation of transportation services between two districts.

v. List and describe pertinent data points that you will use to evaluate the success of your efforts, providing baseline data to be used for future comparison.
Example: change in the number of school buses or miles travelled.

vi. How are you prepared to alter the course of your project if assumptions prove false or outcomes are not realized?

10. Which of the following best describes the proposed project? - (Select one)

- [ ] a. New - Never before implemented
- [ ] b. Existing - Never implemented in your community school or school district but proven successful in other educational environments
- [x] c. Replication - Expansion or new implementation of a previous Straight A Project
- [ ] d. Mixed Concept - Incorporates new and existing elements
- [ ] e. Established - Elevating or expanding an effective program that is already implemented in your district, school or consortia partnership

C) BUDGET AND SUSTAINABILITY

11. Financial Information: - All applicants must enter or upload the following supporting information. The information in these documents must correspond to your responses in questions 12-19.

a. Enter a project budget in CCIP (by clicking the link below)

Enter Budget

b. If applicable, upload the Consortium Budget Worksheet (by clicking the Upload Documents link below)

c. Upload the Financial Impact Table (by clicking the Upload Documents link below)

Upload Documents

The project budget is entered directly in CCIP. For consortia, this project budget must reflect the information provided by the applicant in the Consortium Budget Worksheet. Directions for the Financial Impact Table are located on the first tab of the workbook. Applicants must submit one Financial Impact Table with each application. For consortium applications, please add additional sheets instead of submitting separate Financial Impact Tables.

1,000,000.00 12. What is the amount of this grant request?

13. Provide a brief narrative explanation of the overall budget.
Responses should provide a rationale and evidence for each of the budget items and associated costs outlined in the project budget. In no case should the total projected expenses in the budget narrative exceed the total project costs in the budget grid.

Tri-Rivers will not be receiving any of the actual benefit of the grant but will be paid by the grant for providing the trainers and training facilities for professional development; therefore, it will not show any benefit of dollars on the Consortium Budget. PURCHASED SERVICES: $160,000 The two new RAMTEC districts will received $37,500 for curriculum development, marketing and professional development for the teachers within the program, for a total of $75,000 (one time grant costs). External evaluation for the program for the implementation year and all of the sustaining years of the grant will be $37,500 for each of the new RAMTEC districts for a total of $75,000 (multi-year contract (through 6/2022) allowable per guidance as evaluation is implementation cost). Each district will receive $5,000 for student based robotics camps workshop for a total of $10,000 (one time grant cost). Equipment: $840,000 Each district will receive $420,000 for equipment from the grant. The project total cost is $508,816.58 per district. The difference of $88,816.58 will be paid by the district as part of the match for the grant. The equipment costs are: FANUC FENCELESS LR MAte 200iD $46,045; FANUC Integrated v-Guided Belt Conveyor system $9,300; FANUC Battery Project Kit $4,100; MANUC Pill Sorting Project Kit $4,495; Teach Pendent for RoboGuide $51,450; IRVision Training Kit $5,000; Motomoan MHJF Stem Robotics $39,795; CNC MIllin Cert Cart with FANUC OI Mate-MD Controller $37,100; CNC Turning Cert Cart with FANUC OI Mate-TD Controller $37,034; CNC equipment software $3,227; Concept Tooling equipment $11,253; CNC FANUC simulator $25,000; Micro 850 Workstation $15,330; Automation Ferris Wheel Workstation $55,440; Allen Bradley Lab Equipment $4,510; Parker Hanniffin hydraulic power unit $26,422; REALWELD PowerWaver C3000 and jig set $52,000; Universal VLS Laser Engraver $16,128; Bofa Advantage Base Oracle $2,816; Computer Cart and 20 computers $25,434; Vex Robotics equipment $15,000; Shipping and installation $12,937.58; RAMTEC Sign $9,000; for a total of $508,816.58 each district. Briefly describe Alignment of Reasonable Budget with student impact, outcomes and lasting value. While initial start up equipment purchases and instructor training costs are high these are one time start-up costs. The only multi-year contract is for evaluation services to ensure Tri-Rivers has long term capacity to report on project activities through sustainability. Sustaining costs are minimal ($1500 per district), and the equipment will last for more than 5 years. Equipment will be used by both HS and adult ed programs. While, increased revenue is not allowable for this grant, it should be noted that adult ed programs are revenue generating and will cover costs for replacement once they are

outdated and/or no longer useful. This additional resource will ensure state funds have significant student impact and lasting value.

14. Please provide an estimate of the total costs associated with maintaining this program through each of the five years following the initial grant implementation year (sustainability costs). This is the sum of expenditures from Section A of the Financial Impact Table.

3,000.00 a. Sustainability Year 1
3,000.00 b. Sustainability Year 2
3,000.00 c. Sustainability Year 3
3,000.00 d. Sustainability Year 4
3,000.00 e. Sustainability Year 5

15. Please provide a narrative explanation of sustainability costs.
Sustainability costs include any ongoing spending related to the grant project after June 30, 2017. Examples of sustainability costs include annual professional development, staffing costs, equipment maintenance, and software license agreements. To every extent possible, rationale for the specific amounts given should be outlined. The costs outlined in this narrative section should be consistent and verified by the financial documentation submitted and explained in the Financial Impact Table. If the project does not have sustainability costs, applicants should explain why.

Throughout the life of the grant the only area that will need to be sustained is that of the increases of the electricity for the use of the robotics and automation equipment and the insurance premiums. These will be low as all of the robotics, automation equipment and computers use standard electric outlets and do not pull more than that of an ordinary computer lab or classroom. The amount of the actual increases will not be known until after the first year of full implementation of the program. Sustainable costs are estimated to be $1,500 per district each year (which we believe to be overestimated) for increases in electricity and property insurance premiums to power the robotics and automation equipment that will be purchased and operated as a result of this grant. These costs would cover cost to operate the industrial robotic and automation trainers on a daily basis. This grant is heavy on equipment and professional development which are all part of the initial purchase and contracted service agreements. Equipment maintenance and software upgrades were also included in the initial purchase agreements as to lower any recurring cost and sustainability issues. Tri-Rivers negotiated significant educational discounts for the purchase of automated industrial equipment and software needed to run the actual equipment being used in the advanced manufacturing facilities throughout Ohio and across the world. That is a key component to the training certifications that the students receive. Not only are students receiving the same certification that is require in industry, they are training and certifying on the same equipment. Why weren't we doing this before? The reason that this wasn't possible before was the cost of the industrial equipment and software and training were never before made affordable for a school setting. This all changed with the establishment of the first RAMTEC training center which has negotiated educational training pricing in order to assist companies with the significant shortage of skilled workers to run this highly automated equipment. These educational discount now allow for nearly 60-70% off the cost to business and industry. This results in over $720,875 in cost savings per school off the current manufacturing list price for the equipment and software alone. When you add in the industrial automation teacher training and certification required for teachers to be able to train and certify students there is another $14,160 savings to each school. Thus, the total of $735,035 in savings when applied to both schools shows a $1,470,070 ($735,035 x 2 consortium schools) in matching funds being donated by the equipment vendors. So what changed? The reason has everything to do with the 60,000 skilled worker shortage in Ohio and the 1.6 million nationwide according to the latest federal workforce development numbers. The worlds' largest advanced manufacturing equipment vendors along with the world leaders in business & industry have started to partner directly with educational and training institutions to meet these growing needs. (Please see detailed list of industry and vendor in-kind educational savings detailed in question #17).

0 16. What percentage of these costs will be met through cost savings achieved through implementation of the program?

Total cost savings from section B of the Financial Impact Table divided by total sustainability cost from section A of the Financial Impact Table. If the calculated amount is greater than 100, enter 100 here.

17. Please explain how these cost savings will be derived from the program.
Applicants who selected spending reductions in the five-year forecast as a goal must identify those expected savings in questions 16 and 17. All spending reductions must be verifiable, permanent, and credible. Explanation of savings must be specific as to staff counts; salary/benefits; equipment costs, etc.

This project is revenue neutral from a direct cost position only as there will not be ongoing costs during the five years of the grant beyond the stated amounts. But in order to see a complete breakdown of the cost saving being giving directly from the manufactures and vendors I have listed those below. The cost saving will be derived from the program with professional development cost and industrial advanced manufacturing & software saving as follows for each of the Industry equipment partners (Listed are the exact costs to industry and all fees have been waved for partnering in this grant) FANUC Robotics- ($3,500.00); FANUC CNC Machining- ($1,660.00);FANUC Vision- ($5,000.00); Rockwell International/Allen Bradley- ($1,500.00); Parker Hannifin- ($1,200.00); Total Certification and Training Savings- ##### ($14,160.00) #####;Equipment & Software Savings: FANUC Robotics Roboguide Equipment & Software - ($249,875.00); Motoman Robotics MotoSim Equipment & Software - ($200,000.00); Rockwell International/Allen Bradley Equipment & Software - ($175,000.00); FANUC CNC Machining Equipment & Software - ($96,000.00); Total Equipment & Software Savings- ##### ($720,875.00) #####.

100 18. What percentage of sustainability costs will be met through reallocation of savings from elsewhere in the general budget?

Total reallocation from section C of the Financial Impact Table divided by total sustainability cost from section A of the Financial Impact Table
Note: the responses to questions 16 and 18 must total 100%

19. Please explain the source of these reallocated funds.
Reallocation of funds implies that a reduction has been made elsewhere in the budget. Straight A encourages projects to determine up front what can be replaced in order to ensure the life of the innovative project.

The districts are going to reallocate the amount that they would have purchased in supplies - $1,500 of supplies each year. These supplies are being included with the program and are not necessary for the changes within the curriculum as most of the lessons that are included in the grant implementation are completed on computers not requiring supplies as they were in the past. This reallocation of funds will cover the

sustainable costs that are estimated to be $1,500 per district each year (which we believe to be overestimated) for increases in electricity and property insurance premiums to power the robotic and automation equipment that will be purchased and operated as a result of this grant. Though difficult to predict, these costs would cover the operation of the robots on a daily basis for a much longer time period than what the activities of the grant will require. All of the equipment will be using standard 110v electrical outlets which should not require additional electrical changes or a higher pull of electricity to operate the equipment. The districts will not know for sure until after the grant implementation year and the first year of operation the extent of the actual increase in electricity or insurance premiums for the project.

D) IMPLEMENTATION

20. Please provide a brief description of the team or individuals responsible for the implementation of this project, including other consortium members or partners.

This response should include a list of qualifications for the applicant and others associated with the grant. Please list key personnel only. If the application is for a consortium or a partnership, the lead should provide information on its ability to manage the grant in an effective and efficient manner. Include the partner/consortium members' qualifications, skills and experience with innovative project implementation and projects of similar scope.

Enter Implementation Key Personnel information by clicking the link below:

Add Implementation - Key Personnel

For Questions 21-23 please describe each phase of your project including its timeline, and scope of work.

A complete response to these questions will demonstrate awareness of the context in which the project will be implemented and the time it will take to implement the project with fidelity. A strong plan for implementing, communicating and coordinating the project should be apparent, including coordination and communication in and amongst members of the consortium or partnership (if applicable). Not every specific action step need be included, but the outline of the major steps should demonstrate a thoughtful plan for achieving the goals of the project. The timeline should reflect significant and important milestones in an appropriate time frame.

21. Planning

a. Date RangeMar 2016 July 2016

b. Scope of activities - include all specific completion benchmarks.

Upon award: media notification; board approvals/contracts signed; planning team designated; Recruit teachers for training; finalize student recruitment & evaluation plan; create Consortia Leadership Team meetings calendar for planning period to ensure all processes are in place for implementation; Sp/Su 2016: create plan of action; partnership development (local and statewide); staff curriculum and correlations to Career Tech competencies/ Industries Certification needs; determine teacher needs, curriculum needs, equipment needs and reassurance that facility space and electrical needs; Register instructors/ set-up instructor certification; Contact architect/maintenance supervisor to proceed with renovations; Contact equipment vendors to identify equipment delivery schedules; Continue articulation agreements with Community Colleges for College Credit Plus; Initiate weekly meetings for Project Steering Committee; submit final evaluation plan to ODE; Quarterly project evaluation. Benchmarks to demonstrate success equipment & supply purchases evaluation plan created board contracts approved curriculum design documents marketing and recruitment plan communication/key stakeholder engagement/consent from all required officers, governing bodies The experience gained in RAMTEC round 2 will help us to plan on going communications for round 3. Hold local celebrations and events with business partners to build deeper relationships, board/staff meetings to announce project; quarterly board/community updates; create marketing plan: Consortia Leadership Team meetings coordinate project outcomes, ensure strong communication and capacity to manage scope of work. Monthly meetings with evaluator to monitor evaluation plan & project fidelity. Site visitations, instructor training at RAMTEC Marion, Instructor Certification with worldwide leading manufacturers and monthly webinars are essential for success.

22. Implementation(grant funded start-up activities)

a. Date RangeApril 2016 to June 2022

b. Scope of activities - include all specific completion benchmarks

Sp/Su 2016: Kick-off marketing campaign in CTC regions; lead instructor training; FANUC Certification Training; FANUC Certification CERT Cards delivered; Deliver VEX Training Equipment VEX Lead Teacher Two-Day Training; Initiate training for Motoman Robotics; Deliver STEM cart; Deliver/install FANUC & Motoman Robotic Equipment; Fall/Wi 2016-17 Host open houses; Delivery of the 7th and 8th grade training units; VEX Lead Teacher Training; Finalize marketing and recruitment efforts; Planning meetings for summer camps; Plan summer PD; summer camp recruitment Sp/Su 2017 Finalize summer camps and PD; Conduct summer camps and professional development; Student recruitment for following year Benchmarks to demonstrate success equipment & supply purchases training participation student attendance at summer camp certifications issued College Credit Plus courses completed Communication/key stakeholder engagement/consent from all required officers, governing bodies; continue project coordination, marketing and communication activities and board reports as described in planning; administer and manage scope of work/ develop interdependent system of change; Project Director will coordinate Quarterly Project Steering Team meetings; CTC Teachers involved in decision making; annual surveys to determine project success; Board approves contracts and will receive quarterly reports from evaluator on progress; continue outreach with business/higher ed partners to build deeper relationships,Monthly meetings with evaluator to monitor evaluation plan & project fidelity.

23. Programmatic Sustainability (years following implementation, including institutionalization of program, evaluation and communication of program outcomes)

a. Date RangeAugust 2016- June 2022

b. Scope of activities - include all specific completion benchmarks

A competency based educational model integrates pre/post assessments as embedded measurements for curriculum objectives that RAMTEC centers will assess with e-assessment management systems. 2016-2017: identify instructional competencies required for students in manufacturing pathways; pre-assess student knowledge and prescribe effective training based on the competencies required of the Advanced Manufacturing model being used; (on-going) formative assessments provide data analysis of both individual and class results that identify instructional areas that are weak and need additional teaching: post-testing will occur upon completion of the program and before industry certification tests are taken. 2016-2022: Evaluator will assess: Training effectiveness as a result of assessment system; Performance and satisfaction data collected from students and employers - business oversight, and employer evaluations of student interns and adult employees who are graduates and trained in one of the RAMTEC centers. Benchmarks : graduation, community college credits, passage of industrial certifications, and job placement and students planning to pursue further education, training, or employment; cost savings and cost reallocation per FIT. Administer and manage scope of work/ communication/key stakeholder engagement/consent from all required officers, governing bodies; Consortia Leadership Team meet quarterly thru 2022; META-outcome reporting thru 2022; semi-annual board reports; each CTC provide META access to student data for analysis-include project related surveys/ relevant data to effectively access-analyze data; develop interdependent system of change; manufacturing needs continually assessed and responses from the manufacturers used to adjust instruction and to improve student learning; new CTCs will network with other RAMTEC centers to share/learn best practices to enhance statewide manufacturing centers' instruction.

E) SUBSTANTIAL IMPACT AND LASTING VALUE

24. Describe the expected changes to the instructional and/or organizational practices in your institution.

The response should illustrate the critical instructional and/or organizational changes that will result from implementation of the grant and the impact of these changes. These changes can include permanent changes to current district processes, new processes that will be incorporated or the removal of redundant processes. The response may also outline the expected change in behaviors of individuals (changes to classroom practice, collaboration across district boundaries, changes to a typical work day for specific staff members, etc.). The expected changes should be realistic and significant in moving the institution forward.

Please enter your response below:

Organizational/instructional changes The RAMTEC centers are committed to changing the way we go about teaching and learning. Students today engage in technology as early as two years old, yet education still tends to look much like it did in the 1960's. The RAMTEC centers will enable our instructors to teach in a blended learning manner using E-learning materials with real life simulators and authentic activities by using hands- on learning to build & operate robotic and advanced automation equipment, design & build parts and share these ideas with each of the other centers through the web. These activities will be CTE/STEM related and address the high academic standards across the disciplines. We will provide RAMTEC students the ability to do hands on, real life activities in the classroom using the identical equipment used in Industry. Professional Development will be provided to each RAMTEC instructor to make sure they are Industry Certified. Cross training with be integrated for career pathway instruction in Welding, Engineering & Advanced Manufacturing, Precision Machining, and Computer Networking. The students in these programs could be offered welding certification, robotics, CNC certification and industrial maintenance certification. This will allow the existing programs to utilize the RAMTEC centers equipment to cross train students and offer them stackable certifications and post-secondary college credits. Each pathway program currently has an advisory committee made up from people from Industry and postsecondary representatives to make sure the program is meeting the guidelines of the state and local Industry. The advisory committees will be updated with the new certifications being offered and make sure they directly correlate to the needs of the job market. Post--Secondary education staff will continue to work with each pathway instructor to ensure dual enrollment opportunities continue to build. Instructors in the 7th, 8th, 9th and 10th grades will be given Carnegie Mellon University Robotics training that will allow them to become certified that enables their students to earn Robotics college credit. This will then allow the instructors to expose students to a career pathway in Advanced Manufacturing to help drive more interest to student to enroll in RAMTEC certification programs

25. Please provide the name and contact information for the person and/or organization who will oversee the evaluation of this project.

Projects may be evaluated either internally or externally. However, evaluation must be ongoing throughout the entire period of sustainability and have the capacity to provide the Ohio Department of Education with clear metrics related to each selected goal.

Please enter your response below:

Meta Solutions, Tad Douce, Vice President of Innovation and Adult Learning at META Solutions 2100 Citygate Drive |Columbus, OH 43219
614-473-8300

26. Describe the overall plan for evaluation, including plans for data collection, underlying research rationale, measurement timelines and methods of analysis.

This plan should include the methodology for measuring all of the project outcomes. Applicants should make sure to outline quantitative approaches to assess progress and measure the overall impact of the project proposal. The response should provide a clear outline of the methods, process, timelines and data requirements for the final analysis of the project's progress, success or shortfall. The applicant should provide information on how the lessons learned from the project can and will be shared with other education providers in Ohio. Note: A complete and comprehensive version of the evaluation plan must be submitted to ODE by all selected projects.

Consortium partners are partnering with META Solutions to provide an in-depth program of research and evaluation in order to produce key information about the effectiveness of advanced manufacturing implementation how it relates to the student outcomes identified. A systematic research process will be employed with both an internal project team and external evaluator to work on the program evaluation. The evaluation will use both qualitative and quantitative data collection and analysis. A competency based educational model integrates pre/post assessments as embedded measurements for curriculum objectives that RAMTEC centers will assess with e-assessment management systems. 2016-2017: identify instructional competencies required for students in manufacturing pathways; pre-assess student knowledge and prescribe effective training based on the competencies required of the Advanced Manufacturing model being used; (on-going) formative assessments provide data analysis of both individual and class results that identify instructional areas that are weak and need additional

teaching: post-testing will occur upon completion of the program and before industry certification tests are taken. 2016-2022: Evaluator will assess: Training effectiveness as a result of assessment system; Performance and satisfaction data collected from students and employers - business oversight, and employer evaluations of student interns and adult employees who are graduates and trained in one of the RAMTEC centers. Benchmarks (disaggregated by gender): graduation, community college credits, passage of industrial certifications, and job placement and students planning to pursue further education, training, or employment; cost savings and cost reallocation per FIT. final analysis of progress, success or shortfall Ongoing formative annual evaluation submitted to the Board of Education and the ODE will continue beyond the grant period and will conclude with a summative program evaluation at the end of the 5 years. All reports will adhere to national standards of confidentiality protecting any personal information. Project leaders will submit proposals to share progress at all state conferences and forums. Project team will communicate progress quarterly to Board of Education and community. Sharing lessons learned across Ohio Additionally, the evaluation will consider the impact of the project as it relates to the conditions for sustainability and expansion across the state.

27. Please describe the likelihood that this project, if successful, can be scaled-up, expanded and/or replicated. Include a description of potential replications both within the district or collaborative group, as well as an estimation of the probability that this solution will prove useful to others. Discuss the possibility of publications, etc., to make others aware of what has been learned in this project.

The response should provide an explanation of the time and effort it would take to implement the project in another district, as well as any plans to share lessons learned with other districts. To every extent possible, applicants should outline how this project can become part of a model so that other districts across the state can take advantage of the learnings from this proposed innovative project. If there is a plan to increase the scale and scope of the project within the district or consortium, it should be noted here.

Not only is the project able to be replicated in other districts in Ohio, but the proposal is specifically designed to replicate RAMTEC Advanced Manufacturing training model within two additional Career Tech Centers in regions where advanced manufacturing is an in-demand career field. The first RAMTEC center took 3 years to design and implement. and was then replicated for the first time during Straight A Round 2. During that replication, Tri-Rivers successfully scaled the model within 9 months to add 8 new RAMTEC centers across Ohio. To ensure quality replication, the vast majority of training occurs at the Tri-Rivers RAMTEC center in Marion. Grant dollars are used for equipment and training so the new RAMTEC centers will be operational in less than six months. Tri-Rivers knows this work is critically important as Ohio's workforce shifts from low skill industrial work to high skill advanced manufacturing. The Ohio Association of Community Colleges stated, "We must create a network of education, training, and research to develop a highly -skilled workforce". RAMTEC has responded to this need by spending the last 3 1/2 years collaborating with industry, state, and educational leaders to identify and obtain the training equipment and facilities to meet the needs of Ohio's Manufacturing community. RAMTEC was designed and built to answer exactly what industry was saying they needed, and as a result, interest is high to find a way to replicate RAMTEC in other counties in Ohio. Further replication of RAMTEC model is the centerpiece of this grant proposal. As the state's only RAMTEC training provider, Tri-Rivers is uniquely positioned to support additional Career Tech Centers in creating the future for Ohio's advanced manufacturing workforce training. Tri-Rivers has the capacity to support additional districts and the training mechanisms in place to quickly scale and expand consortia district capacity to implement the model. Tri-Rivers is not requesting any funds to scale or expand services locally, but is facilitating the work in consortia Career Tech Centers so they can be immediately successful. The RAMTEC consortium partners currently have the existing facilities, administration, instructional and curriculum staff to replicate the RAMTEC philosophy. RAMTEC will share its 2 years of experience to help the consortium members achieve the same goals in six months. Tri-Rivers already has strong partnerships with Post--Secondary institutions, Career & Technical Centers, and business leaders across Ohio. These two sites were chosen because JobsOhio data demonstrates that these regions have a large percentage of their workforce employed in advanced manufacturing career pathways. The identified career centers will share certified trainers for specialized instruction while quickly expanding the pool of trained staff by being able to certify additional instructors on the equipment and providing on-going professional development. RAMTEC has successfully done what no other facility in the United States has succeeded in doing by bringing together both Industry and Education partnerships with the largest suppliers of equipment to Industry. These companies have worked with RAMTEC to offer Industry certifications for Robotics, CNC Machining, Welding, Industrial Maintenance, and Mechatronics under one roof. These companies offer RAMTEC center financial support and proprietary curriculum required to replicate RAMTEC centers across Ohio with minimal sustaining costs. With Ohio having an immediate need for 60,000 workers in advanced manufacturing, we must take advantage of this offer before we lose the opportunity to any other state. We must keep Ohio as a leader in advanced manufacturing.

By virtue of applying for the Straight A Fund, all applicants agree to participate in the overall evaluation of the Straight A Fund for the duration of the evaluation time frame. The Governing Board of the Straight A Fund reserves the right to conduct an evaluation of the project and request additional information in the form of data, surveys, interviews, focus groups and other related data on behalf of the General Assembly, Governor and other interested parties for an overall evaluation of the Straight A Fund.

PROGRAM ASSURANCES: I agree, on behalf of this applicant, and any or all identified consortium members or partners, that all supporting documents contain information approved by a relevant executive board or its equivalent and to abide by all assurances outlined in the Straight A Assurances (available in the document library section of the CCIP).

Charles Speelman, Tri-Rivers Superintendent, 11/30/2015

Consortium

Tri-Rivers (065268) - Marion County - 2016 - Straight A Fund - Rev 0 - Straight A Fund

Save And Go To

Consortium Contacts							
First Name	Last Name	Telephone Number	Email Address	Organization Name	IRN	Address	Delete Contact
Staci	Kaufman	1-800-686-3944	kaufman.s@vantagecareercenter.com	Vantage Career Center	051672	818 N Franklin St, Van Wert, OH, 45891-1304	
Margaret	Hess	513-932-5677	margaret.hess@mywccc.org	Warren County Vocational School	051474	3525 N State Route 48, Lebanon, OH, 45036-1038	

Partnerships

Tri-Rivers (065268) - Marion County - 2016 - Straight A Fund - Rev 0 - Straight A Fund

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Partnerships							
First Name	Last Name	Telephone Number	Email Address	Organization Name	IRN	Address	Delete Contact
John	Burkhart	4195663636	jburkhart7@gmail.com	IST Ohio		150 Industrial Drive, , Lexington, Ohio, 44904	
Tad	Douce	6144738300	tdouce@metasolutions.net	META Solutions		2100 Citygate Drive, , Columbus,, OH, 43219	
Kevin	Kahle	419-532-3890	kevinkahle@bktool.com	B-K Tool Design		480 W. Min St, PO Box 416, Kalida, , OH , 45853	
William	Sillies	513-860-4299	wsillies@remtec.com	REMTEC		6049 Hi-Tek Court, , Mason,, OH , 45040	
Missy	Daugherty	5133981414	a.daughert@ashleyward.com	Ashley Ward		7490 Easy Street, , Mason, Ohio, 45040	
Keith	Boecker	4197845399	local211@defnet.com	General Motors - Defiance UAW		26427 State Route 281 East, , Defiance, Ohio, 43512	

Implementation Team

Tri-Rivers (065268) - Marion County - 2016 - Straight A Fund - Rev 0 - Straight A Fund

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Implementation Team								
First Name	Last Name	Title	Responsibilities	Qualifications	Prior Relevant Experience	Education	% FTE	Delete Contact
Tad	Douce	META VP of Innovation and Adult Learning	External evaluator - coordinate all evaluation activities for project	Define, communicate and drive overall strategic and growth agendas for META's Education Solutions Division. This includes analyzing industry and market trends, evaluating the needs of the customer, and aligning stakeholders for the division's future business/initiatives. Works with other leaders to define and champion business commitments and priorities to guide internal decision making. Bringa leadership and management experience to hire, coach, and develop the team for Adult Learning, Professional Development and Creative Services. Creates a culture that celebrates success, professional growth and will support the communication and implementation of change in the organization.	Tad Douce received 2015 Tri-Rivers Lautenslager Distinguished Service Award recognizing his many contributions, including those to RAMTEC. Tad Douce has been instrumental in the continuous development of the Tri-Rivers Engineering programs and RAMTEC facility. Since the mid-1990's he has participated in and helped develop the River Valley Middle School as a leader in technical education in Ohio. Tad created state 4-H Lego Robotics program books I and II and first came up with the idea to host the Society of Manufacturing Engineers Educational Foundation's National Robotics Challenge in Marion in 2002 when they could no longer afford to run the operation at the Rochester Institute of Technology." Without his constant support, friendship and collaboration there would be no National Robotics Challenge (NRC), RAMTEC Vex Robotics League and more than likely no RAMTEC. He was one of the leaders in the community that helped us create the vision., The highly successful RAMTEC Vex Robotics League and the RAMTEC Advanced Manufacturing & Engineering	BS Technology Education	5	

					programs have grown into national prominence from this contest.			
Chuck	Speelman	Superintendent	As lead district superintendent in the consortium, Mr. Speelman will be responsible for the communication of the overall vision and expectations held within the grant. He will be responsible for the scheduling of the quarterly and bi-annual advisory meeting and oversee the data collection of the performance measures.	As lead district superintendent in the consortium, Mr. Speelman will be responsible for the communication of the overall vision and expectations held within the grant. He will be responsible for the scheduling of the quarterly and bi-annual advisory meeting and oversee the data collection of the performance measures. For the past two year Mr. Speelman has led the vision to build the current RAMTEC center located at Tri-Rivers Career Center in Marion, OH. He also led the district construction team, which served as the construction managers for the project. The project came in under budget and on -time and has been identified as a "best practice" training site by many of the manufacturing partners.	Mr. Speelman has over 12 plus successful years as a superintendent in Ohio public schools. In 2005 the district in which he was superintendent for the previous four years was named one of the top ten most improved school districts in the state by ODE, based on performance measures. He was recently name as one of the board of directors on the Ohio Association of Career Technical Superintendents.	MA School Admin, Ashland Univ, Ashland, OH, current ABD Doctoral Student in Exec School Leader. Cohort Program at Seton Hall University,NJ	20	
Ritch	Ramey	RAMTEC Coordinator	Coordinate the development and implementation of the statewide RAMTEC Advanced Manufacturing and Robotics training program. Oversee the state wide advisory committee. Collaborate with RAMTEC facility and industrial partners to implement and develop professional development and certification programs for instructors. Direct, develop and implement student work based	Certified Project Lead the Way (PLTW) Digital Electronics, Computer- Integrated-Manufacturing (CIM) and Engineering Design and Development instructor	Certified Project Lead the Way (PLTW) Digital Electronics, Computer- Integrated-Manufacturing (CIM) and Engineering Design and Development instructor	BS - Adv Tech Education (BGSU); AAS in Engineering (Marion Technical College) Ohio Vocationally Certified Engineering instructor	20	

			robotics camps. Develop and oversee certification process for RAMTEC facilities coordinators and staff.					
Larry	Hickman	Executive Director, Tri Rivers Career Center	Coordinates all district level compliance documentation and works closely with fiscal office to insure the local district director has a work knowledge of the program alignment and crosswalk opportunities that exist in aligning training. Mr. Hickman will sit on the core RAMTEC planning team and provide guidance to the team on opportunities to support and expand project based learning for students and develop new opportunities for students to be engaged and innovate.	Highly skilled school leader that currently serves as the State President of Ohio's largest Career Tech organization (Ohio ACTE). Mr. Hickman has 28 years in CTE and has been recognized for his innovation and ability to develop programs meeting the needs of all students.	Mr. Hickman was a member of the planning and design team that build the first RAMTEC center.	Ashland University (Supt/Princ license); Bowling Green State University (MA Guidance, Career Tech Ed) Mount Vernon Nazarene Un (Music Ed)	10	
John	Burkhart	President, IST-Ohio	Mr. Burkhart's responsibility is to oversee the RAMTEC partnerships with Industry partners. He will coordinate the working relationships with FANUC Robotics, FANUC CNC, Motoman Robotics, Allen Bradley, Parker Hannifen and Lincoln Electric to ensure all training needs and certifications are being properly administered. He will also coordinate the installation and training of each of the RAMTEC partners and ensure instructors are receiving	Mr. Burkhart has been working with Ohio's State Department of Adult & Career Technical Education for over 25 years. He has correlated and performed skills needs analysis on equipment and curriculum needed to operate career pathway programs across the state. Mr. Burkhart has been a past Career & Adult Education Hall of Fame inductee as well as being inducted into the North Central State College entrepreneur of the year program.	Mr. Burkhart has worked in the past with the Ohio Department of Adult & Career Technical Education staff to help correlate skills and competencies to Ohio's ITWorks program. The ITWorks progam is a very comprehensive program to address Computer Web Page Design, Interactive Multimedia, Computer Maintenance and Digital Design. Mr. Burkhart was partnered with the existing RAMTEC Consortium to ensure communications between Education and Industry and also facilitate RAMTEC facility setup. Mr. Burkhart has worked with the RAMTEC	Graduate of North Central State College 1975, Electrical Engineering	30	

			Industry certifications. Mr. Burkhart will overseer requirements for equipment specifications for room layout, electrical requirements and air requirements at each RAMTEC location.		program to ensure skills and curriculum correlations have been meet between Education and Industry in the areas of Robotics, CNC Machining, Industrial Maintenance, Robotic Welding and Computer PLC controls.			
Staci	Kaufman	Vantage Career Center Superintendent	Ms. Staci Kaufman has served as Vantage Career Center's Superintendent since 2007. Her responsibilities include supervising the buildings and staff as well as the High School Programs and Adult Education Programs. Prior to becoming Superintendent, Ms. Kaufman was a Supervisor at Four County Career Center from August 1991 - June 2007, she also was an Instructor as Northwest State Community College (June 1987 - August 1991) and a Senior Lecturer at The Defiance College (August 1985 - August 1991).	Prior to becoming Superintendent, Ms. Kaufman was a Supervisor at Four County Career Center from August 1991 - June 2007, she also was an Instructor as Northwest State Community College (June 1987 - August 1991) and a Senior Lecturer at The Defiance College (August 1985 - August 1991).	Prior to becoming Superintendent, Ms. Kaufman was a Supervisor at Four County Career Center from August 1991 - June 2007, she also was an Instructor as Northwest State Community College (June 1987 - August 1991) and a Senior Lecturer at The Defiance College (August 1985 - August 1991).	She received her Master in Secondary Education in 1986.	5	
Margaret	Hess	Warren County Career Center Superintendent	Ms. Maggie Hess has served as Superintendent of Warren County Career Center since 2004. Her role as Superintendent is to oversee day to day operations of the High School and Adult Education programs as well as staff and buildings.	Oversee daily operations of the high school and adult education programs.	From July 1989 - August 2004, Ms. Hess served as Special Education and Campus Director Administrator at Great Oaks Career Campuses.	She received her Master's Degree in Educational Administration and Supervision in 1982.	5	
Pete	Prichard	Director of Vantage	Mr. Pete Prichard has served as	Oversees program and staff	Oversees program and staff	Wright State University with	10	

		Career Center	Director of Vantage Career Center since 2007. In his role as director, he oversees the programs and staff.			his Master of Education in Educational Leadership in 2010.		
Tom	Harris	Director of Warren County Career Center	Mr. Tom Harris has served as Warren County Career Center's Director since 2007. His roles include overseeing the programs and staff as well as directing training and development of new programs. Prior to his director role at Warren County Career Center,	Oversees the programs and staff as well as directing training and development of new programs	Mr. Harris was the Adult and Community Education Director as Greene County Career Center (June 2001 - June 2007), the Adult Director of Millstream Career and Technology Center in Findlay (June 2000 - June 2001), and the Program Manager at Ogden - Weber Applied Technology Center (College) (November 1994 - June 2000).	Masters of Art in Organizational Management from the University of Phoenix and in 2009 received his Superintendents Licensure in Education	10	
Stephen	Earnest	Treasurer, Tri Rivers Career Center	Fiscal agent responsible for ALL financial aspects of the administration of the RAMTEC grant on behalf of all consortia	Mr. Earnest has been a school treasurer / fiscal officer for nearly 30 years.	Mr. Earnest has been a treasurer in five four different districts. He currently oversees all expenditures related to the RAMTEC Tri Rivers. He understands the nature of the project and the tight timelines.	BS Bus. Admin, Bowling Green, MA in Bus. Admin, Ashland U, Certified CPA	10	
Mark	Edington	Certified Robotics Instructor	Conduct all certification training for consortium members. He will be the lead instructor at RAMTEC Tri Rivers to conduct training for industry incumbent workers. He will market, recruit and conduct open houses for industry partners at RAMTEC Tri Rivers	FANUC Robotics Certification. Fully certified on Motoman Robots. One of two instructors for FANUC and is the only Motoman certified instructor. 25 years experience in industry building robotic equipment and maintaining its operation. He has been to Japan to visit FANUC Corporation and to see first hand how robotics can help to improve the efficiency of today's manufacturing environment.	Has successfully trained more than 60 local incumbent workers and has successfully certified them in FANUC Robot Operations. He has worked in conjunction with Ritch Ramey, daytime instructor, to certify the first students in high school in Ohio with FANUC Robot Operations.	ISO 9000 and 9001, Motoman Merit Certified Trainer	30	