



THOMAS P. MILLER & ASSOCIATES

City of Key West

Proposal for Grant Writing Services

December 7, 2015

Contact:

Elizabeth Higgins, Senior Project Consultant

Phone: 916-276-8731

Email address: ehiggins@tpma-inc.com

Website: www.tpma-inc.com



Cover Letter

Dear City of Key West, Florida City Clerk

Thomas P. Miller & Associates, LLC (TPMA) is pleased to submit the attached proposal to the City of Key West for grant writing services.

Celebrating over 26 years in business, TPMA has a long history of grant writing, strategic planning, sophisticated qualitative research techniques, policy analysis and guidance for education, healthcare, economic development, and workforce development clients across the United States. This is an exciting project and we have assembled a highly qualified team of professionals to expertly complete the services defined in the scope of work. TPMA has extensive grant writing experience having garnered over \$247 million in funding from federal and state agencies, and private foundations for our clients since our founding in 1989.

We strive for excellence with all clients, but, for the reasons described above, our Project Team would particularly value the opportunity to put our expertise to work with the City of Key West, Florida. We believe strongly that this opportunity can create work of superior quality, and we look forward to working together.

We will comply with all insurance forms and requirements upon reward of contract. If you have any questions or need any additional information regarding the project, please contact the authorize representative able to negotiate the terms of an agreement:

Elizabeth Higgins, Senior Project Consultant, Grant Manager
1630 N. Meridian St, Suite 430
Indianapolis, IN 46202
Office: 317-894-5508
Cell: 916-276-8731
ehiggins@tpma-inc.com
www.tpma-inc.com

Thank you for your consideration.

Sincerely,



Thomas P. Miller
President and CEO
Thomas P. Miller and Associates, LLC

Scope of Services/ Firm Experience

Founded in 1989, Thomas P. Miller and Associates, LLC (TPMA) has a long and rich history of partnering with public, private, and nonprofit organizations to develop actionable workforce and education systems and implement strategies for economic growth. For more than 26 years, TPMA has provided clients a range of services to design, develop, evaluate, and implement effective programs. TPMA views our clients as partners and takes pride in working with partners to move items from paper into tangible results. TPMA has been particularly successful at translating completed research, analysis and planning efforts into implementation activities tailored to the assets and opportunities of each client. Our work helps organizations focus their efforts to create effective development strategies, generate needed jobs and spur economic growth.

Organization Overview

TPMA Vision:	Incorporating workforce development and education advancement approaches into the mainstream of economic development strategy
TPMA Mission:	We align people, technology, and initiatives to enhance the economic value of communities, educational institutions, and companies.
Years of Operation:	Over 26 years (founded in 1989)
Organization Size:	60 employees
Incorporation status:	Limited Liability Company (LLC) owned by Thomas P. Miller, President & CEO
Locations:	Indianapolis, Indiana (headquarters) Lexington, Kentucky Denver, Colorado Holland, Michigan Youngstown, Ohio Orlando, Florida Dallas, Texas
Service Areas:	Nationwide (current projects in 36 states)

TPMA has a bias toward strategic fund development that includes diverse funding sources. Our fund development approach is based on the premise of understanding our clients' long-term vision for their organizations, and identifying funding sources whose strategic priorities align closely with that vision. We then work collaboratively with our clients to prioritize funding targets, craft a program concept and approach, and prepare comprehensive grant proposals.

We possess expertise in the many areas and phases of fund development and grant writing, including:

- Program design
- Technical writing
- Engaging partners and creating consensus for collaborative solutions

- Data analysis
- Program evaluation
- Program implementation

TPMA has worked with over 50 customers, in over 30 states to provide grant writing assistance and grant research consulting. This includes contracts with K-12 school districts, community colleges, four-year public universities, four-year private colleges and universities, workforce investment boards, non-profit organizations, economic development organizations, and private companies.

TPMA has extensive grant writing experience having garnered over \$247 million in funding from federal and state agencies, and private foundations for our clients since our founding in 1989.

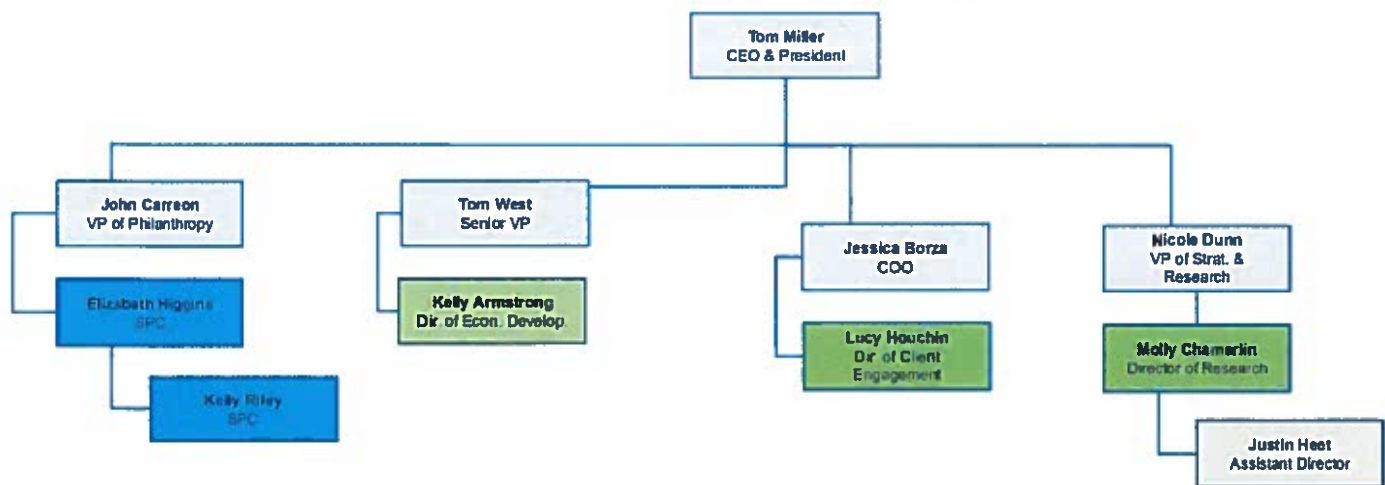
Over the past 5 years, we have secured over \$108 million for our clients. A small sample of recent grant wins in 2015 include:

- State of Indiana, U.S. Department of Labor Sector Partnership National Emergency Grant program: \$4.875 million
- State of West Virginia, U.S. Department of Labor Sector Partnership National Emergency Grant program: \$5.25 million
- Montgomery County Workforce Investment Board (Pennsylvania), U.S. Department of Labor Linking to Employment Activities: \$500,000

TPMA’s approach to all projects is to provide data-driven, action-oriented recommendations to clients and partners. The firm’s extensive experience with federal grants and education and workforce related projects ensures that recommendations are grounded in reality and considered in light of what is feasible in the time frame available and for the project overall.

TPMA’s team based approach ensures the right team member with the skill set best-suited for each task is leveraged to the greatest degree for the benefit of the client. If a grant is identified that requires a specific expertise outside our scope, TPMA’s extensive network of staff and qualified subcontractors can be leveraged to provide the best team. Subcontractors are only utilized with the permission of the client. Because TPMA has 60 employees, we are able to leverage knowledge and skill sets from other team members to ensure a robust knowledge-base is utilized for each client project.

Project Team Organizational Chart (full organizational chart included in attachments)



Bankruptcy/Litigation:

TPMA has never filed for bankruptcy.

TPMA has no past or present litigation or arbitration or dispute of services with clients.

Project Team

This project will be led by an assigned Project Manager, Elizabeth Higgins. She will act as the main contact to City of Key West staff to ensure consistency in communication. The Project Manager will work with the other project staff to determine appropriate timelines and oversee all parts of a project to ensure work is completed on time. The grant writer, Kelly Karbowicz-Riley, will participate in meetings to absorb information so she can write the grant proposal under the direct supervision and with the support of the other team members. The Project Manager will review and edit every draft and collect feedback from City staff to incorporate into the final proposal. The Project Manager may additionally facilitate concept development sessions when College staff need help developing an idea.

If a grant project is related to economic development or workforce development, one of our experts from the economic or workforce development teams will be brought into the project to advise and ensure best practices are utilized in the concept development and project design. These experts can also facilitate brain storming sessions, lead sector partnership initiatives, and guide City staff as they identify community needs.

Project Team

- Project Manager, Grants Expert – Elizabeth Higgins
- Grant Writer – Kelly Riley
- Research & Evaluation Expert – Nicole Dunn
- Florida Local Expert, Research & Evaluation Expert – Justin Heet
- Economic Development Expert- Kelly Armstrong
- Workforce Development Expert – Lucy Houchin

Elizabeth Higgins, Senior Project Consultant & Grant Manager (Project Manager)

Master of Public Affairs and Nonprofit Management, School of Public and Environmental Affairs at Indiana University, Indianapolis, IN

- Completed coursework in fund development and grant writing

Bachelor of Arts in Counseling Psychology, William Jessup University, Rocklin, CA

Bachelor of Arts in Theology, William Jessup University, Rocklin, CA

Associate of Arts in Liberal Studies, Cuesta College, San Luis Obispo, CA

Sample of Project Experience:

- Alamance Community College, NC, 2015 – Serving as the strategic advisor in the identification and pursuit of federal and state grant funds.

- First in the World (DOE), WV, 2015 – Serving as Project Lead in the grant development process for one community college located in West Virginia for future submission of a grant proposal for the DOE’s First in the World competition.
- Strengthening Institutions Program (DOE), WV, 2015 - Served as Project Lead, provided coaching, strategy consultation, and grant editing services to Eastern West Virginia Community & Technical College.
- Sector Partnership National Emergency Grant (DOL), WV, 2015 – Served as Project Lead, providing coaching and strategy services to the West Virginia Community & Technical College system resulting in a \$5.25 million dollar award from the Dept. of Labor.
- Serve Indiana (a division of the Indiana Department of Workforce Development), IN, 2013 - 2015 – Served as Deputy Director and previously as a Program Officer, provided oversight to sub-grantees and facilitated funding processes for the AmeriCorps*State, Hoosier Corps, and Indiana Kids programs. Reviewed AmeriCorps grant proposals, presented funding recommendations and defended proposals before the Indiana state commission on service and volunteerism (Serve Indiana Commission). Supported executive staff and provided instruction for three nonprofit organizations as they identified community needs, developed a program design, selected performance measures, forecasted budgets, and developed internal policies to comply with federal regulations.
 - AmeriCorps*State, IN, 2013-2015 – Provided support, assistance, and oversight for 18 AmeriCorps programs (located statewide). Monitored programs and implemented plans of corrective action to ensure compliance with federal laws and regulations. Conducted fiscal reviews, budget consultations, budget development and management, procurement, grant close-out and reconciliation. Ensured monitoring processes and management systems complied with federal laws and stated objectives.
 - Planning Grant Advisor AmeriCorps*State, IN, 2013-2015 – Led multiple nonprofit organizations, including one institutions of higher education, through program development, research and writing processes with the purpose of designing quality programs to meet pressing community needs through the utilization of federal funds.
 - Hoosier Corps, IN, 2013-2014 – Completed assessment of statewide Hoosier Corps program to determine efficiency, analyze adherence to program goals, and create projections for future funding needs. Re-designed program to remove excess activities not related to mission and goals, streamlined data collection and reporting, and reduced program expenses. Created grant application instructions and notice of funding opportunity, managed grant submission and review process, and awarded funds to selected programs.
 - Hoosier Corps, IN, 2014-2015 - Monitored pass-through funds, provided technical assistance, and executed oversight and monitoring of sub-grantees. Implemented new control system to monitor sub-grantee award draw-downs and predict future funding levels. Saved the State over \$100,000 per year.
- Finish Line Youth Foundation, IN 2014 – Developed and completed an internal assessment and conducted key informant interviews to support recommendations for the FLYF board to enhance corporate employee engagement in Foundation giving and marketing initiatives.

- Legal Services of Northern California’s Senior Legal Hotline, CA, 2009 – 2011 – Served as a Paralegal, Grant Manager, and Administrative Assistant to develop protocol, manage grant requirements, report outcomes, meet project goals, and led organization through monitoring activities for two federal housing counseling grants totaling \$160,000. Assisted with grant writing and submissions.

Kelly Karbowicz Riley, Project Consultant- Grant Writer

Bachelor of Arts, Integrated Strategic Communications, University of Kentucky, Lexington, KY

Kelly joined TPMA from the non-profit sector (Lexington Art League and Lexington Habitat for Humanity) where she worked on fund development, sponsorships, grants, community partnerships, event planning and management. Her strengths are recognizing opportunities for both financial capital as well as organizational recognition and development in their field. Kelly has experience working with Community Foundations, VISTA programs and developing community and corporate partnerships. She has assisted in strategic planning and development strategies for non-profits.

Selected Project Experience:

- Skill Up! Indiana Grant Writing, Zionsville Chamber of Commerce, October- December 2015 - Worked with industry leaders and educational partners to help develop programming for a strong workforce to meet the need of the surge in the tech sector in Indiana. Wrote grant proposal for Phase II and Phase III of the application process.
- Big Sandy Community College, 2015 – Conducted research for funding opportunities for higher education, technology and healthcare in rural communities. Presented funding opportunities with other TPMA staff. Developed content and facilitated components of federal grant funding applications.

Nicole Dunn, Vice President of Strategy and Research

As Vice President of Strategy and Research, Nicole leads a team of more than a dozen researchers and evaluators focused on turning data into intelligence.

Master of Public Affairs, Nonprofit Management, Highest Distinction. Indiana University School of Public and Environmental Affairs, Indianapolis

Bachelor of Science, Public Affairs, Highest Distinction. Indiana University School of Public and Environmental Affairs, Indianapolis

Selected Project Experience:

- BillingsWorks: State of the Workforce Report and Action Plan, MT, 2015 – Assisted the BillingsWorks Workforce Council in developing its State of the Workforce report and Strategic Action Plan. Through a series of focus groups, interviews, a survey, and training analysis, developed workforce indicators and an Action Plan to position the community as the premier business-driven talent hub by 2023.
- Nevele Resort, Casino & Spa: Regional Workforce Assessment and Training Plan, NY, 2013-2014 – Completed a comprehensive workforce assessment and facilitated a six-month regional education and training planning process to prepare the Mid-Hudson Valley region for the expansion of the hospitality and gaming industry.

- **Tioga Downs Casino: Workforce Plan, NY, 2014** – Completed a workforce and career pathways assessment for Tioga Downs Casino that analyzed labor availability, documented existing workforce development efforts, made recommendations for expansion of efforts, and ensured Tioga Downs understood the full breadth of workforce development issues that must be addressed in a New York State gaming license application.
- **Greater Capital Region Workforce Investment Boards: Workforce Innovation Fund Evaluation, NY, 2012-2015** – Three-year pre-/post-outcomes and implementation evaluation of a \$3 million USDOL Workforce Innovation Fund Grant covering an 11-county, 4 Workforce Investment Board region in upstate New York.
- **Mid-Ohio Valley Regional Council: Ethane Cracker Supply Chain Analysis, WV, 2014-2015** – Conducted a study to assist the region in developing economic development strategies centered on how existing business can take advantage of the proposed cracker, as well as business attraction strategies to engage companies within the ethane cracker supply to the region.
- **Workforce Investment Board Mid-Ohio Valley: State of the Workforce Study, WV, 2013** – Completed a State of the Workforce Study for the nine county Mid-Ohio Valley region in West Virginia, including a labor market assessment, county profiles, and a target industry analysis. Gathered information through secondary data sources, as well as interviews and county input sessions in each county
- **Mid-Willamette Valley Council of Governments: Make It In The Mid-Willamette Valley, Manufacturing Supply Chain and Industry Needs Analysis, OR, 2014** – Examined supply gaps and market trends to better serve manufacturers in Oregon's Mid-Willamette Valley, including barriers to growth, employment projections, and opportunities for on-shoring.

Justin Heet, Assistant Director, Research & Evaluation (located in Orlando, FL)

Justin specializes in economic impact analysis, the analysis of labor market and demographic trends, and regional economic development. In addition to these areas, his experience is highly multi-disciplinary, due to his interests in research methodologies and the effect of technological change on the workplace and government.

Bachelor of Arts, Economics and Political Science, Indiana University, Bloomington, IN.

Selected Project Experience:

- **Rural Health Innovation Collaborative (RHIC) Business Plan, IN, 2015** – The RHIC, comprised of a group of healthcare provider, higher education and economic development stakeholders in the west-central region of Indiana, strives to advance healthcare workforce development, strengthen healthcare access, and attract investment to the state. The RHIC Society for Simulation in Healthcare-accredited Simulation Center provides a unique avenue for innovative healthcare workforce training for the partners. TPMA conducted a qualitative assessment to document and specify community need for an expanded Simulation Center, developed several operational budget modeling scenarios. And implemented a study to estimate the fiscal and economic impact of the Simulation Center on the region.
- **City of Bridgeport, NE: Impact and Feasibility Study of the Bridgeport SRA, 2015** —TPMA is creating an operating and maintenance budget for the SRA that the City can present to the City Council,

demonstrating anticipated expenses, revenues, and cash flow for the first 5 years of City ownership. Then, TPMA will analyze the overall economic and then the fiscal effects of the SRA for the City, Morrill County, and State of Nebraska.

- **Indiana State University, IN: Impact and Feasibility of the Hulman Center Renovation Project, 2014-2015** — TPMA performed an objective, third party analysis of the current and projected economic impact of a project to renovate and expand the Hulman Center Arena. Then, TPMA conducted a fiscal impact analysis to project state and local tax revenues due to the Project and to evaluate the feasibility of creating a special taxing district in order to help finance the project. Based on the results of our analysis, TPMA provided strategic guidance regarding the development potential of the site and the feasibility of financing the project through local sales and excise tax revenues. Based in part on the results of our study, the Indiana General Assembly agreed to provide financial assistance for the project, resulting in a \$37.5 million increase in ISU's budget for 2016.
- **The Impact of Immigration on Indiana, Indiana (2008)** Led a unique effort funded by the Lumina Foundation to assess the economic impact of immigration on the State of Indiana that combined demographic micro-sample analysis with economic impact research; the final result of the project was to be considered the independent expert witness for the Indiana General Assembly's contemporary immigration legislation.

Kelly Armstrong, Director of Economic Development

Kelly brings her experience leading efforts in Business Attraction, Business Retention and Expansion in both rural and urban settings in communities spanning populations of 10,000 to 1.3 million. She has successfully launched new cluster strategies by collaborating with all levels of government and spearheading corporate partnerships with a focused approach to regional economic vitality and community betterment.

Bachelor of Arts, Public Administration, University of Northern Iowa, Cedar Falls, IA

Selected Project Experience

- Launched a highly successful new healthcare cluster strategy, resulting in 536 new headquarter jobs with \$65,000 average wage (\$14,000 over regional average) and \$20 million of investment in first 18 months.
- Designed and implemented new cluster strategy and strategic plan in Craft Distilling while heading Business Attraction efforts resulting in 3 new craft distillers with \$12 million in investment in the first 6 months of launch.
- Branded Louisville as the world leader in innovation, thought leadership, business growth and talent in the cluster through extensive networking, marketing and media relations generating multiple national press hits including *The Washington Post*, *The New York Times*, *The Economist* and other national industry trade publications. (Google: Louisville, Aging Care)
- Created, managed, and executed national industry event that fostered collaboration with five founding partners, which included two Fortune 500 companies. Secured sponsorship in excess of \$250,000 to use as a tool for business recruitment.

Lucy Houchin, Director of Client Engagement, Workforce Development Team

Lucy has worked with national initiatives, states, metro areas, and rural communities to develop demand-driven strategies to connect individuals to careers and businesses to talent needed for growth. She brings first-hand knowledge as a workforce practitioner, as well as extensive knowledge of promising talent development and education practices throughout the country.

Bachelor of Arts English, Butler University, Indianapolis, IN

Selected Project Experience:

- **CareerSource Citrus, Levy, Marion, Workforce Innovation and Opportunity Act (WIOA) Strategic Plan and Transition Plan, FL 2015** – Strategic planning for CSCLM to guide the Board’s work and create a strong foundation for transitioning to WIOA. Completed an assessment of current Board membership and staff organizational structure leading to recommendations for adjustments that will be optimal for supporting the strategic plan and effectively delivering services.
- **Indiana Career Council, Strategic Plan and Implementation Assistance, IN 2014** – Developed a strategic plan and supported its implementation. The plan aligned and coordinated the activities conducted by the state’s education, job skills development, and career training system to ensure that education and training meets the existing and future needs of Indiana’s employers.
- **Oregon Department of Community Colleges and Workforce Development, State and Local Workforce Area Strategic Planning, OR 2014-2015** – Developed a strategic planning toolkit for local workforce boards including a board orientation program and facilitated the strategic planning process for the Oregon Workforce Investment Board.
- **BillingsWorks, State of the Workforce Report and Action Plan, MT 2015** – Assisted the BillingsWorks Workforce Council in developing its State of the Workforce report and Strategic Action Plan. Through a series of focus groups, interviews, a survey, and training analysis, developed workforce indicators and an Action Plan to position the community as the premier business-driven talent hub by 2023.
- **Kentucky Workforce Investment Board, High Impact WIB Standard Revisions, KY 2014-Present** – Provided recommendations to update the Kentucky Workforce Investment Board’s High Impact WIB standards to include WIOA requirements. Reviewed the existing program, hosted focus groups, and interviewed Board members and staff to draft recommendations for program improvements. Then assisted with implementation.
- **Indiana Department of Workforce Development, Business Services Training, IN 2014** – Provided a series of professional development opportunities for business services staff and partners aimed at continuously improving the system’s services to businesses.
- **Michigan Works! Kent & Allegan Counties, Demand-driven Jobseeker Service Delivery Design, MI 2014** – Conducted a review of Michigan Works! Kent & Allegan Counties’ service delivery system, recommending strategies to ensure jobseeker services are demand-driven. Outlined a plan for functional alignment within Service Centers for a seamless jobseeker experience.
- **Waccamaw Regional Council of Governments: 5-year Strategic Plan, SC, 2009** – Developed a 5-year strategic plan for the Waccamaw Workforce Investment Board. Conducted a regional data and asset scan, individual interviews, focus groups with economic development and education

leaders, county stakeholder input sessions, and two special youth input sessions to gather insights from local stakeholders.

Grants Secured for Clients in Past Five Years

FEDERAL & STATE GRANTS	Type of Client	Agency	Total Award	Year
TAAGCCT				
<i>Round 1</i> Pennsylvania Community Colleges	Higher Education	DOL	\$ 20,000,000.00	2011
<i>Round 2</i> Vincennes University	Higher Education	DOL	\$ 2,900,000.00	2012
<i>Round 3</i> Three Rivers College	Higher Education	DOL	\$ 2,750,000.00	2013
<i>Round 4</i> Mountwest Community and Technical College	Higher Education	DOL	\$ 9,461,288.00	2014
Missouri Community College Association	Higher Education	DOL	\$19,700,000	2014
Workforce Innovation Fund				
<i>Round 1</i> New York Steps Up to STEM	WIB	DOL	\$ 3,000,000.00	2012
Oh-Penn Interstate Region	WIB	DOL	\$ 6,000,000.00	2012
Ohio Business Resource Network	WIB	DOL	\$ 6,000,000.00	2012
Innovative CTE Curriculum Grant				
Kokomo Career Center	CTE District	State of Indiana	\$ 75,000.00	2014
Ready to Work				
EmployIndy	WIB	DOL	\$ 8,364,602.00	2014
Other Federal Opps				
Purdue University & Ivy Tech Community College, Smart Grid Workforce Training	Higher Education	DOEnergy	\$ 4,700,000.00	2011
State of Ohio State Energy Sector Partnership (SESP)	State of Ohio	DOL	\$ 6,000,000.00	2010
Linking to Employment Activities				
Montgomery County Workforce Investment Board (PA)	WIB	DOL	\$500,000	2015
Sector Partnership National Emergency Grants				
State of West Virginia	State Agency	DOL	\$5,250,000	2015
State of Indiana	State Agency	DOL	\$4,875,000	2015
FOUNDATION/PRIVATE FUNDING				
Lilly Endowment Round 3 Challenge				
University of Southern Indiana	Higher Ed	Lilly Endow.	\$ 3,000,000.00	2013
Marion University	Higher Ed	Lilly Endow.	\$ 1,000,000.00	2013
ISU	Higher Ed	Lilly Endow.	\$ 3,000,000.00	2013
Valparaiso University	Higher Ed	Lilly Endow.	\$ 1,000,000.00	2013
Rose Hulman	Higher Ed	Lilly Endow.	\$ 1,000,000.00	2013
TOTAL GRANT FUNDING AWARDED:			\$ 108,575,890.00	

Grant Proposal Examples

Grant proposal examples are included in the attachments for the following clients:

- Community Colleges of Pennsylvania
- Mountwest Community and Technical College
- Three Rivers Community College
- Vincennes University

We are limited in the proposals we can share due to client confidentiality. However, all of the proposals above can be accessed through the Department of Labor's contract portal. Each of the proposals above were between \$11,000 to \$26,000. The ranges varied based on the client's preparedness and our level of

involvement. Those on the lower end of the pricing scale were thoroughly ready to engage in the grant writing process and had mostly completed the development phase of the project design. Those on the upper end of the pricing scale needed greater assistance in engaging partners and identifying best practices for their project design. Each project included full grant writing and editing services, with the clients responsible for submitting the proposal in Grants.gov and completing the financial attachments on their own. Some of the projects included grant development assistance by engaging partners or recommending project models to emulate.

Program Approach and Price

What the City Can Expect Working with TPMA

Process for Writing Grant Narratives

When a grant opportunity is under consideration, TPMA staff will identify critical components of the project concept development and proposal writing processes, including, research deadlines, surveys of needs, partner communication and commitments, letter of interest submission due date, number of editing days needed, and final approvals. The components will be organized in a timeline that identifies who is responsible for the activity and the due date for completion. TPMA staff frequently assists clients in developing timelines and are familiar with processes of approvals that many public institutions must adhere to prior to submitting a final proposal.

Each project and program will vary in depth and complexity. For simple projects, TPMA can lead brainstorming sessions and identify critical next steps in the development process by utilizing teleconferencing and videoconferencing.

For more complex projects or programs, TPMA will conduct an on-site launch meeting with key City faculty and staff. Prior to the onsite meeting, TPMA will speak with staff on the phone to identify the phase of the idea and determine the most useful approach for the onsite time. If a general direction is known prior to the onsite meeting, TPMA can assist in pulling research on successful program models for discussion. If the concept is in the early phase, TPMA staff will facilitate brainstorming sessions and help City staff flush out the idea. TPMA may propose potential barriers to implementation or funder acceptance so the group can discuss proactive approaches in addressing potential issues. Once the project idea is well developed, TPMA staff will work with City staff on solidifying partnerships and honing partner roles, identify appropriate research to present in the grant proposal, and assist the City staff in creating a plan for garnering external support of the proposed project. Before each launch meeting TPMA creates an outline of the funder's expectations to use as a guide ensuring the conversations that transpire are in the spirit necessary to honor the funder's mission and funding objectives.

The benefit of having TPMA grant staff work alongside research and evaluation staff is that grant proposals reflect solid research methodologies and include professional evaluation plans. TPMA staff will identify the best research to inform the concept development process as well as the grant narrative. Past research for grant writing clients has included: program models, barriers to entry, fiscal impact, feasibility, evidence-based program outcomes, economic indicators, census and EMSI data, competitor programs,

and more. TPMA can conduct research for each grant proposal or can work directly with City research staff as they conduct their own research.

After gathering a clear picture of the target need, the purpose of the project, and the ultimate goals, TPMA staff will weave the information into the required format indicated in the funder's application instructions. TPMA believes that all grant proposals should communicate a compelling need, highlight evidence-based practices, and outline outcomes that will directly meet the target need. After the first draft is compiled TPMA will provide feedback and suggestions to City staff on how to enhance the proposal or other ways the concept itself might be strengthened. TPMA will create a mock scoring tool that adheres to the funder's point system noted in the application instructions. The tool will be utilized by TPMA team members that were not directly involved in drafting the proposal to score the draft. Their feedback will help strengthen the proposal and ensure the readers are receiving the intended information and that it aligns with the funder instructions. In direct cooperation with the City, TPMA will polish the project until it represents a well-designed and articulate concept prime for implementation. TPMA always creates a "due date" for the final draft to occur a couple days before the application is due to the funder so the client has time to submit early in case there are technical difficulties or questions regarding the submission process. Prior to submitting the final grant packet, TPMA staff review the margins, font style, font size, and spacing careful to ensure it meets the guidelines. Additionally, TPMA will search the proposal to ensure names and abbreviations are used consistently. All documents will be saved according to funder guidelines and ready for submission.

- a. *1. Explain why your organization should be selected for performing the services covered under the RFP and how you can add value to the goals and objectives of the City. Include examples of your success in performing such services with other entities.*

TPMA would be a valuable partner to the City of Key West. Our team possess a great deal of experience in identifying and securing grant funding for public agencies. Beyond the project team, the City would have access to the extensive knowledge and experience of all other TPMA team members which can be leveraged based on the type of project being pursued. For example, if the City was interested in a project to address water treatment facilities, the TPMA team could bring in Dana Riddle, our Director of Healthcare Services, an individual that has a history of identifying and winning funding for communities addressing water treatment projects.

One benefit to hiring TPMA is our access to experience and knowledge, not just internally, but across the country due to our long history of involvement in economic development across the nation.

The team selected for this project has extensive experience in developing grant projects that succeed. Our staff have worked in the field in state and local government implementing grant projects and reporting to federal and state funders.

- b. *From a logistics perspective, explain how your organization intends to interact and interface with the City in the performance of the Services covered under the RFP.*

TPMA's Project Manager would have a monthly check in call with a designated City staff member to ensure continuous communication. When a grant opportunity is identified the City staff member would notify TPMA's Project Manager. Together they would discuss the next steps and timeline for the project. If the City staff already have a developed concept, a video conference would be set up for them to communicate the project design to TPMA staff. If, however, the City staff need assistance in developing the concept or conducting brainstorming sessions, 1-2 TPMA staff members would fly to the City and meet with staff to facilitate the meeting onsite. TPMA would utilize cost-effective means of communication such as video or teleconferencing whenever possible.

- c. *Specify address of Firm's designated office where the majority of work on this project will be performed. Indicate percentage total overall of the Services to be performed by the Firm's office specified above. Specify address of Firm's other office(s) where any part of the work for these Services will be performed, if applicable.*

The majority of the services of this project will be handled by the Project Manager, located in Denver, Colorado and the Grant Writer, located in Lexington, Kentucky, approximately 65% of the contract. The Project Manager and Grant Writer work closely on a daily basis and utilize technology to the greatest degree to achieve efficiencies. The subject matter experts are located Orlando, Florida and our headquarters in Indianapolis, IN and will contribute to approximately 35% of the project.

TPMA's address is 1630 N. Meridian Street, Suite 430, Indianapolis, IN 46202

- d. *Describe any limitations that may exist that would impact your organization's ability to perform the services covered under this RFP. The City of Key West is an aggressive grant seeker.*

One of the benefits of hiring a large firm is that no project is out of reach for TPMA staff. We have the ability to find the expertise and time within our firm or through our extensive network of quality subcontractors to ensure any feasible project is handled in a timely manner. There are no known barriers that would impact TPMA's ability to perform services under this RFP.

- e. *Proposed price for a three (3) year period for the scope of services of the RFP. The price includes, but is not limited to, CONSULTANT'S travel costs (meals and lodging), transportation, fringe benefits, clerical support, salaries, general overhead costs, direct expenses, profit and all other out-of-pocket expenses.*

TPMA proposes a monthly retainer for \$1,000 to cover grant opportunity scanning and communication with staff. Each grant opportunity will then be priced according the size and scope of the proposed project. TPMA's rate would be locked in at \$130 an hour (not including travel) for the length of the contract. Prior to each grant writing project, TPMA would give an estimate of hour based on the services requested by the City. A maximum-allowable amount would be agreed upon in writing before proceeding. TPMA grant writing projects range from \$5,000 – 18,000 depending on the type of grant opportunity pursued and the level of preparation conducted by the client. The City would have the opportunity to revise the scope of the project to increase or decrease TPMA's role based on their own internal capacity.

Monthly Retainer: \$1,000/mo. X 36 months = \$36,000

Travel Costs: \$1,750 per TPMA staff member, per trip

Grant development and grant writing services: \$130 per hour (includes personnel expenses, fringe benefits, clerical support, overhead, and other out-of-pocket expenses).

The City and TPMA will discuss which TPMA staff members need to attend onsite trips and how many trips need to occur each year. TPMA recommends having 1-2 staff members participate in an onsite facilitation or brain storming session for grant opportunities in which the City has not yet designed or developed a program or project concept. For each grant proposal pursued in which the City does not need development assistance, the project design can be communicated to TPMA staff via video conferencing meetings.

If the City would like to have one contract to cover the entire three years, we could discuss the number of grant proposals that would be pursued to come up with a set contract fee amount.

- f. *Any other material as may be helpful to establish that the respondent has the necessary facilities, ability, and financial resources to furnish the required services in a satisfactory manner.*

TPMA has the stability necessary to carry out a three year project. Our team will be available to the City in the long-term to ensure continuity and success.

Familiarity with Florida and the Florida Keys

TPMA has a history of working successfully with Florida communities, through a variety of projects with different focuses and goals. Below is a sample of our projects in Florida.

Client:	Palm Beach State College, as a subcontractor to WorkED Consulting, LLC
City or Region:	Palm Beach County
State:	Florida
Description:	In order to strategically align its educational programming with the industry and occupational needs of Palm Beach County, WorkED Consulting, with TPMA as a subcontractor, together produced a Targeted Program Growth Study. The Study was designed to understand growth industries and occupations and evaluate PBSC's current academic portfolio to inform decisions on resource allocation within the College. TPMA's work focused on an industry and economic snapshot and a detailed analysis of projected growth in middle-skill occupations. Areas of analysis included industry composition, historical growth patterns, small business trends, and growth in demand occupations.
Dates:	2014

Client:	Pellissippi State Community College (SEELC Consortium)
City or Region:	Southeastern Economic and Education Leadership Consortium (SEELC): Knoxville, TN; Blountville, TN; Asheboro, NC; Henderson, NC; Winter Haven, FL; Lake Worth, FL
State:	TN, NC, FL

Description: TPMA is subcontracting to ICF International for their third party evaluation of the US DOL TAACCCT Round III grant for the Southeastern Economic and Education Leadership Consortium (SEELC) made up of schools from Tennessee, North Carolina, and Florida. The grant focuses on welding, machining, and advanced manufacturing with the goal of creating career pathways, providing ongoing career support, and creating regionally based economic solutions to workers' skill needs. As a subcontractor to ICF, TPMA is leading the implementation evaluation which includes conducting monthly and bi-monthly update calls, completing annual site visits to each of the six schools, providing SWOT analyses and other program analysis and feedback, and lending assistance on quarterly and annual performance reports.

Dates: November 2014 – September 2017

Client: CareerSource Citrus, Levy, Marion
City or Region: Citrus, Levy, and Marion Counties
State: FL
Full Description: TPMA facilitated a strategic planning process for CareerSource Citrus Levy Marion in preparation for a transition to new WIOA regulations. The project team held planning sessions with the Board and gained input through interviews with other partners and stakeholders in the CLM region. The resulting strategic plan included five goal areas that the Board identified as key areas for its work moving forward, including strategies to focus on sector partnerships, expanding service delivery strengths, strengthening board member engagement, convening community partners, and communicating services and successes of the talent development community in the region. TPMA also assessed Board membership and staff organizational structure and provided recommendations for adjustments that will be optimal for supporting the strategic plan and effectively delivering services.

Dates: February – May 2015

Client: CareerSource Florida and Policy and Research Group (PRG)
City or Region: Florida statewide
State: Florida
Short Description: TPMA has been subcontracted by PRG to assist in providing a mixed methods approach to evaluating CareerSource Florida's "Pay for Performance" funding model. The analysis will include regional profiles, evaluation monthly/quarterly calls, focus groups and interviews, and outcome reports.

Dates: April 2015 to September 2019

Client: Miami Dade College
City or Region: Miami
State: FL

Full Description: TPMA is conducting a four year quasi-experimental evaluation of the TRAMCON program created by a consortium of four colleges' \$9.98 million USDOL TAACCCT Round 4 grant. The Training and Certification Programs in Manufactured Construction (TRAMCON) will provide a program of skills, training, and education specially designed for the manufactured construction industry. The TRAMCON program is designed to address the current training gap in this industry by providing a complete system of nationally recognized certification programs that will be tied to existing manufacturing technology and construction management programs as well as two-year and four-year degree programs offered by Florida's state colleges and universities. Colleges in the consortium include: Miami Dade College, Polk State College, Santa Fe College and Seminole State College.

Dates: May 2015-September 30, 2018

Client References

SERVICES PROVIDED: Grant Writing - State Funds	
NAME OF ORGANIZATION: Kokomo School Corporation	
ADDRESS OF ORGANIZATION: 1500 S. Washington Street, Kokomo, IN 46904	
CONTACT:	<p>Name: Penny Siefert</p> <p>Title: Assistant Superintendent</p> <p>Address: 1500 S. Washington Street, Kokomo, IN 46904</p> <p>Email: psiefert@kokomo.k12.in.us</p> <p>Phone: (765) 455-8000 ext.306</p> <p>Fax: (765) 455-8018</p>
SUMMARY OF SCOPE OF SERVICES: TPMA worked with the Kokomo School Corporation to prepare a grant application to the Indiana Works Councils and Center for Education and Career Innovation's Innovative Career and Technical Education Curriculum grant program. The proposal centered on implementing the Creating Entrepreneurship Opportunities (CEO) program at the Kokomo Area Career Center, providing students with opportunities to learn about creating their own businesses and interact with local business owners in a variety of sectors. TPMA was responsible for preparation of the entire application, including the statement of need, description of proposed curriculum, budget narrative, and the identification of performance measures, evaluation methods, and approaches to sustainability. KSC was awarded \$75,338 to implement the program.	

SERVICES PROVIDED: Grant Writing & Consortia Building – Federal Funds	
NAME OF ORGANIZATION: Missouri Community College Association (coordinated a consortium comprised of 13 members in Missouri)	
ADDRESS OF ORGANIZATION: 200 E. McCarty, Suite 100, Jefferson City, MO 65101	
CONTACT:	<p>Name: Dawn Busick</p> <p>Title: MoSTEMWINs Project Director</p> <p>Address: 200 E. McCarty, Suite 100, Jefferson City, MO 65101</p> <p>Email: dawn.busick@mccatoday.org</p>

Phone: (573) 634-8787
Fax: N/A

SUMMARY OF SCOPE OF SERVICES: TPMA wrote a successful Trade Adjustment Assistance Community College and Career Training (TAACCCT) Round 4, Department of Labor grant of \$24,456,304 for the *MoSTEMWINS* project. It will implement three major strategies: 1) Accelerate Entry Into Career Programs, 2) Create Clear Pathways to STEM Fields, and 3) Improve Employment Attainment. The 13 college consortium will serve 1,853 participants over the four years of project implementation. Credentials being created or revised include: IT-COMPTIA, Microsoft, Cisco, Cyber Security, Systems Admin & Engineering, Networking; Health Sciences – PharmTech, Ultrasound Tech, Medical Office Assistant, Certified Medical Assistant, Radiology, Certified Associate Healthcare Information and Management Systems; Transportation – Advanced Driving and CDL; Manufacturing – MSSC-CPT, CLT, Technician and Mobile Mechanic, IFPS, Industrial Tech – Mechatronics, ETA, and AWS; Science – Chemical Technology, Environmental Sciences, Chemical Tech, and Life Sciences Lab Assistant. These stacked and latticed credentials will create career pathways and the curriculum development process includes employer engagement and embedded work-based learning opportunities.

SERVICES PROVIDED: Grant Writing – Federal Funds

NAME OF ORGANIZATION: EmployIndy (Marion County, Indiana Workforce Investment Board)

ADDRESS OF ORGANIZATION: 115 W Washington St 450 South, Indianapolis, IN 46204

CONTACT: Name: EmployIndy
Title: Chelsea Meldrum, Director of Development
Address: 115 W Washington St 450 South, Indianapolis, IN 46204
Email: cmeldrum@employindy.org
Phone: (317) 684-7624
Fax: (317) 639-0103

SUMMARY OF SCOPE OF SERVICES: TPMA wrote a successful \$9.4 million grant to the U.S. Department of Labor for the Ready to Work Partnership grant program. The funding will create the *Employ Up* program with the goal of equipping participants (the long-term unemployed) with STEM-related skills in technology and healthcare to reduce the need for area employers to rely on H-1B visas to fill local positions with foreign workers. The program will work closely with a network of community partners for referral, training, and case management, including TechPoint, a business-related nonprofit partner focused on the growth of Indiana's tech sector. *Employ Up* participants will undergo an intensive counseling and assessment process and then be directed into one of three reemployment paths: rapid re-employment, short-term training, or career pathway training. Training partners, including Global Knowledge, Ivy Tech Community College of Indiana, and the IUPUI School of Informatics, will offer an array of certifications and credentials for participants.

Attachments:

- Proposal Form
- Anti-Kickback Affidavit
- Sworn Statement under section 287.133(3)(a) Florida Statutes, on Public Entity Crimes
- Indemnification Form
- Local Vendor Form
- Domestic Partnership Affidavit

- Cone of Silence Affidavit
- All requirements listed in Proposal Submittal Requirements
 - Grant Proposal Examples
 - Organizational Chart
- All required Insurance forms or indication of ability to comply with requirements upon reward of contract
- Signed addenda

PROPOSAL FORM

PROPOSER

The name of the Proposer submitting this Proposal is

Thomas P. Miller and Associates, LLC doing business at

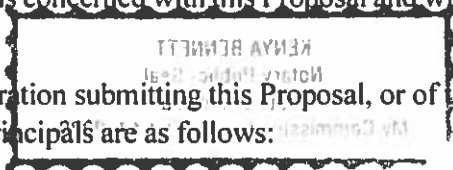
1630 N. Meridian Street, Suite 430, Indianapolis, IN, 46202
Street City State Zip

ehiggins@tpma-inc.com

Email address

which is the address to which all communications concerned with this Proposal and with the Contract shall be sent.

The names of the principal officers of the corporation submitting this Proposal, or of the partnership, or of all persons interested in this Proposal as principals are as follows:



Name	Title
<u>Elizabeth Higgins</u>	<u>Senior Project Consultant</u>
<u>Kelly Karbowicz Riley</u>	<u>Project Consultant</u>
<u>Lucy Houchin</u>	<u>Director of Client Engagement</u>
<u>Nicole Dunn</u>	<u>Vice-President of Strategy and Research</u>
<u>Justin Heet</u>	<u>Assistant Director</u>
<u>Kelly Armstrong</u>	<u>Director of Economic Development</u>

If Sole Proprietor or Partnership

IN WITNESS hereto the undersigned has set his (its) hand this ____ day of _____ 20__.

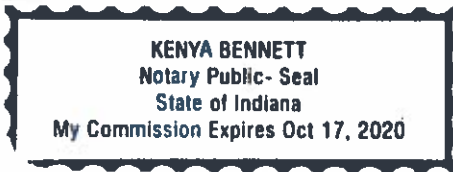
Signature of Proposer

Title

If Corporation

IN WITNESS WHEREOF the undersigned corporation has caused this instrument to be executed and its seal affixed by its duly authorized officers this 7 day of December 2015.

(SEAL)



Thomas P. Miller & Associates, LLC
Name of Corporation

By *Ken Bennett*

Title office manager

Attest _____
Secretary

ANTI-KICKBACK AFFIDAVIT

STATE OF Indiana)

: SS

COUNTY OF Marion)

I, the undersigned hereby duly sworn, depose and say that no portion of the sum herein bid will be paid to any employees of the City of Key West as a commission, kickback, reward or gift, directly or indirectly by me or any member of my firm or by an officer of the corporation.

By: 

Sworn and subscribed before me this 7 day of December 2015.

NOTARY PUBLIC, State of Indiana at Large

My Commission Expires:
Oct 17, 2020



* * * * *

ATNYA BLOUNT
Notary Public - Seal
State of Indiana
Commission Expires 06/15/2020

SWORN STATEMENT UNDER SECTION 287.133(3)(A)
FLORIDA STATUTES ON PUBLIC ENTITY CRIMES

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICER AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement is submitted with Bid or Proposal for City of Key West

2. This sworn statement is submitted by Thomas P. Miller and Associates, LLC
(Name of entity submitting sworn statement)

whose business address is 1630 N. Meridian Street, Suite 430 Indianapolis, IN 46202

and (if applicable) its Federal Employer Identification Number (FEIN) is 30-0025201

(If the entity has no FEIN, include the Social Security Number of the individual

signing this sworn statement _____

3. My name is Thomas P. Miller
(Please print name of individual signing)

and my relationship to the entity named above is President and CEO

4. I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including but not limited

to, any bid or contract for goods or services to be provided to any public or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, material misrepresentation.

5. I understand that “convicted” or “conviction” as defined in Paragraph 287.133(1)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication guilt, in any federal or state trial court of record relating to charges brought by indictment information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.

6. I understand that an “affiliate” as defined in Paragraph 287.133(1)(a), Florida Statutes, means
 - a. A predecessor or successor of a person convicted of a public entity crime; or

 - b. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term “affiliate” includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm’s length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.

7. I understand that a “person” as defined in Paragraph 287.133(1)(8), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with public entity. The term “person” includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

8. Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement. (Please indicate which statement applies).

 X Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor any affiliate of the entity have been charged with and

convicted of a public entity crime subsequent to July 1, 1989, AND (Please indicate which additional statement applies.)

 There has been a proceeding concerning the conviction before a hearing of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer did not place the person or affiliate on the convicted vendor list. (Please attach a copy of the final order.)

 The person or affiliate was placed on the convicted vendor list. There has been a subsequent proceeding before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer determined that it was in the public interest to remove the person or affiliate from the convicted vendor list. (Please attach a copy of the final order.)

 X The person or affiliate has not been put on the convicted vendor list. (Please describe any action taken by or pending with the Department of General Services.)

Thomas P. Miller

(Signature)

12/7/2015

(Date)

STATE OF Indiana

COUNTY OF Marion

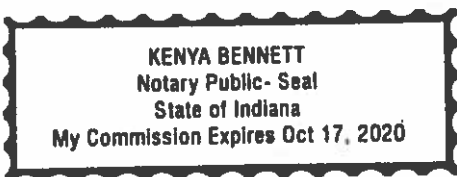
PERSONALLY APPEARED BEFORE ME, the undersigned authority,

Thomas Miller who, after first being sworn by me, affixed his/her

(Name of individual signing)

signature in the space provided above on this 7 day of December, 2015.

My commission expires: 10/17/2020



[Handwritten Signature]

NOTARY PUBLIC

My Commission Expires Oct 17, 2020
KELLY BENNETT
Notary Public - Seal
State of Indiana

CITY OF KEY WEST INDEMNIFICATION FORM

To the fullest extent permitted by law, the CONSULTANT expressly agrees to indemnify and hold harmless the City of Key West, their officers, directors, agents and employees (herein called the "indemnitees") from any and all liability for damages, including, if allowed by law, reasonable attorney's fees and court costs, such legal expenses to include costs incurred in establishing the indemnification and other rights agreed to in this Paragraph, to persons or property, caused in whole or in part by any act, omission, or default by CONSULTANT or its subcontractors, material men, or agents of any tier or their employees, arising out of this agreement or its performance, including such damages caused in whole or in part by any act, omission or default of any indemnitee, but specifically excluding any claims of, or damages against an indemnitee resulting from such indemnitee's gross negligence, or the willful, wanton or intentional misconduct of such indemnitee or for statutory violation or punitive damages except and to the extent the statutory violation or punitive damages are caused by or result from the acts or omissions of the CONSULTANT or its subcontractors, material men or agents of any tier or their respective employees.

Indemnification by CONSULTANT for Professional Acts. CONSULTANT hereby agrees to indemnify the City of Key West and each of its parent and subsidiary companies and the directors, officers and employees of each of them (collectively, the "indemnitees"), and hold each of the indemnitees harmless, against all losses, liabilities, penalties (civil or criminal), fines and expenses (including reasonable attorneys' fees and expenses) (collectively, "Claims") to the extent resulting from the performance of CONSULTANT'S negligent acts, errors or omissions, or intentional acts in the performance of CONSULTANT'S services, or any of their respective affiliates, under this Agreement. If claims, losses, damages, and judgments are found to be caused by the joint or concurrent negligence of the City of Key West and CONSULTANT, they shall be borne by each party in proportion to its negligence.


The indemnification obligations under the Contract shall not be restricted in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the CONSULTANT under Workers' Compensation acts, disability benefits acts, or other employee benefits acts, and shall extend to and include any actions brought by or in the name of any employee of the CONSULTANT or of any third party to whom CONSULTANT may subcontract a part or all of the Work. This indemnification shall continue beyond the date of completion of the work.

CONSULTANT: Thomas P. Miller & Associates, LLC

SEAL:

1630 N. Meridian Street, Suite 430 Indianapolis, IN 46202

Address



Signature

Thomas P. Miller

Print Name

President and CEO

Title

DATE: 12/7/2015

**LOCAL VENDOR CERTIFICATION PURSUANT TO
CITY OF KEY WEST ORDINANCE 09-22 SECTION 2-798**

The undersigned, as a duly authorized representative of the vendor listed herein, certifies to the best of his/her knowledge and belief, that the vendor meets the definition of a "Local Business." For purposes of this section, "local business" shall mean a business which:

- a. Principle address as registered with the FL Department of State located within 30 miles of the boundaries of the city, listed with the chief licensing official as having a business tax receipt with its principle address within 30 miles of the boundaries of the city for at least one year immediately prior to the issuance of the solicitation
- b. Maintains a workforce of at least 50 percent of its employees from the city or within 30 miles of its boundaries.
- c. Having paid all current license taxes and any other fees due the city at least 24 hours prior to the publication of the call for bids or request for proposals.
 - Not a local vendor pursuant to Ordinance 09-22 Section 2-798
 - Qualifies as a local vendor pursuant to Ordinance 09-22 Section 2-798

If you qualify, please complete the following in support of the self-certification & submit copies of your County and City business licenses. Failure to provide the information requested will result in denial of certification as a local business.

Business Name Thomas P. Miller & Associates, LLC Phone: 317-894-5508

Current Local Address: 1630 N. Meridian St, Suite 430 Indianapolis, IN 46202 Fax: 317-894-5370

(P.O Box numbers may not be used to establish status)

Length of time at this address: 6 years

Thomas P. Miller Date: 12/7/2015

Signature of Authorized Representative

STATE OF Indiana COUNTY OF Marion

The foregoing instrument was acknowledged before me this 7 day of December 2015.

By Kenya Bennett, Office Manager, of Thomas P. Miller and Associates
(Name of officer or agent, title of officer or agent) (Name of corporation acknowledging)

or has produced identification _____ as identification
(Type of identification)



[Signature]

Signature of Notary

Kenya Bennett

Print, Type or Stamp Name of Notary

Office Manager

Title or Rank

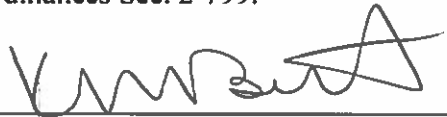
Return completed form with
Supporting documents to:
City of Key West Purchasing

MY Commission Expires On 12/31/2010
State of Indiana
Notary Public
RENEE BROWN

EQUAL BENEFITS FOR DOMESTIC PARTNERS AFFIDAVIT

STATE OF Indiana)
 : SS
COUNTY OF Marion)

I, the undersigned hereby duly sworn, depose and say that the firm of _____
Thomas P. Miller & Associates, LLC
provides benefits to domestic partners of its employees on the same basis as it provides benefits to employees' spouses, per City of Key West Code of Ordinances Sec. 2-799.

By: 

Sworn and subscribed before me this 7 day of December, 2015

NOTARY PUBLIC, State of Indiana at Large

My Commission Expires:
10/17/2020



* * * * *

My Commission Expires Oct 17, 2020
State of Indiana
Notary Public - Seal
KATHA BLINNETT

CONE OF SILENCE AFFIDAVIT

STATE OF Indiana)

: SS

COUNTY OF Marion)

I, the undersigned hereby duly sworn, depose and say that all owner(s), partners, officers, directors, employees and agents representing the firm of Thomas P. Miller & Associates, LLC have read and understand the limitations and procedures regarding communications concerning City of Key West issued competitive solicitations pursuant to City of Key West Ordinance Section 2-773 Cone of Silence.

By: 

Sworn and subscribed before me this
1 day of December 2015.

NOTARY PUBLIC, State of Indiana at Large

My Commission Expires: 10/17/2020



* * * * *

MY COMMISSION EXPIRES OCT 13 2020
STATE OF ILLINOIS
NOTARY PUBLIC - SEAL
KENYA BENNETT

Our Community Colleges of Pennsylvania are pleased to submit this proposal at a critical time in the evolution of both education and workforce development delivery systems in Pennsylvania and the nation. We appreciate the opportunity and challenge presented to us by the U.S. Departments of Labor and Education to further align structures to simultaneously meet the needs of laid-off adults and employers in Pennsylvania at a time when budget constraints in both workforce development and education systems demand that duplication of effort must be eliminated. This funding opportunity comes at a particularly opportune time for the Community Colleges of Pennsylvania as we already had in place a "Think Tank" appointed by our college presidents to work on strategies and statewide procedures to accelerate recruitment, retention, credentials attainment, and job placement for low-skilled adults. The receipt of this grant will allow us to put in motion many of the ideas from the Think Tank and its work groups.

The fourteen colleges are collaborating in an unprecedented way to bring our workforce delivery and curriculum development systems to scale for achieving new levels of success with our adult students, particularly for our laid-off workers who have little chance of returning to prior wage levels without new credentials. With assistance from this grant, we will accelerate our progress in developing a credentialing system that ties with national systems that are articulated in the recently released "Breaking New Ground" white paper by ACT. And we are committed to incorporating higher levels of credentialing into our completion goals of each of our colleges and to ensuring that credentials are stackable in a variety of ways tied to customer demand and changing labor market priorities. Our proposed approach is presented with strong support from our workforce investment boards who have laid the groundwork for ongoing employer support via a statewide network of industry partnerships and connections to career readiness certificates.

Our proposal is built on the core belief that a more highly evolved structure for skills certification will drive both the articulation process among educational entities and the vehicle to be used in connecting education with the workforce development system and our state's employers. We are currently seeing the convergence of three major trends that lead to skill certifications being the currency for both hiring by

employers and advancement in education. First, employers are placing much higher value on proof of specific skills than on general degrees. Second, education systems are rapidly developing and deploying "stackable certificates" to define articulation agreements and to accelerate students' degree attainment. Third, the escalating cost of college is leading many students to obtain initial credits at lower cost via industry-defined certifications and community colleges.

As the post-secondary entities that have an ear-to-the-ground relationship with the employers of our respective regions, we hear daily the employers' descriptions of their changing skills needs. As the U.S. Department of Education's "College Completion Tool Kit" (March 2011) states, "The days of being able to rely on high school graduates to provide economic stability and vitality are over. More than half of all new jobs in the next decade will require a postsecondary certificate or degree." Our proposal recognizes what employers are telling us – a postsecondary credential is increasingly the ticket to today's middle class wages. Our challenge is to communicate that message to TAA recipients and other laid-off workers and to show them the time-efficient, cost-efficient paths to earning credentials needed for their job choices.

Our approach is built on a foundation of innovation and collaboration among our membership fostered by a number of collaborations via our state association, Pennsylvania Commission for Community Colleges, including Achieving the Dream and the National Community College Benchmark Project. The bedrock guiding principles that you will see in all aspects of our proposed approach include: **standardization** of courses as the basic building blocks for programs; **customization** of programs using the building blocks to meet needs of employers and students in a volatile marketplace; and **regionalization** of capacity building based on varying industry mixes and priorities in different regions of the state.

In signing the partnership agreement, our 14 colleges pledge to learn by doing, and to keep our efforts squarely focused on the desired impact of this grant – the rapid re-deployment of laid-off workers to high-wage, high-demand jobs throughout the Commonwealth of Pennsylvania.

STATEMENT OF NEED

Impact of Foreign Trade on the Commonwealth of Pennsylvania: According to the U.S. Department of Labor, the Commonwealth of Pennsylvania has had 572 TAA Certification determinations since January 1, 2007. The impact on workers across the state was significant; it is estimated that in FY 2010 there were 15,922 workers covered. In PY 2009 alone, there were 218 TAA Certifications¹ and 4,491 active TAA participants in the Commonwealth.²

In PY 2009, 56 of the 67 counties had active TAA participants. The three counties with the highest number of participants were Westmoreland, Elk and Berks Counties. Westmoreland County had the highest number of TAA participants in PY 2009, with 14 TAA Certification determinations and 326 TAA participants (71684, Quality Mould, 10/30/2009; 72236, Pleasant Trucking, 1/4/2010; 70097, Hydro Carbide, 1/12/2010; 72819, Siemens AG, 2/24/2010; 71691, National Material Company, 2/26/2010; 71256, Powerex, 2/26/2010; 72830, ECM Transport, 3/2/2010; 71327, Arcelormittal Monessen, 3/9/2010; 72803, Latrobe Specialty Steel, 3/16/2010; 70851, Kennametal, 3/25/2010; 72189, DME Company, 4/8/2010; 72089, Hyde Park Foundry, 4/16/2010; 73332, Mine Safety Appliances, 5/6/2010; 73195, PIAD Precision Casting Corporation, 5/18/2010).

TAA Population in the Commonwealth of Pennsylvania: The majority of the TAA population in Pennsylvania is comprised of males who are 40 – 60 years of age; of the 4,491 participants in PY 2009, 59.5% were male; 62.4% were 40 – 60 years old. Using SIC codes, the 218 TAA Certifications in PY 2009 were from the following industries:

Industry	Number	Percentage
Manufacturing	171	78.4%
Services	28	12.8%
Transportation, Communications, Electric, Gas and Sanitary Services	7	3.2%
Finance, Insurance, Real Estate	5	2.3%

¹ U.S. Department of Labor, Trade Act Program. www.doleta.gov/tradeact/

² PA Department of Labor and Industry, Center for Workforce Information and Analysis. File dated Jan. 20, 2011.

Wholesale Trade	4	1.8%
Construction	1	0.5%
Agricultural Production Crops	1	0.5%

A sample of the TAA participants, as reported by PA Department of Labor and Industry, shows the following educational attainment levels for participants from July 1, 2009 through March 30, 2011:

Less than a HS diploma	3.7%
HS diploma or equivalent	57.4%
Some college	17.4%
Certification/ Associates degree	4.3%
Bachelors degree of higher	17.2%

Based on our previous experiences serving the TAA population, we anticipate several barriers that the TAA and TAA-like population may face in completing training and ultimately finding employment. First, for the large majority of the population who are in the 40 – 60 age range, the prospect of either returning to school or enrolling for the first time after twenty or more years can be discouraging. The colleges report that TAA enrollees often face self-confidence issues that must be addressed before students can be successful. The population also faces challenges with digital literacy and computer skills, but jobs of the twenty-first century increasingly require baseline computer skills that they lack. While technology will help accelerate training, we are cognizant of the limited familiarity that many TAA individuals bring; our approach has assistance embedded to increase digital literacy for success in training programs and on the job.

Finally, in a survey by the PA Department of Labor and Industry in 2008, nearly 25% of TAA-affected workers reported they did not take advantage of training funds because their main goal was to find a job.³ We must help workers understand that the jobs of the twenty-first century require re-training and re-tooling for new skills, as employers are reporting skills gaps when screening applicants for new jobs.

Targeted Industries and Occupations: For the TAACCCT grant program, our fourteen colleges will focus on building capacity in training programs in the following industries and occupations:

³ PA Department of Labor and Industry, "Annual Report to the Secretary: Program Year 2009." October 2010.

Advanced Manufacturing and Logistics: In the Advanced Manufacturing and Logistics industry, our colleges will build capacity to train students for occupations as Production Technicians, Industrial Maintenance Technicians, CNC Operators, and Logistics Technicians. There is significant demand for these occupations; based on 2010 High Priority Occupations from local Workforce Investment Boards as well as data from Economic Modeling Specialists, Inc. (EMSI), we project the following job openings:

Occupation	New Positions	Replacement Positions	Total Positions
Production Technician	458	1,853	2,311
Industrial Maintenance Technician	653	1,053	1,706
CNC Machine Operator	133	266	399
Logistics Technician	194	239	433

While job openings are expected, employers remind us that there is a critical shortage of qualified workers to fill these jobs. Employers reveal⁴ that they have trouble finding qualified candidates for their precision machining and industrial maintenance positions due to skills shortages. Students will gain the knowledge and competencies necessary for success in the Advanced Manufacturing and Logistics industry through the following coursework and stackable credentials:

Production Technician	Coursework in industry fundamentals, mechanical fabrication, prints and drawings, safety, workplace effectiveness, and welding that leads to a certificate.
Industrial Maintenance Technician	Coursework based on skills consistent with Advanced Manufacturing Integrated Systems Technology (AMIST) Levels 1, 2, 3, and 4, articulating to an Associates degree if needed.
CNC Machine Operator	Coursework in NIMS Endorsed CNC Machine Operator, NIMS Endorsed Machining Level 1, NIMS Endorsed Machining Level II.
Logistics Technician	Coursework in the MSSC Certified Logistics Associate and Certified Logistics Technician.

Energy Distribution, Production, and Conservation: The capacity built at our colleges in the energy industry will include programs to prepare workers for careers as Renewable Energy Technicians, Nuclear Operators, Geothermal Installers; Natural Gas Technicians, Smart Grid Technicians, Smart Meter Technicians, Solar Photovoltaic Installers, Solar Thermal Installers, and BPI Building Analysts. According

⁴ Pennsylvania Center for Advanced Manufacturing Careers, "Critical Shortages of Precision Machining and Industrial Maintenance Occupations in Pennsylvania's Manufacturing Sector," December 2010.

to "The Pennsylvania Green Jobs Survey Report,"⁵ employment in Renewable Energy occupations is expected to grow from 11,290 in 2009-2010 to 14,065 by 2011-2012, a 24.6% increase. Marcellus Shale natural gas drilling and production is creating high demand in the state for gas technicians and all other occupations required of the industry; utilizing SOC codes from labor management data and High Priority Occupations data from PA Department of Labor and Industry, projections suggest nearly 32,000 openings by 2016. In the nuclear energy sector, the Pennsylvania Center for Workforce Information and Analysis (CWIA) projects employment as high as 2,200 for Nuclear Engineers and 560 for Nuclear Technicians.⁶ Furthermore, local employers such as Exelon, are projecting as many as 200 openings in their nuclear facilities within the next 5 to 10 years due to retirements. Students will gain the knowledge and competencies needed for success in the Energy Distribution, Production and Conservation industry through the following coursework and stackable credentials:

Natural Gas Technician	First earn a certificate as a Certified Production Technician, then complete coursework in AMIST Level 1. After earning these credentials, students can earn an Associate degree in Integrated Systems Technology or complete the Gas Technology Certificate 1, 2, and 3.
Renewable Energy Technician	Coursework in AMIST Level 1, Solar, Wind, Solar Thermal, and Geothermal. Students will also complete AMIST 2, 3, and 4 for the Renewable Energy Technology degree.
Nuclear Operator	Regulated training required for the uniform curriculum. Individuals will earn an Associate degree.
Geothermal Installer	Coursework in Blue Print Reading, Introduction to HVAC, Duct and Sheet Metal Fabrication, Heat Pump Systems, Pipe Joining Techniques, Trenching/ Drilling Processes, Pump Fluids and Thermal Conduct., Introduction to Electricity, and Introduction to Solar Thermal. Students can become International Ground Source Heat Pump Association (IGSHPA) Certified Installer.
Solar Thermal Installer	Coursework in Electrical Systems, Measurement Tools, Mechanical Fabrication, Print Reading, Basic Wiring, Power Control, Solar Concepts, Power Distribution, Solar PV Installation and Solar PV Troubleshooting. Leads to NABCEP PV Installer, NABCEP Solar Thermal Installer certifications/ licenses.
BPI Analyst	Coursework and credentialing according to the Building Performance Institute (BPI) in the area of weatherization and envelope tightening.

⁵ Pennsylvania Department of Labor and Industry, "The Pennsylvania Green Jobs Survey Report," December 2010.

⁶ Pennsylvania Center for Workforce Information and Analysis, www.paworkstats.state.pa.us/

Healthcare Technology/ Medical Records Technology: Our colleges will create more capacity to deliver training for careers in the Healthcare Technology/ Electronic Medical Records industry. Individuals will receive industry-recognized credentials as Healthcare Technology Specialists. The Pennsylvania Center for Health Careers reports that the pipeline for qualified, trained Health Information Technology professionals has become vital in light of more the shift toward electronic medical records.⁷ In Pennsylvania, the occupation is projected to grow by 16%; projections by the PA Department of Labor and Industry anticipate the need for 9,150 trained Medical Records and Health Information Technicians by 2016. In our discussions with local employers, industry has affirmed the need for such training to fill the pipeline of talent they need. Students will gain the knowledge and competencies needed for success in the Healthcare Technology industry through the following coursework and stackable credentials:

Healthcare Technology Specialist	Coursework in the Healthcare Core Curriculum that will include topics in Healthcare Systems, Medical Terminology, Communications, Basic Computer Functions, IT Introduction Unit, Healthcare Careers. After completing the Core Curriculum, students will move into the Healthcare Technology Specialist program which blends healthcare-related curriculum with IT courses with industry-recognized IT certifications built in.
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Gaps in Existing Educational and Career Training Programs: Some of our fourteen colleges have identified the need to develop new programs, while others need to enhance or expand existing programs in order to meet demand from both employers and students. The gaps in education programs in the three industries are outlined in the grid below. Colleges may choose to opt out of certain industries based on regional priorities and existing capacity so not all fourteen colleges are shown in all sectors

Advanced Manufacturing and Logistics	
Community College of Allegheny County	Gaps in software and equipment to provide training Certified Production Technician and AMIST Levels 2-4; gaps in personnel for programs.
Bucks County Community College	Gaps in curriculum alignment with AMIST program; gaps in equipment for the AMIST program
Delaware County Community College	Gaps in all levels of AMIST; gaps in courseware and training equipment for Certified Production Technician training

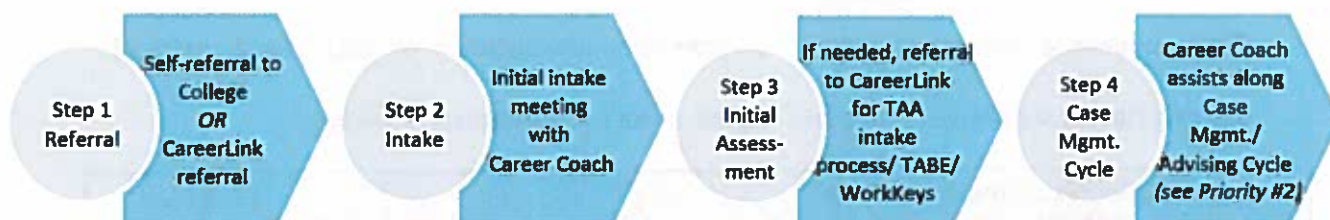
⁷ Pennsylvania Center for Health Careers, "Health Care Industry Partnerships and the Pennsylvania Center for Health Careers: The Interconnected Relationship." December 2010.

Harrisburg Area Community College	Gaps in motion control and AMIST Blue Industrial Mechanics 2; cross-training between hydraulics, pneumatics, electrical, and PLCs; maintenance training for CNC equipment; Certified Logistics & Production Technician
Luzerne County Community College	Gaps in Advanced Technology/ Industrial Maintenance programs to keep up with demand; gaps in equipment needed to expand these programs
Montgomery County Community College	Gaps in curriculum, instructors, supplies, courseware, and equipment for Production and Industrial Maintenance; gaps related to Logistics include curriculum, instructors, and classroom supplies
Northampton County Community College	Design /purchase and deliver non-credit to credit program hybrid options for Industrial Maintenance Mechanics; gaps in courseware, instructors, and equipment and classroom supplies.
Community College of Philadelphia	Gaps in AMIST Levels 1 and 2
Reading Area Community College	Gaps in courseware and equipment for Production Technicians; replace outdated AMIST equipment that no longer meets industry standards
Westmoreland County Community College	Gaps in all levels of AMIST (1-4); gaps in Production Technician program courseware and equipment
Energy Distribution, Production, and Conservation	
Community College of Allegheny County	Need to enhance AMIST Level 1 model to include stackable credentials in Gas Technology Levels 1 – 3; gaps in administrative staff to recruit and place students through connections with the CareerLinks
Community College of Beaver County	Gaps in Renewable Energy Certificate program and Nuclear Engineering Technology program
Delaware County Community College	Build upon the college's PV Solar and Geothermal courses, as they need updates to the Electrical and HVAC programs; need to condense courses to meet industry and TAA participants' needs
Harrisburg Area Community College	Gaps in the number of Green Energy Trainers so that the college can increase the number of classes it can hold, and add a credit program; gaps exist in Solar PV Trainer and Portable Machine Bases
Northampton Community College	Create and/or purchase four hybrid, non-credit to credit program options in solar PV, geothermal, and electrical construction programs. Gaps in instructors, equipment coursework and classroom supplies.
Reading Area Community College	Need to build a NABCEP-based Solar PV Installer curriculum stacking Production Technician, AMIST Level 1, NABCEP Entry-level PV Installer NABCEP Certified PV Installer certificates.
Westmoreland County Community College	Build upon the AMIST Level 1 to include Gas Technology Levels 1-3, providing participants the opportunity to complete the career pathway; gaps in dedicated staff for recruitment and placement of students
Healthcare Technology/ Electronic Medical Records Technology	
Statewide	In regard to the Healthcare Technology Specialist, there are no other programs like it across the Commonwealth. A curriculum for the program is currently under development at Harrisburg Area Community College.

WORK PLAN AND PROJECT MANAGEMENT

Overview of Proposed Strategy: Our proposed approach is built on a foundation of innovation and collaboration among our membership. The bedrock guiding principles will be seen in all aspects of our proposed approach include: 1) Standardization of courses as the basic building blocks; 2) Customization of programs using the building blocks; and 3) Regionalization of capacity building based on varying industry sector mixes and priorities of employers in different regions of the state.

Priority #1: Accelerate Progress for Low-Skilled and Other Workers



The Basic Skills/Intake/Assessment Work Group of the Presidents' Think Tank has focused attention on the importance of the front-end process in engaging the student in charting his/her own course for achieving both academic goals and job placement success. The statewide front-end process will rely heavily on Career Coaches (discussed in Priority #2), coordination with the network of CareerLinks, self-paced remedial education if needed, contextualized basic core skills, and a statewide on-line platform for student assistance and data management (discussed in Priority #2). Two major strategies – self-paced, fast-track remediation and contextualized core skills – form the core of our approach to accelerating the progress of low-skilled and other workers.

Strategy 1.1: Rapid Remediation

Provide students with open-entry, fast-track remediation assisted by enhanced on-line support.

Core implementation components of this strategy include:

- Open-entry access – students may enroll and begin courses at any time;
- Up-front assessment to customize a gap-filling remediation approach tied to entry requirements of core courses in the chosen occupational track;

- Guided self-paced use of on-line developmental education packages – specific applications may vary by college and may include WIN, Key Train, Pearson Developmental, and Plato;
- Coordination with CareerLinks to review existing assessments to determine if other assessments are needed or if direct placement can occur (as opposed to the duplication that sometimes occurs now);
- Entry into occupational training as soon as prerequisites are met for entry courses, with continued developmental work in other areas occurring in parallel to prepared for advanced courses; and
- During the course project implementation, continued work by the Basic Skills/Intake/Assessment Work Group to develop statewide standards for proficiency demonstration of skills gained on-the-job, ensuring that the student spend time only in areas where content mastery is needed.

Strategy 1.2: Contextualized Core Skills

Embed basic skills needed for each sector-based track into occupationally-based entry courses for the sector, while additional remediation occurs in parallel

Core implementation components of this strategy include:

- Creation of a statewide agreement to address student success in healthcare core programs, to include a standardized Healthcare Core Curriculum (HCC). The HCC will serve as a foundational step for participants who have no healthcare experience and who are interested in pursuing this career path. This introductory core will provide knowledge and skill building at a contextualized basic level to prepare students for success as they move to the next step on the career pathway.

The HCC core will be purchased centrally upon award of the grant. We have identified HealthCenter21, an online learning system developed by Applied Educations Systems, to provide basic skills learning in a healthcare context. Eight self-paced topical modules have been selected: 1) Healthcare Systems; 2) Medical Terminology; 3) Medical Communications; 4) Basic Computer Usage; 5) Intro to Medical IT Applications; 6) Job Search Skills for Medical Field; 7) Healthcare Career Opportunities; 8) Cultural Awareness in the Workplace. These will be delivered in a non-credit hybrid or

proctored format to help students as they work the modules and to provide the opportunity to ask questions and seek individualized direction. The modules were strategically selected based on their application to a broad spectrum of healthcare careers, from medical billing, to health information technology, to direct patient care. In other words, this core is an appropriate “bridge” or first step on a career pathway that has many destinations or exit points.

- Creation of a statewide agreement to establish common contextualized core competencies in Advanced Manufacturing/ Logistics and Energy Distribution, Production and Conservation based on competencies aligned to the Advanced Manufacturing Integrated Systems Technology (AMIST) Level 1 curriculum. During work group discussions, agreement was reached that many of the same core competencies are needed in Advanced Manufacturing/ Logistics and Energy. The two Work Groups selected the AMIST Level 1 coursework as a foundation to align to which includes modules in: Hydraulics; Pneumatics & Pneumatics Maintenance; Piping Systems; Mechanical Drives; Light & Heavy Duty V-Belt Drives; Electrical Control Circuits; Electrical Motor Control; Electro-Fluid Power; Electronic Sensors; Residential/ Commercial & Industrial Wiring; Industrial Power Distribution; and Programmable Logic Controllers (PLC). With these core skills, students will move along the pathway to manufacturing, logistics, and energy specialty areas customized to meet employer and student needs.
- Inclusion of a variety of academic and career orientation strategies during the core phase for the sector, with basic computer skills as a key foundation across the board – computer literacy is a primary goal for the target population, as it will be essential for using the self-help platform, for accessing self-paced training, and for ultimately performing on the job.
- Proctored orientation during the early stages of core skills to determine the student’s ability to move forward quickly using the on-line course offerings that can be accessed in a supervised setting at the college, and also at home and work.

Evidence Base for Priority #1:

1. ***I-BEST (Integrated Basic Education & Skills Training)***. The I-BEST mode fully integrates basic skills with college-level technical courses, challenging conventional approaches that require basic skills to be completed prior to entering occupational training. It is estimated that I-BEST participants had a higher probability (51%) of earning an award than non-participants (16%).⁸
2. ***Achieving the Dream***. Pennsylvania Community Colleges have been participating in this nationwide initiative supported by the Lumina Foundation. Much of our work has focused on improvements at the foundational skills level to improve student retention, with particular emphasis on students who enter with significant barriers. Efforts have included: an *Early Alert* system to address issues in successful intervention and resolution; *Smart Path Math* refresher modules built into Pearson's My Math Lab, supporting faster remediation for adult students whose skills are "rusty;" *Jump Start Math* to compress the time frame for developmental needs of students; and expanded mentoring for high-risk students. Successful practices in Achieving the Dream colleges will be incorporated in our approach.
3. ***Complete College America***. Pennsylvania is one of the partnering states committed to implementing policies aimed at increases in college attainment rates. A key component of the work is reducing the time to attain degrees, both for adults and youths. Our work under TAACCCT will integrate with this initiative and will offer evidence for state policy advances.

Priority 2: Improve Retention and Achievement Rates and/or Reduce Time to Completion

Two facets of our approach will be key to improving retention and achievement rates: 1) attaching students to Career Coaches from the time they enter our "doors" until they complete training and 2) a statewide on-line platform that offers self-service tools for students and tracking and assistance mechanisms for Career Coaches.

⁸ Jenkins, Davis, Matthew Seidenberg and Gregory Kienzl. "Building Bridges to Postsecondary Training for Low-Skill Adults: Outcomes of Washington State's I-BEST Program." Community College Research Center Brief, May 2009. <http://www.eric.ed.gov/PDFS/ED505705.pdf>

Strategy 2.1. Increase Student Supports via Career Coaches

Connect students to Career Coaches from the time of entry until completion to provide wrap-around student supports to improve retention and achievement.

Career Coaches will be a focal point of all of our colleges to provide wrap-around student support. We believe that the TAA population will benefit from having an advocate and navigator from the very first stages of engagement.

Therefore, a participant will be connected face-to-face with a Career Coach during the initial intake meeting and will stay connected to his/ her Career Coach throughout his/her entire training. The

Career Coach will serve as the student's ongoing mentor and advocate, aiding in accessing services available in all college departments, connecting to external services, and in utilizing the self-service tools that will be available on the new statewide platform. Specifically, Career Coaches will assist students with:



- **Placement Testing:** If students have not already met with the CareerLink for TAA intake processes and TABE and/or WorkKeys assessments, Career Coaches will refer them to the local CareerLink. To avoid over-testing, we will review existing assessments to determine if other assessments are needed or if direct placement can occur (as opposed to the duplication that sometimes occurs now);
- **Liaison with the CareerLink:** In order to help students navigate TAA forms and required reporting, the Career Coaches will become direct liaisons with the local CareerLinks. This will also be a critical partnership once the student completes training and is seeking employment.
- **Assessments and Career Counseling:** Career Coaches will assist each student through the assessment process so that he/she can perform as highly as possible via connection to fast-track intensive remediation. Coaches will work with students to identify interests as well. They will also have access to labor market information to help students in understand the local job market.

- **Case Management**: Recognizing that TAA individuals face challenges including self-confidence issues, resistance to change, or readjusting to education after twenty years, Career Coaches will help individuals address barriers to success. We will hire Career Coaches that have a "case management" skill set to counsel on "life skills" issues in addition to academic ones.
- **"Aggressive" Advising**: Career Coaches will ensure that students are meeting the required steps throughout their education and training programs. Through the online platform, discussed in more detail below, Coaches will be able to send reminders and encouragements to students electronically to supplement face-to-face time. We also draw on research that shows that adult students have primary connections with the instructors and the classrooms and not advising centers and student activities.⁹
- **Employer Engagement**: Working with employers in an advisory capacity as well as on mentoring and employment opportunities will be another responsibility of the Career Coaches. Building relationships with employers will also help place students in successful employment.
- **Participant Tracking and Reporting**: Coaches will track and report on student progress and successes. The online platform will offer a common reporting mechanism for Career Coaches across the state.

While Career Coaches may not perform all of these tasks individually, they will be a central point of contact to other college departments to ensure that activities are being executed for their student clients.

Strategy 2.2: Increase on-line connectivity to and among students and Career Coaches
Create an on-line platform to be utilized by both students and Career Coaches that will offer career exploration, advising, and connections to the local job market.

To support the essential work of the Career Coaches, our implementation plan calls for the issuance of a request-for-proposal for a student assistance and data management platform immediately upon grant award. The capabilities of this platform will serve two functions: 1) to provide a 24/7 support to

⁹ Chronicle of Higher Education, "An Award-Winning Dissertation Draws Lessons from 9 Community-College Students Who Persisted in Their Studies." April 11, 2011. <http://chronicle.com/article/An-Award-Winning-Dissertation/127076/>

students who can use the platform for career exploration or to connect with their Career Coach and other supportive functions, and 2) to provide Career Coaches with a mechanism for data management as well as a tool for “aggressive advising.” The Think Tank has already approved the specifications for the solicitation for a platform that will have statewide and regional capabilities for:

- Student progress tracking and interface with required reporting structures for TAA, WIA, and the unique elements required for TAACCCT progress measurement;
- Connecting to the state’s job board and possibly private job boards for recruitment of students and promoting training and tuition assistance available via the program;
- Initial assessment to match career interests with career education and training pathways via the current and expanded courses at the colleges;
- Continuous updating of employer job demand information;
- Tools for assistance to Career Coaches for enhanced interaction with the students in customizing their courses and programs tied to evolving employer demands; and
- Self-service options for 24/7 career and academic advice for students

Evidence Base for Priority #2:

1. **Opening Doors Program:** Lorain County Community College and Owens Community College have shown that intensive student services provided through their Opening Doors program improved academic outcomes. Students in the program were more likely to register for at least one course in their second semester (65.3%) than students in the control group (58.3%).¹⁰
2. **Cal-PASS Model:** Models such as Cal-PASS in California evidence the effectiveness of online platforms. The Cal-PASS site allows consortium members to collect and analyze data on student successes and transitions from K-12 education through post-secondary and to make data-driven

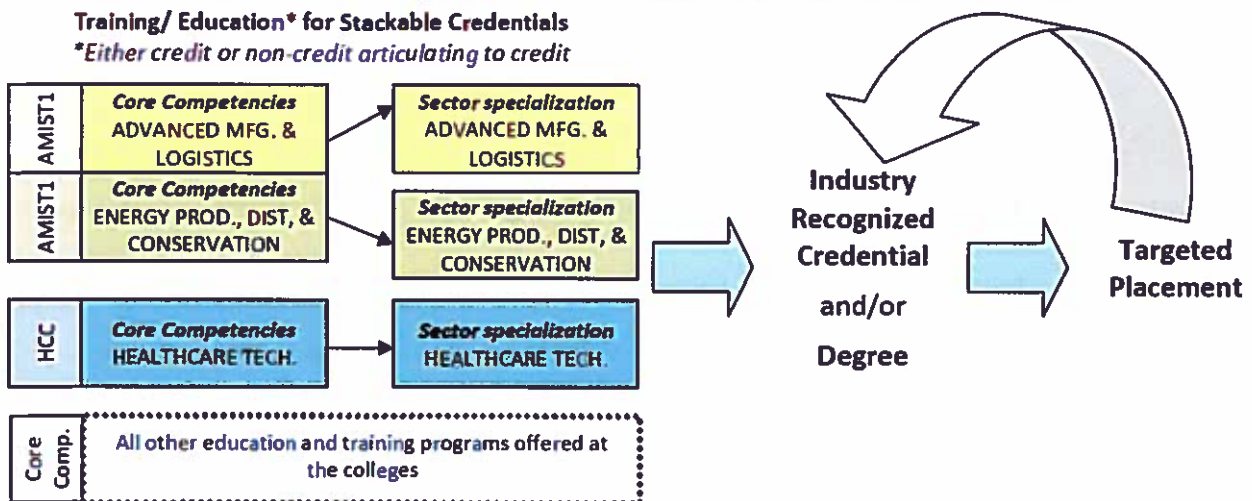
¹⁰ Scivener, Susan and Michael J. Weiss. “More Guidance, Better Results? Three Year effects of an Enhanced Student Services Program at Two Community Colleges.” MDRC, August 2009. <http://www.mdrc.org/publications/524/execsum.pdf>

program and curriculum decisions.¹¹ While our platform will track only community college students, the effects of a common platform for reporting and tracking across a multi-institution consortium apply.

3. **Increasing “Planfulness”:** Karp discusses the methods various colleges have utilized to engage and retain at-risk students. She says that tools that increase a student’s planning capabilities helps clarify career goals and next steps. Karp says that using individual advising sessions or new technologies such as online tools would support student retention and achievement.¹²
4. **Alignment of Processes and Student Services:** Jenkins conducted a review of lessons learned from high-performing education models and other organizations and reports that aligning processes and student services creates “mutually reinforcing supports for students.” Common practices of effective undergraduate institutions identified include well-coordinated student support services; targeted advising and academic support programs for at-risk students; and collaboration across departments.¹³

Priority #3: Build Programs that Meet Industry Needs, Including Developing Career Pathways

Training/ Education* for Stackable Credentials
 *Either credit or non-credit articulating to credit



¹¹ Cal-PASS Initiative Web site. www.cal-pass.org

¹² Karp, Melina Mechur. “Toward a New Understanding of Non-Academic Student Support: Four Mechanisms Encouraging Positive Student Outcomes in the Community College,” Community College Research Center, February 2011. <http://ccrc.tc.columbia.edu/Publication.asp?UID=860>

¹³ Jenkins, Davis. “Redesigning Community Colleges for Completion: Lessons from Research on High-Performance Organizations.” CCRC, January 2011. <http://ccrc.tc.columbia.edu/Publication.asp?UID=844>

Our industry-based strategies have been focused on needs, existing employer partnerships, and solutions for the Advanced Manufacturing/Logistics; Energy Distribution, Conservation and Production; and Healthcare IT sectors. We are fortunate in Pennsylvania to have award-winning community colleges and a national model for Industry Partnerships supported by local Workforce Investment Boards. Our three major strategies under this priority relate directly to the identified employer demands in our three target sectors.

Strategy 3.1: Statewide Transition to Advanced Manufacturing & Logistics
Develop a statewide customizable approach for creating clear pathways for laid-off manufacturing workers to return to the industry with the skill sets needed for high-wage jobs

Core implementation components of this strategy include:

- Expand access across all colleges to on-line manufacturing courses already used by some of our colleges (Amatrol, Oxygen Education, Toolkit) and use this program to increase our overall capacity and flexibility, with more precisely defined relationships to our site-based courses;
- Promote the opportunities that exist for laid-off manufacturing workers to “re-tool” at a higher skill level in advanced manufacturing – this requires selling workers on the idea that they are not “going back to manufacturing” but are building their current skills to enter the new sector of “advanced manufacturing”;
- Build on the existing base of programs across all of our colleges in four ways: 1) Offer an entry-level credential to students who lack the fundamental orientation to the sector; 2) Build upon the AMIST model to include levels 2-4, allowing students an advanced pathway to higher-skilled jobs; 3) Enhance statewide capacity to provide assistance to students in accessing courses on-line; and 4) Dedicate staff to recruitment and job placement connections with the CareerLinks and Industry Partnerships;
- While students are acquiring core competencies in the basic skills described in Priority #1, prepare students with parallel remediation as needed to be able to enroll in the next level of the pathway:

Credential	Reading/Writing	Math
AMIST 3	Grade 10	Trigonometry
AMIST 4	Grade 10	Trigonometry
NIMS – Level II	Grade 10	Trigonometry

- Provide statewide consistency across four high-demand certifications in high demand by advanced manufacturing employers: 1) Production Technician (Amatrol/Oxygen Education or MSSC paths); 2) Industrial Maintenance Technician; 3) Machining; 4) Logistics;
- Maintain an ongoing connection between TAACCCT implementation and the work of the Pennsylvania Center for Advanced Manufacturing Careers and its Specific Skills Pipeline Committee, drawing on the employer connections that have already been built by the Center and sharing in collection and dissemination of real-time information between employers and the colleges.

Partnerships with employers of the Advanced Manufacturing and Logistics sector will be maintained and expanded through several established mechanisms:

- Existing strong relationships between our colleges and local Workforce Investment Boards, particularly in several regions where the WIB, CareerLinks, and colleges have collaborated on industry pathways;
- Stronger relationships with the 16 Industry Partnerships in the manufacturing sector and 6 in the logistics sector, as the TAACCCT grant addresses a key priority of capacity building, and our statewide multi-college approach will greatly enhance cross-partnership sharing and ultimate sustainability of the efforts –all Pennsylvania counties have participated in advanced manufacturing partnerships;
- Employer advisory groups at each college and employer partners we have worked with on the grant process – moving to implementation, we envision statewide “grand convenings” of advanced manufacturing and logistics employers to test our approaches and promote employer participation.

Strategy 3.2: Regional Energy Specialization

Create regionally-specific advanced energy courses tied to the unique needs of each of our regions

Energy needs vary greatly across the regions of Pennsylvania. In the western part of the state focus is on the Marcellus Shale natural gas industry, for example. In other regions building efficiency is the main area of interest. The Think Tank and Energy Work Group were cautious not to exclude energy industries that may be important to regional economies and therefore offer each college the flexibility to

choose programs that reflect the labor market demand in their region. For this reason, the Energy Work Group has identified fourteen programs that colleges can choose to build capacity in. We expect clusters of colleges coming together to deal with specialized energy programs to meet regional needs.

TAA participants will have the option of preparing for a "middle skill" occupation choosing from the following credit and non-credit programs: Alternative & Renewable Energy Systems; BPI Building Analyst; Building Energy Analyst; Energy Technology; Geothermal Driller; Geothermal Installer; Natural Gas Technology; Smart Grid Technician; Smart Meter Technician; Solar Photovoltaic Installer; Solar Thermal Technician; Weatherization Technician; Wind Energy Technician; and Nuclear Technology.

With many of the core skills needed for energy distribution, production and conservation grounded in manufacturing principles and competencies, we are able to create efficiencies with the Advanced Manufacturing and Logistics programs by utilizing the AMIST Level 1 as a common core curriculum to both.

Career pathways have been identified for eleven of the fourteen programs. Pathways for the remaining three programs are currently being developed. An example of one of these pathways, the Natural Gas Technology pathway, is: AMIST1 → GAS TECH 1 → GAS TECH 2 → GAS TECH 3 → AS → BS. The career pathway for Natural Gas Technology begins with students earning a certificate as a Certified Production Technician, followed by the AMIST Level 1 credential. Once complete, participants will have the opportunity to either enter an Integrated Systems Technology and be awarded 17 credits toward an Associate degree or they may choose to enter the Marcellus Shale Natural Gas Technology Certificate program which will include Gas Technology Certificate 1, 2, and 3. All pathways lead toward an industry-recognized credential (Building Performance Institute, North American Board of Certified Energy Practitioners) and/or an Associate degree, often articulating to a Bachelor degree program.

Upon award of the grant, we plan to translate these programs to an on-line or blended delivery format. A national survey conducted by the Energy Work Group discovered only a few on-line energy programs, none of which match the program configurations that we have identified as needed. For

example, Online Labvolt Industrial Training Zone has an on-line Renewable Energy Curriculum, but it incorporates training on various energy systems as opposed to concentrating on one system.

There are 11 Energy Industry Partnerships across Pennsylvania which are focused on specific energy sectors based on regional priorities, ranging from the Oil and Gas Industry Partnership of Southwest Pennsylvania to the Smart Energy Initiative of Southeastern Pennsylvania focused on solar, geothermal and energy efficiency. These Industry Partnerships, as well as our colleges' existing advisory boards of employer partners and local Workforce Investment Boards, will continue to be engaged to provide guidance on program design and curriculum development to ensure that programs are relevant to industry needs.

Strategy 3.3: Meeting Expanding IT Needs of Healthcare
Promoting job opportunities in Healthcare IT/Medical Records Management to laid-off workers from other sectors and creating the transitional skills pathways for success

With the national shift toward electronic medical records as well as an aging population, occupations in Healthcare Information Technology are experiencing significant growth. Employers, however, report that we need to fill the pipeline of talent for these jobs with the needed skills. In order to do so, our colleges will establish the statewide Healthcare Core Curriculum discussed under Priority #1 as an entry-point for all healthcare related programs and a Healthcare Technology Specialist program.

As mentioned in the Statement of Need, employment in Medical Records and Health Information Technology is expected to grow by 16% in Pennsylvania by 2016. The Healthcare Technology Specialist program will prepare IT technicians with state-of-the-art IT skills and a working knowledge of the healthcare system, and it will be modeled on a program in development at Harrisburg Area Community College (HACC). A draft curriculum will continue to be refined and serve as a starting point for the statewide curriculum. The curriculum offers a blend of healthcare-related courses and IT courses with industry recognized IT certifications built into the program. Two practicums, one hospital-based and one office-based, are also included to provide hands-on practice and skill development.

The colleges that will be building capacity for a Healthcare Technology Specialist will refine the curriculum and its delivery methods. We aim for a blend of on-line, hybrid and classroom courses in the program. One possibility that will be considered will be to deliver on-line courses centrally – directly to students when appropriate and to participating campuses for hybrid settings. The curriculum developed by HACC is aligned to 14 SOC codes and has been vetted through multiple meetings with industry partners who have validated the need for such a program.

Select modules in the Healthcare Technology Specialist program will be packaged separately as a certificate or diploma that could also be used by incumbent workers who may need retooling as the technology integration in hospitals and physicians' offices continues to ramp up.

In addition to the employers we have been and will continue to work with on the development of the program, we will engage with the 14 Healthcare Industry Partnerships that serve the Commonwealth. We will look to industry to help with program design and also their active participation in providing student practicum sites. As in our strategy for Advanced Manufacturing and Logistics, we envision statewide “grand convenings” of employer partners to test approaches and re-engage industry.

Evidence Base for Priority #3:

1. **Data-driven Targeted Industries:** The three targeted industries and occupations were selected based on labor market information from the Pennsylvania Center for Workforce Information and Analysis' High Priority Occupations list and meet three criteria: 1) in demand by employers, 2) have higher skill needs, 3) provide family sustaining wages, and 4) offer career pathways.¹⁴

¹⁴ Pennsylvania Department of Workforce Development, Center for Workforce Information and Analysis. “An Introduction to High Priority Occupations” (PowerPoint presentation). 2010.

2. **Industry-focused Training Programs:** According to a study by Public/ Private Ventures (P/PV), industry-focused training programs were proven to lead to employment and higher-wages for participating individuals.¹⁵
3. **Employer Engagement:** The same study from Public/ Private Ventures that shows the positive outcomes of sector-focused training programs also highlights the importance of employer involvement. Of the three successful programs that were evaluated, all had a strong involvement from employers.

Project Work Plan					
Priority 1:	Accelerate Progress for Low-Skilled and Other Workers				
Activities	Implementer(s)	Costs	Time	Deliverables	
Strategy 1.1: Rapid Remediation	1.1.a) Inventory current assessment approaches used by all colleges and CareerLink centers and define crosswalks. 1.1.b) As core entry courses are defined and standardized across the state, define minimal competencies needed for each. 1.1.c) Define statewide standard and protocols for open-entry access and create each college's procedures tied to its unique assessment and on-line remediation packages. 1.1.d) Develop standards for competency demonstration for skills learned on the job.	All colleges		Start Date: 7/1/2011 End Date: 6/30/2014 Milestones: Inventory of assessment approaches by Jan. 2012 Define statewide standard for open-entry access June 2012	Inventory of current assessment approaches used across the Commonwealth Statewide standards and protocol for open-entry access

¹⁵ Maguire, Sheila, Joshua Freely, Carol Clymer, Maureen Conway and Deena Schwartz. "Tuning in to Local Labor Markets: Findings from the Sectoral Employment Impact Study." Public/ Private Ventures, July 2010.

Activities		Implementer(s)	Costs	Time	Deliverables
Strategy 1.2: Contextualized Core Skills	1.2.a) Purchase AES HealthCenter21 modules for the Pennsylvania Healthcare Core Curriculum 1.2.b) Roll out Healthcare Core Curriculum at all colleges 1.2.c) Establish Core Curriculum based on AMIST Level 1 for Advanced Manufacturing/ Logistics and Energy	All colleges		Start Date: 7/1/2011 End Date: 6/30/2014 Milestones: Refine curriculum for statewide basic core curriculum in Healthcare and Advanced Manufacturing/ Logistics and Energy Equip all fourteen colleges with necessary software and supplies to deliver standard core curriculum	Statewide Healthcare Core Curriculum Advanced Manufacturing/ Logistics and Energy Core Curriculum based on AMIST Level 1
Priority 2: Improve Retention and Achievement Rates and/or Reduce Time to Completion					
Activities		Implementer(s)	Costs	Time	Deliverables
Strategy 2.1: Increase Student Supports via Career Coaches	2.1.a) Refine statewide job description for Career Coaches 2.1.b) Hire or re-dedicate Career Coaching personnel at each college 2.1.c) Initial and annual training for Career Coaches 2.1.d) Purchase office supplies/equipment for Career Coaching personnel	All colleges		Start Date: 7/1/2011 End Date: 6/30/2014 Milestones: Hire and train Career Coaches in Year 1. Serve students in Years 2 and 3.	Career Coaches on staff at all fourteen community colleges
Activities		Implementer(s)	Costs	Time	Deliverables
Strategy 2.2: Increase Connectivity to and among students and Career Coaches	2.2.a) Refine Statement of Work, Procure vendor to develop a on-line platform 2.2.b) Work with procured partner to develop statewide platform	All colleges		Start Date: 7/1/2011 End Date: 6/30/2014 Milestones: Procure vendor to create online platform 7/ 2011 On-line platform live and in use 1/ 2012 Utilize platform Years 2 and 3	Statewide on-line platform with self-service tools and data management system included
Priority 3: Build Programs to Meet Industry Needs, Including Developing Career Pathways					
Activities		Implementer(s)	Costs	Time	Deliverables
Strategy 3.1:	3.1.a) Define	Community College		Start Date: 7/1/2011	

	3.2.f) Purchase equipment and supplies					training using equipment that meets industry standards
Activities		Implementer(s)	Costs		Time	Deliverables
Strategy 3.3: Meeting Expanding IT Needs of Healthcare	3.3.a) Continue to develop and refine the curriculum for Healthcare Technology Specialist program	Bucks County Community College, Butler County Community College, Delaware County Community College, Harrisburg Area Community College,			Start Date: 7/1/2011 End Date: 6/30/2014	Healthcare Core Curriculum
	3.3.b) Equip participating colleges with necessary equipment and supplies	Lehigh Carbon Community College, Luzerne County Community College, Montgomery County Community College,			Milestones: Finalize Healthcare Technology Specialist curriculum by 1/2012	Healthcare Technology Specialist program
	3.3.c) Roll out Healthcare Technology Specialist program at select colleges	Pennsylvania Highlands Community College, Community College of Philadelphia, Reading Area Community College			Serve students in remainder of Year 1 and Years 2 and 3	

Project Management: As the group that defined the strategic design of our approach, the Think Tank will continue to be the TAACCCT leadership organization throughout the grant period. Three work groups will be formed to oversee the implementation of the sector-based activities, including the establishment of the common basic core competencies. A fourth unit devoted to the Statewide Framework will oversee the implementation of the statewide platform, Career Coaching, and fast-track remediation.

The Community College of Philadelphia (CCP) will serve as the lead college and will be responsible for all fiscal and administrative duties related to the grant. CCP will hire the following team of personnel to for management of our TAACCCT program.

Title:	Executive Director
Duties:	Provides fiscal leadership, coordination, and direction for the grant funded initiative state wide. Responsible for coordination of overall fiscal, administrative and compliance reporting across 14 community college partners. Work with PA community college partner senior administrative staff to ensure individual campus programming is in support of grant goals and objectives.
Title:	Manager, Grants & Compliance
Duties:	Provides overall leadership for the grant state-wide for monitoring and facilitating to ensure compliance with external funding source regulations, current accounting standards, contractual

	obligations, and internal financial and resource management requirements. Work closely with the Executive Director, Office of Institutional Advancement staff, the General Counsel, and key program staff responsible for managing the programmatic aspects of grants.
Title:	Accountant (2 full-time positions)
Duties:	Responsible for the financial records in the grant area, general ledger account analysis and various special projects. Maintain financial recording of all grant funds consistent with audit standards. Perform grant accounting and coordinates budgets with grant accountant. Monitor and audit travel, tokens, credit cards and purchase orders. Perform general ledger account analysis. Perform fringe benefits calculations, including adjustments resulting from redistributions. Responsible for processing grant disbursement checks. Assist in grant closing process, including salary accruals and accruals of other expenditures; monitor for reversals.
Title:	IR/Data
Duties:	Coordinates with the Director, Institutional Research and the Research Associate to define, collect, extract, compile, analyze and report institutional data for use in institutional reporting, planning, and assessment of institutional effectiveness. Facilitate the development of datasets for assigned research projects for internal and external use. Design queries for data analysis to respond to ad-hoc requests for institutional research. Assist the development, maintenance and analysis of dashboard and performance indicators and other institutionally relevant outcomes and reports. Present statistical findings in clear, concise, and understandable formats.
Title:	Application Developer
Duties:	Develops applications for Banner (forms, packages, Web applications), provides support for existing Banner objects, develops and maintains existing internal web applications and backup outside web applications. Works with user departments to identify and solve system problems, identify unused features and determine appropriate implementation plans. Design, code and test new applications. Work with users to define and document requirements for new applications.
Title:	Administrative Associate Support
Duties:	Provide administrative and clerical support for the Executive Director and oversight staff. Duties and responsibilities may involve developing plans for accomplishing and prioritizing work and reasoning/analyzing data and information to resolve problems, data management to ensure the integrity of statewide database, providing day to day support for the Executive Director including: conducting research, planning and coordinating meetings, preparing multiple reports, etc.

Financial and Reporting Systems: CCP utilizes ACT Banner as its enterprise-level administrative system. Banner Finance and Banner Student will be used to manage the transactional activity and reporting required for the TAACCCT grant goals. CCP's chart of accounts will be modified to establish an account structure which ensures that all transactions associated with the TAACCCT grant are appropriately segregated for financial control and reporting purposes. Brio (Hyperion) is used as the CCP's reporting tool and will be used to develop required reports for the grant. CCP routinely issues monthly and quarterly financial reports for all organizational units including grant-funded projects.

Under the College Controller is a staff of special funds accountants who manage all of the CCP's specially-funded projects. The special funds accountants will create a chart of accounts and budgets within Banner for the grant that will facilitate appropriate financial controls and reporting. All personnel and other expense requests will flow through the special funds accountants to ensure their conformity with grant requirements. The accounting staff will ensure that budget-use reporting conforms to the requirements of the grant and that grant reporting deadlines are met. The accountants will work with the project director to ensure that any requirements for budget revisions are identified on a timely basis, and that internal and external approvals for budget modifications are obtained as needed. Hiring and procurement procedures employed for the grant will conform to all college policies and applicable federal and state laws. Hiring will be coordinated by the College's Department of Human Resources, and the Office of Purchasing will be responsible for the procurement of goods and services associated with the grant. CCP has a formal Records Retention Policy which will govern how records associated with the project are maintained. The Controller is responsible for coordinating all external audits. He will ensure that procedures are in place to facilitate any required audit for the project. It is anticipated that this grant will meet the major-program dollar threshold which requires an A-133 audit. The average cost for an A-133 audit at CCP is \$11,000.

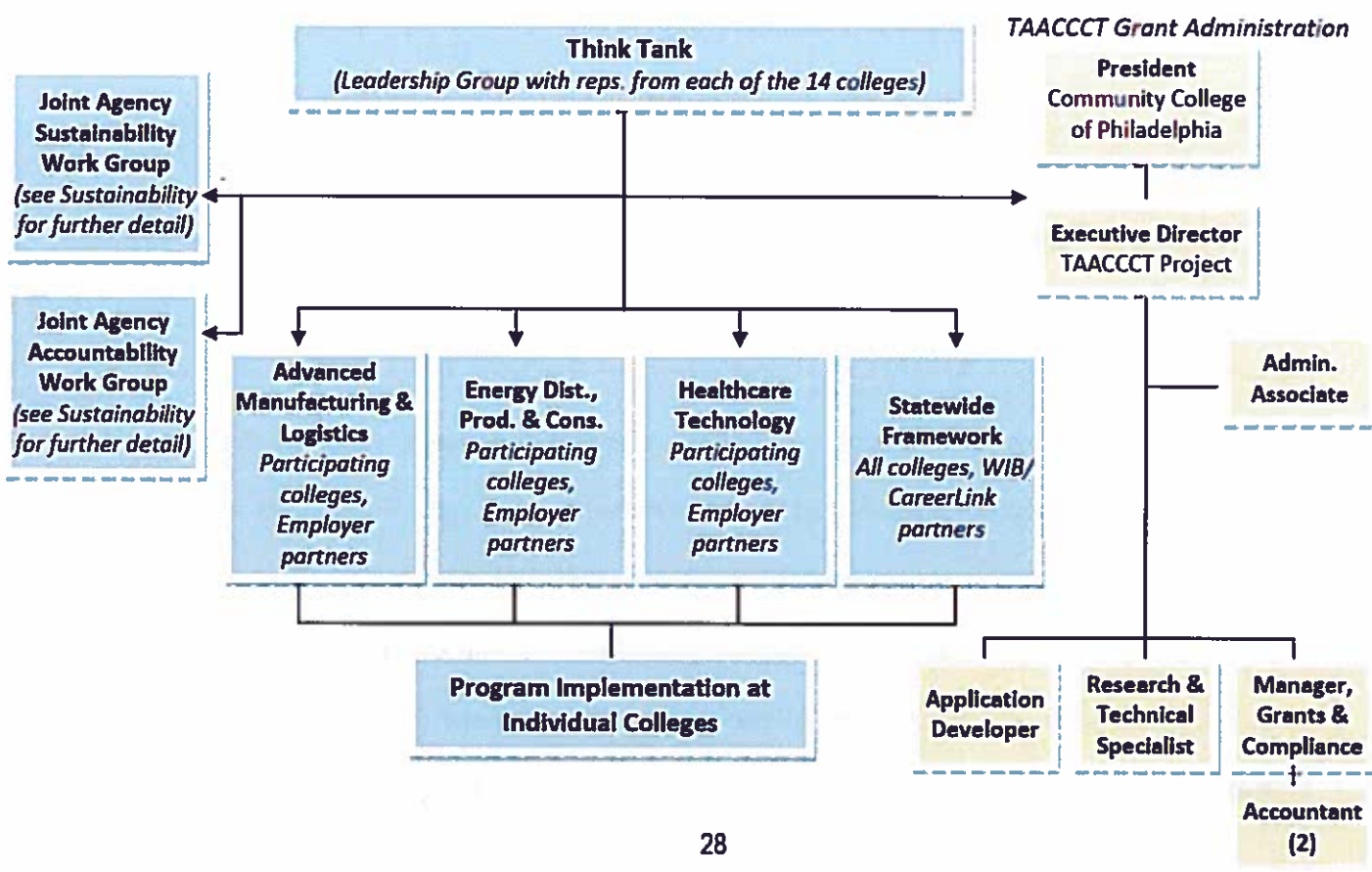
Leveraged Expertise: Content experts will be engaged during the planning and implementation phases of our approach. In regard to the sector-specific strategies around Advanced Manufacturing and Logistics, Energy Distribution, Production and Conservation, and Healthcare Technology, we will draw on the expertise of the Commonwealth's Industry Partnerships in each of these areas. As experts in bringing industry, WIBs, and education providers together to meet the training needs of employers and their employees, the Industry Partnerships across the state will be a sounding board and guide.

Our fourteen college consortium will also partner with Creative Commons, Carnegie Mellon's Open Learning Initiative, CAST, and the Washington State Board for Community and Technical Colleges. These experienced organizations will provide infrastructure support and capacity building.

- Creative Commons is the global leader in open content licensing and will provide technical support in meeting the open licensing requirement and ensuring interoperability of C3T funded content.
- Carnegie Mellon Open Learning Initiative brings expertise in applying results from learning sciences to the implementation, evaluation and improvement of open web-based learning environments.
- CAST is a pioneer in the field of Universal Design for Learning and will offer grantees technical support and enabling technologies to ensure that all of the digital content and learning environments developed in this project succeed with the widest range of learners possible.
- The Washington State Board for Community and Technical Colleges is one of the nation's leading community college systems fully embracing open educational resources and open licensing, and will develop best practices, policies and professional development that work for participating institutions.

Services will be coordinated through Creative Commons, at zero budget impact to our Consortium.

Organizational Chart:



Third-Party Evaluation: Subject matter experts will evaluate all deliverables produced under the TAACCCT grant project. Upon award of the grant, we will procure this service.

Role of Employers and the Public Workforce System: Employers and the public workforce system have been actively engaged in our design of the project and will continue to be involved in its implementation. Employers: During the design phase, employer partners have been consulted about the need for and relevance of the identified training programs. These employers will continue to serve in an advisory role to help guide our implementation. We will look to these partners for assistance and feedback on curriculum design, mentoring opportunities for faculty and students, and ultimately hiring students. In addition, we envision a statewide "grand convening" of sector-based partners in Advanced Manufacturing and Logistics, Energy, and Healthcare Technology at least once a year.

As mentioned earlier, we are also uniquely positioned to draw on the Industry Partnerships (IPs) that exist across the Commonwealth for active engagement around the three targeted industries. In the state, there are 22 Advanced Manufacturing and Logistics IPs, 11 Energy IPs, and 18 Healthcare IPs.

The Public Workforce System: Each of the colleges consulted with its local Workforce Investment Board on training priorities, labor market information, and their experiences with and insights on the TAA population. In regard to program design, our Intake/ Assessment/ Basic Skills Work Group consulted with the local Workforce Investment Boards and their network of CareerLinks on streamlining the intake and assessment processes at both the CareerLinks and the colleges. The WIBs and CareerLinks will be vital partners throughout all phases of a participant's training, but will be key to both the intake and assessment process and working with the Career Coach to place a student in gainful employment.

Consortium Members Roles and Responsibilities: The members of the consortium commit to implementing the program activities that build the fourteen community colleges' capacity to deliver training to TAA and TAA-like populations. Consortium members will align current intake and assessment processes to the statewide framework for intake, assessment and career coaching that has been designed

with consideration for TAA individuals' needs and potential barriers. The fourteen consortium members will build capacity within their own institutions around one or more of the targeted industries and occupations, depending on its region's industrial environment and priorities. Within these areas of study, the colleges will work toward standardization of coursework to increase stackability of training programs and credentials across the Commonwealth of Pennsylvania.

Sustainability: The next three to five years will likely be the most volatile period that many of us in education and workforce development have experienced. It will be marked by continuation of seismic shifts in the economy, high levels of unemployment resulting from the shifts, political unrest, and constraints on public spending at a time when increasing levels of job seekers and employers will need navigational assistance. To succeed in meeting the challenges, leaders in education, workforce development, and economic development will need focus and coordinate limited resources to achieve the highest possible return on investment. Traditional strategic planning models will not suffice in this volatile period. We must act with speed and urgency as we "act our way to new plans" rather than "plan for new actions." Our proposal presents such actions that we will study as we implement, realizing that some are designed to take us out of our comfort zones, both internally and externally in our relationship with our partners.

Sustainability, along with evaluation, will be addressed from the first day of grant implementation. We are not alone in our need to sustain successful approaches to dealing with key issues; Pennsylvania's network of Industry Partnerships, the Pennsylvania Fund for Workforce Solutions, our Workforce Investment Boards and CareerLinks, and our own colleges all face significant funding challenges over the next few years. With this in mind, we plan to create a Joint Agency Sustainability Work Group immediately upon grant award to share knowledge, goals for sustainment, and to craft strategies that focus all of our energies toward joint research, evaluation, advocacy, and fund development. We will also use this forum as the work group for the design of our evaluation process for this project, as our evaluation structure must address a broad set of impact objectives shared by the broader group.

While this group will focus on sustaining efforts at a higher strategic level, our own college partners will keep in place a work group focused on sustaining our statewide on-line platform and the expansion of the statewide network of Career Coaches. Both of these tactical approaches have implications for our partner organizations, which we will share with the Joint Agency Accountability Work Group.

Our colleges will also participate in capacity-building partnerships for our three industry targets of advanced manufacturing/logistics, energy, and healthcare information technology. Clearly, sustainability will occur for curriculum that is developed and standardized, equipment that is employed as part of the expanded curriculum, and for the multi-college networks that have been formed to continue the development of coursework for each of the sectors. We also expect that the sector-based model for planning and development for our three industry sectors will prove highly successful and will be expanded to other sectors not chosen for capacity building under this grant.

MEASUREMENT OF PROGRESS AND OUTCOMES

Each of the 14 community colleges has an institutional research (IR) office that serves as its central source of institutional and student data. IR offices complete and/or provide assistance with demographic analyses, projections, mandated reporting and research focused on students, staff, budget, and outcomes. Many college IR offices also serve as the gatekeepers for their institution's student information system.

The Pennsylvania Commission for Community Colleges functions as a centralized IR office. The Commission maintains historical data from the inception of Pennsylvania community colleges in 1963. The Commission performs many data functions from collecting, analyzing, and reporting on core aggregate data such as enrollment and awards to developing databases and survey instruments. A vast majority of the information housed at the Commission is supplied by the college IR offices due to a strong partnership between the colleges and the Commission.

Achieving the Dream and the National Community College Benchmark Project are two notable data projects undertaken by the Commission. The Commission developed a longitudinal database to house, retrieve, and analyze student-level data reported by the seven institutions participating in the Achieving the Dream initiative. This database currently contains general information on nearly 150,000 students and over 560,000 transactional records. Cohort-based student success reports are created and analyzed by Commission staff and college IR staff.

The National Community College Benchmark Project (NCCBP) survey is administered by Johnson County Community College in Kansas. Each survey contains 166 data entry fields and 104 calculated data elements but not all items are applicable to Pennsylvania community colleges. Copies of survey responses are provided to the Commission and entered into an internally-developed database. All 14 Pennsylvania community colleges have participated in the NCCBP survey for the past four years.

The Commission will play an active role in supporting and guiding the data collection and evaluation processes. To assist this process, the statewide on-line platform will include tracking and reporting capabilities. Having this mechanism on the statewide platform allows for 1) common means and methods for tracking across the fourteen colleges and 2) an easy way for the project manager to coordinate and “download” the necessary data and documentation.

Progress and Implementation Measures:

Priority 1: Accelerate progress for low-skilled and other workers		
Strategy	Progress Measures	Implementation Measures
1.1 Rapid Remediation	<ol style="list-style-type: none"> 1. Average number of weeks needed for students to test out of remedial courses 2. Number and percentage of students who complete remedial education and earn a credential 	<ol style="list-style-type: none"> 1. Availability of fast-track, online remediation tools at each college 2. Number of students using fast-track, online remediation tools.
1.2 Contextualized Core Skills	<ol style="list-style-type: none"> 1. Average number of weeks needed for students to complete core curriculum 	<ol style="list-style-type: none"> 1. Establish Advanced Manufacturing/ Logistics and Energy common core

	2. Number of core skills certifications awarded per 100 students enrolled.	curriculum 2. Establishment of the Healthcare Core Curriculum
Priority 2: Improve retention and achievement rates and/or reduce time to completion		
Strategy	Progress Measures	Implementation Measures
2.1 Centralized Career Coaches	1. Number and percentage of students enrolled in training in consecutive semesters 2. Student satisfaction rate with Career Coaching process	1. Establishment of Career Coaches at each college 2. Student status data entered /available on the platform
2.2 Statewide platform with self-service tools and tracking	1. Number of participants utilizing self-service tools 2. Number of students entered into the on-line platform (data management system).	1. Development/ maintenance of statewide online platform 2. Career Coaches satisfaction rate with ease of tracking and reporting
Priority 3: Build programs that meet industry needs, including developing career pathways		
Strategy	Progress Measures	Implementation Measures
3.1 Statewide transition to Advanced Manufacturing and Logistics	1. Number of certificates stacked to core skills/ first level certification 2. Number of certifications above core awarded per 100 students enrolled	1. Number of new or expanded Advanced Manufacturing and Logistics programs 2. Number of employers who have reviewed and validated curriculum
3.2 Regional Energy specialization	1. Number of certificates stacked to core skills/ first level certification 2. Number of certifications above core awarded per 100 students enrolled	1. Number of new or expanded Energy programs 2. Number of employers who have reviewed and validated curriculum
3.3 Meeting expanding IT needs in Healthcare	1. Number of certificates stacked to core skills/ first level certification 2. Number of certifications above core awarded per 100 students enrolled	1. Establishment of Healthcare Technology Specialist program at colleges 2. Number of employers who have reviewed and validated curriculum

Outcome Measures:

Tracking of student outcomes will be coordinated across the state via: 1) our online statewide platform that will assist Career Coaches with tracking and reporting of student progress and outcomes; 2) our partnership with the Pennsylvania Department of Labor & Industry that will assist specifically with

accessing employment data available through unemployment wage records; 3) the contacts and follow up procedures routinely undertaken by our colleges; and 4) employer satisfaction surveys, when appropriate.

A comparison cohort has been identified and will be tracked as well. Our comparison cohort will be adult students who are over the age of 25, otherwise not receiving assistance through TAA or other federal funding streams, taking at least 9 credits a career program (diploma, certification, or Associate) and placing into one or more developmental education course.

Our baseline data in the table below is comprised of TAA participants our colleges recently served combined with a TAA-like population served through Pennsylvania's Free Tuition/ Tuition Waiver program. This program served workers who were laid-off because of the economic downturn beginning in 2008.

We currently do not have baseline data for employment outcomes (Entered Employment Rate, Employment Retention Rate, Average Earnings) for our baseline cohort. However, we have established a partnership with the Pennsylvania Department of Labor and Industry to assist us with accessing employment data via unemployment wage records throughout the grant period.

Targets - Annual Program Participants	Year 1	Year 2	Year 3
Number of Program Participants	1,089	1,398	1,320
Number of Program Completers	677	926	849
Number of Placements into Employment	456	644	590

Participant Demographics:	Baseline Data	Year 1	Year 2	Year 3
Age				
Age 25 and Under	6.4%	5.0%	3.5%	3.5%
Age 26-35	20.0%	20.0%	17.5%	15.0%
Age 36-45	25.7%	30.0%	33.5%	36.5%
Age 46-55	32.0%	35.0%	37.0%	40.0%
Age 55 and Over	15.2%	10.0%	8.5%	5.0%
Age Unknown	0.6%	0.0%	0.0%	0.0%
Gender				
Male	52.6%	55.0%	52.0%	50.0%
Female	47.4%	45.0%	48.0%	50.0%
Race / Ethnicity				
Minority Race	13.2%	15.0%	18.5%	20.0%
Hispanic	3.9%	5.0%	7.5%	10.0%

Attendance Status				
Full-time Student	57.3%	65.0%	70.0%	75.0%
Part-time Student	42.7%	35.0%	30.0%	25.0%
Highest Level of Education				
No High School Diploma	3.4%	3.5%	4.0%	4.0%
High School Diploma	58.7%	60.0%	65.0%	70.0%
Some College, No Degree	28.4%	35.0%	30.0%	25.5%
Associate's Degree	3.4%	1.5%	1.0%	0.5%
Bachelor's Degree and above	1.7%	0.0%	0.0%	0.0%
Education Level Not Available	4.4%	0.0%	0.0%	0.0%
Other				
Disabled Person	2.3%	2.5%	2.5%	2.5%
Veteran	1.8%	2.0%	3.0%	4.0%

Annual Outcome Measures	Baseline	Year 1	Year 2	Year 3
Entered Employment Rate	NA	NA	NA	NA
Employment Retention Rate	NA	NA	NA	NA
Average Earnings	NA	NA	NA	NA
Credit Attainment				
Total # of credits completed in the first year	31,748	20,691	30,770	32,208
Average credits completed in the first year per student	17.6	19.0	20.5	22.0
Basic Skills Attainment				
# of participants who completed Level 1 of a stackable certificate	364	677	769	642
% of students who complete Level 1 of a stackable certificate	32.2%	62.2%	51.2%	43.9%
Attainment of Certificate - Less than One Year				
# of industry-recognized certificates of less than one year awarded	319	677	769	642
% of all industry-recognized certificates	31.8%	25.1%	27.5%	21.4%
Attainment of Certificate - More than One Year				
# of industry-recognized certificates of more than one year awarded	108	0	175	225
% of all industry-recognized certificates	28.4%	0.0%	6.2%	7.5%
Attainment of Degree				
# of degrees awarded	264	0	50	75
% of students who attain a degree within two years or less	20.6%	0.0%	3.3%	5.7%

Heroes for Hire: Putting Experience to Work

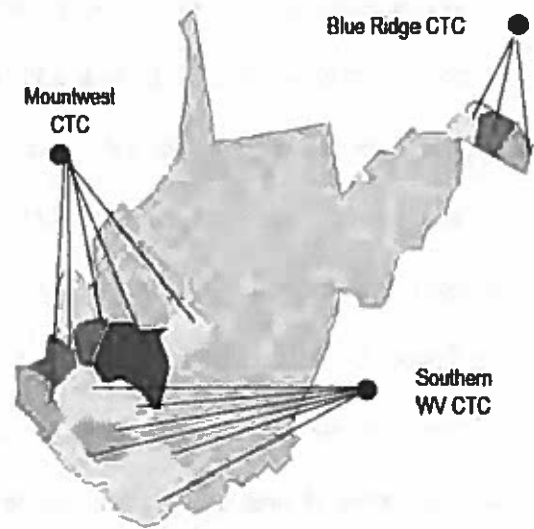
In order to address the needs of the state's fast-growing industries and improve education and training opportunities aligned to these needs, three West Virginia community and technical colleges are partnering on the *Heroes for Hire: Putting Experience to Work* program.

Mountwest Community and Technical College (Mountwest CTC), the Lead Applicant, will lead a consortium of partners comprised of Blue Ridge Community and Technical College (Blue Ridge CTC) and Southern West Virginia Community and Technical College (Southern WV CTC).

Heroes for Hire will target TAA-eligible participants as well as military service members and veterans, a TAA-like population. TAA-eligible workers and veterans share similar characteristics. They tend to be older, have a considerable amount of work experience, financial difficulties, and competing priorities for their time, such as family obligations or part-time jobs. Combined, these characteristics can discourage enrollment in training programs. For those who do enroll, these same factors make it difficult to complete programs. Both groups benefit from targeted interventions, such as tailored recruitment, wrap-around career and support services, and retention strategies.

Mountwest CTC has been named the top "Best for Vets" career and technical college in the nation for the past two years by *Military Times*, ranking it above hundreds of schools surveyed across the nation, due to its programming for military service members and veterans.¹ In addition, Mountwest CTC is recognized as a national best practice in support service delivery for the military population.²

Consortium Partners' Service Regions



¹ *Military Times*, 2014, <http://projects.militarytimes.com/best-for-veterans/colleges/career-technical-colleges/2014/>

² *CareerFocus*, 2014, <http://mclc.mycareerfocus.org/2013/11/21/mountwest-named-best-for-vets-two-years-in-a-row/>

Mountwest CTC's consortium partners, Blue Ridge CTC and Southern WV CTC, also share a commitment to serving the needs of TAA and TAA-like individuals and military service members and veterans. The Air National Guard's 167th Airlift Wing is located in Blue Ridge CTC's service region, and its partnership with the Air National Guard has been a top priority for the college. For example, a 2013 announcement regarding an impending draw-down in forces at the 167th Airlift Wing prompted a swift response from Blue Ridge CTC, which worked closely with the Air National Guard to create an Associates of Applied Sciences program for cyber-security, a program identified as closely matching the skills and experience of the affected service members.^{3,4} Blue Ridge CTC also ranked among the top "Best for Vets" colleges in the nation for 2014, while Southern WV CTC was awarded the 2014 "Military Friendly Schools®" designation by Victory Media.^{5,6,7} Through the *Heroes for Hire* program, Blue Ridge CTC and Southern WV CTC will replicate aspects of Mountwest CTC's career and support services for military service members and veterans, while all three colleges address the critical workforce needs of their respective regional economies through new or expanded career pathways.

(1) Statement of Need

(a) Serving the Education and Training Needs of TAA-Eligible Workers

(i) Impact of Foreign Trade: The U.S. Department of Labor has rendered 48 TAA certification determinations in West Virginia since 2010. Collectively, these determinations have affected 2,772 workers.⁸ In 2012, West Virginia ranked seventh in the nation based on TAA training fund allocations.⁹ Recent

³ Blue Ridge CTC, 2013, www.blueridgectc.edu/new-cyber-program-to-help-displaced-workers/

⁴ Herald-Mail Media, 2013, http://articles.herald-mail.com/2013-08-01/news/40974079_1_jerry-forster-checkovich-blue-ridge-community

⁵ Military Times, 2014, <http://projects.militarytimes.com/best-for-veterans/colleges/career-technical-colleges/2014/>

⁶ Military Friendly, 2014, www.militaryfriendlyschools.com/search/profile.aspx?id=237817

⁷ Southern WV CTC, 2014, www.southernwv.edu/news/southern-awarded-2014-military-friendly-schools-%C2%AE-designation

⁸ U.S. Department of Labor, 2014, www.doleta.gov/tradeact/taa/taa_search.cfm

⁹ U.S. Department of Labor, 2014, www.doleta.gov/tradeact/taa/taa_search.cfm

determinations in the consortium partners' service areas are as follows:

Year	Petitions Instituted	Certification	Estimated Workers Covered	Training Fund Allocation	Rank in Nation (based on Training Fund Allocation)
2010	19	24	1,943	\$4,944,690	28 th
2011	20	6	131	\$2,735,423	28 th
2012	17	18	698	\$6,772,423	7 th
Total	56	48	2,772	\$14,452,536	N/A

Approximately 13 percent (347 workers) of the TAA-impacted workers in West Virginia during this time period were in the consortium partners' service regions. The chart below details the companies located in each area that dislocated TAA eligible employees.

TAW Number	NAICS	Company Name	Decision Date	Service Area Affected	Workers Affected
85086	Pesticide and Other Agricultural Chemical Manufacturing (325320)	Bayer Cropscience LP	4/2014	Southern WV CTC Mountwest CTC	15
83033	Iron and Steel Mills and Ferroalloy Manufacturing (331110)	Felman Production, LLC	9/2013	Mountwest CTC	247
81937	Miscellaneous Durable Goods Merchant Wholesalers (42399)	Clearon Corporation	11/2012	Southern WV CTC Mountwest CTC	50
82091	Not available	T-Shirt International	11/2012	Mountwest CTC	6
81237	Telemarketing Bureaus and Other Contact Centers (561422)	TRG Customer Solutions	3/2012	Southern WV CTC Mountwest CTC	40

In coordination with state TAA agencies and veterans' organizations, the *Heroes for Hire* program will recruit TAA eligible individuals and veterans to enroll in the career pathways developed through the initiative. Recently, West Virginia has designated case workers to work specifically with the TAA population. Utilizing these resources, consortium partners will have a database of TAA-eligible workers to use when recruiting program participants. In 2012, West Virginia received more than \$6.7 million in grant funding to serve its TAA population and served 975 total TAA participants between October 1, 2011 and September 30, 2012. The consortium will initiate a marketing campaign for TAA caseworkers and veterans' organizations and student support services staff will establish regular contact with these stakeholders for recruitment activities.

(ii) Education and Training Needs of TAA-eligible workers: According to U.S. Department of Labor's TAA

State Profile for West Virginia, "the majority of TAA participants who enter the program face similar challenges in obtaining reemployment, which can include no education beyond high school, job skills solely in the manufacturing sector, an average age of 46, and over 12 years of experience in a specific job that may no longer exist."¹⁰ From previous research conducted through the *Bridging the Gap* TAACCCT Round 3 consortium, *Heroes for Hire* also understands that since 2008, 77 percent of TAA-eligible individuals have been male and three percent African-American or Hispanic. Furthermore, current skill levels and educational attainment also vary within West Virginia's TAA population. Fifty-six percent of TAA-eligible workers have a high school diploma or equivalency (GED/TASC), 17 percent have earned some college credits, and 23 percent have college degrees.¹¹ Of the 347 workers affected by TAA certifications in the *Heroes for Hire* areas, 75 percent, or 262 workers, were previously employed in the Manufacturing sector. All other certifications were from the Wholesale Trade and Administrative and Support Services and Waste Management and Remediation Services sectors.

Building on information gathered previously by the TAACCCT Round 3 *Bridging the Gap* consortium and through *Heroes for Hire's* conversations with veteran service providers, the consortium members have identified a number of barriers to employment for this population. Since many TAA members have dependents and families at home, relocating for school is not always an option. This population needs flexible course delivery options to increase the probability of persistence and success, highlighting the importance of modularized and compressed curriculum and online learning strategies. Furthermore, many TAA workers have spent years within one specific industry, usually one which is in decline or which is restructuring its staffing patterns in favor of high tech skills. As they transition from that industry into new career paths, they

¹⁰ US Department of Labor, Employment and Training Administration, Office of Trade Adjustment Assistance, "Trade Adjustment Assistance State Profile: West Virginia," 2010.

¹¹ Information gathered through *Bridging the Gap* – TAACCCT Round 3 Consortium. Data from WorkForce West Virginia and focus groups conducted in 2013 with TAA participants.

require guidance and career coaching. *Heroes for Hire* addresses this barrier through its strong student support services component.

(iii) Partnerships with State TAA for Workers Agencies: Consortium members have established partnerships with the West Virginia Trade Adjustment Assistance Unit, WorkForce West Virginia, and their local Workforce Investment Boards (WIB) to coordinate a regional approach to workforce and economic development to better meet the needs of both businesses and workers. These entities will aid *Heroes for Hire* in improving the skills, competencies, and employment opportunities for TAA workers and veterans. WorkForce West Virginia and the local WIBs will refer appropriate candidates to the *Heroes for Hire* program, providing counseling and career coaching to participants to improve participant retention and placement, and help facilitate employer engagement in the sector strategies. This will ensure efficient service delivery without duplicating efforts.

b) Evidence of Job Opportunities in the Targeted Industries and Occupations

(i) Evidence of Employer Demand for Targeted Industries and Occupations: *Heroes for Hire* will create career pathways in Geospatial Science and Technology (GIS), Chemical Technology, Health Professions, and Health Information Technology (HIT) to expand training capacity in the targeted industry sectors of Health Care and Social Assistance (HIT and Health Professions pathways); Manufacturing (Chemical Technology pathway); and Professional, Scientific, and Technical Services (GIS and Chemical Technology pathways). The current and projected employment and the share of the total workforce for these sectors are as follows:¹²

Targeted Industry Sectors	Percent of Total Jobs	2014 Jobs	2019 Jobs	Percent Change
Professional, Scientific, and Technical Services (NAICS Code 54)	5%	16,234	17,115	5%
Manufacturing (NAICS Code 31)	5%	16,111	14,982	-7%
Health Care and Social Assistance (NAICS Code 62)	14%	49,859	54,925	10%

¹² Economic Modeling Specialists Intl., 2014, <http://www.economicmodeling.com/>

The associated industries for these pathways along with current and projected employment over the next five years, average hourly wages, and job opening data for the members' service areas are outlined below.¹³

GS	Targeted Occupations	2014 Jobs	2019 Jobs	Percent Change	Avg Hourly Wage	Annual Openings ¹⁴	Current Job Postings ¹⁵	Education Required
	Computer Occupations, All Other (15-1199) ¹⁶	997	1,014	2%	\$38.76	22	125	Bachelor's degree
	Chemical Engineers (17-2041)	50	50	0%	\$40.14	2	59	Bachelor's degree
	Environmental Engineers (17-2081)	121	121	0%	\$36.48	3	11	Bachelor's degree
	Food Scientists and Technologists (19-1012)	15	16	7%	\$29.29	1	0	Bachelor's degree
	Environmental Scientists and Specialists (19-2041)	168	172	4%	\$22.83	7	10	Bachelor's degree
	Agricultural and Food Science Technicians (19-4011)	12	12	0%	\$17.88	1	72	Associate's degree
	Chemical Technicians (19-4031)	197	183	-7%	\$22.08	6	2	Associate's degree
	Environmental Science and Protection Technicians (19-4091)	127	129	2%	\$18.81	6	9	Associate's degree
	Total	688	683	-1%	\$26.79	26	163	
	Registered Nurses (29-1141)	7,326	8,118	11%	\$27.43	342	1,083	Associate's degree
	Cardiovascular Technologists and Technicians (29-2031)	188	215	14%	\$20.61	9	21	Associate's degree
	Emergency Medical Technicians and Paramedics (29-2041)	782	844	8%	\$14.02	42	35	Post-secondary non-degree award
	Nursing Assistants (31-1014)	2,743	3,030	10%	\$11.79	131	237	Post-secondary non-degree award
	Phlebotomists (31-9097)	291	311	7%	\$12.77	11	0	Post-secondary non-degree award
	Total	11,330	12,518	10%	\$17.32	535	1,356	
	Medical Records and Health Information Technicians (29-2071)	452	498	10%	\$15.48	23	51	Post-secondary non-degree award
	Medical Transcriptionists (31-9094)	302	311	3%	\$13.97	10	5	Post-secondary non-degree award
	Total	1,964	2,093	7%	\$14.36	75	124	

¹³ Economic Modeling Specialists Intl., 2014, <http://www.economicmodeling.com/>

¹⁴ Estimated employment change and turnover for an occupation for 2014. This is EMSI's estimate of labor market demand for an occupation.

¹⁵ The number of job openings currently posted online for this occupation, according to Indeed.com. Indeed is an online job posting aggregator, and this number is complementary to, but likely to differ significantly from, the Annual Openings Estimate EMSI provides for this occupation.

¹⁶ Includes data for Geographic Information Systems Technicians (15-1199.04), detailed projections are not readily available for this detailed SOC code

While the Manufacturing industry sector and several of the targeted occupations are projected to have no growth or to lose jobs over the next five years, projections may reflect the trend of job growth given the current state of affairs- the lack of adequate training programs for the occupations may have result in decreased demand. However, anecdotal evidence from discussions with employers, estimated annual openings, the number of major employers engaged in these industries in the service regions, and real-time labor market information suggest that these occupations are important to the economy and are appropriate targets for the *Heroes for Hire* program. Based on real-time labor market information, the following employers in the consortium partners' service areas are currently hiring positions related to the *Heroes for Hire* program's targeted occupations:¹⁷

Employer	Industry Sectors	Service Region	Current Job Openings
Genesis Healthcare	Health Care and Social Assistance	Mountwest CTC	63
Pikeville Medical Center	Health Care and Social Assistance	Southern WV CTC	37
Valley Health-Morgan County	Health Care and Social Assistance	Bluedge CTC	32
Williamson ARH Hospital	Health Care and Social Assistance	Southern WV CTC	9
Esstroc	Manufacturing	Bluedge CTC	7
Thomas Health Systems	Health Care and Social Assistance	Southern WV CTC	7
WV Department of Transportation	Professional, Scientific, and Technical Services	Mountwest CTC	6
CAMC General Hospital	Health Care and Social Assistance	Southern WV CTC	5
St. Francis Hospital	Health Care and Social Assistance	Southern WV CTC	5
HIMG	Health Care and Social Assistance	Mountwest CTC	5
Charleston Areas Medical Hospital	Health Care and Social Assistance	Southern WV CTC	3
Ecolab	Manufacturing	Bluedge CTC	2
DuPont USA	Manufacturing	Bluedge CTC	2
Shenandoah Valley Medical System	Professional, Scientific, and Technical Services	Bluedge CTC	2
Kraft Foods	Manufacturing	Bluedge CTC	1
Woodlands Retirement Community	Health Care and Social Assistance	Mountwest CTC	1
Advanced Technical Solutions	Professional, Scientific, and Technical Services	Mountwest CTC	1
		Total	188

¹⁷ Based on current job postings as of July 2, 2014 accessed on www.indeed.com and the following employer websites: <http://www.dupont.com/>, www.arh.org/careers/jobs.aspx, <http://camc.org/alliedhealthpositions>, www.stfranchospital.com/, www.pikevillehospital.org/, www.genesisihcc.com/, www.uhswv.com/, <http://agency.governmentjobs.com/wv/default.cfm>

The consortium partners have performed extensive outreach to employers in their service regions to identify which career pathways where would best meet the local workforce needs. The following employers have signed letters of support for the *Heroes for Hire* program and have indicated interest in hiring program participants as interns and/or full-time employees upon program completion: Cabell County Planning Commission, Cabell-Huntington Hospital, Essroc Italcementi Group, Genesis Rehab Services, HealthNet Aeromedical Services, Logan Regional Medical Center, St. Mary’s Medical Center, University Healthcare, and Valley Health System.

(ii) Understanding the Skills Required in the Targeted Industries and Occupations: The credential and education requirements for the targeted occupations range from post-secondary, non-degree awards to Bachelors’ degrees, as outlined in section 1(b)(i). The knowledge, skills, and abilities required for the targeted occupations, aggregated by career pathway are as follows:¹⁸

Pathway	Top Knowledge, Skills, and Abilities
GIS	<ul style="list-style-type: none"> • Knowledge: Geography, Computers and electronics, English language • Skills: Reading comprehension, Active listening, Complex problem solving • Abilities: Written comprehension, Oral expression, Oral comprehension
Chemical Technician	<ul style="list-style-type: none"> • Knowledge: Chemistry, English language, Math • Skills: Critical thinking, Reading comprehension, Active listening • Abilities: Deductive reasoning, Oral comprehension, Written comprehension
Health Professions	<ul style="list-style-type: none"> • Knowledge: Customer and personal service, English language, Medicine and dentistry • Skills: Active listening, Service orientation, Coordination • Abilities: Oral comprehension, Problem sensitivity, Oral expression
HIT	<ul style="list-style-type: none"> • Knowledge: Clerical, English language, Clerical • Skills: Active listening, Reading comprehension, Writing • Abilities: Oral comprehension, Written comprehension, Written expression

The consortium will establish a Curriculum Advisory Council for each proposed career pathway and intends to invite employers, industry representatives, state and regional accrediting bodies, and other relevant stakeholders. These Councils will provide strategic guidance on coursework and experiential learning components of each pathway, as well as insight on how the curriculum could be modified to align

¹⁸ O*Net, 2012, <http://www.onetonline.org/>

more closely with employer needs. The Councils will also continuously review the career pathway curriculum and make recommendations regarding the adoption of national accreditation standards.

(c) Gap Analyses

(i) Significant Gaps in Education and Training for Targeted Industries and Occupations: The consortium has identified significant gaps in the availability of training programs for the targeted occupations and industries, based on the following outreach activities: one-on-one conversations with WIB partners, regional employers, WorkForce West Virginia (the state TAA agency), and veterans service and support organizations; Building on information gathered during outreach conducted for the *Bridging the Gap* application for TAACCCT Round 3; research on previously-funded TAACCCT projects in the service regions; an audit of consortium partners' training programs; and an audit of training programs and infrastructure in the consortium partners' service region, including technical education centers, universities, and for-profit institutions. The table on the following page outlines the existing training programs in the targeted industries and occupations that are currently available in the partners' service regions, as well as the gaps in training programs for the targeted career pathways.¹⁹

(ii) Impact of Gaps on Ability to Serve TAA-Eligible Workers Seeking Education and Career Training: The *Heroes for Hire* consortium partners face several external limitations in adequately serving the needs of the TAA population. Due to the state's historical reliance on the Manufacturing and Construction industries, which require a relatively lower-skilled workforce, West Virginia's workforce lacks the advanced skills needed for jobs in the Health Care and Social Assistance and the Professional, Scientific, and Technical Services industries.²⁰ The magnitude of underprepared workers highlights the importance of creating adequate training

¹⁹ As reported by the consortium members, based on the outreach activities described.

²⁰ Economic Development and WIA-WP Integrated State Workforce Plan, 2012,

http://www.wvcommerce.org/App_Media/assets/doc/businessandworkforce/workforcewv/publicnotices/West_Virginia's_Five_Year_Plan_Final_3.7.2013.pdf

programs to meet the needs of employers in these growing industries and occupations at area community colleges within West Virginia. As shown in section 1(c)(i), there are major gaps in academic programs that teach the skills required for careers in the targeted industries and occupations in the consortium partners' service areas.

CTC	Pathway	Existing Training Programs	Gaps Identified
Blue Ridge CTC	HIT	<ul style="list-style-type: none"> Blue Ridge CTC contracts a Medical Billing and Coding Certificate 	<ul style="list-style-type: none"> No pathway to AAS in Health Information Technology in the service area or surrounding counties in neighboring states Coursework will need to be developed Faculty and equipment will be needed
	Chemical Technology	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> No certificates or credentials offered in the service area No programs offering a CAS in Chemical Technology offered in service area No pathway to AAS in Chemical Technology offered in service area Faculty and equipment will be needed
Southern WV CTC	HIT	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> No certificates or credentials offered in the service area No programs offering a CAS in Health Information Technology in the service area No pathway to AAS in Health Information Technology in the service area or surrounding counties in neighboring states No pathway to BAS in Health Information Technology offered in the service district Faculty and equipment will be needed
Mountwest CTC	Health Professions	<ul style="list-style-type: none"> Patient Care Technician certificate offered at Collins Career Center EKG and Phlebotomy certificates offered as continuing education at Mountwest CTC Basic EMT certificate offered at Mountwest CTC AAS Paramedic Science offered at Mountwest CTC 	<ul style="list-style-type: none"> No certificates or credentials for Certified Nurse Aide or Home Health Aide in the service area No programs offering a CAS with concentrations in EKG or Phlebotomy in the service area No pathway to AAS Health Science, Health professions concentration offered in service area Faculty and equipment will be needed
	GIS	<ul style="list-style-type: none"> ESRI Certificates in GIS offered at Marshall University 	<ul style="list-style-type: none"> No programs offering a CAS in Geospatial Science offered in service area No pathway to AAS in Geospatial Science offered in service area Faculty and equipment will be needed

TAA-workers and military service member and veteran populations tend to experience life circumstances that could discourage them from pursuing higher education or vocational training. These factors include, but

are not limited to: age, income, professional background, lack of time and/or adequate support systems. The robust student support services component of *Heroes for Hire* seeks to mitigate these barriers and help participants successfully complete their academic programs and progress to meaningful careers.

(2) Methodology and Workplan

(a) Evidence-Based Design

The *Heroes for Hire* program will incorporate three main evidence-based strategies into its design: (1) Expansion of individualized student support services; (2) Expansion of a technology-based learning environment; and (3) Provision of college credit for previous work or military experience.

(i) Review of Evidence for Program Design: Strategy 1: There is strong evidence that providing individualized student support services to students' leads to a higher graduation rate. It has been determined that "attrition rates between students' first and second year are the strongest determinants of institutional graduation rates".²¹ Approximately 75 percent of community college students balance school responsibilities with work and family responsibilities.²² The Aspen Institutes' Workforce Strategies Initiative studied six non-profit community college partnerships that serve low income communities and workers and found that many of these adult learners face the following challenges: applying and enrolling, understanding the college system, inadequate career counseling and obtaining financial aid.²³ Studies also find that attrition rates generally decrease by 50 percent in each subsequent year following the first year in attendance at an academic institution.²⁴ A Community College Research Center study found that students who enrolled in student success courses were more likely to be successful "over the given time period as measured by

²¹ Hanover Research, 2011,

www.mybrcc.edu/intranet/attachments/article/110/Improving%20Student%20Retention%20and%20Graduation%20Rates.pdf

²² Phillippe, Kent and Christopher Mullin. "Community College Estimated Growth: Fall 2011," American Association of Community Colleges, 2011. www.aacc.nche.edu/Publications/Reports/Documents/CommunityGrowth.pdf

²³ Ibid.

²⁴ Hanover Research, 2011,

www.mybrcc.edu/intranet/attachments/article/110/Improving%20Student%20Retention%20and%20Graduation%20Rates.pdf

credential completion, persistence in the college and transfer for a four-year college in Florida."²⁵ Academic preparation, self-confidence, financial support, institutional commitment, and social networks can all contribute to students' decisions to persist in college. Research has also shown that the higher the degree of integration and involvement with the institution, the more likely students are to persist and ultimately graduate.²⁶ Student support services staff are in a unique position to link students to institutional resources, activities, and their peers, and increase the chance of credential completion. Mountwest CTC's TAACCCT Round 1 *BEACON* program employs several of these student support strategies. In its first full year of implementation, Mountwest CTC saw a fall to spring retention increase by 25 percent.²⁷

Strategy 2: The usage of technology-based learning environments is crucial to serving TAA workers and military and veteran populations, since students require flexibility to complete coursework due to other responsibilities and life circumstances. For this mode of instruction to be effective, there must be a concentrated effort to tailor faculty professional development toward these learning platforms. According to Technologies for Education, "most teachers want to learn to use educational technology effectively but they lack the conceptual framework."²⁸ A well-planned professional development program that is linked curricular objectives and incorporates formative evaluation activities that are sustained by financial and staff support is essential if teachers are to use technology effectively to improve student learning.²⁹ There is moderate evidence that these learning models provide students with skills and capabilities that will translate to a workplace advantage. According to the NMC 2014 Horizon Report, "educational paradigms are shifting to

25 Cho, S. W., & Karp, M. M., 2013, Student success courses in the community college: early enrollment and educational outcomes. *Community College Review*, 0091552112472227.

26 Lotowski, V., Robbins, F., & Noeth, R. (2004). The role of academic and non-academic factors in improving college retention.

27 Based on Mountwest CTC's reporting of outcome statistics.

28 Carlson, S., & Gadio, C. T., 2002, Teacher professional development in the use of technology. *Technologies for Education*, 118-132.

29 Ibid.

include more online learning, blended and hybrid learning and collaborative models.”³⁰ These models offer different amenities and opportunities to students such as increased collaboration that fosters the real-world skills necessary in today’s workplace. It also notes that when hybrid models are designed and successfully implemented, students are able to travel to campus for some activities while completing their studies online.³¹ This type of learning environment ensures students are given flexibility to complete their studies.

Strategy 3: West Virginia’s TAA eligible population and veterans come from a variety of backgrounds; however, one commonality between these populations is their considerable learning that occurred from their work experience. Thus, providing college credit for previous work or military experience is one of the primary goals of the *Heroes for Hire* program. Preliminary evidence suggests that prior learning assessments (PLA) “can help more workers complete training and degree programs sooner by giving them college credit for knowledge and competencies gained outside of the classroom.”³² The Council for Adult and Experiential Learning surveyed 62,000 adult learners and found that students with PLA credit had higher graduation rates, better persistence and lower degree completion time compared to students without PLA credit.³³ A study of Mountwest CTC students between 2006 and 2011 identified a significant relationship between relatively lower net time to degree completion and the application of PLA credits earned through portfolio assessments, standardized tests, and examinations, ACE-evaluated corporate and military training, and institutional or state credit evaluations.³⁴ States including Texas, Idaho, Louisiana, Florida, Ohio, Oregon, and Virginia have passed legislation requiring “a commission to identify, develop and support methods to maximize academic

30 Parslow, Graham R. "Commentary: Educational Technology for the next Five Years: The NMC Horizon Report." 2014, www.nmc.org/pdf/2014-nmc-horizon-report-he-EN.pdf.

31 Ibid.

32 Council for Adult and Experiential Learning, 2012, www.cael.org/pdfs/College-Productivity-Resource-Guide2012

33 Council for Adult and Experiential Learning, 2010, www.cael.org/pdfs/123_pla_communitycolleges

34 Chappell, J.M., 2012, A study of prior learning assessment in degree completion. Theses, Dissertations, and Capstones. Paper 410, <http://mds.marshall.edu/cgi/viewcontent.cgi?article=1410&context=etd>

or workforce education credit awarded by institutions of higher education to veterans and military service members for military experience, education, and training obtained during military service.”³⁵

(ii) Use of evidence in Program Design: Strategy 1: (Expansion of individualized student support services): Expanding elements of Mountwest CTC's *BEACON* program (funded through TAACCCT Round 1), the consortium partners will utilize Student Success coaches and professional counselors to provide students with support services. Counselors and advisors will help students overcome potential graduation barriers while counselors will aid in career services. Using a targeted recruitment effort focused on the TAA and military and veteran populations and incorporating proven models from the *BEACON* program, such as web-based career planning and course analytic systems, and job placement partnerships, will aid the consortium partners in reaching the overall goals of the *Heroes for Hire* program.

Strategy 2: (Technology Based Learning Environment): Consortium members are currently implementing several technology-enabled learning strategies through *Bridging the Gap*, a statewide TAACCCT Round 3 program that has established (1) a new "technology gateway" courses focused on technical instruction; (2) online and blended instruction; and (3) remote and simulated learning. While these tools are mainly targeted toward students, *Heroes for Hire* consortium partners will implement professional development and pedagogy training for faculty members to increase their skills and enhance technology-enabled teaching standards. Faculty members teaching online courses will be required to complete individualized training modules for different types of technology that they will be utilizing. These modules will be completed utilizing technical bridge courses that combine technical skill sets and relevant teaching topics.

Strategy 3: (Credit for Previous Work or Military Experience): The consortium will adapt the existing PLA processes to assess skills and knowledge gained from military experience or prior work environments in order

35 Chappell, J.M., 2012, A study of prior learning assessment in degree completion Theses, Dissertations, and Capstones Paper 410, <http://mds.marshall.edu/cgi/viewcontent.cgi?article=1410&context=etd>

to award the TAA and military and veteran populations college credit toward their degrees. The American Council on Education (ACE) publishes recommendations for non-college formal training that takes place in the corporate and military setting.³⁶ Each consortium school will design institutional evaluation processes using ACE guidelines to ensure proper translation of work and military experience.

(b) Career Pathways

The consortium proposes to create or expand the following pathways with TAACCCT funding:

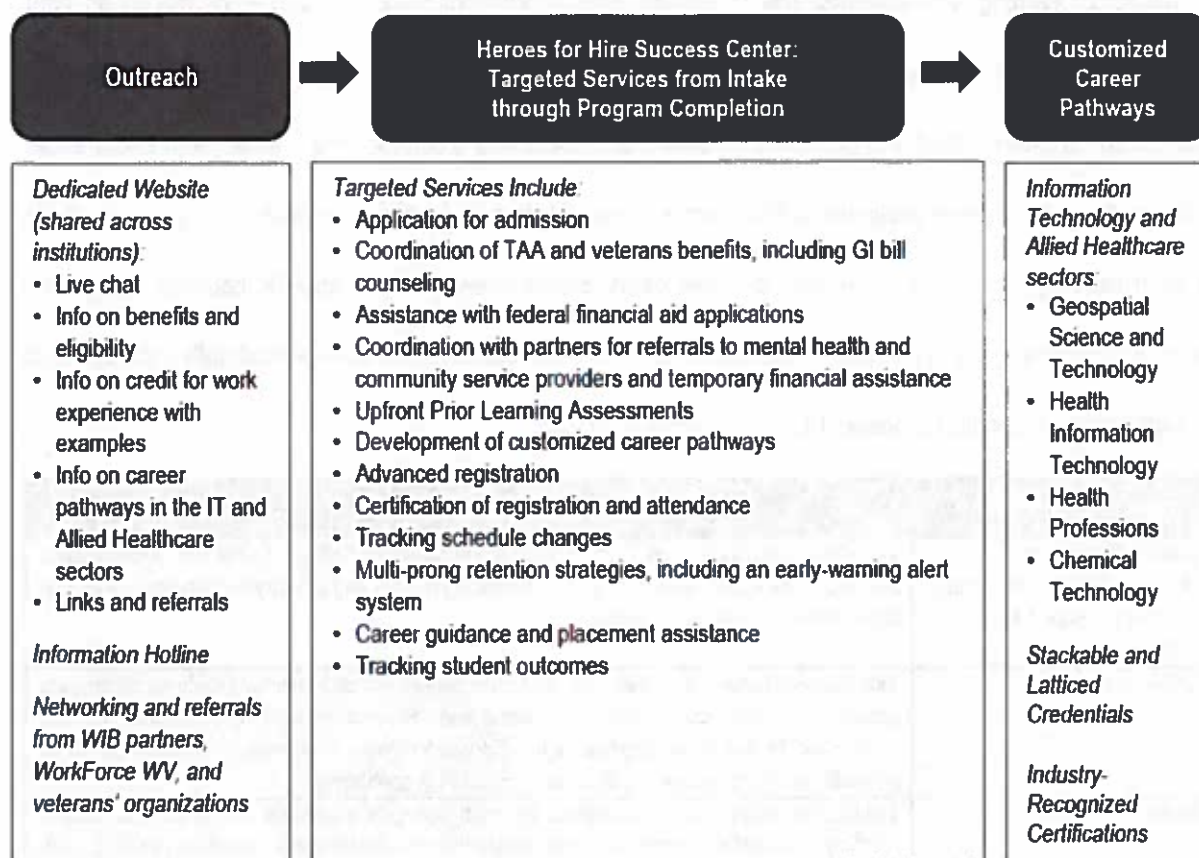
CTC	Pathway	New Programs	Expanded Programs
Blue Ridge CTC	HIT	<ul style="list-style-type: none"> AAS Health Information Technician 	<ul style="list-style-type: none"> Medical Billing and Coding Certificate
	Chemical Technology	<ul style="list-style-type: none"> CAS Chemical Technology AAS Chemical Technology 	<ul style="list-style-type: none"> N/A
Southern WV CTC	HIT	<ul style="list-style-type: none"> CAS Health Information Technician AAS Health Information Technology 	<ul style="list-style-type: none"> N/A
Mountwest CTC	Health Professions	<ul style="list-style-type: none"> AAS Health Science, Nursing concentration Credentials: Certified Nurse Aide, EKG, Phlebotomy, Home Health Aide 	<ul style="list-style-type: none"> AAS Paramedic Science Credentials: Patient Care Tech, EMT CAS Health Science CAS Certified Coding Specialist
	GIS	<ul style="list-style-type: none"> CAS Applied Science Credentials: ArcGIS Desktop, ArcGIS Desktop Certification, ArcGIS Desktop Developer Certification, Web Application Developer Certification, Enterprise Geodatabase Management Certification, Enterprise System Design Certification, Enterprise Administration Certification 	<ul style="list-style-type: none"> AAS Information Technology, Geospatial Science and Technology concentration

(i) Accelerated Remediation: Each institution has a unique model for offering accelerated remedial coursework; each model allows students to receive specialized instruction in basic skills while simultaneously progressing through their program and learning how to apply those skills to chosen occupations. In general, English and math skills will either be evaluated through standardized test scores or through assessment as part of the enrollment process. The methods for accelerating remediation and applicable coursework include:

³⁶ American Council on Education, 2011, www.acenet.edu/Pages/default.aspx

CTC	Acceleration Methods	Applicable Courses
Blue Ridge CTC	<p>Co-requisite model for math and English:</p> <ul style="list-style-type: none"> • Students enroll in college-level courses • Simultaneous enrollment in a basic skills courses or lab • Contextualized instruction 	<p>MATH 100: Math Essentials taken alongside:</p> <ul style="list-style-type: none"> • MATH 101: Algebra • MATH 105: Introduction to Math • MATH 114: Elementary Probability & Statistics <p>ENGL 110L: Technical Writing Lab taken alongside:</p> <ul style="list-style-type: none"> • ENGL 110: Technical Writing • ENGL 101: Written English
Southern WV CTC	<p>Co-requisite model for math:</p> <ul style="list-style-type: none"> • Students enroll in college-level courses • Simultaneous enrollment in an "Enhanced" basic skills courses • Supplemental labs • Contextualized instruction <p>Pre-requisite model for English:</p> <ul style="list-style-type: none"> • 3 developmental English courses combined into a single course 	<p>Enhanced math courses shares the same course number, but with an A at the end</p> <ul style="list-style-type: none"> • MATH 121 and 121A: College Math for General Education, Enhanced • MATH 123 and 123A: Intermediate Algebra, Enhanced • MATH 124 and 124A: Technical Math, Enhanced • MATH 128 and 128A: Algebra for Allied Health, Enhanced <p>EN 099: Beginning Composition</p>
Mountwest CTC	<p>Occupational pathway model:</p> <ul style="list-style-type: none"> • Replacement for developmental math requirements • Accelerated and contextualized instruction • Fulfills general education requirements 	<p>MATH 100: Occupational Math</p> <p>Integrated Reading and Writing</p> <p>AH 151: Medical Terminology</p>

(ii) **Support Services and Career Guidance:** The consortium partners will leverage wraparound student support services already in place, including Academic Skills Centers and Writing Centers for tutoring support, career guidance, internship and job placement, TAA-specific counseling, disability assistance, financial aid advising, and academic counseling. Specific tracking of student progress and intrusive advising will be used with all students in the program, modelled after the TAACCCT-funded *BEACON* program at Mountwest CTC. In addition, each partner will create a *Heroes for Hire* Success Center to provide support services and career guidance to the target population. Each of the consortia partners will adhere to the model on the following page to create its *Heroes for Hire* Success Center.



These strategies are designed to address the specific barriers of program retention, completion, and employment faced by the target population, such as work and family obligations and navigating complex benefits and reporting requirements of federal programs for TAA-eligible workers and veterans. By targeting outreach and providing a one-stop shop for all support services, benefit coordination, and career guidance, program participants will be fast-tracked through the application and admission process and will be placed into customized career pathways designed to meet individual learning goals and to accelerate the path toward program completion. When possible, the Success Centers will be staffed by veterans and counselors with work experience similar to the targeted TAA-eligible population, which will facilitate trust and encourage long-term relationships between participants and staff.

(iii) **Prior Learning Assessments:** The *Heroes for Hire* program will place a strong emphasis on up-front competency assessments as part of the enrollment procedure, as outlined in section 2(b)(i). Currently, each college has its own method and policy for assessing and awarding credit for prior learning and experience; however, there have been preliminary discussions to standardize PLAs at the state-level. In general, credit for prior learning is decided on a case-by-case basis, credit is awarded for specific courses when prior learning is determined to meet course objectives, and the most effective and accelerated path is determined through a degree auditing process. PLA strategies will include:

Type of Assessment	Assessment Process
American Council on Education & National College Credit Recommendation Service	The American Council on Education and the National College Credit Recommendation Service evaluate non-college programs (including military and industry training programs) and recommends the award of credit.
Certifications	Industry certifications are evaluated either institutionally or statewide by faculty members who provide a standardized credit recommendation. Statewide credit recommendations are maintained by the West Virginia Higher Education Policy Commission. Institutional credit evaluations are maintained by their designated PLA coordinator.
Challenge Exams	Institutional exams are administered by each college's academic unit to assess subject mastery. The test is equivalent to a comprehensive final exam and requires a passing score in order to receive a grade of "credit" for passing this test.
College-Level Examination Program/DSST/ Excelsior	Exams test mastery of college-level material and award college credit based on assessment scores.
Locally evaluated industry and workplace credit	Faculty evaluate local training for content, learning outcomes achievement to ascertain if any college and amount of college credit to recommend, subject to the Dean's approval.
Prior Learning Portfolio	Program faculty review portfolios to recommend if credit can be awarded based on the demonstrated mastery of the subject and learning outcomes, subject to approval by the Dean.
Transcripts	Transcripts from Regionally Accredited institution are reviewed by faculty to determine that the course fulfills program requirements, all credit will transfer. For institutions outside the region, the process is the same as for 'locally evaluated industry and workplace credit'.

Observational methods used in the classroom or at clinical sites will include, but are not limited to: continuous and final assessments; divergent assessments to gauge problem-solving and creativity; preceptor evaluations; direct observation; simulations and role-play exercises; peer review; skills check-offs and technique assessments by the instructor and/or preceptor.

(iv) **Competency-Based Assessments:** A large portion of the coursework for each of the new or expanded programs will include clinicals or practicums. Students will be expected to physically master and demonstrate the required skills. They will be assessed using observational methods and given on-the-spot feedback as they progress through program objectives. Examples of competency-based coursework include:

CTC	Pathway	Examples of Competency-Based Coursework for 60 Credit-Hour AAS	
Blue Ridge CTC	HIT	Approximately 20 credit hours • Fundamentals of Health Information Lab • Classification System –I ICD • Clinical practicum I	• Clinical practicum II • Classification Systems II • HIT Capstone
	Chemical Technology	Approximately 8 credit hours: • Instrumental and Quantitative Analysis 1	• Instrumental and Quantitative Analysis 2
Southern WV CTC	HIT	Approximately 7 credit hours: • Professional Practice Experience 1 • Professional Practice Experience 2	• Computer Literacy
Mountwest CTC	Health Professions	Approximately 3 credit hours: • Patient Care Specialist	• Medical Assistant
	GIS	Approximately 12 credit hours: • Information Technology Concepts • Information Concepts, Spatial Analysis and 3D Modeling	• Integration of GIS and RS Systems • Online GIS and Open Source Software

(v) **Modularized Curricula:** During the curriculum development phase, the Steering Committee, via the Curriculum Development Workgroups, will work with the registrars, Project Leaders, and faculty at each member institution to identify portions of the coursework which can be modularized, based upon the input and feedback of the Curriculum Advisory Council, as described in section 2(b)(vii). Preliminary identification of coursework that may be eligible for modularization is outlined on the following page.

CTC	Pathway	Examples of Modularization of Curriculum
Blue Ridge CTC	HIT	<p>Certifications that could be delivered in modules</p> <ul style="list-style-type: none"> • Medical Billing Coding Fast-Track Certificate • Information Literacy (IC3 Certification) • Project Plus Certification
	Chemical Technology	<p>Courses that may contain modules with skills competencies for each scientific instrument.</p> <ul style="list-style-type: none"> • Instrumental and Quantitative Analysis I • Instrumental and Quantitative Analysis II
Southern WV CTC	HIT	<p>The following courses may be modularized into 8-week courses:</p> <ul style="list-style-type: none"> • Semester 1 <ul style="list-style-type: none"> • Orientation to Technical Programs • Health Care Organization and/or Medical Terminology • Semester 2 <ul style="list-style-type: none"> • Health Record Content and Structure • Health Record Management • Semester 3 <ul style="list-style-type: none"> • Health Care Supervision and Management • Professional Practice Experience I • Semester 4 <ul style="list-style-type: none"> • Professional Practice Experience II • HIT Seminar
Mountwest CTC	Health Professions	<p>Courses will be developed to be delivered in a fast track fashion. After the completion of one module, students can move into the next section in the same academic term.</p> <ul style="list-style-type: none"> • Patient Care Specialist • EKG • Phlebotomy • Introduction to Healthcare
	GIS	<p>Courses will be developed to be delivered in a fast track fashion. After the completion of one module, students can move into the next section in the same academic term.</p> <ul style="list-style-type: none"> • Python Script • Cartography - The Art & Craft of Map Making • Global Positioning Systems (GPS) & Mobile Geospatial Technologies • GIS for Non-Majors - GIS in Different Industries • Applied GIS Projects & Career Exploration • Introduction to Applied Geology • Geological Field Mapping • Metadata & Database Information Management

(vi) **Interconnected Credentials:** Each of the proposed programs are designed with stacked and latticed credentials and include certifications which are valued by employers. Each program offers a Certificate of Applied Science (CAS) and/or industry-recognized credentials which may be earned in the first year of the program. Students will be encouraged to stack credentials by completing a certificate and/or credentials before proceeding to an Associate of Applied Science (AAS) degree program. Most of the programs can then

be stacked with existing four-year degree programs in the service region. The plan for providing interconnected credentials for the *Heroes for Hire* program is outlined on the following page.

(vii) Employer and/or Industry Association Involvement: The consortium members will establish a Curriculum Advisory Council for each proposed pathway. Employers, industry representatives and associations, representatives from state and regional accrediting bodies, and other relevant stakeholders, will be invited to serve on the Councils, which will meet at least once per year throughout the duration of the grant period. Consortium partners anticipate, however, that the Curriculum Advisory Council for each pathway will meet more regularly during Year 1 while new curriculum is being development. The Councils will provide curricular guidance for the development of strategies, goals, and skills competencies for each pathway and identify which credentials are most valued by employers across the region, state, and industry. In addition, the Councils will review national accreditation agency standards to determine how well the pathways align to national standards.

Career Pathways

- CAS Certified Coding Associate ^{1,2}
- CAS Certified Coding Specialist ^{1,2}
- CAS Medical Scribe Specialist ^{1,2}
- Credentials Only
- Certified Professional Coder ^{1,3}
- EMT – National Registry of Medical Technicians Paramedic Certification Basic ^{1,3}
- EKG Tech Certification ^{1,3}
- Phlebotomy Tech Certification ^{1,2}
- Certified Patient Care Tech/Assistant ^{1,3}
- Certified Nurse Aide - Nursing Assistant Certification ^{1,2}
- Home Health Aide - Natl. Assn for Home Care & Hospice Certification ^{1,3}
- ArcGIS Desktop Certification ^{1,3}
- ArcGIS Desktop Developer Certification ^{1,3}
- Web Application Developer Certification ^{1,3}
- Enterprise Geodatabase Management Certification ^{1,3}
- Enterprise System Design Certification ^{1,3}
- Enterprise Administration Certification (associate or professional) ^{1,3}
- Medical Billing and Coding certificate ^{1,2,3}
- CAS Chemical Technology ^{1,2,3}
- CAS Health Information Technician
- Certified Coding Assistant ^{1,3}

Mountwest CTC
Health Professions
GIS

Blue Ridge CTC
HIT
Chemical Technology

Southern WV CTC
HIT

AAS Health-Science, Nursing Concentration
 • AAS in Paramedic Science
 • National Registry of Medical Technicians Paramedic Certification ^{1,3}
 • AAS in Nursing ⁴
 • AAS Geospatial Studies

AAS Health Information Technology
 • Registered Health Information Technician Certification ^{1,2,3}
 • Information Literacy Certification ^{1,2,3}
 • Project Plus Certification ^{1,2,3}
 • AAS Chemical Technology

AAS Health Information Technology
 • Registered Health Information Technician Certification ^{1,2,3}

BS in Nursing ⁴
 • Certified Medical-Surgical Registered Nurse ³
 • National Council Licensure Exam-RN ^{1,3}

BAS Geospatial Information Science ⁵

BS Engineering or related fields- related fields
 • BS Environmental Science or related fields
 • BS Chemistry

BAS Health Information Management ⁴
 • Registered Health Information Administrator ^{1,3}

Associate's Degree in 2 Years or Less ⁵

Bachelor's Degree in 4 Years or Less ⁵

Entry into the Workforce

Career Pathways with Stacked and Latticed Credentials

Notes:

1. Industry-recognized credentials
2. State-recognized credentials
3. Nationally-recognized credentials
4. Via articulation agreements
5. Depending on credits awarded through Prior Learning Assessments

(viii) **Transferability and Articulation:** Under the terms of the West Virginia Higher Education Policy Commission's Core Coursework Transfer Agreement, a student may transfer up to 35 credit hours of undergraduate general studies credits to all other state higher education institutions. Institutions may submit course information to be reviewed and added to the Transfer Agreement, if approved. The Transfer Agreement and listing of courses are reviewed annually, and, if necessary, modifications are made as within one to two months. The Transfer Agreement will serve as the foundation for the articulation of TAACCCT-funded courses offered by the consortium members. An articulation agreement will be developed between the three consortium partners to allow the seamless transfer of Health Information Technician credits, since all three institutions will offer this program.³⁷ The Curriculum Development Workgroups will explore opportunities for establishing articulation agreements for the other career pathways.

To create an articulation agreement for non-general education coursework between two-year CTCs and four-year institutions, representatives from the institutions' academic areas/department/division meet to discuss the opportunities that can be available for students in programs that feed into each other. Once the two-year curriculum has been agreed upon by the four-year institution, an articulation agreement is signed stating students earning an associate degree in the identified program of study will be admitted to the four-year program and all credits earned at the CTC for this degree will meet requirements of the first two years of the four-year program. The process varies by institution, but can be completed in one to six months.

Currently, articulation agreements do not exist with four-year institutions for the Health Information Technology or Chemical Technology program since they are new programs to be developed with grant funding. Mountwest CTC is currently in the process of developing an articulation agreement for its Health Professions (Nursing concentration) pathway with Ohio University's Southern Campus and an articulation

³⁷ Southern WV CTC and Blue Ridge CTC will establish new HIT pathways with grant funding. Mountwest CTC currently offers an HIT pathway that will not utilize grant funds, but will be included in an articulation agreement with the consortium partners.

agreement for its Geospatial Science and Technology pathway with Marshall University and Ohio University's Southern Campus. Both articulation agreements are expected to be in place by spring 2015.

Further articulation agreements will be pursued for all of the programs created or expanded through the *Heroes for Hire* program. As appropriate, articulation will be pursued with American Public University; American Sentinel University; Capella University; Concord University, for veterans' and TAA-eligible students' credit awarded through PLA; Hood College; Kaplan University; Shenandoah University; Shepherd University; University of Phoenix; West Virginia University; and West Virginia University, Parkersburg.

(c) Advanced Online and Technology-Enabled Learning

(i) Incorporation of Technology into Program Design and Delivery: The consortium partners recognize that TAA students and veterans face unique circumstances that can be addressed by embedding technology-enabled learning strategies into coursework. For the programs developed through the *Heroes for Hire* program, curriculum will leverage one or more of the following:

Strategy	Application
Hybrid and Online Courses	As new coursework is developed, it will be evaluated to determine if online delivery is appropriate, either the entire course or specific modules, allowing students to maximize the credit they are able to earn each term despite scheduling constraints.
Simulated Workplace Technology	Technology used in the workplace will be incorporated into clinicals/practicum for each pathway to provide students the opportunity to apply theories and skills.
Interactive Video Classroom and Lecture Capture	Building on the traditional practice of recorded course content, the Technology subcommittee (see below) will explore <i>interactive</i> lecture capture techniques to use in flipped learning environments, blended courses, or cross-discipline learning.
SMART Boards & Mondo Pads	These tools allow instructors to present content remotely or in an interactive format.

Technology-enabled learning strategies will be particularly helpful for the new HIT programs established with the TAACCCT funding. Since all three institutions will offer an HIT program, the Curriculum Advisory Council of the Steering Committee will explore ways to utilize Mondo Pads to coordinate their programs, providing distance learning opportunities and exploring efficiencies program delivery efficiencies.³⁸ To the

³⁸ Southern WV CTC and Blue Ridge CTC will be establishing new HIT pathways with grant funding. Mountwest CTC currently offers a HIT pathway that will not utilize grant funds, but will be included in opportunities for standardization across the consortium institutions.

extent possible, the curriculum will be shared across institutions and offered jointly via online supports.

(ii) **Alignment with Existing Technology-Enabled Learning:** The consortium partners currently utilize a number of technology-enabled learning strategies in their existing courses and student services, as outlined below. These strategies provide a foundation for further integration of technology-enabled learning.

Strategy	Application
Hybrid and online courses	Most general education work is available in an online delivery format in order to provide scheduling flexibility for adult learners. Students will be able to supplement their on-campus schedule with online courses in order to maximize the credit they are able to earn each term despite scheduling constraints.
Blackboard	Blackboard is an accessible and functional learning management system for delivering coursework and training via the Internet and integrates seamlessly with web tools and platforms for instructional content.

As noted evidence suggests the effectiveness of technology-enabled learning is improved substantially through well-developed, tailored pedagogy training for faculty as they embed these tools and techniques into their teaching. Therefore, the *Heroes for Hire* program's technology-enabled learning strategy will not only deliver professional development, but will also create a peer-to-peer learning network for faculty to improve their pedagogy with these tools, particularly for faculty who will be teaching and/or developing new coursework for the grant-funded career pathways. Training and information will be coordinated via the Professional Development Workgroup of the Steering Committee to increase information sharing, shared resources, and consistency from one program to another. Consortium-wide pedagogy training will facilitate technology-enabled learning integration in a highly effective and consistent way for students.

In addition to formal professional development and pedagogy training, the *Heroes for Hire* program will establish a Technology-Enabled Learning Workgroup on the Steering Committee to maximize the opportunities that technology-enabled learning can offer to the students in (and outside of) the classroom. The Technology Workgroup will: Explore methods for incorporating new and existing technology-enabled learning strategies into the curriculum; develop online, hybrid, and accelerated coursework; identify avenues for technology to provide further access to educational materials beyond the classroom; and research new

simulation based software. In addition to these responsibilities, the Technology Workgroup will provide peer-to-peer learning opportunities such as cross-institution networking and mentoring, reinforce the information and techniques introduced as part of the professional development.

(d) Strategic Alignment with the Workforce System and Other Stakeholders

(i) Coordination with Governor's Economic Development and WIA-WP Plans: The Economic Development and WIA-WP Integrated State Workforce Plan in West Virginia outlines four goals that the governor plans to reach by 2016. The *Heroes for Hire* program aligns with three of those goals: develop a workforce that is responsive to changing economic conditions through workforce training programs that will increase readiness certifications statewide by 20 percent; increase the number of people receiving technical training by 10 percent; and increase the number of credentials awarded through Individual Training Accounts by 10 percent for Adults and Dislocated workers.³⁹

The *Heroes for Hire* program focuses on increasing the number of qualified candidates to fill occupations in three industry sectors projected to experience growth over the next five years: Health Care and Social Assistance; Manufacturing; and Professional, Scientific, and Technical Services. The consortium will increase the number of credentials awarded through individual training for adults and dislocated workers. In alignment with the newly created Governor's Workforce Planning Council, an additional component of the Governor's plan, this project takes "into account the specific workforce needs of the state's businesses and industries and incorporating occupational training into the curriculum to prepare students to enter the workforce."⁴⁰

(ii) Coordination with Public Workforce System: The *Heroes for Hire* program has the support of the Governor of West Virginia and the State Veterans Coordinator, and the consortium has established

³⁹ Economic Development and WIA-WP Integrated State Workforce Plan, 2012, http://www.wvcommerce.org/App_Media/assets/doc/businessandworkforce/workforcewv/publicnotices/West_Virginia's_Five_Year_Plan_Final_3.7.2013.pdf

⁴⁰ Ibid.

partnerships with WorkForce West Virginia, the State workforce agency responsible for TAA programs, and the local Workforce Investment Boards (WIBs) for each site location (Region 2 for Mountwest CTC and Southern WV CTC and Region 7 for Blue Ridge CTC). Evidence of these partnerships is provided in Attachment C: Documentation of Workforce System Commitment. The consortium members have established a strong working relationship with their local WIBs. For example, Mountwest CTC currently is engaged in a partnership arrangement with the Region 2 WIB to assist with tracking participant outcomes for its TAACCCT-funded *BEACON* program, and an employee of Blue Ridge CTC serves on the Region 7 WIB's Governing Board. Each WIB partner has committed to the following throughout the life of the grant: referring appropriate candidates to TAACCCT programs for education and training including TAA-eligible and TAA-like workers; co-enrolling TAACCCT participants into WIA Title I programs, where appropriate; providing supportive services in a leveraged and coordinated manner with the community college, through WIA, TAA for workers programs, and other resources; facilitating employer engagement in the sector strategy, supporting their involvement in both required and encouraged roles in the TAACCCT partnership; creating and implementing a comprehensive strategy of determining the skills needs of employers and the suitability of individuals for training and the attainment of associated credentials; and assisting with the provision of a comprehensive counseling and coaching to TAACCCT participants to help improve participant retention and completion of the program.

(iii) **Coordination with Philanthropic Organizations:** The *Heroes for Hire* program has developed partnerships and received letters of support from the Veterans of Foreign Wars, Post 9738 and the American Legion, Post 16. The consortium partners will reach out to other philanthropic, non-profit and community-based, and labor organizations and business throughout the life of the project. In general, these organizations will be asked to support the *Heroes for Hire* program by: participating in or providing input to the Steering Committee; leveraging comprehensive case management or other services to assist participants with barriers

to employment; connecting program participants to work-based training opportunities; assisting with placement opportunities; and providing supportive services.

(e) Alignment with Previously-Funded TAACCCT Projects

The *Heroes for Hire* program has been thoughtfully designed to align with two TAACCCT-funded programs currently being implemented by West Virginia community colleges, *BEACON* (TAACCCT Round 1) and *Bridging the Gap* (TAACCCT Round 3), as well as other previously funded TAACCCT projects across the country, which can offer lessons learned and shared resources.

The *BEACON* project, a single-institution TAACCCT project funded in Round 1, is being successfully implemented by Mountwest CTC. The project is implementing cross-disciplinary, learning-centered transformation that integrates navigational guides for students, support mechanisms and tools, and professional development for faculty. Specifically, the *BEACON* project has demonstrated success with its "one-stop" approach for delivering academic and student support services. This model will be leveraged and resources shared with the other two consortium members as they establish their own outreach and student support services at their *Heroes for Hire* Success Centers.

Funded by TAACCCT Round 3, the *Bridging the Gap* project is a state-wide consortium of West Virginia's nine CTCs. *Bridging the Gap* seeks to establish a culture of continuous improvement across consortium institutions; developing and implementing enhanced and accelerated sector-driven career pathways in energy, manufacturing, information technology, and construction; strengthening contextualized, online, blended, and remote academic instruction; and implementing expanded and individualized student support strategies. Once fully implemented, students will have access to skill set certificates, certificate degrees, and associate's degrees in the manufacturing and mechatronics, energy technology, information technology, and construction fields.

The project will include mechanisms to identify further specific opportunities for alignment. The state-wide *Bridging the Gap* program manager will serve on the *Heroes for Hire* Steering Committee to ensure that all pathways, technology-enabled learning innovations, and sector strategies align with the TAACCCT Round 3 grant. The *BEACON* program manager, Sheanna Spence, will also serve on the *Heroes for Hire* Steering Committee. With these structures in place, the *Heroes for Hire* Steering Committee and staff will continuously identify opportunities for alignment which may include: sharing information about lessons learned and promising practices; sharing course content and program resources; collaborating in program development and delivery; developing transferability and articulation agreements; partnering to develop best practices (e.g. strategies to engage more learners in information technology pathways) or to maximize the impact of certain strategies (e.g. shared/aligned outreach and recruitment efforts); and leveraging the work of partners, such as the public workforce investment system as they help students served by all TAACCCT projects to access opportunities and re-employment resources.

(f) Sector Strategies and Employer Engagement

(i) Sector Identification: The *Heroes for Hire* program will focus on the Health Care and Social Assistance; Manufacturing; and Profession, Scientific, and Technical Services industry sectors in alignment with the workforce training needs of the consortium partners' service regions. Labor market information data projects these sectors will be areas of growth in the three colleges' service regions, and anecdotal evidence from employer partners supports the growing need for skilled workforce in the program's targeted occupations. For example, through a focus group of regional employers, Southern WV CTC recently discovered that there is a demand for qualified Health Information Technology workers in the region. The table on the following page identifies the committed target-sector employers in the colleges' service region. The "potential employers" column represents additional target-industry employers that could employ program participants.

The consortium partners will actively engage additional employer partners and regional and national industry representatives during the planning phase of the grant period.

CTC	Pathway	Committed Employer Partners	Potential Employers in the Region
Blue Ridge CTC	HIT	<ul style="list-style-type: none"> University Health Care Valley Health System 	<ul style="list-style-type: none"> Berkeley Medical Center Jefferson Medical Center Shenandoah Valley Medical System Local clinics, physicians' offices, and long-term care
	Chemical Technology	<ul style="list-style-type: none"> Essroc Ilalamenti Group 	<ul style="list-style-type: none"> Ecolab HP Hood Kraft Foods DuPont USA Municipal waste water management facilities Food manufacturers Wet industries
Southern WV CTC	HIT	<ul style="list-style-type: none"> Logan Regional Medical Center 	<ul style="list-style-type: none"> Thomas Health Systems Williamson Memorial Hospital Boone Memorial Hospital Williamson ARH Hospital CAMC General Hospital St. Francis Hospital Charleston Area Medical Hospital Pikeville Medical center Local clinics, physicians' offices, and long-term care
Mountwest CTC	Health Professions	<ul style="list-style-type: none"> Cabell-Huntington Hospital HealthNet Aeromedical Services St. Mary's Medical Center Genesis Rehab Services 	<ul style="list-style-type: none"> Woodlands Retirement Community HIMG Local clinics, physicians' offices, and long-term care facilities
	GIS	<ul style="list-style-type: none"> Cabell County Planning Commission 	<ul style="list-style-type: none"> Advanced Technical Solutions City of Huntington State and County tax offices U.S. Army Corps of Engineers, Huntington District WV American Water WV Department of Transportation WV Division of Forestry WV Division of Homeland Security

(ii) Employer and Industry Representative Engagement: The employers identified above and the Chambers of Commerce in each consortium members' service areas support the creation of the *Heroes for Hire* training program and have committed to being involved in the project, as evidenced by Attachment B: Documentation of Employer Commitment. Specifically, these partners have agreed to fill the following roles: serve on the project's Steering Committee and/or on the Curriculum Advisory Councils for the relevant career pathway; helping to implement project strategies and goals; identifying and mapping the necessary skills and

competencies for the program; assisting with development of national industry-recognized credentials that map to curriculum development and course, as applicable; and assisting with curriculum development, program design, and subsequent implementation of program design.

The consortium partners will sustain relationships with their employer partners and industry representatives throughout the duration of the program and beyond in the following ways: incorporating curriculum changes to meet employer and industry needs; developing new or adjusting existing credentials to reflect competencies required by employers and industry; providing educated and trained participants profiles for hiring consideration; providing performance information in order to be accountable to industry for investments made in education and training; making staff and faculty available for employer meetings, conferences or seminars; and implementing continuous improvement processes to ensure needed changes and adjustments are made to the program based on new technologies, conditions or program design.

(iii) **Additional Roles of Employers and Industry Representatives:** In addition to the roles outlined above, all Committed Employer Partners listed in the table above have agreed to fill one or more of the following roles, as evidenced in Attachment E: Documentation of Employer Commitment: providing work-based training opportunities for program participants (such as registered apprenticeships, internships, and on-the-job training); providing leveraged resources to support education/training (such as equipment, facilities, and instructors); and committing to hire, promote, and/or retain qualified program participants. In addition, employer and industry representative partners may be asked to host clinicals or practicums for the Allied Healthcare pathways, participate as guest speakers/lecturers for specific content areas as appropriate, and to serve as adjunct faculty members and career consultants for students as appropriate.

(g) Project Workplan

The proposed project workplan for the *Heroes for Hire* program is outlined on the following pages.

1. PROGRAM LAUNCH & MANAGEMENT

Activities	Implementer(s)	Costs	Time	Deliverables
<p>1.1 Convene Heroes for Hire Steering Committee and establish Workgroups</p>	<ul style="list-style-type: none"> Mountwest CTC Blue Ridge CTC Southern WV CTC Employer reps Workforce WV Region 2 WIB Region 7 WIB 		<p>Start Date: 10/1/2014 End Date: 9/30/2018 Milestones: Conduct first steering committee meeting by 12/1/2014 and establish ongoing meeting schedule at that time.</p>	<ul style="list-style-type: none"> Heroes for Hire Steering Committee Alignment with previously-funded TAACCCT projects
<p>1.2 Hire Heroes for Hire administrative staff 1.2.1 Hire Heroes for Hire Project Manager 1.2.2 Hire/Assign other administrative staff - Prof. Development Coordinator - Institution Project Leaders - Outreach Specialist - Grant Accountants</p>	<ul style="list-style-type: none"> Mountwest CTC Blue Ridge CTC Southern WV CTC 		<p>Start Date: 12/1/2014 End Date: 9/30/2018 Milestones: Jobs posted by 10/15/2014 Consortium Project Manager hired by 1/30/2014 All other program admin staff hired/assigned by 1/31/2015</p>	<ul style="list-style-type: none"> Program staff
<p>1.3 Procure third-party independent evaluator</p>	<ul style="list-style-type: none"> Mountwest CTC 		<p>Start Date: 11/15/2014 End Date: 9/30/2018 Milestones: RFP developed and released, contract negotiated with evaluator by 1/31/2018, final evaluation report by 9/30/2018</p>	<ul style="list-style-type: none"> Third-party program evaluation report
<p>1.4 Establish data collection and participant tracking protocols and implement data collection methodology 1.4.1 Purchase software 1.4.2 Establish terms for data sharing with Workforce WV</p>	<ul style="list-style-type: none"> Data Integration Task Force Mountwest CTC Blue Ridge CTC Southern WV CTC WorkForce WV 		<p>Start Date: 1/1/2015 End Date: 9/30/2018 Milestones: Software purchased by 3/1/2015, contract negotiated with Workforce WV by 3/31/2015, final report from Workforce WV by 9/30/2018</p>	<ul style="list-style-type: none"> Tracking protocols Data collection methodology Reports from Workforce WV
<p>1.5 Coordinate and implement consortium-wide professional development focused on effective use of technology-enabled learning strategies</p>	<ul style="list-style-type: none"> Mountwest CTC Blue Ridge CTC Southern WV CTC Technology Task Force 		<p>Start Date: 10/1/2014 End Date: 9/30/2017 Milestones: Establish schedule for professional development activities by 12/1/2014, establish training for new and existing employees working with veterans</p>	<ul style="list-style-type: none"> 90% of grant-funded employees participating in at least 1 professional development activity annually 85% of existing employees working with vets participating in at least 2 annual training sessions related to veterans 100% of new employees who work with veterans participating in at least 2 annual training sessions related to veterans.

2. STUDENT SUPPORT SERVICES: CAREER GUIDANCE AND ACCELERATION STRATEGIES			
Activities	Implementer(s)	Costs	Deliverables
<p>2.1 Coordinate and implement consortium-wide outreach and recruitment activities, including development of Heroes for Hire website</p>	<ul style="list-style-type: none"> Mountwest CTC Blue Ridge CTC Southern WV CTC Region 2 WIB Region 7 WIB 		<p>Start Date: 1/1/2015 End Date: 9/30/2018 Milestones: Establish outreach/recruitment plan by 1/31/2015, Web site and toll-free number live by 3/31/2015</p> <ul style="list-style-type: none"> Heroes for Hire website with live chat function, program info, assessment info, and links/referrals Activation of toll-free number
<p>2.2 Establish Heroes for Hire Success Centers</p> <p>2.2.1 Hire staff for Heroes for Hire Success Centers</p> <ul style="list-style-type: none"> Academic Advisors Student Success Counselors <p>2.2.2 Purchase supplies and equipment (software, office supplies, computer labs)</p> <p>2.2.3 Develop intake processes and procedures</p> <p>2.2.4 Develop standards for prior learning assessments</p> <p>2.2.5 Begin serving students through Heroes for Hire Success Centers</p> <p>2.2.6 Implement retention strategies</p> <p>2.2.7 Engage WIBs for recruitment and placement activities</p> <p>2.2.8 Place participants in employment after they have completed certificate and/or degree programs</p>	<ul style="list-style-type: none"> Mountwest CTC Blue Ridge CTC Southern WV CTC Region 2 WIB Region 7 WIB CBO partners Employer partners 		<p>Start Date: 1/1/2015 End Date: 9/30/2018 Milestones: Jobs posted by 01/15/2014 Advisors, counselors hired/assigned by 3/31/2015, purchase basic supplies and equipment by 5/31/2015, begin serving students through success center by 6/1/2015</p> <ul style="list-style-type: none"> Dedicated offices and staff to support TAA and veteran populations Prior learning assessment delivery system

3. CAREER PATHWAYS WITH STACKED AND LATTICED CREDENTIALS				
Activities	Implementer(s)	Costs	Time	Deliverables
<p>3.1 Develop new career pathways in Health Information Technology</p> <p>3.1.1 Hire faculty and staff for HIT programs</p> <p>3.1.2 Develop curriculum for new programs with embedded tech-enabled learning strategies for CAS & AAS</p> <p>3.1.3 Purchase HIT equipment (Sim Man manikin, Sim Man nursing simulators, EPIC computer program and equipment, Mondo pads)</p> <p>3.1.4 Roll out HIT CAS & AAS programs</p> <p>3.1.5 Establish articulation agreements for new HIT programs</p>	<ul style="list-style-type: none"> Blue Ridge CTC Southern WV CTC Curriculum Advisory Council Employer Reps 		<p>10/1/2014</p> <p>9/30/2017</p> <p>Post jobs by 1/30/2014; faculty hired/assigned by 1/31/2015, purchase equipment by 5/31/2015; classes offered beginning 08/2015; establish articulation agreements by 9/30/2016</p>	<ul style="list-style-type: none"> 1 new HIT CAS curriculum 2 new HIT AAS curriculum 3 new articulation agreements for HIT CAS to AAS programs (among the 3 consortium institutions) 2 new articulation agreements from HIT AAS programs at Blue Ridge CTC and Southern WV CTC to BAS in Health Information Technology degree programs
<p>3.2 Develop new career pathway in Health Professions (Nursing concentration)</p> <p>3.2.1 Hire faculty and staff for Health Professions (Nursing concentration) program</p> <p>3.2.2 Develop curriculum for new program with embedded tech-enabled learning strategies for Health Professions (Nursing Concentration) credential and AAS curriculum</p> <p>3.2.4 Purchase Health Professions (Nursing concentration) equipment (ambulatory infusion pump, ambulance simulator, maternity simulator, advanced life support simulator)</p> <p>3.2.5 Renovate existing Allied Health facility to accommodate equipment</p> <p>3.2.6 Roll out Health Professions (Nursing concentration) AAS program & stackable credentials</p> <p>3.2.7 Establish articulation agreements for new programs</p>	<ul style="list-style-type: none"> Mountwest CTC Curriculum Advisory Council Employer Representatives 		<p>10/1/2014</p> <p>9/30/2017</p> <p>Post jobs by 1/30/2014; faculty hired/assigned by 1/31/2015, purchase equipment by 5/31/2015, classes offered beginning 08/2015; establish articulation agreements by 9/30/2016</p>	<ul style="list-style-type: none"> 1 new Health Professional (Nursing) AAS curriculum 1 new pathway to CNA credential 1 new pathway to EKG credential 1 new pathway to Phlebotomy credential 1 new pathway to Home Health Aid credential Articulation agreements for Mountwest CTC HIT AAS to BS in Nursing programs

Mountwest Community & Technical College WV

Activities	Implementer(s)	Costs	Time	Deliverables
<p>3.3 Develop new career pathways in Geospatial Science and Technology</p> <p>3.3.1 Hire faculty and staff for Geospatial Science and Technology program</p> <p>3.3.2 Develop curriculum with embedded tech -enabled learning strategies for GIS certifications and AAS curriculum</p> <p>3.3.3 Purchase Geospatial Science equipment</p> <p>3.3.4 Roll out Geospatial Science and Technology certification programs and AAS programs</p> <p>3.3.5 Establish new GIS articulation agreements</p>	<ul style="list-style-type: none"> • Mountwest CTC • Curriculum Advisory Council • Employer Representatives 		<p>10/1/2014</p> <p>9/30/2017</p> <p>Post jobs by 11/30/2014; faculty hired/assigned by 1/31/2015; purchase equipment by 5/31/2015; classes offered beginning 08/2015; establish articulation agreements by 9/30/2016</p>	<ul style="list-style-type: none"> • 6 new GIS certifications • 1 new AAS Geospatial Studies curriculum • Articulation agreements for AAS Geospatial Studies from Mountwest CTC to BAS in Geospatial Information Science
<p>3.4 Develop new career pathways in Chemical Technology</p> <p>3.4.1 Hire faculty and staff for Chemical Technology program</p> <p>3.4.2 Develop curriculum with embedded tech -enabled learning strategies for Chemical Technology certifications & AAS degrees</p> <p>3.4.3 Renovate existing facility to accommodate lab space</p> <p>3.4.4 Purchase Chemical Technology equipment</p> <p>3.4.5 Roll out Chemical Technology program</p> <p>3.4.6 Establish articulation agreements</p>	<ul style="list-style-type: none"> • Blue Ridge CTC • Curriculum Task Force • Employer Representatives 		<p>10/1/2014</p> <p>9/30/2017</p> <p>Post jobs by 11/30/2014; faculty hired/assigned by 1/31/2015; purchase equipment by 5/31/2015; classes offered beginning 08/2015; establish articulation agreements by 9/30/2016</p>	<ul style="list-style-type: none"> • 1 new Chemical Technology AAS program • 1 new Chemical Technology CAS pathway • Articulation agreements from Blue Ridge CTC Chemical Technology AAS to BS in Chemistry, BS in Engineering, or BS in Environmental Science

(3) Outcomes and Outputs

(a) Analysis of Outcome Projections

(i) Outcomes Projections: The projections in the table below include *Heroes for Hire* participants expected to begin and complete their course of study during the project performance period. These projections include all of the career pathways programs created and expanded as part of *Heroes for Hire* program.

Outcome Measure	Year 1	Year 2	Year 3	Year 4 ⁴¹	Total
Total Unique Participants Served					227
Total Number of Participants Completing TAACCCT-funded Program of Study					152
Total Number of Participants Still Retained in Their Program of Study or other TAACCCT-funded Program					71
Total Number of Participants Completing Credit Hours					227
Total Number of Participants Earning Credentials					166
Total Number of Participants Enrolled in Further Education after TAACCCT-funded Program of Study Completion (non-incumbent workers)					93
Total Number of Participants Employed After TAACCCT-funded Program of Study Completion					144
Total Number of Participants Retained in Employment after Program Study Completion					127
Total Number of those Participants Employed at Enrollment Who Received Wage Increases Post-Enrollment					75

(ii) Targets: The consortium members considered historical enrollment data, industry growth and labor market projections, and the *Heroes for Hire* program capacity (including existing and planned faculty, staff, equipment, and space) when establishing these targets. Final aggregate *Heroes for Hire* program completion and credential attainment projections are 67 percent and 73 percent, respectively. While ambitious, these projections are consistent with high-performing institutions used as models and have been exceeded in selected consortium programs, such as Blue Ridge CTC's electrical engineering technology programs. The consortium also expects that the program's emphasis on student support services will boost credential completion. The consortium projects that about 41 percent of participants will enroll in further education after completing a *Heroes for Hire* program of study because of the stackable nature of the credentials developed

⁴¹ Follow-up only

in this project and enhanced articulation agreements. At the end of four years, approximately 96 percent of those served by the program are expected to be employed at the end of the course of study (non-incumbent and incumbent workers combined). While an aggressive goal, consortium members believe strong employer relationships and improved career pathways will facilitate this. Finally, about 88 percent of non-incumbent workers are expected to be retained in employment, which is consistent with current experience.

iii) **Balance of Deliverables and Outcomes:** The consortium's proposed project will produce several large deliverables, including curriculum, certificates, and associate degrees for a new curriculum for a HIT program at Southern WV CTC; a new Chemical Technology program and a significant expansion of the HIT program at Blue Ridge CTC; and significant expansions of the Health Professions and Geospatial Science and Technology programs at Mountwest CTC. These new and enhanced programs will include elements of modularized coursework, which will require significant Registrar offices efforts to work out the details of scheduling and alignment with the academic calendar. They will also require institutional changes in awarding credit for prior work, specifically, creating processes to administer and grant credit via PLA tools. This will include expansion of Mountwest CTC's current practice of using the ACE system for conversion of military experience to college credit. The project will also develop and build upon student support services, scaling up the most successful elements of the *BEACON* program for veterans across all three campuses. Finally, the consortium-wide effort to train faculty on simulated instruction strategies technology in learning will require significant resources both in the form of staff time and equipment. These consortium-wide shifts in the way that instruction is provided and additional support services offered will impact far more than the estimated 227 students included in outcome projections.

(b) System or Process for Tracking and Reporting Outcome Measures

(i) **Existing Tracking Procedures:** As institutions within the West Virginia Community and Technical College System (WVCTCS), consortium members track and report student outcomes in a generally standardized manner. Many of the TAACCCT-required indicators are currently tracked through Ellucian

Banner products, Starfish student retention software, and the Degree Works system on all three campuses. Additionally, the College Central Network possesses some capabilities for collecting employment outcomes. Existing data collection capabilities through the Banner software includes participant enrollment, completion, program retention, and credit hour completion. Mountwest CTC works with its local WIB to gather longer-term data on required indicators for the TAACCCT-funded *BEACON* project), as well as a comparison cohort. Through the *Bridging the Gap* project, the consortium has established an agreement with WorkForce West Virginia, the state's Labor Market Information (LMI) system, to obtain wage information for participants by matching Social Security Numbers with quarterly wages and unemployment insurance records. This system can also track TAACCCT participants' employers' locations and the number of hours worked.

(ii) **Plan to Address Gaps in Tracking:** Consortium institutions have developed general strategies to collect post-program completion employment and earnings data through College Central Network and in the case of Mountwest CTC, through an agreement with their local WIB for the *BEACON* project. However, to date, these strategies have yielded sparse and incomplete data, and no consortium member currently has a standard system in place to determine whether incumbent workers receive wage increases post-enrollment. In addition, there is no method to isolate outcomes for TAACCCT program participants. To address gaps in employment and wage tracking data post-matriculation, consortium members will employ a three-pronged strategy. First, the schools will involve student support services staff in the data collection process. By nature of their job function, these staff members develop strong personal relationships with students and tend to maintain contact with them post-matriculation; therefore, they are well-positioned to collect data from students. Second, the consortium will vastly expand its capacity to collect and report the required data through the purchase of software that assists in tracking and compiling data for TAACCCT-required outcome measures across institutions and has the capability to automate communication around follow-up efforts such as surveys. Finally, through formation of a Data Integration Workgroup, the *Heroes for Hire* program Steering Committee will work with *Bridging the Gap* project stakeholders to address macro-level labor market, industry

growth, employment and wage data matching capacity, and sharing gaps across the community college system and WorkForce West Virginia, as well as neighboring state systems.

Consortium member institution Blue Ridge CTC currently integrates student employment and wage outcome data collection into the student support services function. This model will be formalized and adopted across all three institutions to maximize the consortium's ability to maintain contact with students and collect data on employment and wage outcomes. Across all three institutions, student services staff will leverage their strong personal relationships with program participants to emphasize the importance of responding to requests for employment and wage outcome data post-matriculation. They will explain that participants will receive requests to self-report longer-term outcome data (employment and wage information) via automated contact and encourage them to respond to emails and text messages generated requesting information. They will also collect baseline data on incumbent workers' employment status and earnings. Finally, incumbent worker *Heroes for Hire* program participants will be asked to sign releases allowing their employers to share wage data with the institution in case staff is unable obtain it through other means.

The consortium will purchase and use tracking and reporting software with the capability to automate communication with former students for follow-up data collection purposes. Through this software, former program participants will be able to respond to automatically-generated surveys via email, or provide data on employment and wages through text message responses. This data will be imported and automatically aggregated for reporting purposes. This will facilitate reporting to the Department of Labor by creating standardized reports on all TAACCCT-required outcomes and outputs indicators. Automated data collection capabilities will create significant efficiencies, reduce the amount of time staff must spend on manual data collection and entry, and decrease the incidence of human error in data entry, resulting in more accurate and complete data to report to the Department of Labor and to evaluate the program impacts.

(c) Using Data for Continuous Improvement

(i) **Plan for Formal Data Reviews:** The consortium recognizes the need to coordinate data sharing and utilization efforts between the community college system as part of the *Bridging the Gap* project, WorkForce West Virginia, and neighboring state workforce data systems. To address this, the *Heroes for Hire* program Steering Committee structure will include a Data Integration Workgroup. The Data Integration Workgroup will invite a representative from WorkForce West Virginia's LMI system to participate. The workgroup will also include a representative from the Office of the Chancellor which publishes Workforce Development system-wide report cards on an annual basis; the TAACCCT 3 *Bridging the Gap* project director; the TAACCCT 4 project evaluator; and project staff member(s) from each college, including institutional researchers and IT staff. The *Bridging the Gap* consortium has recently established an agreement with WorkForce West Virginia to provide data on TAACCCT participants' earnings, hours worked, employers, and unemployment insurance claims. However, this system fails to capture data on former TAACCCT participants who are self-employed, who work for the federal government, and who obtain employment in neighboring states.

The Data Integration Workgroup will conduct a needs assessment early in the project period to identify existing capacity and gaps. Based on the results of the assessment, the group will then create a strategic plan that identifies specific initiatives to improve data quality and collection across systems, implement sharing protocols and agreements, and integrate information into state workforce planning and community college system career pathways development. During meetings, the group will also regularly review all current and existing data on TAACCCT-required indicators and develop plans to disseminate timely program outcomes with relevant partners at the institution, consortium, and state level.

(ii) **Sustainability Plan:** The *Heroes for Hire* consortium will work in close collaboration with the evaluator to identify the most successful elements of the proposed project and develop strategies to sustain them past the funding period, integrating them into other academic program areas and at the institutional level. The program evaluation will highlight implementation lessons surrounding the core elements of the program/

Through strategic presentation of quantitative and qualitative data that demonstrates the effectiveness of the project strategies, the consortium will seek private (employer, alumni, and foundation) and public (state and federal government) stakeholder financial support for high-cost continual infrastructure improves, such as technological equipment purchases, and human resources capacity, such as additional student support services staff. The project will diffuse strategies that do not necessarily require large financial resources but rather cultural change in the classroom and at the institutional level, such as modularized coursework and contextualized remediation across the institutions. As such, the consortium will provide professional education for faculty and administrators, seek to foster a culture of innovation, and lead policy initiatives to integrate these elements into standard institutional practice.

Through enhanced partnerships developed with employers and WIBs during project implementation, the consortium will continue to align future curriculum and academic program planning with labor market needs. Through efforts to build data collection, tracking, and forecasting capacity through the Data Integration Workgroup on the *Heroes for Hire* Steering Committee, the project will facilitate better coordination of academic programming and employer needs through an increased understanding of labor market information. These efforts will result not only in project sustainability, but also in better employment and financial outcomes for students and increased productivity and business opportunities for employers.

(4) Organizational Profile

As a recipient of TAACCCT Rounds 1 and 3, Mountwest CTC is well-versed in U.S. Department of Labor's fiscal management and reporting practices. Mountwest CTC staff also has significant experience serving TAA-eligible workers and the regulations associated with working with veterans and active duty military personnel.

(a) Professional Qualifications of Project Staff

Consortium partners have dedicated careful consideration to the job descriptions and qualifications for each position related to the project. Hiring procedures for this project will adhere to standard hiring practices in

compliance with GEPA and federal and state laws. All positions and descriptions have been reviewed and approved by each college's Office of Human Resources, Employee Development & Payroll. Detailed hiring activities for this project are included in the Project Workplan in section 2(g).

(i) **Project Manager:** The *Heroes for Hire* Consortium Project Manager is essential to the overall success of this project. The Consortium Project Manager, housed at Mountwest will be the coordinator of change, overseeing every aspect of the project and facilitating changes recommended based on project outputs. This individual will be responsible for leveraging TAACCCT funding with other federal, state, and private resources to sustain and build upon the project in the future. Mountwest CTC's institutional researcher, Natalie Mills, will serve as the interim Consortium Project Manager, effective October 1, 2014, until such time as the ideal candidate has been hired, no later than December 31, 2014.

Each consortium member will hire a Project Lead to oversee day-to-day activities of the *Heroes for Hire* program at each site location. The Consortium Project Manager will meet regularly with the consortium members' Project Leaders to track the programmatic, fiscal, and administrative progress of consortium members and coordinate to provide technical assistance via the Steering Committee. Qualifications and responsibilities of the Consortium Project Manager and the Project Leads are outlined on the following page. The level of professionalism and experience required of the Project Manager and all Project Leads ensures that reporting and procurement will be conducted in accordance with grant requirements.

(ii) **Fiscal, Administrative Management, and Marketing Staff:** Each member institution will leverage existing resources and roles of its professional fiscal, administrative, and marketing staff for the *Heroes for Hire* program; no new staff members will be hired with grant funds to fulfill these functions. Credentials for faculty and staff vary by institution; however, generally speaking, most fiscal, administration, and marketing staff members have Bachelors' degrees and experience in their fields. In addition, each of the consortium partners have experience administering federal grants, including previous rounds of TAACCCT; therefore, all support staff for the *Heroes for Hire* program are already familiar with the reporting, procurement management, and

marketing activities and requirements associated with federal grant programs.

Qualifications	Consortium Project Manager Responsibilities	Project Leader Responsibilities
<ul style="list-style-type: none"> • Master's degree in business, education, administration or related field⁴² • At least five years of administrative management experience in higher education • Experience in program management • Experience in program evaluation, personnel and budget management • Strong interpersonal and communication skills • Ability to work as part of a team • Strong leadership skill 	<ul style="list-style-type: none"> • Provide a framework for incorporating career pathways concepts into course and credential program design for all consortium institutions • Design and lead consortium-wide implementation of protocols for the following across all credential programs and facilitate knowledge and resources transfer between institutions • Manage and oversee the Project Steering Committee and all sector partnerships and relationships with employers and WIBS. Initiatives with partners, to be completed through the Project Steering Committee structure, should include: <ul style="list-style-type: none"> • Apprenticeships/internships and ongoing student evaluation and feedback • Employment placement agreements • Collaborative course and credential program design (engagement of employers in course design and evaluation of student progress) • Increasing data integration between systems and capacity • Oversee all efforts to develop data and outcome tracking capacity and standardize reporting across consortium institutions. Work to strengthen the collaboration between employment data efforts in the state. • Serve as the primary contact for the project evaluator and support consortium-wide tracking outcome efforts • Assume primary responsibility for all TAACCCT-related reporting, including programmatic and financial 	<ul style="list-style-type: none"> • Implement and manage the day-to-day tasks required to complete institution-specific projects and initiatives around the career pathways concepts, including <ul style="list-style-type: none"> • Course and credential development (ensure integration of stacked & latticed credentials, modularized curricula, accelerated and contextualized remediation, prior learning assessments etc.—including faculty and staff training) • Advanced technological initiatives • Student support services • Ensure timely and accurate reporting of all program-related data and provide support for consortium-wide efforts to enhance data integration and utilization. • Represent the institution on the Project Steering committee and assist with all region-specific initiatives around <ul style="list-style-type: none"> • Apprenticeships/internships and student evaluations • Employment placement agreements • Collaborative course and credential program design • Data integration and outcomes tracking • Assist the project evaluator with institution-specific components of the project evaluation plan • Assume responsibility for all institution-level TAACCCT IV reporting requirements in collaboration with the Consortium Project Manager

(b) Management Structures and Communication

All relevant and grant-funded faculty, management, and support staff for the administration of the TAACCCT grant and the implementation of the *Heroes for Hire* career pathways at each individual member institution are outlined in Attachment I: Organizational Chart. Communication within each partner institution will follow the reporting structure outlined in the Organizational Chart. In general, the day-to-day administration and responsibility for the *Heroes for Hire* program will be delegated to the Project Leader for each institution.

⁴² Considerable program management experience plus a Bachelor's degree may be substituted

The *Heroes for Hire* program will establish a Steering Committee immediately upon receipt of the grant award to facilitate management of the award, coordination among consortium partners, and integration of feedback of external partners and stakeholders. Representatives from the WorkForce West Virginia, non-profit partners, and local WIBs will be invited to join the Steering Committee. In addition, relevant executive staff, faculty, administrative staff, IT staff, and counselors will be invited to attend meetings as appropriate. The Steering Committee will be responsible for: employer engagement; alignment with previous TAACCCT grants; alignment with the Workforce System; alignment of Career Pathways with Sector Strategies; and development of course descriptions and learning outcomes, and data integration.

The Consortium Project Manager will be responsible for convening and organizing regular meetings, and Project Leaders will be expected to attend and report on program activities. In the first year of the *Heroes for Hire* program, the Steering Committee will meet at least once a month to develop the program. Once students are enrolled, meetings may be held on an as-needed basis, but at least twice per year. Individual workgroups will determine their own meeting schedules depending on work flow. The Steering Committee structure will act as a forum for open communication between the consortium partners at all levels, including program management, faculty, and support staff throughout the program. The goals and results of the *Heroes for Hire* program will be regularly reviewed at the Steering Committee meetings. Items of particular note or success will be presented as a press release to local media outlets.

(c) Systems and Processes for Timely Reporting

As described in section 3(b)(ii), the consortium will work through the Data Integration Workgroup to set up systems for effective and timely reporting. In addition, it will purchase and use tracking and reporting software with the capability to import and automatically aggregate data from each partner, facilitating the accuracy and ease of financial and performance reporting across the institutions.

(i) **Previous Grants Management Practices:** Mountwest CTC's administration has extensive experience in managing the fiscal and programmatic aspects of federal grants including the Round 1 TAACCCT grant.

Mountwest CTC is meticulous in submitting reports to private, state and federal grantors in a timely manner and recognizes the importance of completing project activities within the performance period. The same attention to detail and respect for reporting deadlines will be applied in the management of this project. Mountwest CTC has an established hierarchical structure that expedites decision-making, particularly as it relates to grants. Project managers, working with a leadership team, maintain responsibility for the implementation of grant deliverables. Project managers also receive ongoing support from the offices of Institutional Development and Institutional Research. In addition, Mountwest CTC has a full-time accountant dedicated to the fiscal management of grants. This individual, along with project managers, draw down funds, monitor expenses and submit timely, accurate financial reports to the funding agency. Mountwest CTC has already initiated discussions with its external auditor about new regulations regarding subgrants and will work with the auditor to ensure that all processes meet current guidelines.

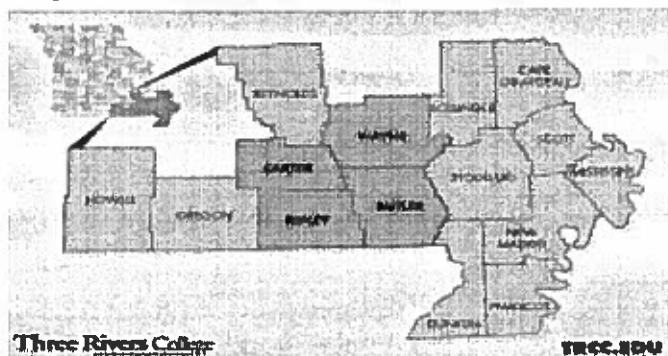
(ii) Procurement Processes, Systems, and Procedures: The Consortium Project Manager and the Project Leaders at each partner institution will work closely with their respective Chief Financial Officers on budget monitoring, fiscal reporting, and the timely procurement of items necessary to achieve project outcomes. As state public institutions, all consortium partners must adhere to the procurement and purchasing regulations put forth by the State of West Virginia, which promote competitive bidding, forbid conflicts of interest, require meticulous recordkeeping and comply with all OMB circular requirement.

Technical Proposal

Three Rivers College (TRC) proposes the **Rebuilding the Missouri Bootheel** initiative to build its capacity in delivering training to meet the needs of TAA-eligible workers, veterans, and other non-traditional learners in Southeast Missouri. The goal of the initiative is to increase job placement for TAA-eligible and nontraditional learners residing in 15 southeastern Missouri counties by training them for high-wage, high-skill employment opportunities available in the regional growth industry sectors of advanced manufacturing (advanced manufacturing pathway) and agriculture (precision agriculture pathway). Our proposed strategic approach is built upon successful TAACCCT projects regionally that have already laid the groundwork in the field of curriculum development and workforce training delivery systems. Leveraging our current relationships with these grantees, our program model implements their best practices and integrates lessons learned. Learning from other models will allow us to build capacity to provide innovative methods for delivering instruction, create clearer career pathways through stacked credentialing and transferability of credits, and align work with organizations and businesses that are connected to our target population at an accelerated rate.

TRC is the fastest growing community college in Missouri, one of the fastest growing community colleges in the nation and continues to grow at an accelerated pace. Figure 1 shows the 15-county region targeted for intervention, which is located in the region of Missouri geographically identified as the "Bootheel" region of the state¹.

Figure 1: Three Rivers Service Area



Enrollment at TRC has increased 50% in the last five years, with a Fall 2012 enrollment of 4,652 students.

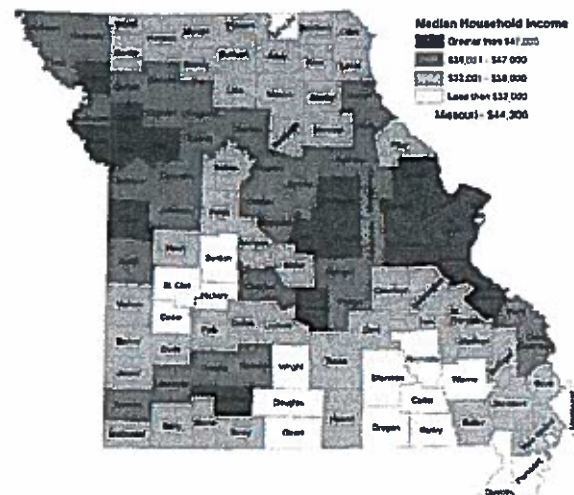
¹ Counties within the "Bootheel" region of Missouri include: Bollinger, Butler, Cape Girardeau, Carter, Dunkin, Howell, Mississippi, New Madrid, Oregon, Pemiscot, Reynolds, Ripley, Scott, Stoddard, and Wayne.

The number of residents served through workforce training, continuing education, and use of college resources for the 2011-2012 academic year increased 66% from the year before, serving a total of 5,382 individuals. TRC also has a history of responding to area workforce needs with recent expansion of its law enforcement, green diesel, fire science, physical therapy assistant, occupational therapy assistance and paramedic programs. The receipt of this grant will allow us to help area TAA-eligible workers, as well as other veterans, unemployed adults, underemployed adults, and other nontraditional learners gain increased access to new training programs important to employers in high job growth industries through this initiative.

1. Statement of Need

This initiative will enhance access to cutting-edge training programs for residents of the 15 counties in southeastern Missouri, the nation's 20th poorest Congressional District. The Median Household Income data for the Missouri Bootheel region is the poorest in the state (Figure 2). The counties targeted in this initiative constitute more than half of Missouri's counties with the lowest median incomes per household. While Missouri's overall unemployment rate is lower than the national average of 7.5%, residents in the Missouri Bootheel face unemployment rates that exceed state and national averages. The top three service counties with the highest unemployment rates are Reynolds (8.9%), Dunklin (8%), and Pemiscot (8%).

Figure 2: 2010 U.S. Census Median Household Income-Missouri



i. Serving the Educational and Training Needs of TAA-Eligible Workers

Impact of Foreign Trade – TAA Certifications Data for Missouri Bootheel Region—According to recent *Research Briefs on Trade Adjustment Assistance in Missouri* by the Missouri Economic Research

and Information Center (MERIC, October 12, 2012), over 19,800 TAA claims have been filed in the State of Missouri since January 26, 2009. Trainees qualified for assistance with 89 company petitions filed under TAA during this period. The 15-County Missouri Bootheel region targeted through this initiative has been particularly hard hit by the impact of foreign trade. More than 35 TAA Certifications were filed by employers residing in the Bootheel region over the past five years. According to MERIC (October 2012), more than 1,600 TAA claims were filed in Butler, Stoddard, and New Madrid counties alone during this period.

Among the industries that laid off employees due to the impact of foreign trade, 13 were from Alumina and Aluminum Production and Processing Companies, 10 were from Motor Vehicle Parts manufacturing companies, and 9 were from Computer Systems Design and Related Services. Manufacturing made up more than half of the top 10 industries with T.A.A. claims in the most recent report by the *TAA Research Briefs* published October 2012. A sample of T.A.A. Determinations impacting the Bootheel are shared in Table 1.

Table 1: Sample of T.A.A. Determinations

TAW Number	Company	Location / County	Decision Date
82708	RBC Manufacturing Corporation	West Plains, MO	5/21/2013
80460	Briggs & Stratton Corp.	Poplar Bluff, MO	12/2/2011
75016	Faurecia, Inc.	Dexter, MO	1 /25/ 2011
70037A - I	Noranda Aluminum, Inc.	New Madrid, MO	9/1/2009

Online learning will be utilized in order to re-train TAA participants. Three Rivers College will implement a blended curriculum of online learning and hands-on learning and will leverage its mobile skills training labs to make both forms of learning accessible to participants.

Partnerships with TAA Agencies will Strengthen Industry Input—TRC has a strong history of partnering with agencies that serve the needs of TAA-eligible workers and employers through the

MoHealthWINS program established under the first round of the TAACCCT grant in Missouri. This consortium project focused on providing low-cost training in a high-demand, high growth industry; personal assistance along the way; and powerful certifications to boost employability and job competitiveness. Through the project, a system was developed for referrals, tracking, testing, and employment that will be replicated and modified for the purposes of this grant. TRC also actively works with South Central and Southeast WIBs on the Job Retention Training Program and the New Job Training Program, provided through DWD focused on training employees of participating companies to improve the skills of the area's workforce. The College will also leverage the information and resources provided by the Missouri Department of Economic Development, the Missouri Economic Research and Information Center (MERIC) and Economic Modeling Specialists Intl (EMSI) to help inform our continuous improvement processes.

At the local level, TRC will lead efforts to engage representatives from Career Centers. TRC currently has strong relationships with each of the centers in Table 3. These centers act as the primary point of entry for TAA eligible workers and other nontraditional learners who are then directed to our programs. This initiative will expand the scope of our relationships with these centers.

Table 2: Partner TAA Agency Institutions

Name of Career Center	Location
Missouri Career Center	Poplar Bluff, MO
Missouri Career Center	Sikeston, MO
Missouri Career Center	Cape Girardeau, MO
Missouri Career Center	Kennett, MO
South Central Missouri Community Action Agency	Poplar Bluff, MO
Susanna Wesley Family Learning Center	East Prairie, MO
New Madrid County Family Resource Center	New Madrid, MO
Ozark Action, Inc.	Mountain Home, MO
Ozark Action, Inc.	West Plains, MO

Education and Training Needs of TAA-eligible workers—Based on our experience with TAA-eligible workers and nontraditional students, Three Rivers College understands the many challenges and barriers TAA-eligible workers and other non-traditional adult learners face as they seek to balance family

commitments, completion of training, and ultimately finding employment with family-supporting wages.

Based on demographic data of TAA claimants in the State of Missouri reported by the Missouri Economic Research and Information Center, 41% have not completed high school, 65% of TAA-eligible workers have completed a high school education, and only 4% are college graduates. Men were also slightly more likely to be a TAA claimant (55%) than women (45%).

Returning to school or enrolling in a training program as an adult learner for the first time in 20 years can be a daunting task. While TRC recognizes that technology accelerates training and is necessary for jobs of the twenty-first century, TRC also acknowledges that some of the targeted population will face digital literacy and computer skills challenges. In order for participants to gain self-confidence and digital literacy skills, our approach embeds remediation within courses and assistance with those who are unfamiliar with technology. In addition, the Three Rivers College Full Service Center located in Dexter, Kennett, Malden, Portageville, and Sikeston successfully serve and support thousands of students in these communities each year who have significantly been impacted by regional layoffs and plant closures. Each of our campus/center locations will be involved in gathering input from industry leaders and building bridges to work-based learning experiences to prepare graduates for successful entry into high job growth industries.

ii. Evidence of Job Opportunities in the Targeted Industries and Occupations

TRC is targeting growing industries and occupations in advanced manufacturing and precision agriculture to develop two pathways programs.

Evidence of Employer Demand for Targeted Occupations

Advanced Manufacturing Pathway: There is significant demand for advanced manufacturing occupations based on the fastest growing employment areas identified by MERIC as well as data from Economic Modeling Specialists, Inc. (EMSI). Manufacturing employs one in 10 workers in the TRC region and provides \$979.7 million in total earnings for manufacturing workers. Manufacturing in the TRC region

pays well – average earnings per job are 54% higher than the average of all other industries in the region. While the state as a whole employs a 5% greater share of manufacturing workers compared to the national economy, the TRC region’s concentration of manufacturing workers (as a portion of total employment) is 39% higher than the state and nearly 50% higher than the nation. According to the Missouri Department of Economic Development’s Economic Research and Information Center (MERIC), four of the top 10 fastest-growing employment areas in the South Central Workforce Investment region of the state are in manufacturing subsectors. The top fastest-growing subsector in the Southeast Workforce region is also within manufacturing. Table 4 shows these manufacturing subsectors.

Table 3: Regional Growing Employment Areas

South Central (includes Butler, Carter, Howell, Oregon, Reynolds, Ripley, and Wayne Counties)²		
Rank	NAICS subsectors	Growth
1	333 Machinery Manufacturing	54%
3	326 Plastics and Rubber Products Manufacturing	43%
6	325 Chemical Manufacturing	27%
9	339 Miscellaneous Manufacturing	15%
Southeast (includes Bollinger, Cape Girardeau, Dunklin, Mississippi, New Madrid, Pemiscot, Scott, Stoddard Counties)³		
1	334 Computer and Electronic Product Manufacturing	62%

Table 4: Occupation Growth Areas for Manufacturing

Occupation	Project Openings, 2013-2018
Machinists and machine operators	431
Assemblers and fabricators	298
Solderers, brazers, and welders	174
CNC operators and technicians	60

Precision Agriculture Pathway: Agriculture contributes more than \$461 million in economic activity (direct and indirect) for the TRC region. The industry employs 7% of workers in the TRC region, and growth in employment is projected to outpace the nation by 1%. Across all counties in the U.S., Mississippi County ranks #28 in concentration of employment in crop production. This concentration of agriculture

² http://www.missourieconomy.org/pdfs/led_if_08_sc.pdf

³ http://www.missourieconomy.org/pdfs/led_if_08_se.pdf

employment in the TRC region is three times the national average. In the TRC Eastern region⁴, 9% of all jobs are in the agriculture industry, and employment concentration is nearly five times the national average. Although we do project the following job openings, we understand that many graduates of agriculture programs will work for family businesses, or will not define their job as a specific occupation.

Table 5: Occupation Growth Areas for Agriculture

Occupation	Projected Openings, 2013-2018
Farmworkers and laborers	390
Agricultural and logging equipment operators	110
First-line supervisors of agriculture workers	30

Understanding Skills Required in the Targeted Industries and Occupations—The identified skills required for our targeted industries, which are outlined in Table 7, are a result of research⁵, monthly meetings with three groups of employers called “training groups” which is explained further under Strategy 3, and advisory committees comprised of industry leaders. These groups identify skills gaps employers are currently facing. Our project design embeds continuous evaluation of our program content partially through continued monthly meetings of these training groups.

Table 6: Skills Required in Manufacturing and Agriculture

Pathway Program	Example Occupations	Knowledge	Skills—Both Soft Skills and Technical	Abilities	Training
Advanced Manufacturing	Machinists and Machine Operators	Mathematics; Mechanical knowledge; Production and Processing; Design	Operation Monitoring; Critical Thinking; Workplace communication; Reading Comprehension	Quick Reaction Time; Selective Attention	Certificate
	Solderers, brazers, and welders	Production and Processing; Design; Administration and Management; Mechanical; Mathematics;	Workplace communication; Critical Thinking; Operation and Control; Monitoring; Reading	Selective Attention; Visualization	Certificate

⁴ Includes Dunklin, Mississippi, New Madrid, Pemiscot, Scott and Stoddard Counties.

⁵ <http://www.onetonline.org/>

		Engineering and Technology	Comprehension		
Precision Agriculture	Precision Agriculture Technicians	Computers and Electronics; Mathematics; Biology; Food Production; Geography; Engineering and Technology	Workplace communication; Active Listening; Critical Thinking; Reading Comprehension; Speaking; Active Learning; Judgment and Decision Making	Deductive reasoning; information ordering; inductive reasoning	Certificate

iii. Gap Analyses

While existing training programs exist at the basic level and A.A.S level, TRC has identified a number of gaps in services from lessons learned from MO Manufacturing WINs, as well as input from our local employers through trainings groups and advisory committees, and other resources. As mentioned above, regional training groups have provided input. In addition, we inventoried gaps from multiple businesses and area industry leaders from across our service area. For example, we participated in an industrial council forum in Willow Springs, MO which included representatives from local employers including CAMCorp (heavy in Welding and manufacturing), Caterpillar (advanced manufacturing) and Invensys, a global manufacturer of high tech gas valves. The analysis from this assessment indicates that the region does not offer enough certificates, credentials, work-based learning experiences, and degree programs which can seamlessly build career ladders into high job growth industries, while filling the high skilled workforce pipeline needs of the region. Current regional training programs include:

- TRC offers an Associate of Applied Science degrees in Applied Technology, Industrial Technology-Manufacturing & Industrial Technology, and Industrial Technology-Power Plant;
- Introductory Welding instruction to high school and community members is offered across the region in partnership with area vocational/technical schools across South Central and Southeast Missouri.

While these current programs lay the groundwork for an advanced manufacturing program and a precision agriculture program, TRC has identified the following current existing gaps in programs and program delivery including:

- The A.A.S. degree and the introductory courses are not connected to create a pathway for students;
- Our industry assessment indicates introductory training alone is inadequate to build the level of skills, competencies, and certifications required for employment in this entry-level career opportunity;
- Feedback from industry leader assessments identified a *critical* gap in degree programs required for growing Welder-certified occupations;
- TRC lacks faculty expertise for both of our proposed pathways;
- Poverty is a barrier to access training at our locations due to lack of transportation and funds in paying for training; and
- Employers in the region across all sectors indicate a lack of “soft skills” such as workplace communication skills.

2. Methodology and Work Plan

Rebuilding the Missouri Bootheel will expand capacity through the development of new **advanced manufacturing and agriculture precision** pathway programs. Aligning and leveraging all of our strategies and activities with our partners, we will utilize stacked and latticed credentials, prior learning assessments, mobile skills training labs, and other technology-enabled delivery systems to build a seamless pathway for workers to gain the type of training critically needed for employment opportunities in manufacturing and agricultural sciences industries in our region. We selected the **option of leveraging previously-funded grantees** because it is key in the development and implementation of our strategies to achieve our goals.

The advanced manufacturing pathway will utilize N.A.M. (National Association of Manufacturers) endorsed Manufacturing Skills Certification System recommendations. First year deliverables for this

pathway will provide training for Certified Production Technician (CPT), Certified Welder, and make accessible Advanced Welding Society Schools Excelling through National Skills Standards and Education (SENSE) online certifications. The precision agriculture pathway will focus on curriculum development in Year 1. Year 2 efforts will introduce precision agriculture short-term modular credentials that stack to a one year certificate and then to an AAS Degree. For both pathway programs, Core Elements of integration of stackable and latticed credentials, transferability, technology-enable learning, and strategic partnerships will be key to achieving our goal.

i. Evidence-based Design

TRC's *Rebuilding the Missouri Bootheel* initiative will seek to leverage previously-funded TAACCCT projects in order to develop our own customized model of program design and delivery by utilizing best-practices and lessons learned at an accelerated rate. TRC is fortunate to be a consortium member of a previously-funded state-wide project focused on health care industries (MoHealth WINS). TRC will also leverage its relationship with other Missouri community colleges who are consortium members of a previously-funded project focused on expanding their existing advanced manufacturing training programs. TRC will benefit substantially from these projects as it develops new programs for targeted industries through adoption of successful strategies.

Strategy 1: Create clear career pathways for participants beginning at recruitment and ending at job-placement or advancement to higher-education

Strategy 1.1 Stacked and Latticed Credentials for Advanced Manufacturing and Precision Agriculture

Research shows evidence	Research conducted by Mansfield, 1989 ⁶ , and Rodriguez, Patel, Bright, Gregory, & Gowing, 2002 ⁷ find that the value of stackable or latticed credentials, also called competency models, is that they provide a “whole-person assessment” in order for
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⁶ Mansfield, B. (1989). Competence and standards. In J. W. Burke (Ed.), *Competency based education and training* (pp. 26-38). Sussex, England: Routledge.

⁷ Rodriguez, D., Patel, R., Bright, A., Gregory, D., & Gowing, M. K. (2002). Developing competency models to promote integrated human resource practices [Special issue: Human resources management in the public sector]. *Human Resource Management*, 41(3), 309-324.

	individuals to identify readiness for a particular occupation.
Strategy 1.2 Prior Learning Assessments to Accelerate Degree Program Completion	
Research shows evidence	The Council for Adult and Experiential Learning (CAEL)'s multisite study of the results of Prior Learning Assessment (PLA) on student outcomes by comparing PLA students with non-PLA students. PLA students: graduated at higher rates; earned more credits in coursework; saved 1.5 to 4.5 months of time while earning their Associate's degrees; and more (56%) earned postsecondary degrees compared to 21% in control groups. ⁸
Strategy 1.3: Develop credit transferability and articulation agreements for new programs to promote seamless transitions for clear career pathways	
Research shows evidence	A 2001 study by the Ford Foundation surmised that though the quality of credit transfer programs varied widely, it was generally true that the more credits a student acquires at a community college, the more likely he or she is to acquire a four-year degree. A summary document on transferability from the College Board found that at least 50% and as many as 80% of all incoming community college students want to transfer credits in order to earn a bachelor's degree. ⁹
Strategy 2: Deliver programs through a mix of innovative online or technology-enabled learning models and mobile labs to increase speed to completion and increase flexibility for participants	
Research shows evidence	Benson, A.D. et. Al (2004) indicate that online and blended learning models provide unique and flexible options for students without sacrificing student performance. ¹⁰
Research shows evidence	A recent Rutgers University study of mobile learning labs used in Colorado for retraining incumbent manufacturing employees had high participation rates (in one instance 100% participation because the labs were on-site for job retraining) with employers noting positive changes in worker productivity, workflow and even communication: Employees were able to quickly translate new skills into their job functions and were reported to have a more comprehensive understanding of production processes. ¹¹
Strategy 3: Develop and Expand Strategic Partnerships	
Strategy 3.1 Strengthen relationships with employers in target industries	
Research shows evidence	A report by Maureen Conway of the Aspen Institute finds that benefits flow to employers with strong sector partnerships including "improvements to a business's

⁸ Center for Educational Learning, (2010). Fueling the race to postsecondary success: A 48-institution study of PLA and adult student outcome. www.cael.org/pdf/PLA_Fueling-the-Race.pdf

⁹ Ford Foundation, The Road to Equality: Report on Transfer for the Ford Foundation, Ford Foundation, 320 E. 43rd Street, New York, NY 10017, 212-573-5000 (Julie Yearsley Hungar and Janet Lieberman, The Ford Foundation, 2001).

¹⁰ Benson, A.D., Johnson, S.D., Taylor, G.D., Treat, T., Shinkareva, O.N. & Duncan, J. (2004). Distance learning in postsecondary career and technical education: A comparison of achievement in online vs. on-campus CTE courses. St. Paul, MN: National Research Center for Career and Technical Education.

¹¹ Rutgers, The State University of New Jersey, School of Management and Labor Relations, Piscataway, NJ, March 2013, Colorado SECTORS Initiative: Pueblo Manufacturing Collaboration.

evidence	ability to find and retain qualified workers, increases in productivity and increases in the skills of existing workers.” These benefits can flow to the entire industry. ¹²
Strategy 3.2 Strengthen coordination with public workforce system	
Research shows evidence	A 2009 random-assignment evaluation of three sector partnerships aligned with the public workforce system in by Maguire, Freely, Clymer, Conway, Schwartz, showed that worker participants earned significantly more (18 percent more, or \$4,500 over 24 months) than the control group. According to the report, “the reason was that they were more likely to work, worked more consistently, and worked in jobs with higher wages. They also had higher-quality jobs, as measured by benefits such as health insurance, paid vacation, and paid sick leave. ¹³
Strategy 4: Leverage Existing Partnerships with other Community Colleges and TAACCCT Funded Programs Based on Geographic Proximity or Target Industries	
Research shows evidence	Norwalk Community College (NCC) in Connecticut is just one example of a state consortium that is using its \$12.1-million TAACCCT grant for a Health and Life-Science Career Initiative with four other community colleges including Capital, Gateway, Manchester and Middlesex colleges and an online college. ¹⁴

Use of Evidence in Program Design—This initiative will make use of evidence-based practices proven to provide support services that strengthen the college to career readiness of graduates. Research indicates that partnerships and blended learning models including lab-based learning are key to developing positive outcomes for participants. Because of these findings, we will integrate these practices throughout the development and implementation of our project. Most importantly, our evidence is based on other TAACCCT grants that have demonstrated success. Building on the lessons learned and the successes of these grants, we will lift successful models for addressing each Core Element and strategy of our project.

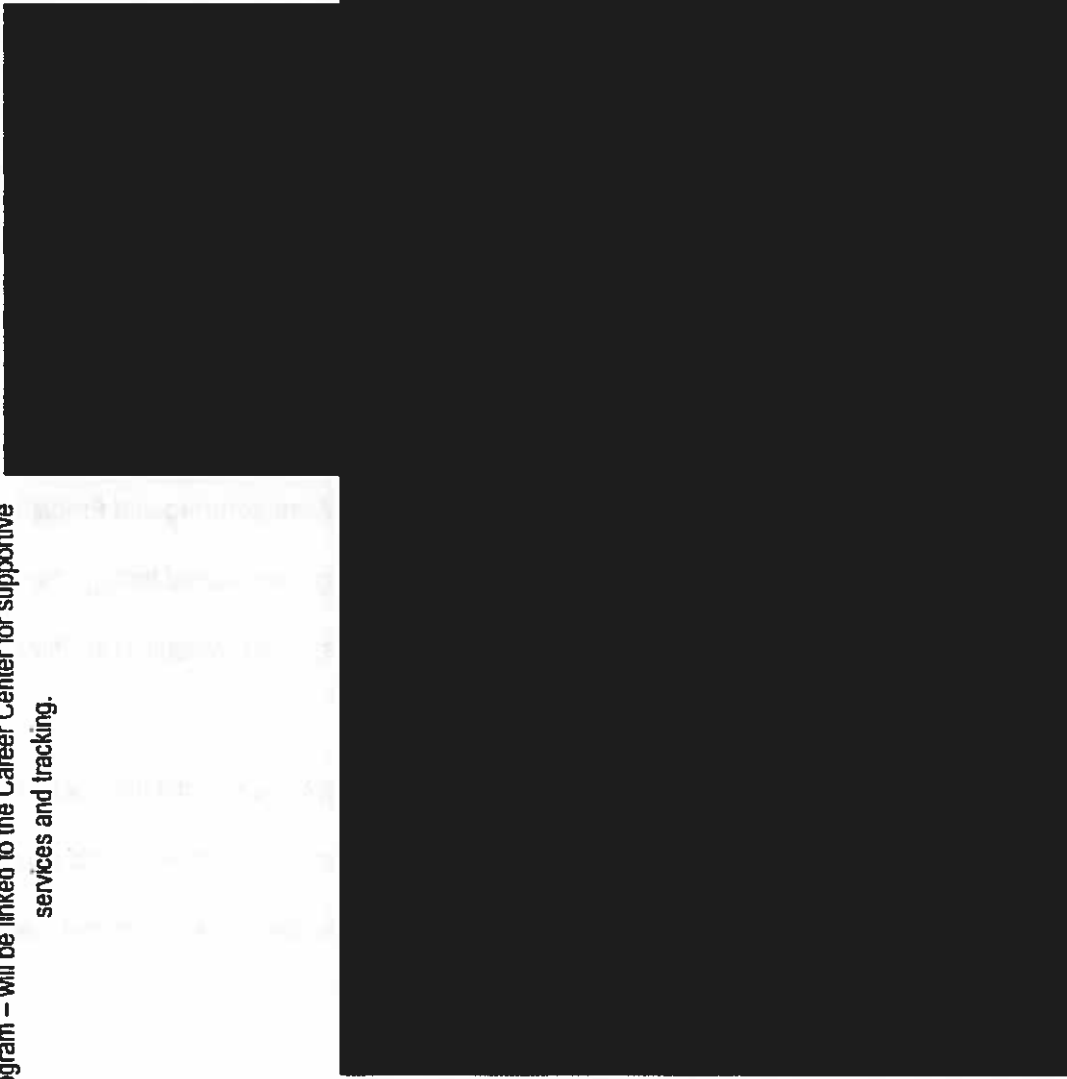
12 Conway, M. Sector Strategies in Brief, Workforce Strategies Initiative, the Aspen Institute, November 2007, <http://www.aspenwsi.org/publications/07-014b.pdf>. And <http://www.clasp.org/admin/site/publications/files/workforce-effectiveness.pdf>

13 S. Maguire, J. Freely, C. Clymer, M. Conway, D. Schwartz, Tuning in to Local Labor Markets: Findings from the Sectoral Employment Study, Public/Private Ventures, July 2010, http://www.ppv.org/ppv/publications/assets/325_publication.pdf

14 S. Maguire, J. Freely, C. Clymer, M. Conway, D. Schwartz, Tuning in to Local Labor Markets: Findings from the Sectoral Employment Study, Public/Private Ventures, July 2010, http://www.ppv.org/ppv/publications/assets/325_publication.pdf

Participants will be recruited from Career Centers, the K-12 schools, and individuals who come directly to TRC. All participants – no matter how they initially engage with the program – will be linked to the Career Center for supportive services and tracking.

Figure 3: Project Design



STRATEGIC PARTNERSHIPS:

- Workforce system/ Career Centers – recruitment, placement assistance
- K-12 Education (Guidance/ Career Counselors and Area vocational/ technical schools) – recruitment, transition from secondary education.
- Employers – (Advisory Committee) program development, internships, employment
- 4-year Colleges and Universities – transfer/ articulation into degree programs

Program Design

Strategy 1: Create clear career pathways for participants beginning at recruitment and ending at job-placement or advancement to higher-education

Recruitment, Entry, and Enrollment into the Program – Our program design begins with close partnerships with our partners in the Missouri Career Centers, K-12 education and the area vocational and technical schools and employers from the manufacturing and agriculture industries. Participants will be recruited from the Missouri Career Centers, K-12 schools – especially the area vocational and technical schools – and individuals who engage directly with Three Rivers College. All participants – no matter how they initially engage with the program – will be linked to the Career Centers to receive career development supports and services. Individuals will then be enrolled at Three Rivers College. This process builds on the MoHealth WINs project which laid the infrastructure of this system.

Assessment– Once enrolled, students will receive a number of assessments including placement tests, Prior Learning Assessments (described in more detail below), and a Work Ready test. These assessments will gauge the student's readiness for program coursework. TRC recognizes the importance of PLA from our previously funded TAACCCT grant, and has learned of their value from other grant recipients such as MOManufacturing WINS.

Strategy 1.1 Stacked and Latticed Credentials for Advanced Manufacturing and Precision

Agriculture–Once individuals have enrolled in Three Rivers College and worked through the appropriate placements tests and assessments, they will pursue a pathway of stacked credentials in either Advanced Manufacturing or Precision Agriculture.

Industry Engagement to Identify Credentials—Employers and industry have been involved and will continue to play a role in identifying the necessary skills and competencies. As stated earlier, employers and leaders are engaged through training groups and advisory committees that identify which

skills are being in the region. Through consensus building, regional industry leaders have agreed on nationally-recognized industry credentials.

Advanced Manufacturing Pathway – The stacked credentials for the Advanced Manufacturing pathway will align with the National Association of Manufacturers (NAM) endorsed Manufacturing Skills Certification System. The Manufacturing Institute created a system of stackable credentials applicable to all sectors in the manufacturing industry to which our advisory committees have agreed to recognize. These nationally portable, industry-recognized credentials validate the skills and competencies needed to be productive and successful in any manufacturing environment. The NAM-endorsed Manufacturing Skills Certification System includes both technical and non-technical skills for advanced manufacturing roles. The four priorities of the certification system include:

- Competency-based, customized education and training for the manufacturing workforce;
- Technology-infused, more industry-relevant education;
- Increased access to post-secondary degrees and industry-recognized credentials; and,
- Clear career pathways aligned to competency-based education and certification programs.

Specifically, TRC's Advanced Manufacturing pathway will include the Manufacturing Skill Standards Council's (MSSC) **Certified Production Technician (CPT)** certification and the American Welding Society's **Certified Welder** certification. These certifications can both stand alone or stack toward an A.A.S. degree. This design allows multiple stop-out or achievement points for students. The CPT is applicable to all entry-level jobs in all sectors in manufacturing within the region. The American Welding Society's (AWS) **Certified Welder** certification uses performance-based testing to validate procedures used in the structural steel, petroleum pipelines, sheet metal and chemical refining industries. Upon completion of the competencies, a student receives final certification that includes a welding credential transferable across all manufacturing sectors. Based on Industry Competency Models for Advanced Manufacturing occupations, training certifications in Welding Technology can provide bridges to employment as a Certified Welder, Railroad Welder, Certified Welder Educator, Universal Equipment Operator or Operating Engineer,

Certified Robotic Arc Welder, Skilled and Technical Science Technician, Plate Shop Operator, Certified Welding Engineers, Welding Metal Fabricators, Certified Welding Inspectors, and other high job growth occupations in demand across the region.

Precision Agriculture Pathway – TRC will develop a modular curriculum for the Precision Agriculture pathway that leads to short-term credentials that stack to a 1-year certificate and eventually an Associate of Applied Science degree. Currently, the only programs that exist for Precision Agriculture are from proprietary vendors and focus on only a specific piece of equipment or training. The modular curriculum that will be developed through the grant will provide an opportunity for students to develop a more well-rounded understanding of the knowledge, skills, and equipment they will utilize on the job. Certificates currently being considered include Ag Applicator, Telemetry, and Equipment Operations leading to an A.A.S. degree in Agricultural Geospatial Technology.

Strategy 1.2 Prior Learning Assessments to Accelerate Degree Program Completion – Before entering the Advanced Manufacturing pathway or the Precision Agriculture pathway, students will complete a Prior Learning Assessment (PLA) to identify previously mastered competencies and abilities. The PLA will serve as a mechanism to grant college credit for technical certificates earned, professional exams taken, and other forms of documented training relevant to the technical skills required within an option or emphasis area. Three Rivers College will allow a maximum of 25 percent of a program to be earned through PLA credits for certificate or degree which can provides both a faster and a less expensive route to successful program completion.

Strategy 1.3: Develop credit transferability and articulation agreements for new programs to promote seamless transitions for clear career pathways—Participants have the option to stack credentials to pursue an A.A.S. degree and ultimately a four-year degree. We will development of seamless transitions by building on our existing relationships with regional institutions of higher education. This will involve developing articulation agreements and expanding existing general transfer agreements.

For example, Missouri State University has a basic articulation plan for transfer students that allows up to 35 hours of transferable credit, but we will work to establish a transfer and articulation agreement allowing graduates to transfer up to 60 hours of credit for degrees.

For our advanced manufacturing programs, we will align our program with institutions by mapping course equivalencies and creating articulation agreements in Year 1. We plan to align our program with **Southeast Missouri State University's** B.S. in Engineering Technology with an option in Mechanical and Manufacturing Systems; **Arkansas State University's** B.S. in Technology with an emphasis in one of five areas: 1) Technical Studies, 2) Technology Management, 3) Computer Aided Drafting and Design, 4) Computer Systems, and 5) Manufacturing - Industrial Technology; **Missouri State University's** B.A.S. in Technology and Construction Management with an emphasis in Technology Management; and **University of Missouri-Columbia's** B.S. in Industrial Engineering.

For our precision agriculture program, we will align our program with the above institutions to prepare participants for degrees in Agribusiness, Plant and Soil Science, and Applied Science during Year 1 developing articulation agreements concurrently with program development. For example, we will align our program with SEMO's B.S. in Agribusiness with an option in Plant and Soil Science and Arkansas State University's B.S.A. degree or its B.S. in Agriculture with an emphasis on Agricultural Studies or Plant and Soil Science.

TRC and partnering universities will work collaboratively between faculty and leadership. Since these are new academic programs to TRC, building pathways beyond two-year degree programs through the articulation agreement development process will be built in parallel with program development. We will also partner with these institutions by utilizing the expertise of their four-year faculty to assist in program development which will aid in creating automatic transferability.

Strategy 2: Design innovative online or technology-enabled learning strategies to increase speed to completion and increase flexibility for participants

Utilization of Mobile Lab Units— In order to deliver training, TRC will use a mix of classroom and technology-enabled distance delivery methods including the integration of mobile lab units. TRC recently received a grant to purchase two mobile learning labs, so we can deliver services in locations throughout our region, lifting barriers to training such as lack of transportation. We will leverage these two labs in the delivery of our Advanced Manufacturing pathway program. Funding from the TAACCCT program will be used specifically to support the development of faculty who will train in the labs, purchase a mobile lab for specific use in our Precision Agriculture pathway program, and support any necessary equipment improvements. The labs are versatile in that equipment can easily be replaced to fit the needs of a program in a given location. For example, in the future the lab could be outfitted with computers for online welding instruction (like SENSE) and the next filled with welding simulation equipment for a hands-on lab session. All units are equipped with laptop computers, GIS software, wireless internet, and printers.

Adding to our flexibility, TAA-eligible workers will be able to access programs at the Three Rivers College main campus in Poplar Bluff, as well as through distance delivery programs administered through our regional network of TRC Full-Service Centers in Dexter, Kennett, Malden, Portageville, and Sikeston. TRC will build on its experience with distance-delivery instruction since more than 70% of existing instructional certificates are offered via distance-delivery instruction. For example, online course resources, including the AWS Schools Excelling through National Skill Standards and Education (SENSE) online learning opportunities, will be included in distance delivery program offerings.

Career Tracking Software System-TRC will infuse technology at every point of a participant's experience from before he or she enters TRC to post-completion of TRC programs. At any time during their experience, potential or current participants will be able to access an open or guided search on TRC's website for career profiles. Each career profile provides regional job information regarding salary,

education level required, number of job openings in the region, etc. With each career, training and degrees related to those occupations offered by TRC will be listed below, so potential and current participants can map their career path. TRC will be able to track what careers are most popular in searches and which training and degree programs are most viewed to help inform what programs and careers are in most demand by students and which programs may require promotion (if the related occupations are highly demanded in the region) or which may be irrelevant. The tool also provides a guided resume builder as well as a regional listing of job openings by a national job website. This will be an accessible tool that communicates workforce related data to not only our participants, but our employers and the broader community.

Expected Impact of Technology on Program Outcomes—Including both distance and lab-based learning strategies into our program design will enable our participants to attain skills and credentials in a flexible learning environment. Taking advantage of efficiencies of scale, our mobile lab units and online learning applications will increase capacity for program delivery in terms of expediency of program completion as well as increase the numbers of participants, completers, and job placements or transfers to four year institutions.

Strategy 3: Develop and Expand Strategic Partnerships

Underlying all of our strategies are our partnerships. Partnering with employers, coordinating with the public workforce system and the state workforce plan, and collaborating with local business-related organizations are all key to the success of the initiative. From participants' point-of-entry into the initiative, to our evaluation processes, partners will play an active role in every step of the project.

Ensure Coordination with state workforce plans—Our approach is in coordination with *The State of Missouri's Workforce Integrated Plan for Program Years 2012-2016*¹⁵. The targeted industries of manufacturing and agriculture are also priority targeted industries of the state (2012, p. 30). The state

¹⁵ https://worksmart.ded.mo.gov/includes/secure_file.cfm?ID=2624&menuID=6

adopted eight strategies and nine actions items to accomplish these goals, many of which align to our initiative including one strategy that calls the state to, "Attract, develop, and retain a workforce with the education and skills to succeed in a 21st Century economy," (p. 30). Other action items call for increased emphasis on the work of community colleges, improved workforce training, increased provision of affordable and flexible credential-based training, the integration of innovative training methods, and the adoption of best practices for learning. These action items speak directly to the strategies we have outlined for our initiative.

Strategy 3.1 Strengthen relationships with employers in target industries Employers will play a crucial role throughout the continuum of our initiative from program planning to implementation to measuring outcomes. Industry partners will also play a key role in providing resources such as equipment and space that might be needed for sustainability as well as access for students in different parts of the expanded service region. We will strategically engage with employers through three channels: advisory committees, work-based training programs, and job placement activities. Members of our advisory committees and their defined roles are outlined below.

Table 7: Rebuilding the Missouri Bootheel Employer Advisory Committee

Employer Role	List of Employers on Advisory Committees
Define program strategies and goals	Faurecia; Missouri Department of Transportation; Nordyne; Briggs and Stratton; Schultz & Summers Engineering; Smith & Company Engineering; Starting USA Corp; Gamblin Lumber Company; Dille & Traxel LLC; Quadri Contractors; Associated Electric Coop, Inc.; Gates Rubber Company; Huffman, Inc.; University of Missouri-Columbia Extension Service; Farm Credit Services; USDA Forest Service; Mingo Wildlife Refuge; Wappapello Lake Project; Missouri Department of Conservation; Eleven Point Ranger District; Area farmers
Identify skills and competencies, assist in curriculum development	
Provide resources to support education/training (work-based learning)	
Develop pathways for individuals	
Develop and align stackable credentials with career ladders	
Develop and scale sector-focused strategies	
Provide work-based training opportunities	
Commit to hiring, promoting and/or retaining qualified program participants	

Work-based Training Programs—Three Rivers College currently has three customized training consortiums created through The Missouri Customized Training program (MCTP) operated by the Department of Economic Development's Division of Workforce Development (DWD). This program is not only an essential tool for the state, but for the region TRC serves. The Missouri Job Development Fund is the Department of Economic Development's funding source for the Missouri Customized Training Program.

Table 8: Regional Training Groups

BRTG Bootheel Regional Training Group (Sikeston Area)	HOTC Heart of the Ozarks Training Consortium (West Plains Area)	PBTG Poplar Bluff Training Group (Poplar Bluff Area)	Other companies TRC assists with in training needs
Alan Wire Associated Electric Orgill Pepsi SRG Global Tetra Pak	Armstrong Wood Caterpillar Jasper Engines RBC Manufacturing	Briggs & Stratton Mid-Continent Nail Nordyne Starting USA	ARI-American Railcar (Kennett) Gates Rubber(Poplar Bluff) Faurecia (Dexter) Brewer's Ice (Eminence)

In addition, TRC has and will continue to work closely with Missouri's Job Retention Training Program (JRTP) and New Jobs Training Program (NJTP). Created from state employment taxes, this program helps companies train recent hires through a mix of on-the-job training and specific training at local community colleges. These programs will play an important role as they hire eligible participants, leverage their funding for individuals' training costs while TRC provides training.

Table 9: List of Participating Companies in JRTP and NJTP

JRTP Programs	NJTP Programs
Noranda Aluminum (just completed)(New Madrid) SRG Global (Portageville)	Orgill (Sikeston) Invensys(West Plains)

Strategy 3.2 Strengthen coordination with public workforce system—As stated earlier, TRC has a strong working relationship with Workforce Investment Boards located in our service region. We will continue to partner directly with area Career Centers as they will assist in identifying participants, entering

participants into their system as they move through our programs, provide additional supports to the individual participants needs, and provide job placement assistance after training.

Coordination with Other Organizations—The College views itself as part of a larger community. Examples of this include opening public computing center to make high-speed Internet access available to all residents and partnering with Servicemembers Opportunity Colleges Consortiums to better serve military veterans who choose to enroll at TRC. This initiative will also extend our partnership with local chambers of commerce which currently partner with TRC to help identify gaps in programs and services and share regional information and resources. Also, TRC is utilizing the funding received from the Delta Regional Authority to purchase a mobile skills lab for the advanced manufacturing pathway to help leverage the expansion of mobile skills labs to the precision agriculture pathway.

Strategy 4: Align Existing Partnerships with other Community Colleges and TAACCCT Funded Programs based on geographic proximity

As defined earlier, our selected option strategy focuses on leveraging previously-funded grantees to develop and implement our strategies. As a consortium member of a previously-funded state-wide project focused on health care industries (MoHealth WINS), TRC has learned the importance of Prior Learning Assessments and remediation of newly enrolled participants. TRC will also leverage its relationship with Momanufacturing WINS, another previously-funded project in Missouri involving a different set of community colleges that focused on expanding and improving their existing advanced manufacturing training programs. We currently meet with the members of these consortiums through our relationship with the Missouri Community College Association (MCCA) which holds monthly meetings for college administrators where lessons learned, promising practices, and course and program content is shared. As the program develops, TRC will work with MCCA members to identify collaborative opportunities in program delivery methods, articulation agreements, and the development of a best practice coalition in targeted industries.

vii. Work Plan and Project Management

Project Work Plan				
Project Launch and Planning				
Activities	Implementer(s)	Costs	Time	Deliverables
a) Procure evaluator b) Hire project manager c) Develop Marketing materials to communicate stacked and latticed pathways to potential participants and coordinate with public workforce system in distributing recruitment materials	President of TRC Vice President of Learning Project Manager			Qualified evaluator Qualified project managers Marketing materials
Strategy 1	<i>Create clear career pathways for participants beginning at recruitment and ending at job-placement or advancement to higher-education</i>			
Activities	Implementer(s)	Costs	Time	Deliverables
Strategy 1.1 Stacked and Latticed Credentials for Advanced Manufacturing and Precision 1.1.a) Define stackable credential- based career pathways at select colleges and develop course competencies and learning outcomes per pathway 1.1 b) Purchase courseware, equipment,	Vice President of Learning Project Manager Employer Partners Public Workforce			Course competencies for each pathway for stackable credentials for certificates (7/1/2013-6/30/2014) 63 pieces of

TRC Rebuilding the Missouri Bootheel Initiative – TAACCCT Technical Proposal

<p>Agriculture</p>	<p>and consumable instructional supplies needed to deliver training for stackable credentials at select colleges</p> <p>1.1 c) Hire faculty to deliver training</p> <p>1.1 d) Obtain national certifications and accreditations</p> <p>1.1 e) Deliver stackable credentials and accelerated remediation for advancement along career pathways at select college</p>	<p>Partners</p> <p>Faculty</p>		<p>equipment and courseware (7/1/2013-7/1/2014)</p> <p>Plan and matrix of certification and accreditation options (7/1/2013-6/30/2014)</p> <p>High-quality staff faculty</p> <p>33 credits per pathway program will be defined</p>
<p>Strategy 1.2 Integrate Prior Learning Assessments to accelerate degree program completion</p>	<p>1.2 a) Conduct PLA workshop with faculty and staff</p> <p>1.2 b) Conduct employer-based evaluations to determine college credit eligibility</p> <p>1.3 c) Integrate assessments into initiative</p>	<p>Project Manager</p> <p>Employer Partners</p> <p>Vice President for Learning</p> <p>Staff</p>		<p>PLA policies and practices that allow for up to 25% of credit for any pathway program.</p>
<p>Strategy 1.3: Develop credit transferability and articulation agreements for new programs to promote seamless transitions for clear career pathways</p>	<p>1.3 a) Meet with partner institutions</p> <p>1.3 b) Develop agreements with each institution</p> <p>1.3 c) Implement use of agreements by assisting successful completers to transfer</p>	<p>Vice President of Learning</p> <p>Project Manager</p> <p>4 year Institutional Partners</p> <p>Faculty</p>		<p>Articulation agreements with partners universities for each pathway program with at least 4 four-year institutions that allow up to 60 transferred credits</p>
<p>Strategy 2:</p>	<p><i>Deliver programs through a mix of innovative online or technology-enabled learning models and mobile</i></p>			

labs to increase speed to completion and increase flexibility for participants				
Activities	Implementer(s)	Costs	Time	Deliverables
<p>2 a) Develop hybrid courses offered both online and on-site</p> <p>2 b) Procure vendor to develop online platform for Career Tracking System</p> <p>2 c) Purchase technology equipment and instructional supplies including mobile skills lab and career tracking system</p> <p>2 d) Deliver hybrid courses both online and on-site</p>	<p>Project Manager</p> <p>Faculty</p> <p>Staff</p>			<p>Career Tracking System</p> <p>Online training that fits the technology of TRC and is interactive and user friendly for students</p> <p>Equipped labs to provide hands-on training using mobile skills lab technology regardless of</p>
Strategy 3: Develop and Expand Strategic Partnerships				
Activities	Implementer(s)	Costs	Time	Deliverables
<p>Strategy 3.1: Strengthen relationships with employers in target industries</p> <p>3.1.a) Initial meetings (regarding implementing this particular project) with employers</p> <p>3.1 b) Map career pathways between college to employers</p> <p>3.1 c) Continue to host training group meetings to evaluate program</p> <p>3.1 d) Identify work training opportunities</p> <p>3.1 e) Assist successful completers to find employment</p>	<p>President of Three Rivers Community College</p> <p>Vice President of Learning</p> <p>Project Manager</p> <p>Employer Partners</p>			<p>Refined pathways for 100% of participants by end of three years from training to employment</p> <p>Internships for each pathway program or another work-based opportunity</p>

<p>Strategy 3.2: Strengthen coordination with public workforce system</p>	<p>3.2.a) Work with existing partners in determining the recruitment practices 3.2 b) Host forums with various centers 3.3 c) Assist successful completers to find employment</p>	<p>President of Three Rivers Community College Vice President of Learning Project Manager Public Workforce Partners</p>		<p>Bi-Annual regional forums</p>
<p>Strategy 4: <i>Leverage Existing Partnerships with other Community Colleges and TAACCCT Funded Programs Based on Geographic Proximity or Target Industries</i></p>				
Activities	Implementer(s)	Costs	Time	Deliverables
<p>4. a) Continue to develop working relationships with MO Manufacturing WINS 4.b) Continue to partner with MO Health WINS</p>	<p>President of Three Rivers Community College Vice President of Learning Project Manager Previous TAACCCT grantees</p>			<p>Partnership agreements and sharing of knowledge Bi-annual forums among the three grantees to share lessons learned and identify ways to de-duplicate efforts and leverage resources</p>

3. Outcomes

i. Analysis of Outcome Projections

Outcome Measures	Targets for TAACCCT Programs	
1 Total Unique Participants Served		Total 220
2 Total Number of Participants Completing a TAACCCT-Funded Program of Study		Total 200
3 Total Number of Participants Still Retained in Their Program of Study or Other TAACCCT-		Total 230

Funded Program			
4 Total Number of Participants Completing Credit Hours		Total	220
5 Total Number of Participants Earning Credentials		Total	150
6 Total Number of Participants Enrolled in Further Education After TAACCCT-funded Program of Study Completion		Total	220
7 Total Number of Participants Employed After TAACCCT-Funded Program of Study Completion		Total	115
8 Total Number of Participants Retained in Employment After Program of Study Completion		Total	250
9 Total Number of Those Participants Employed at Enrollment Who Received a Wage Increase Post-Enrollment		Total	50

Data collected by the Project Director will be a part of the continued strategic planning process in evaluation and assessment of the project to ensure its continued success. The outcomes of this effort will be monitored and tracked for all program participants across the life of the project. The *targets* were identified as reasonable based on improved equipment, commitment from our strategic partners, and based on discussions with instructors.

Although the federally funded portion of the project will end after three years, the **balance of deliverables and outcomes** of our efforts will extend far beyond the grant period. Although a cost-per-person analysis would lead one to believe that this is a costly project, within the entire context of the project, the number of participants being served during the grant period is only one outcome. Other

deliverables such as a robust manufacturing and agricultural curriculum, extended reach via mobile labs, data tracking infrastructure, and relationship building with strategic partners justify the participant numbers for the grant period.

ii. Process or System for Tracking or Reporting Outcome Measures

Existing Tracking Procedures— TRC currently tracks enrollment, retention, grade point average, transfer credits, college placement scores, skill assessments, credentials/certifications, and graduation with certificate or degree through the Ellucian Colleague Enterprise (Datatel) student information system. Each student has a unique student identifier, so that all data can be tracked for the grant and non-grant participants, as well as disaggregated by gender, race, age, and other demographic factors.

Plan to Address Gaps in Tracking—TRC has identified gaps in data collection including tracking employment progression from point-of-entry to the program's multiple exit-points. Although we currently track employment three to six months after career track program completion, our current methodology of data collection (survey and phone calls) is not optimal. We plan to integrate employment information into Datatel and will work with our evaluator to develop a plan for tracking employment progression during the program and after participants have completed their certificates or degrees.

iii. Using Data for Continuous Improvement


Plan for Formal Data Reviews—In the Fall of 2011, Three Rivers College established a Continuous Improvement Leadership Team to ensure the college uses data-informed decision making and assessment to improve college operations and programs on an ongoing basis. The Project Director will collect and review monthly data throughout the life of the grant. Reports will be completed at the end of each term to analyze programming and other factors to determine effectiveness. Data will be shared with the Vice President of Learning, Chief Student Success Officer, the division chair, appropriate faculty, appropriate student services officers, advisory committee members, and employer/workforce partners to

ensure the successful assessment, design, development, implementation, and evaluation of this project throughout the life of this important initiative.

Sustainability Plan—TRC has planned for sustainability of the proposed strategies beyond the grant period. Advanced manufacturing and precision agriculture represent the most significant investment of grant resources. TRC will offset future maintenance and upgrades to equipment by leveraging industry relationships and funding available through career and technical programs such as the federal Perkins IV Grant and the Missouri Enhancement Grant. The Project Director will create an upgrade plan for equipment that will ensure up-to-date technology exists. The other investment of grant resources is personnel and these positions will be integrated into regular funded positions within the College to sustain this effort.

4. Project Management

Three Rivers College Vice President of Learning, Dr. Wesley Payne, will assume overall responsibility for the Rebuilding the Missouri Bootheel initiative. Dr. Payne has been at Three Rivers since July 2009.



Upon grant receipt, a full-time Project Director will be hired who has experience working with business and industry leaders, experience with career and technical education (preferably at the postsecondary level), experience and expertise in curriculum development, and an understanding of student support systems. The Project Director will possess excellent written and oral communication skills and experience with federal grants. The Project Director will serve as the college's liaison to public workforce groups and other postsecondary institutions, cultivate strategic partnerships, and serve as the lead administrator for all college personnel involved with the project. This individual's responsibilities will

include oversight of grant deliverables, timelines, outcomes, reporting and budgets. The Project Director will oversee the procurement and management of external resources including technical assistance and evaluators.

Three Rivers College has experience administering federal grant awards and will maintain and track grant funds and fiscal records in a separate and restricted account using current approved operating procedures. Inherent in these policies and procedures are internal monitoring and reporting systems which ensure the achievement of objectives and avoid any unapproved use of federal funds. The Project Director is responsible for approving and monitoring all TAACCCT expenditures. Purchasing will follow guidelines set by the business office and the State of Missouri. Quarterly financial records will be maintained through the Project Director's Office and a fiscal report, along with necessary supporting information. Fiscal auditing will be conducted annually using independent auditors assigned by the State of Missouri.

Mrs. Charlotte Eubank, Chief Financial Officer at Three Rivers, will serve as the lead fiscal officer for the project. Mrs. Eubank started at Three Rivers in 2007 as Comptroller and became the Chief Financial Officer in 2010.

financial service

Three Rivers' College media services department will work closely with the Project Director to support the development of marketing and media materials (print, web, radio, and video) used for the promotion of this initiative to TAA-eligible workers. Faculty members will be hired by Three Rivers College to meet the training needs for each level of program offerings initiated for program expansion.

1. Statement of Need

Serving the Education and Training Needs of TAA-Eligible Workers

Factor 1: Impact of Foreign Trade

Vincennes University's Logistics Training and Education

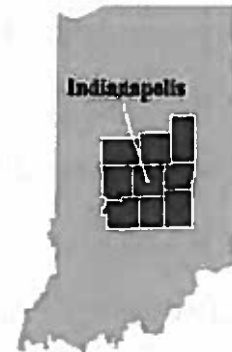
Center (LTEC) Initiative will serve communities in Indiana's

Economic Growth Region 5. This region occupies the Central

Indiana counties of Boone, Hamilton, Hancock, Hendricks,

Johnson, Madison, Marion, Morgan, and Shelby. Since January 1,

2007, 48 TAA Certifications have been issued in this region including:



TAA Number	Company	Location	Decision Date	Occupation of Workers Affected
80142A	Ditan Distribution	Plainfield	10/14/2011	Produced CD's and DVD's
75033	Indianapolis Metal Center	Indianapolis	02/18/2011	Produced Automotive Stamping
73627	Pratt and Whitney International Aerospace Tubes	Indianapolis	05/20/2010	Produced and Repaired Tubes, Ducts, and Manifolds for Aircraft Engines
71229	Diamond Chain Company	Indianapolis	05/12/2010	Produced Industrial Roller Chain
71759	Meridian Automotive Systems, Inc.	Shelbyville	05/04/2010	Produced Bumper Systems and Thermoplastics Products

Over 3,700 individuals have been impacted by the threat to, or loss of, jobs resulting from foreign trade through these certifications.² According to the Bureau of Labor Statistics, the average unemployment rate for all nine counties in Central Indiana has increased from the January 2007 rate of 4.71% to the January 2012 rate of 8.13%.³ The TAA-eligible workers were primarily employed in production and assembly positions. These included occupations in the vehicular lighting equipment, electrical equipment, audio and video equipment, and plastics product manufacturing subsectors.

¹ Indiana Department of Workforce Development, *Indiana Trade Adjustment Assistance*, 12 April 2012. <http://www.in.gov/dwd/2422.htm>

² Indiana Department of Workforce Development (Research and Analysis Department) email to the author 29 March 2011.

³ United States Department of Labor-Bureau of Labor Statistics, *Local Area Unemployment Statistics Home Page*, 11 May 2012. <http://bls.gov/lau/home.htm>

Factor 2: Partnerships with Applicable TAA Agencies

Vincennes University's project will ensure that participants are served through a continuum of services that help them to obtain employment or advance along their career pathway. VU understands and appreciates the expertise of the public workforce system in meeting the service needs of TAA-eligible individuals. Therefore, VU will partner with the public workforce system which has direct links to the state TAA for Workers Program to provide the following integral services: 1) assist with achieving program strategy and goals; 2) assess skill levels and refer TAA-eligible and other participants to the LTEC program; 3) connect program participants with employers through meetings and career fairs; 4) provide assistance, as appropriate, with training and evaluation of the workforce; 5) assist with Dept. of Workforce Development to link educational outcome information to employment information; 6) serve as an advocate for large scale deployment of stackable, nationally recognized credentials; and 7) work with TAA Office and other state level agencies to establish tracking initiatives for program participants.

Factor 3: Education and Training Needs of TAA Eligible Workers in Communities to be Served

The following information obtained from the Indiana Department of Workforce Development (DWD) provides further insight into the characteristics of TAA-eligible workers in Central Indiana.

Industry in which the population was employed. The TAA-eligible individuals were primarily employed in production and assembly positions. These included occupations in the vehicular lighting equipment, electrical equipment, audio and video equipment, and plastics product manufacturing subsectors.

Current level of skills and educational attainment. Only 17.9% of the TAA-eligible workers in Central Indiana have either an associate or baccalaureate degree. The majority, 55.5% of the individuals, have obtained only a high school or GED education level. However, because many

of these individuals have skills from their previous manufacturing positions, VU will assess these skills and build upon their applicability to the logistics industry.

Additional barriers. TAA individuals in Central Indiana are primarily between the age of 43 and 48. Being away from the educational system for a long period of time and being put into rigorous certificate programs will undoubtedly present developmental concerns. VU will work to help former students regain necessary study and learning skills which are vital to a student's success. The creation of a blended learning environment will combine non-traditional content delivery methods such as project-based, online, and hands-on with more traditional classroom learning to provide a greater opportunity for retaining information. This population also has family responsibilities and a need to earn family supporting wages as quickly as possible – a traditional two-year Associate Degree pathway is not effective in meeting their immediate needs. The program's design will emphasize a compressed schedule for attainment of certifications to provide immediate employment opportunities while continued training and education will lead to increased opportunities for higher wages.

Evidence of Job Opportunities in the Targeted Industries and Occupations

Factor 1: Identification of Targeted Industries and Occupations

The LTEC Initiative will prepare TAA-eligible workers and other participants for employment in the logistics industry. This industry - also commonly referred to as supply chain management (SCM) or transportation, distribution, and logistics (TDL) - integrates information, transportation, inventory, warehousing, material-handling, packaging, tracking, advanced manufacturing, and other high-tech services.

The focus of this project is to increase the number of qualified, employable candidates by providing them with increased opportunities to advance in their education and within their careers. Ultimately, those following the developed career path will progress to middle-skill and

higher-skill jobs while increasing their wages. Many TAA-eligible workers already possess the transferable skills necessary to work in the logistics sector in positions such as: material handlers, industrial truck operators and front-line supervisors. With a focused career training and education path, these same employees will be positioned for careers in more advanced high-skill, high-wage roles such as shipping, receiving and traffic clerks, warehouse specialists, purchasing and procurement analysts, storage and distribution supervisors, inventory planners and logisticians. Existing training programs will also be included for participants to gain specialized skills such as 5S, lean processes and Six Sigma.

As an employer-driven initiative, the involvement of logistics employers is imperative to the success of this program. Vincennes University has commitments from the following employers to serve on the Employer Leadership Group that will bring their expertise to assist in program and curriculum development by identifying skills, competencies, and credentials needed in their workforce and committing to hire qualified program participants: [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Several employers, [REDACTED] have committed to providing products for students to process as well as the equipment needed to process the products.

Factor 2: Evidence of Employer Demand

The logistics industry is one of the largest areas of private sector employment in Indiana. Nearly 257,000 workers are employed in transportation and material moving occupations across the state⁴. Over the next six years, more than 8,500 new “middle skill” jobs—those that require

⁴ Thomas P. Miller and Associates, Analysis of Economic Modeling Specialists, Inc. EMSI Analyst 3.0. EMSI Complete 2012.1 27 April 2012. <http://www.economicmodeling.com>

more than a high school diploma but less than a bachelor's degree—will be added to Indiana's logistics industry. Another 53,000 jobs will open through turnover. Indiana's industry leaders recognize that the state is poised to experience explosive growth in logistics, as total U.S. freight movement is expected to double by 2035⁵. Overall, Indiana's logistics employment rate in storage and warehousing is 60 percent higher than the national average. In addition to thriving in the Central Indiana economy, the logistics industry also pays well. Indiana's logistics workforce earns an average of \$49,700 each year, 13% higher than the state's overall private industry average of \$44,000. Central Indiana's logistics workers earn even more; logistics workers in the nine counties served by the proposed LTEC Initiative can expect average earnings of \$50,100 per year. There have been many recent announcements regarding logistics companies moving to the Central Indiana region and bringing hundreds of jobs:

Announcement Date	Company	Logistics Jobs Created
1/27/2012	New Sunshine, LLC.	180
8/17/2011	Old Dominion Freight Line, Inc.	183
7/6/2011	Amazon.com #4	200
6/28/2011	Ozburn-Hessey Logistics (OHL)	415
5/9/2011	Amazon.com #3	200
3/21/2011	Drive Time	100
6/3/2010	Johnson & Johnson	465

Occupation Description	2012	2015			2018		
	Jobs	Jobs	Δ	% Δ	Jobs	Δ	% Δ
Logisticians	394	436	42	11%	463	69	18%
Cargo and freight agents	1,159	1,262	103	9%	1,320	161	14%
Transportation inspectors	171	185	14	8%	194	23	13%
Truck drivers, tractor-trailer	19,551	20,997	1,446	7%	21,908	2,357	12%
Truck and tractor operators	6,107	6,495	388	6%	6,706	599	10%
Stock clerks and order fillers	12,537	13,049	512	4%	13,436	899	7%
First-line supervisors/managers of laborers, material movers	2,024	2,106	82	4%	2,149	125	6%
Laborers, stock, material movers	27,593	28,617	1,024	4%	29,141	1,548	6%
Material moving workers, other	145	150	5	3%	153	8	6%

⁵ Conexus Indiana, *Logistics: Moving Products and People*, 27 April 2012. <http://www.conexusindiana.com>

Packers and packagers	6,674	6,893	219	3%	7,042	368	6%
Transp. and dist. managers	890	920	30	3%	931	41	5%
Production, planning, clerks	1,967	2,032	65	3%	2,072	105	5%
Truck drivers, light delivery	7,369	7,547	178	2%	7,625	256	3%
First-line supervisors/managers of vehicle operators	1,571	1,579	8	1%	1,572	1	0%
Total	88,152	92,268	4,116	5%	94,712	6,560	8%

According to Integrated Postsecondary Educational Data System (IPEDS) data, Indiana's higher education institutions produce only about 1,000 logistics and operations certificate and degree graduates each year and most of these degrees and certificates are not serving the needs of the employers in Central Indiana. Ball State University's Center for Business and Economic Research (CBER) gives Indiana a grade of "A" for Logistics Industry Health. However, the state earns a "C" for quality of Human Capital, as "the state's human capital condition continues to slow manufacturing and logistics growth, and serves as an impediment to new capital formation in many regions."

VU has met with and engaged many employers who confirm this challenge of a lack of qualified workforce to meet their needs. The following employers have committed to hiring qualified participants of the LTEC program:

[REDACTED]

[REDACTED]

[REDACTED]

Factor 3: Understanding of Skills Required In the Targeted Industries and Occupations

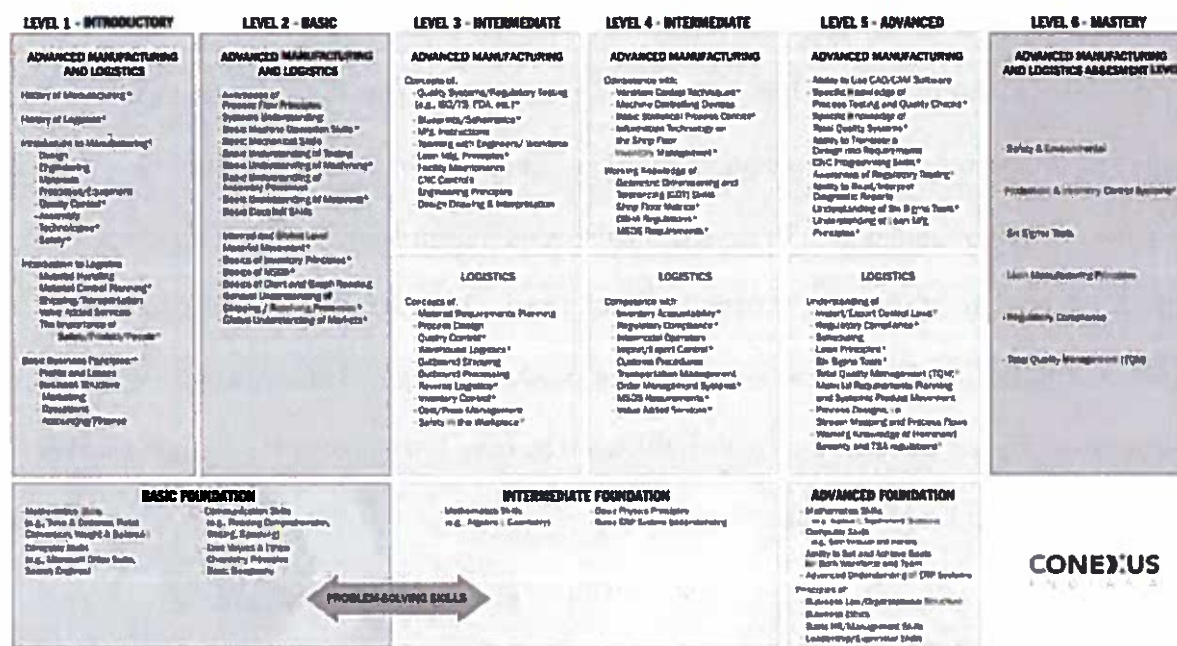
A number of studies, surveys, and reports reveal the necessary skills required of employees in the logistics sector. VU has actively worked with *Conexus Indiana* to provide through their industry partners, expertise in skills, credentials, and certificate identification. *Conexus Indiana* is a private sector-led initiative focused on the advanced manufacturing and

⁶ Thomas P. Miller and Associates, Analysis of Economic Modeling Specialists, Inc. *EMSI Analyst 3.0. EMSI Complete 2012.1* 27 April 2012. <http://www.economicmodeling.com>

logistics sectors. The organization is focused on the logistics industry in Indiana by strengthening the state's human capital, building industry partnerships, and promoting a better understanding of the importance of this industry to Indiana's economic future. *Conexus Indiana* assembled a group of 35 human resource and operation executives from companies across Indiana to determine the skills required for a successful middle-level logistics employee. Participating companies ranged in size from 50 to over 1,000 employees. This taskforce first identified the highest demand positions, and then determined the knowledge required of successful employees in those areas. The results, which were then validated by over 150 employers, were published in the *Conexus Indiana Logistics Skills Map* seen below.

Vincennes University has also partnered with the [REDACTED] [REDACTED] to survey 21 logistics employers in Central Indiana on the topic of necessary skills for their workforce. The most common message from employers continues to be that students need more training on the use of the equipment and technologies used in their industry. VU's program will do just that by providing training in a hands-on, fully operational warehouse learning environment. The Employer Leadership Group will be led by [REDACTED] and will meet semi-monthly while program content is being developed to discuss program implementation and workforce needs.

Conexus Indiana Logistics Skills Map



Gap Analyses

Factor 1: Analysis of Gaps in Existing Educational and Career Training Programs and Systems Infrastructure

A study completed by the Indianapolis Private Industry Council (IPIC – the local Workforce Investment Board which recently changed its name to EmployIndy) concluded that there is an **unmet** demand for postsecondary logistics education and training in Central Indiana, and Ball State University’s Center for Business and Economic Research (CBER) gave Indiana a “C” for quality of Human Capital. The state’s human capital condition harms the economy and “serves as an impediment to new capital formation in many regions.” Further, the Indiana DWD reports that three of the top ten skill gaps identified by state-wide Indiana employers are in logistics occupations. In addition to the lack of educational programs that meet industry needs, the current programs are not reaching the number of students needed to fill employment opportunities in this growing sector. According to the IPEDS only 34 logistics related associate degrees were obtained throughout the state of Indiana during 2008-2009.

Existing programs range from short 12 hour certifications to 4 year BS programs but focus largely on business processes rather than on the technology used in the industry and do not address the breadth of occupations in the logistics sector. Further, they are disconnected across institutions so that workers, students, and employers must piece together their own career training plan. The IPIC (EmployIndy) study acknowledges these education programs but concludes that they lack sufficient urgency and coordination and recommends that new courses and programs utilize industry input and real-world examples to make them fully effective. This need for better focused education and training has also been expressed by numerous companies in Central Indiana. Discussions with companies such as [REDACTED] [REDACTED] revealed that experienced-based training combined with credentials and credits that stack up toward an Associate Degree in supply chain logistics would be beneficial for developing a knowledgeable, more competent workforce.

Through this project employers will identify which industry certifications are viewed as necessary in their workplace by breaking programs down to the skill competency level. Once the necessary certificates are identified, their basic components will be grouped to find similarities. VU will foster an environment of coordination that will lead to the creation of articulation and transferability agreements between industry associations and educators.

As part of our community outreach process VU identified employers, non-profit organizations, public organizations, workforce groups, and many other entities to engage in the design of this program. VU's Director of Logistics has presented to numerous employers, met with many workforce agencies, and will continue this level of engagement and outreach throughout the grant program.

Factor 2: Analysis of Gaps in Institutional Ability to Implement the Core Elements

Collaboration with industry and industry associations to develop stackable credentials – VU needs to take its established connections with employers to the next level by working with these employers, industry associations, and curriculum specialists at the institution to finalize the stackable credentials program.

Online learning programs – Most programs identified do not offer substantial content to be delivered online; VU only offers online materials to full-time enrolled students, which does not fulfill the need for online certificates. VU plans to work with an online education provider to develop these programs for the logistics curriculum.

Articulation Agreement – Currently Vincennes University has a single articulation agreement with the University of Indianapolis that allows Associate Degree credits to transfer to U of I's Bachelor Degree program. There are no transfer or articulation agreements established for the remaining 30 programs in Indiana, but VU plans to work with other institutions to create them. There will also need to be agreements created that allow certifications received to successfully transfer to these programs.

Data Capturing – Although some data elements are already tracked for students enrolled in credit bearing courses, VU does not currently capture all of the information vital for non-credit bearing industry-recognized certifications. VU will need to purchase a module to upgrade its SCT Banner System that will allow it to track certifications. Because VU does not have the ability to track the employment outcome data, it will work with the public workforce system to assist with capturing all of the employment outcome data for participants.

Coordination with the public workforce system – VU has an established relationship with the public workforce system in Central Indiana but will need to work with them to ensure the needs

of the TAA-eligible workers are met as well as to ensure they clearly understand the LTEC Initiative. This will allow them to refer candidates and better meet the needs of TAA individuals.

Factor 3: Impact of Gap Analysis

Vincennes University's current two-year Associate Degree in Supply Chain Logistics

Management is limited in its effectiveness, both in the difficulty in delivering industry-driven curriculum and in the lack of capacity to reach the population most in need of the program:

Limitations in the number of students served and inability to meet demonstrated demand.

VU's current Supply Chain Logistics Management program is offered at the Vincennes campus in southwestern Indiana. Because of its location, the program cannot support the industry and student needs in Central Indiana. VU issued less than 10 degrees and certificates in Supply Chain in the past year. The Indiana DWD reports that three of the top ten skill gaps identified by state-wide Indiana employers are in logistics occupations. This is due primarily to a lack of skilled workers and an "assorted logistics curriculum not meeting industry needs."⁷ If nothing is done to change these trends, Indiana can expect a workforce qualifications gap of thousands of logistics positions by 2018. The new program will be located immediately adjacent to the Indianapolis International Airport and situated amongst 26 million square feet of logistics and distribution warehouses – the heart of the one of the nation's largest logistics hubs.

Limitations in faculty expertise and facility infrastructure. VU currently has limited faculty that teach logistics courses. Additionally, faculty have little familiarity with blended learning and stackable certificates. Developing curriculum for the program will require faculty training in new design and delivery techniques.

Limitations in the content and quality of available courses. Current logistics curriculum is delivered in a traditional classroom environment through a teacher – student interaction and is

⁷ Conexus Indiana, *Phase I: A Plan for Indiana's Logistics Future*, 27 April 2012. <http://www.conexusindiana.com/logistics-report-video>.

only available to students on the Vincennes campus. This delivery method is designed for traditional students, is less effective with the targeted population and is also out of line with what the industry has told us the workforce needs – training in the technology used in the industry; therefore, VU will utilize a blended learning environment that combines classroom instruction, online courses, hands-on warehouse lab space, and where possible, work-based learning through internships, OJT, and cooperative education.

The need for specialized equipment. The LTEC Initiative will house a fully operational warehouse that prepares students on equipment and technology utilized in the numerous warehouses surrounding the training center. VU will need to acquire specialized equipment including technology solutions such as pick-to-light systems and simulation software modules.

2. Description of Project: Strategic Approach and Core Elements

Evidence-Based Design

Factor 1: Review of Evidence for Program Design

Collaborating closely with employers, industry associations, workforce agencies, and government entities, VU will transform its existing logistics education and training to more effectively meet the needs of TAA-eligible workers and employers in Central Indiana through the following strategies: 1) creating a blended learning environment by combining classroom instruction and online courses with a hands-on logistics lab that simulates the 26 million square feet of logistics companies surrounding the Center and 2) compressing time to attainment of industry-recognized credentials by embedding certifications into components of curriculum, developing a career pathway design, and providing rigorous academic and career guidance. In doing this, VU will fill the substantial middle-skills gap currently existing in Central Indiana and meet the needs of employers industry-wide. With a Logistics Training and Education Center already operating and basic entry-level courses being offered, VU will use this grant to move the

program to the next level by focusing on the thousands of middle-skill jobs that need filled and the competencies needed to fill those jobs.

While evidence suggests that exclusive online courses are not effective for populations with characteristics similar to TAA-eligible workers, there is evidence showing that a blended learning environment increases persistence, as well as achievement and attainment rates.⁸ A study by the U.S. Department of Education concludes that fully online courses, especially for low-income, underprepared students, may hinder student success.⁹ VU's model will blend online learning with classroom instruction, a hands-on lab, and intensive career advising.

Although there is not yet strong evidence supporting the success of career pathway designs in increasing completion, the creation of career pathways is widespread and has been recognized as a very promising strategy to link occupational and academic programs by offering students a clear direction toward employment.¹⁰ According to Complete College America, "one of the best ways to reduce students' time to degree-and improve the odds of success as well-is to ensure that the courses they take are the ones they need." Institutional and organizational factors such as complex scheduling, a confusing number of course and program options, and inadequate advising slow student progress. Creating career pathways is key to overcoming these obstacles. Of special relevance is the relationship between career pathway design and the ability to embed industry certifications into components of the curriculum. This links employer needs with educational programs when employers specify the skills and certifications required for occupations within their industry. In her dissertation research, Kate Dins noted the potential for

⁸ Ausburn, Lynna J. 'Course design elements most valued by adult learners in blended online education environments: an American perspective', *Educational Media International*, (2004), Vol. 41-4

<http://www.informaworld.com/smpo/finterface?content=a713721963&fulltext=713240930&fm=section>

⁹ U.S. Department of Education, Office of Planning, Evaluation, and Policy Development, *Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies*, Washington, D.C., 2010
<http://ccrc.tc.columbia.edu/Publication.asp?UID=796>

¹⁰ There is considerable literature on career pathway initiatives in state workforce systems. See for example Oregon's Career Pathway Statewide Initiative at www.worksourceoregon.com/index.php/component/docman/doc_download/1190-career-pathways-3-pager-6-10

aligning “stackable credentials” within a career pathway.¹¹ Though supporting evidence is not yet available for these practices, existing research suggests that comprehensive and integrated designs to restructure education and institutional practices will have a positive effect – compared to traditional practices – on retention and completion for TAA-eligible workers. In addition, preliminary evidence suggests that the “career coach” model increases persistence and is a more cost-effective way to increase retention and completion than other interventions.¹²

Factor 2: Use of Evidence in Program Design

Based on evidence cited, the LTEC’s blended learning environment will combine classroom instruction and online courses with a hands-on logistics lab. This fully-operational warehouse will allow students to perform learned tasks in an environment that replicates the industry they will be working in. Students are more likely to complete the journey along their chosen career path if the time to completion is compressed and they can see the rewards of retention in terms of faster access to higher wages as they climb the skill ladder. VU will implement a career pathway design (driven by employers) that incorporates stackable industry-recognized credentials and an academic/career coach in order to assist students with compressing time to attainment.

Stacked and Latticed Credentials

Factor 1: Industry Engagement to Identify Credentials

Vincennes University has invested considerable time and effort with regional employers to identify their workforce needs. The following organizations/employers will be involved in the process of identifying which credentials are most valuable to their needs and how these credentials can be made stackable and portable by frequently meeting to establish program design: 1) Conexus Indiana, an industry association focused on logistics workforce development

¹¹ Kate Dins for the degree of Doctor of Philosophy in Education presented on November 15, 2005. Title: “Chunking” Professional LTECHNICAL Programs to Create Pathways to Degree Completion in Community Colleges. See also: <http://www.rsp.vt.edu/files/credentials.pdf> Matus-Grossman, Lisa, MPA, and Tinsley-Gooden, Susan, Ph.D., “Opening Doors to Earning Credentials: Impressions of Community College Access and Retention from Low-Wage Workers,” 23rd Annual Research Conference of the Association for Public Policy Analysis and Management, Manpower Demonstration Research Corporation, Washington, DC November 2001

¹² Bettinger, E and Baker R. (2011) The Effects of Student Coaching in College: An Evaluation of a Randomized Experiment in Student Mentoring. Stanford University School of Education. http://ed.stanford.edu/sites/default/files/bettinger_baker_030711.pdf

that works with the more than 6,100 logistics employers in Indiana, 2) The Association of Operations Management (APICS), 3) The Council of Supply Chain Management Professions (CSCMP), 4) Employer Leadership Group comprised of regional employers including but not limited to [REDACTED]

[REDACTED]

[REDACTED]

Factor 2: Plans to Stack and Lattice Credentials

From the broad array of middle-skills credentials we have identified as part of the logistics system, we will work with employers to prioritize those that represent their highest levels of need to form our initial plans for stacking. VU's Director of Logistics, Assistant Provost for Curriculum, and a faculty subject matter expert will be responsible at the institution for detailing how these credentials and certifications will be made stackable by our institution and will serve as the knowledge expert when designing programs with other institutions (as previously noted, the selected credentials will ultimately be decided with input from the Employer Leadership Group). VU will design a process to take specific components of each credential and develop a skills matrix to prove the transferability of common elements. This transferability will provide a needed component in the compressed schedule for attaining certifications by eliminating the need for retraining common elements. The current list of certifications that will be evaluated for their importance in the industry and ways to stack include: Certified Logistics Associate, Certified Logistics Technician, Certified in Production and Inventory Management, Certified Production Technician, Certified Supply Chain Professional, Certification in Transportation and Logistics, Certified Warehouse Distribution Specialist, Distinguished Logistics Professional, Fundamentals of Warehousing and Distribution Level I, Fundamentals of Warehousing and

Distribution Level II, Global Logistics Associate, Transportation, Distribution, Logistics AS, Material Handling Certificate, Principles of Distribution and Logistics, Principles of Inventory Management, Professional Designation in Logistics and Supply Chain Management, Professional of Manufacturing Management, Principles of Managing Operations, Principles of Operations Planning, Industrial Distribution, Industrial Engineering, Organizational Leadership and Supervision, Operations and Supply Chain Management BA or BS, Supply Chain Management Professional, Supply Chain Logistics Management AS, and Supply Chain Logistics Management Certificate.

Factor 3: Prior Learning Assessment

VU will build on its current processes to award applicable credit for prior work experience, experiential learning, training and other educational programs. The University currently employs the AccuPlacer competency test for assessing prior learning of math, English, and reading skills for adult students. Under this grant we will institute ways to assess work experience to accurately capture obtained skills. By properly assessing current academic skills and work experience, students will be placed in programs specifically designed for their current understanding and built upon their applicability to the logistics industry. VU will assess the transferability of work experience and academic skills through cross program skills mapping. VU also allows students to create a personal portfolio to present previous work and school experiences. The Project Manager and Director of Logistics will work to re-define and solidify the requirements for the personal profile review as it pertains to the logistics industry and specific certifications earned. By awarding credit for prior work and school experiences, the program will compress the schedule for attaining industry recognized certifications and accelerate participants' time to completion.

The logistics industry is a natural transition for the men and women of our military. The leadership and process skills learned during their service are critical and attractive for employment, though sometimes difficult to transfer or translate directly into occupational or academic skills categories. VU will crosswalk relevant military occupations and develop a system of transferable credits linking Veterans and their service experience to a career in logistics.

Online and Technology-Enabled Learning

Factor 1: Incorporation of Technology into Program Design and Delivery

VU will procure services for an online learning company to create logistics-specific online coursework. VU will evaluate current online courses that the institution already has in place to assess the applicability to the program. An online learning management system (LMS) will allow the program to track every interaction, assessment, or credential for a student while having the ability to quickly load and deploy content to learners. This easy-to-use interface allows management of SCORM-compliant content, course catalogs, users, and groups. This active management of information will provide mechanisms for feedback allowing course designers and instructors to improve content and delivery methods to make students more successful in attaining credentials. In addition, the learning management system allows employers to log in and view credentials obtained by students which allows for a vital recruitment tool.

VU will provide access to a technology-enabled learning environment by implementing a hands-on program that allows students to use cutting edge technology such as scanners, RFID tracking, forklift and warehouse planning simulation software as well as higher level electronics used in the warehousing and distribution environments. This hands-on learning environment allows students to operate in instructor-guided learning situations and forces students to work

with each other and learn skills such as supervising their workgroup, conflict-resolution and teamwork that are often not included in traditional classroom based learning.

Factor 2: Expected Impact of Technology on Program Outcomes

VU's blended learning environment combines classroom instruction with hands-on technology learning. Students will be taught concepts in the classroom but will also have the ability to function in a warehouse learning environment and be able to perform the tasks that were taught in the classroom. This ability to operate the technology used in the industry will improve learning and create better trained and employable workers for the industry. VU expects this will result in improved employer and worker satisfaction and retention rates, ultimately leading to fewer performance-related issues and less employee turnover.

Improved access to on-line training programs will allow students to work around current work or family schedules. Online environments remove a potential barrier to success by providing access to training and education 24 hours a day, seven days a week. VU expects this ongoing access to courses will lead to accelerated completion rates of certificates.

Transferability and Articulation

Factor 1: Transferability of Credits and Credentials

Employers have expressed that a system of standardized credentials is necessary for the long-term growth of the logistics industry. Each articulation and transferability agreement will require a different project timeline. Established agreements will be addressed within the first few months of the project, while larger scale program comparisons will require additional steps and necessary approvals. These transferability agreements will ensure that students are able to retain their earned credits which will lead to a compressed schedule of attainment of new certificates. VU has an articulation agreement with the University of Indianapolis that addresses its current Associate Degree in Supply Chain Logistics Management (SCLM). VU will need to update and

strengthen this agreement to include the new certificates and credentials proposed in this project. In addition, VU has approached Ivy Tech Community College (a Round One TAACCCT winner) regarding their established Transportation, Distribution and Logistics AS degree program. VU is working towards both programs being able to offer seamless transferability without forfeiting significant program credits. The industry currently recognizes two main organizations for certificates and credentials: The Association of Operations Management (APICS) and The Council of Supply Chain Management Professionals (CSCMP). Each of these organizations offers multiple qualifications and training programs leading toward industry-recognized credentials. The goal of our program will be to offer courses that teach specific components of each of these credentials. Upon completion of VU SCLM courses, individuals will be prepared to take industry-recognized credentialing exams developed by APICS and CSCMP. In addition, we will develop a matrix for VU academic professionals to determine the transferability of those already holding these credentials.

Factor 2: Articulation of Credits and Credentials

In addition to the established articulation agreement with the University of Indianapolis' Operations and Supply Chain Management, VU is currently working on an agreement with [REDACTED] [REDACTED] degree which includes an 8-week accelerated schedule allowing a student to use their transferred credits to complete their BS in less than 18 months. [REDACTED] has recently opened a campus location in Avon, Indiana - nine miles from VU's LTEC Program.

There are other nationally recognized Supply Chain and Logistics Bachelor Degree programs where it would be advantageous to develop articulation agreements. VU has standing articulation agreements with Purdue University in other programs of study including Aviation Maintenance

and Flight. Agreement between logistics programming will be the next VU-PU agreement focus. Purdue University currently has four similar programs of study: College of Technology, Industrial Distribution or Organizational Leadership and Supervision; College of Engineering, Industrial Engineering; School of Management, Industrial Management. We plan to engage Purdue University very early in the developmental process to allow the required steps for articulation and approval to be successfully completed.

Strategic Alignment

Factor 1: Coordination with Employers and Industry

Vincennes University has conducted significant outreach to numerous employers in the Central Indiana region. These employers confirmed the need for skilled workers and expressed their commitment to hiring individuals with skill sets obtained through this program. VU has commitments from the following companies: [REDACTED]

[REDACTED] Employers will continue to fill the following roles in the program: 1) identifying necessary skills and competencies; 2) assisting with curriculum development and program design; 3) providing resources, where applicable, to support the education and training program; and 4) committing to hire qualified program participants. In addition to these companies, Conexus Indiana, the logistics industry association, will assist in engaging employers, developing course content, identifying nationally-recognized credentials and sharing best practices and lessons learned.

Factor 2: Coordination with the Public Workforce System

Vincennes University's project will ensure that participants are served through a continuum of services that help them in obtaining employment or advancing along their career pathway. VU understands and appreciates the expertise of the public workforce system in meeting the service

needs of TAA-eligible individuals. Therefore, VU will partner with the public workforce system to provide the following integral services: 1) assess skill levels and refer TAA-eligible and other participants to VU's LTEC program; 2) connect program participants with employers through meetings and career fairs; 4) provide assistance, as appropriate, with training and evaluation of the workforce; 5) assist with Dept. of Workforce Development to link educational outcome information to employment information; 6) serve as an advocate for large scale deployment of stackable, nationally recognized credentials; and 7) work with state TAA office and other state level agencies to establish tracking initiatives for program participants.

Factor 3: Outreach and Coordination with Educational Institutions and Other Organizations

██████████ is a mayor-sponsored public charter school operated by ██████████ ██████████ Inc. The ██████████ provides adults the opportunity to earn a high school diploma and begin post-secondary education. Vincennes University has approached ██████████ ██████████ with a partnership to offer students college credit courses in Supply Chain Logistics Management. In 2011, the Indiana Department of Workforce Development introduced a new partnership with adult education providers around the state named GED Plus. This initiative pairs GED students with a career path and appropriate occupational certifications. The overarching goal of the program is to allow students to finish academic courses with marketable skills. We believe this initiative directly aligns with our program goals and will seek partnering opportunities so that we can work closely with these adult education providers.

VU has reached out to Ivy Tech Community College, a first round TAACCCT grant recipient, to share information about lessons learned and best practices. VU is also a member of the Complete College America (CCA) Alliance of States and will participate in the CCA

Learning Network along with other successful grant recipients to share promising practices and engage in peer to peer learning exchanges.

Vincennes University has also partnered with [REDACTED] a national book bank based in Washington, DC. [REDACTED] works through existing community programs, literacy efforts and schools to provide an ongoing supply of new books and reading materials – at low or no cost. A large part of the success of the First Book operation is derived from the high school and community college material handling programs involved. VU's LTEC Initiative is First Book's newest partner, offering free warehousing and distribution space to process the donated books. The operations model adopted allows students to process actual inventory while demonstrating learned concepts of

material handling, inventory control, shipping, receiving, fulfillment and many others. These real-life experiences provide instant validation and feedback of skills attained; a step in the education process that is normally deferred until employment post-graduation.

**3. Work Plan and Project Management
Project Work Plan**

NOTE: Timeline is predicated on an award date prior to July 1, 2012. Milestone dates will be revised if award notification is delayed. *(CE) Denotes where Core Elements are included in work plan.

Project Work Plan					
Priority: Build Training and Educational Programs That Meet Industry Needs					
Activities	Implementer(s)	Costs	Time	Deliverables	
Strategy 1: Develop a Blended Learning Environment for Program Delivery	Activity 1.1 -Hire Project Manager -Establish Employer Leadership Group (ELG) (CEv)*: develop charter; formally invite members; create annual work plan incorporating continuous improvement goals.	Logistics Director Project Manager, Logistics Director, Employer Leadership Group	Start: July 1, 2012 End: Jun 30, 2015 Milestone: ELG Established August 15, 2012	Employer Leadership Group annual work plan	
	Activity 1.2 - Hire Grant Fiscal Analyst. Procure online environment to deliver program materials and learning management system to track participant data (CEiii). -Procure technology solutions	Project Manager, Grant Fiscal Analyst, VU faculty Project Manager, Grant Fiscal Analyst,		Start: Aug 1, 2012 End: Jun 30, 2016 Milestone: First section of online content	Online learning environment and LMS established.

						2015 Mid-Point Progress Evaluation June 30, 2014 Final Evaluation June 30, 2016		
Priority: Build Training and Educational Programs That Meet Industry Needs								
		Activities	Implementer(s)	Costs	Time			Deliverables
Strategy 2: Compress Time to Attainment of Industry-Recognized Credentials	Activity 2.1	-Develop career pathways matrix to map the relationship between common skill sets across all training certification and degree programs (CEiv). -Hire Student Career Coach	Employer Leadership Group, APICS, CSCMP, Conexus Indiana Project Manager		Start: July 1, 2012 End: Jun 30, 2015 Milestone: First student enrolled January 1, 2013		Career pathways matrix including certification, degrees, sequencing & skills for each credential.	
	Activity 2.2	-Hire first faculty member to serve as subject matter expert for Vincennes University programs -Form detailed work plan to stack and link industry credentials for VU program credit (CEii). -Develop military specific system of articulated credits;	Project Manager, Logistics Director Logistics Director, VU Provost for Curriculum, faculty SME Project Manager, Logistics Director, VU Director Military Ed.		Start: July 1, 2012 End: Jun 30, 2015 Milestone: Military outreach campaign for Veterans March 15, 2013		Detailed work plan defining links between educational programs and industry credentials; including average expected wage increase associated with	

	<p>integrate into career pathways matrix (CEii).</p> <ul style="list-style-type: none"> -Develop articulation and transferability agreements with other universities and educational programs (CEiv). -Modify curriculum to incorporate additional skills identified by ELG, identified best practices for embedded remediation and ways to utilize blended learning environments (CEiii). -Hire additional faculty and adjunct professors; train faculty on new blended learning delivery methods. 	<p>VU Provost for Curriculum, VU faculty</p> <p>Logistics Director, VU Provost for Curriculum, faculty SME</p> <p>Project Manager, Logistics Director, faculty SME</p>	<p>Signed articulation and transferability agreements June 30, 2013</p>	<p>credentials.</p> <p>Articulation and transferability agreements with universities and educational programs. College credit matrix defined for each credential earned and curriculum framework clearly outlined to support compressed career path training.</p>						
Activity 2.3	<ul style="list-style-type: none"> -Procure Public Workforce System Services; train staff on program requirements (CEv). -Communicate Beta Test 	<p>Project Manager, Grant Fiscal Analyst</p> <p>3rd Party Evaluator</p>	<table border="1"> <tr> <td>Start:</td> <td>July 1, 2012</td> </tr> <tr> <td>End:</td> <td>Jun 30, 2016</td> </tr> <tr> <td colspan="2">Milestone:</td> </tr> </table>	Start:	July 1, 2012	End:	Jun 30, 2016	Milestone:		<p>Beta Test program results; communicate results to other University</p>
Start:	July 1, 2012									
End:	Jun 30, 2016									
Milestone:										

	<p>lessons learned and best practices to influence University wide program reform;</p>	<p>Project Manager, Logistics Director, VU Provost for Curriculum, VU faculty</p>	<p>Public Workforce System trained on logistics career pathways February 15, 2013</p>	<p>programs.</p>
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Project Management

Factor 1: Effective Project Management and Staff

Vincennes University will hire a full-time Project Manager within 60 days of receiving the grant award notification. The professional qualifications will include: At a minimum, the Project Manager will have a Bachelor's Degree (Master's Preferred) in Education, Workforce Development, Public Administration, or Management, successful experience in administering federal grant projects at a comparable scope of budget and complexity; experience in project administration, fiscal management, and the ability to work with a broad range of stakeholders, including faculty, students, staff, industry employers, and the public workforce system. This individual's responsibilities will include oversight of grant deliverables, timelines, outcomes, reporting, budget, and subrecipient monitoring. This position will ultimately be accountable for ensuring all grant compliance and regulations are adhered to. In the interim period between receiving the grant award notification and hiring a full-time Project Manager, the Vice President of Workforce Development will serve in this position.

VU will also devote a .5FTE Grant Fiscal Analyst to assist with day to day financial matters related to the grant as well as to assist with data tracking. Qualifications for this individual are listed in the budget narrative. The Project Manager and the Grant Fiscal Analyst will be responsible for working directly with VU's Accounting Department, Grant Office, Procurement Office, and Budgeting Office to leverage their expertise and experience in administering federal grants. These individuals have significant experience in managing both state and federal level grants and have degrees in Business Administration, Accounting, and Public Administration. Through their education and past grant experience, these individuals are well qualified to assist with grant fiscal management. Because of the complexities of managing and administering grants, the Project Manager, Grant Fiscal Analyst and key administrative staff

(Grant Specialist, Director of Accounting, etc.) will meet at least monthly to review grant requirements and identify any areas of support needed. The Project Manager will be responsible for maintaining up-to-date progress reports that provide monthly descriptions of performance indicators including outcomes measures as well as budget versus actual expenditures and status of all grant activities.

Vincennes University's External Relations Division is responsible for the institution's marketing initiatives. The Project Manager and Director of Logistics will work with the External Relations Division to create a marketing plan and materials for the program. The staff in this department have assisted with marketing initiatives for other federal grant programs on campus and will draw upon this expertise to assist with the TAACCCT grant program.

Factor 2: Effective Management Structures

Vincennes University understands that successful grant management must include a team effort by all departments involved. VU's Director of Logistics will play a key role in the implementation of the program. As the organizational chart in the Attachment section demonstrates, both the Project Manager and the Director of Logistics report directly to the Vice President for Workforce Development. These individuals will meet at least monthly to monitor project implementation, grant timelines, etc. and to ensure that all grant requirements are being fulfilled and that goals and outcomes are being met. It is also important that the industry partners and workforce agencies have effective communications amongst each other and with VU's program administrators. Although the Project Manager and Director of Logistics will be regularly in contact with these groups, bi-monthly Employer Leadership Group meetings will be held to bring workforce agencies, employers, and VU's program staff together.

Factor 3: Effective Systems and Processes

The Vincennes University Finance and Business Office uses its accounting system “SCT Banner” to provide the following services 1) prepare all University financial reports on a monthly, quarterly, and annual basis; 2) process and monitor receipts and disbursements in order to initiate an effective cash management program; 3) prepare federal and state tax returns; 4) monitor debt service funds; 5) provide all payroll services including the tracking and processing of payroll deductions for all University fringe benefits; 6) procure goods and services; 7) track all fixed assets; and 8) act as a fiscal agent for the federal and state programs. Vincennes University’s administrative controls enable it to comply with Federal rules and regulations related to fiscal and administrative grant requirements. VU has received grants from numerous organizations, and continues to successfully administer federal, state, and private funds from agencies which include the U.S. Dept. of Labor, U.S. Dept. of Education, U.S. Dept. of Justice, U.S. Dept. of Agriculture, and the Indiana Department of Workforce Development. VU is audited annually by the Indiana State Board of Accounts in accordance with Government Auditing Standards.

The Vincennes University Office of Procurement is responsible for purchasing and risk management at the institution. Procedures related to the acquisition, storage, and placement of equipment, material, and services are established and enable the University to meet all Federal and State procurement requirements. The Office of Procurement assists with identifying, tracking, and tagging all fixed assets and supports faculty and staff with securing materials and contracting services. Subcontracts must include clear work scope and deliverables, cite all applicable federal and state requirements, and clearly outline compliance obligations and performance responsibilities. VU will monitor all sub agreements to ensure compliance with

terms, activity, scope, and deliverables. The Project Manager will be responsible for working with the Office of Procurement to meet all grant related requirements.

Vincennes University has been administering a Dept. of Labor ETA Community Based Job Training Grant since July 2010 and has submitted all quarterly reports on time in accordance with grant requirements.

Factor 4: Well-Defined Roles and Responsibilities for Consortium Members

Vincennes University is applying for the TAACCCT Grant as an individual institution.

Factor 5: Sustainability Plan

Working with faculty, staff, employers, and the third-party evaluator, the Project Manager will use data from the evaluation as well as input from employers and the workforce agencies to determine which strategies developed through the grant period were most successful. VU will evaluate such things as 1) certificates that resulted in highest employment rates, 2) participants that earned the highest wages, 3) employer demand for specific occupations, and 4) other factors deemed important by the industry. After identifying the standing costs associated with maintaining or expanding successes, the funds needed to sustain the Logistics Education and Training program will be integrated into the overall VU institutional budget. Most project strategies including the development of stackable credentials, integration of technology-enabled learning, development of articulation agreements and purchasing of equipment will require little funding beyond the initial development and implementation. Faculty and program staff salaries will be sustained through generated tuition and fees. Program continuation will be consistent with other academic programs of the institution. Employer partnerships are imperative to the successful continuation of the program. For this reason, the Employer Leadership Group will continue to meet and serve an important role in the program. The Vincennes University

administration understands the great need for Logistics education and is committed to continuing to serve the employers, workforce agencies, and students in the region.

4. Outcomes

Analysis of Outcome Projections

Factor 1: Complete and Accurate Projections Provided

Outcome Measure		Targets for TAACCCT Program (All Participants) PROVIDE TARGETS IN RAW NUMBERS; PERCENTAGES OR OTHER TYPES OF DATA PROJECTIONS ARE NOT ACCEPTABLE. PROVIDE TARGETS FOR EACH YEAR OF THE GRANT (AS SHOWN BELOW) AND FOR THE TOTAL GRANT PERIOD. PROVIDE TARGETS IN AGGREGATE FOR ALL PROGRAM PARTICIPANTS, EVEN IF YOU PLAN TO HAVE MULTIPLE EDUCATIONAL PROGRAMS OF STUDY.	
1	Total Unique Participants Served Cumulative total number of individuals entering any of the grant-funded programs offered	Year 1: 30 Year 2: 90 Year 3: 190	Total: 310
2	Total Number of Participants Completing a TAACCCT-Funded Program of Study Number of unique participants having earned all of the credit hours (formal award units) needed for the award of a degree or certificate in any grant- funded program	Year 1: 0 Year 2: 32 Year 3: 90	Total: 122
3	Total Number of Participants Still Retained in Their Program of Study or Other TAACCCT- Funded Program Number of unique participants enrolled who did not complete and are still enrolled in a grant- funded program of study	Year 1: 25 Year 2: 61 Year 3: 114	Total: 200
4	Total Number of Participants Completing Credit Hours Total number of students enrolled that have completed any number of credit hours to date.	Year 1: 25 Year 2: 61 Year 3: 114	Total: 236
5	Total Number of Participants Earning Credentials Aggregate number of degrees and certificates completed by participants in grant-funded programs of study	Year 1: 0 Year 2: 32 Year 3: 100	Total: 132
6	Total Number of Participants Enrolled in Further Education After TAACCCT-funded Program of Study Completion Total number of students who complete a grant- funded program of study and enter another program of study	Year 1: 0 Year 2: 11 Year 3: 26 Year 4: (follow-up only): 26	Total: 63

7	Total Number of Participants Employed After TAACCCT-funded Program of Study Completion Total number of students (non-incumbent workers only) who completed a grant-funded program of study entering employment in the quarter after the quarter of program exit	Year 1: 0 Year 2: 19 Year 3: 57 Year 4 (follow-up only): 59	Total: 135
8	Total Number of Participants Retained in Employment After Program of Study Completion Total number of students (non-incumbent workers only) who completed a grant-funded program of study and who entered employment in the quarter after the quarter of program exit who retain employment in the second and third quarters after program exit	Year 1: 0 Year 2: 17 Year 3: 51 Year 4 (follow-up only): 53	Total: 121
9	Total Number of Those Participants Employed at Enrollment Who Received a Wage Increase Post-Enrollment Total number of students who are incumbent workers and who enrolled in a grant-funded program of study who received an increase in wages after enrollment	Year 1: 0 Year 2: 10 Year 3: 28 Year 4: (follow-up only): 30	Total: 68

Factor 2: Appropriate Targets Projected

The numbers provided in the outcome table represent those students that fully advance along the career pathway to earn either an Associate Degree or a one year certificate in Supply Chain Logistics Management. These numbers do not include the substantial amount of participants that VU expects to serve through industry-recognized certifications. VU anticipates that this program will also provide training to several hundred participants each year that come to the program to earn an industry-recognized certification to gain employment. The outcome numbers provided were based on the following premises: 1) first six months of the grant will be a start-up phase; 2) 80% retention rate for first year students; 3) 85% retention rate for second year students; 4) 95% employment rate for AS graduates; 5) 90% employment rate for certificate graduates; 6) 90% employment retention for all graduates; 7) 30% of certificate graduates will move into the AS degree program; and 8) 20% of AS graduates will move onto Bachelor degree programs with partner schools.

Factor 3: Appropriate Balance of Deliverables and Outcomes

Although the outcome numbers are low, there are several factors that are important to understand. VU is completely redesigning the way it delivers logistics education – this involves a new facility, new technology and online learning, new curriculum and industry certifications, and new faculty. These substantial changes involve significant start-up costs. Once funded and established, this program will have an enormous impact on individuals seeking employment.

Process or System for Tracking and Reporting Outcome Measures

Factor 1: Existing Tracking Procedures

VU's SCT Banner system captures metrics such as 1) student demographics, 2) enrollment, 3) credit and degree information, and 4) graduation and retention rates. The Banner system can track outcome items 1-6 as described in the SGA. VU does have a gap in data tracking in that the institution does not have a standard system to track non-credit bearing certifications. Outcome measures 7-9 will be tracked by the public workforce system through state longitudinal data. The Grant Fiscal Analyst will be responsible for working with VU's Institutional Research Department and the public workforce system to maintain all grant-related data to report outcomes for all nine outcome measures.

Factor 2: Well-Defined Plan to Address Gaps in Tracking

Because VU does not have the ability to track specific employment information, it will partner with the public workforce system which has access to state longitudinal data systems to track students' employment outcomes after exit or completion. The non-credit certifications that students receive will be tracked through additional software that VU will acquire for the Banner system.

Using Data for Continuous Improvement

Factor 1: Well-Defined Plan for Formal Data Reviews

The Grant Fiscal Analyst will be responsible for maintaining data tracking and gathering information from the correct sources (Banner and the public workforce system). The Grant Fiscal

Analyst will provide data analysis to the Project Manager on a monthly basis who will be responsible for ensuring outcome measures are on track. The Project Manager will provide this information to key internal staff on a monthly basis including the VP for Workforce Development, the Grant Office as well as the external evaluator. The Project Manager will review outcome measures quarterly with key stakeholders and partners including the Employer Leadership Group which is comprised of employers and the public workforce system. Progress toward achieving outcomes will also be evaluated by the third party evaluator who will provide progress reports developed during Month 12, Month 24, and Month 36. The evaluator will examine how the program has been implemented at each stage, and to what extent the program is aligned with the original plan. This continuous evaluation of outcomes will ensure that numbers are on track and will enable the Project Manager to make necessary program changes if problems are identified. Successful findings will be used to inform and lead change both within the LTEC Initiative and throughout the University as a whole.

5. Non-Participant Data Submission

Vincennes University commits to providing basic individual-level information annually on students enrolled in selected non-TAACCT-funded credit and/or non-credit programs to the Department of Labor. VU sees this as an opportunity to improve the quality of its post-graduation employment outcome information and to improve programs of study.

Tom Miller
CEO & President

John Carmon
VP of Philanthropy

- Shoshanna Higgins SPC
- Patty Riley SPC
- Beth Hahn PC

Tom West
Senior VP

- Emily Anderson SPC
- Courtney Zwiagg Assistant Director
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- Maggie Bennett SPC
- Kermya Bennett Office Manager
 - Chelsea Eberhardt Operations Assistant
 - Andrea Blodgett HR Assistant
- Natalie Rodriguez Executive Assistant

Jessica Borza
COO

- Michelle Borza SPC
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- Kristen Berry SPC
 - Dee Aglio PC
 - Katherine Register PC
 - Kristopher Subler PA
- Sara Hunt SPC
 - Danielle Josay PA
- Sue Watton Project Coordinator
 - Jessica Driscoll PA
- Diane Karlin PC
 - Interns
 - Meggen Wagner Ingram PC
 - Rosemary Hank SPC

Nicole Dunn
VP of Strat. & Research

- Christina Dunn SPC
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 - Marcus Downing SPC
 - Jeff Velders SPC
 - Diana Barrett SPC
 - Celine Lindemeyer PC
 - Isabel Herne Intern
 - Neil Metzger PA
- Statilica PC
- Abby Kelly-Smith Assistant Director
 - Laura Mangione SPC
 - Erik Carlson PC
 - Tom Weingartner PA
- Jennifer Behrke Assistant Director
 - Kristin Baker SPC
 - Kaley Schoepf PC
 - Sam Beres Intern

ADDENDUM NO. 1

To All Proposers:

The following change is hereby made a part of RFP #16-003 as fully as completely as if the same were fully set forth therein:

The following is a list of addenda that shall govern all other contract documents to the extent specified.

Addendum No. 1

The following revision is hereby made a part of the Contract Documents as fully as completely as if the same were fully set forth therein:

1. Is the City happy with the firm handling it now? I see the one year extension is until March 2016. Who might I ask?

Answer: The current firm has performed within the terms of the contract.

2. Is it possible to get a copy of my submission from last time? And also a copy of the 2013 submission from Langdon REM?

Answer: A public records request can be made with the City Clerk's office.

3. Page 22 of the RFP mentions local license taxes need paid 24 hours prior to issuance of RFP. I have not paid my taxes this year yet. Does that mean I'm disqualified?

Answer: Page 22 is the Local Vendor Certification. If you have not met the deadline of at least 24 hours for payment of all current license taxes and any other fees due the city, the definition of a "Local Business" has not been met. You are not disqualified from submitting a proposal for RFP 16-003 but local vendor status does not apply.

4. Page 13 of the RFP, question 3 under Qualifications it says "Include 3 examples of grant applications..." Is the name of the grant and the award amount sufficient? Also, I'm not sure what "pricing methodology" means here – is it supposed to be "funding methodology"?

Answer: Please submit examples of just the application portion of 3 grant applications you have prepared that best exemplifies your grant writing skills.

The full grant application is not necessary. Pricing methodology refers to the method used to invoice the client for preparing the application.

5. Does the grant writing company need to be home based in Key West?

Answer: No.

All Proposers shall acknowledge receipt and acceptance of this Addendum No.1 by acknowledging Addendum in their proposal or by submitting the addendum with the proposal package. Proposals submitted without acknowledgement or without this Addendum may be considered non-responsive.

Thomas P. Miller
Signature

Thomas P. Miller & Associates, LLC
Name of Business