NAC National Aviation Consortium

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Trade Adjustment Assistance Community College and Career Training Grant Program

September 30, 2016

Third-Party Evaluator – Final Report

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I. Program Description and Activities

The United States Department of Labor (DOL) initiated the Trade Adjustment Assistance Community College and Career Training (TAACCCT) program in 2011. In September 2012, the DOL announced a round two award for the National Aviation Consortium (NAC). The NAC had a goal to train more than 2,500 individuals for careers in aviation and manufacturing. The NAC website (http://naccareers.com) lists the consortium partners and includes a link to each institution.

- Wichita Area Technical College (WATC) in Kansas [lead institution]
- Edmonds Community College/Washington Aerospace Training and Research Center (EdCC/WATR) in Washington
- Guilford Technical Community College (GTCC) in North Carolina
- Ivy Tech Community College (Ivy Tech) in Indiana
- Tulsa Community College (Tulsa CC) in Oklahoma

The NAC programs are structured to deliver accelerated training, using on-line, hybrid, and traditional delivery to fill current aviation manufacturing jobs that remain open due to an unskilled workforce. Program staff provide student support, including job search and placement assistance. A sector-based strategy builds on the previous success of the National Association of Manufacturers (NAM) Manufacturing Institute's Skills Certification System, and expands it with six aviation endorsed manufacturing credentials.

Career pathways utilize stacked and latticed credentials to align educational certificates with industry-recognized credentials. The approach offers multiple on- and off-ramps to enter employment so trade-impacted and other workers can continue to advance in the education pathway. The partner colleges have worked to incorporate prior learning assessments in their programs to support accelerated training for experienced adult learners. Continued development of transfer and articulation agreements with universities that build on industry-recognized credentials has also been a focus.

II. Evaluation Design Summary

The Office of Educational Innovation and Evaluation (OEIE) at Kansas State University served as the third-party evaluator for the NAC and collaborated with the NAC Project Management team (PM team) to integrate evaluation activities throughout the grant's implementation. The purpose of the evaluation was to collect and report data on the implementation progress and outcomes of the NAC project to inform policy and program decision-making. Evaluation activities were designed to assess project progress and processes, to understand successes and stumbling blocks, and to answer DOL questions about project implementation. The evaluation assessed the project's progress through: data on program implementation; documentation of

course implementation; perspectives via interviews from the project staff, college partners, administrators, and stakeholders; document analysis of project records; review of project outputs and activities related to the timeline and work plan; and assessment of project strategies (e.g., curriculum, delivery methods, assessment of employer engagement). Attention was given to understanding how each college/co-grantee implemented the NAC program. The evaluation also addressed the partnership collaboration process, leveraging resources, and the contributions of each partner toward project success, all factors especially important for a multi-state program.

The following questions guided the evaluation:

1) To what extent have the stated program goals and objectives been accomplished?
2) Which components of the program are most influential on the curriculum, national credential development, and overall project implementation? What measurable evidence demonstrates that these components are effective?
3) What challenges were encountered during the program's implementation and how were they addressed?
4) To what extent will the program components be sustained?

OEIE created a logic model for the NAC that could be used as a planning tool, to clarify and graphically display what the project intended to do, and to describe anticipated accomplishments and impacts. Throughout the implementation period, the logic model was revised and updated to reflect the evolution of the programs. The initial strategies remained constant through the grant period, and the medium-term outcomes were achieved.

The evaluation used a mixed-methods approach, incorporating surveys, interviews, focus groups, document review, site visits, and observations. OEIE collected and analyzed feedback from NAC project staff, faculty, students, college administrators, and employers and other external partners to: 1) monitor program start-up processes; 2) document the evolution of relationships with external partners, such as employers, and internal partners within colleges; 3) help keep the project on track operationally; 4) document strategic components of the program; and ultimately 5) capture outcomes and impacts of the grant. Examples of feedback collected from specific stakeholder groups included:

- Student feedback and satisfaction with curriculum, feedback on format and delivery, online learning tools, career guidance, pathway program, job placement, etc.
- Faculty and stakeholder feedback/assessment of curriculum and program
- Data on institutional change at the college
- Industry feedback on program participants and partnerships

Outcomes Analysis

The initial objective for the outcomes assessment was to understand the NAC's impact on student participants in terms of training and employment outcomes, compared to students not served by the grant program. However, as reported in the interim evaluation report, the proposed approach for the outcomes analysis was modified. The partner sites were diverse in that some offered for-credit programs, while others were non-credit customized training, and some colleges

provided both short-term and traditional courses. As a result, it was not possible to identify comparison groups for the analysis across the consortium. Rather than comparing TAACCCT student outcome data to another group, the analysis focused on the following questions:

- What was the average time to employment for NAC program participants?
  - Did time to employment vary by gender or veteran status?
- What was the average time to employment for participants in each of the partner colleges?
- What the average final earning for NAC program participants?
- What was the average final earning for participants in each of the partner colleges?
- What was the average wage gain for NAC program participants?
- What was the average wage gain for participants in each of the partner colleges?
- How did wages differ for participants obtaining jobs in aviation/advanced manufacturing from those working in non-aviation/advanced manufacturing?

Additionally, supplemental information is presented throughout this section. This information details:

- Whether or not time to employment varied as a function of participant age
- Differences in wage change as a function of occupation area (manufacturing vs. non-manufacturing occupations)
- Differences in average final earnings for incumbent vs. non-incumbent workers

NAC also experienced challenges in accessing employment and wage data throughout the grant. As a consortium spanning multiple states, the project faced challenges in coordinating directly with state Departments of Labor. As a result, data used in the outcomes analysis were collected through participant follow-up. Program staff contacted program participants quarterly post-exit to compile employment outcomes. Where possible, employer verification was also used.

III. Implementation Findings

Based on the evaluation data collected, the following highlights of successes and challenges are presented below.

NAC Successes

- The grant allowed the partner colleges to expand employer partnerships.
  - Employers provided input on knowledge/skills needed and current skills gaps for entry-level positions.
  - Multiple employers now provide guaranteed interviews to NAC graduates.
  - Employers donated valuable equipment/supplies.
  - The NAC program has provided a broader recruiting pool for employment in local industry, allowing employers to better manage their flow of man power.
  - Hiring local candidates improves employee retention and strengthens the local community.
- The Retention Specialists (RS) have been key to students' success in completing the program and gaining employment.

- RSs provide wrap-around services, including in-person orientations, resume preparation, mock interviews, support with the job application process, and one-on-one problem-solving consultations.
- Increased contact with students keeps them motivated and aware of next steps, so they do not feel alone, helping with retention, employability, and placement.
- RSs provide another point of contact for students, including follow-up/tracking efforts. RSs take pressure off instructors/facilitators, so they can focus on teaching and providing encouragement/support in the classroom. Instructors and RSs work together, communicating about student-related issues and identifying solutions.

- The NAC programs allowed NAC colleges the opportunity to strengthen student policies/guidelines to better prepare students for employment, thus meeting employer needs.
  - Employers reported that NAC students are more willing to learn, have better morale, and are more motivated than others. Additionally, NAC students are skilled and ready for entry-level positions, coming to industry without a need for retraining to correct bad habits.
  - The NAC program allows students to develop skills and gain hands-on experience with the projects, providing them with expectations and standards for the course that prepare them for the workplace.
  - Completing NAC gave students the opportunity to earn a living wage through employment.
  - Everything, the NAC model of program design, staffing, and structure, was done as a catalyst for student success.
  - The 180 Skills online component allowed partner colleges the ability to teach at an accelerated rate.
- Consortium resources and structure were helpful to partner schools.
  - The national team made connections between colleges so they could learn from each other, answer questions, and get on the same page. These relationships have helped with implementation by sharing successful strategies/best practices across sites.
  - Having similar training programs in multiple areas of the nation provides students with options for employment outside of their home state.
  - Faculty members were able to visit existing programs to learn about set-up and implementation of NAC.
  - The national team provided metrics that could be used locally for data-based decision making.

NAC Challenges

- The five partner colleges had different markets and implemented the curriculum in vastly different ways (e.g., credit vs. non-credit), making articulation challenging, and making it difficult to understand what other programs were offering and how they were integrating the various strategies.
- Partner colleges are spread out geographically, making face-to-face collaboration a challenge. The grant provided some opportunities to gather in person, like through Peer-

to-Peer Meetings, but it would have been helpful to have more time together during the initial set-up process.

- Each state had different policies, regulations, and employer needs. That required each site to have a different strategy. As a result, working as a nation-wide consortium was challenging; working regionally may have allowed for a collective focus on regional needs or challenges (i.e., employer needs in a region may be more similar than across the country).
- It was challenging for program staff to balance extensive reporting and compliance requirements with serving students and developing partnerships in their local communities.
- Most colleges did not plan for a marketing budget for NAC program recruitment. Extra complications included working with two marketing vendors during the grant, and trying to connect to college resources throughout the grant.
- Some employers would have liked to see more hands-on projects to get students in the lab even more than they are under the current program.
- The 180 Skills curriculum is heavily based on a specific employer (e.g., some part numbers and equipment are Boeing-specific), making for a tough transition to other markets.
- Short-term classes (i.e., four weeks) hinder the opportunity for students to complete an internship, which are desirable to build relationships with employers. This is causing pushback from some students.
- Swings in the economy and the cyclical nature of manufacturing production were challenges for the NAC colleges. It was difficult to coordinate program schedules when employment needs fluctuated throughout the grant.
- Community colleges had difficulty in accessing employment and wage data, making it very challenging to track program outcomes.

IV. Participant Impacts & Outcomes

Throughout the grant, project staff tracked participants to report on the DOL metrics identified for the TAACCCT program. The following table presents a brief summary of these data as of August 2016. Please note, the project continued to track and clean data through early September 2016. As a result, the numbers included in this final evaluation report may not be identical to the final participant outcomes reported in NAC's final report to the DOL.

DOL Metrics	Count
Unique Participants Served	3,019
Participants who have Completed a TAACCCT-Funded Program	2,296
Participants Still Retained in Their POS or Another TAACCCT-Funded Program	121
Participants Completing Credit Hours	2,508
Participants Earning Credentials	2,563
Participants Enrolled in Further Education After Grant-Funded POS Completion	101
Participants Employed After Grant-Funded Program of Study Completion	309
Participants Retained in Employment After Program of Study Completion	155
Participants Employed at Enrollment who Receive a Wage Increase Post-Enrollment	423

- Of the total NAC participants served (*N*=3,019), just over three-quarters of them (*n*=2,296, 76.1%) completed a TAACCCT-funded program.
    - Slightly more than half (*n*=1,212, 52.8%) of the participants that completed a NAC program were incumbent workers.
    - Of all (incumbent and non-incumbent workers) those who did not complete a program, 121 (4.0%) are still retained in their program of study or another TAACCCT-funded program.
- 2,508 (83.1%) of the participants have completed credit hours in one or more NAC programs.
- 2,563 (84.9%) of the participants have earned college and industry-recognized credentials.
- 101 (4.4%) of the participants who completed a program are enrolled in further education.
- 309 non-incumbent workers gained employment in the first quarter after completing an NAC program.
- 423 incumbent workers received a wage increase post-enrollment.

On average, respondents obtained employment 94.35 days after exiting a program. The median, however, shows a faster turnaround, with half of all participants obtaining employment within 66 days. At most, it took one project participant 659 days to obtain employment after their earliest program completion.

Consortium-level: Summary Statistics of Time to Employment (in days).

	Maximum Time to Employment	Mean Time to Employment	Median Time to Employment	*N*
Overall	659	94.35	66	846

Over 60% of program participants in the consortium obtained employment within the first 90 days of completing their NAC program. The percentage of participants obtaining employment after exiting a program increased further as more time passed, to over 80% by the second quarter and approximately 90% by the third quarter. While participants continued to gain employment as time went on, the percentage obtaining employment decreased with every additional quarter that passed following the 3rd quarter after exiting from the program.

Among project participants, the maximum earnings difference observed between intake and earliest employment was an increase of $37.50. On average, final earnings increased by $1.35 from intake to post-program employment. The median, however, showed a higher final earnings increase, with half of all participants receiving a wage increase of two dollars. Among those participants who gained earnings, wages increased from intake to post-program employment by an average of $4.22. On the other hand, the median earnings gain was less than the average earnings gain at $3.73.

Consortium-level: Summary Statistics of Earnings.

	For All Students Reporting Both an Intake and Post-program Wage				*For All Students Showing a Wage Increase from Intake to Post-Program Employment*		
	Maximum Earnings Difference	**Mean Final Earnings Difference**	**Median Final Earnings Difference**	***N***	**Mean Earnings Gain**	**Median Earnings Gain**	***N***
Overall	$37.50	$1.35	$2.00	994	$4.22	$3.73	662

V. Conclusions

Based on the successes and challenges faced during the program as well as effective practices that have been put in place, the NAC identified the following lessons learned:

- It is not enough to just reach out to employers; a dedicated focus is needed to build authentic partnerships.
  - At the beginning of the grant, NAC had letters of intent from a number of manufacturers from the executive level. It may have been helpful to also include other representatives, such as Human Resources, for broader engagement.
  - The relationship between the community college and employer needs to be mutually beneficial.
- Be strategic and focused in implementation.
  - Understand employer demand in the local region and design a program that matches demand. Think ahead, and look for a broad range of industry partners, so that program is not too narrow.
  - Develop an outreach strategy to facilitate enrollment.
  - Pay close attention to budgets and anticipate real costs to college.
  - Allow for multiple points of entry in a program. As one stakeholder explained, "[the program should be designed] so where ever an individual steps on the path, they won't end up with door closed in their face."
- The retention specialist was identified as a critical role across the consortium partners. Responsibilities included:
  - Coordinated recruitment for the program
  - Served as a dedicated liaison between students, employers and community partners, with detailed knowledge of the NAC program
  - Provided continuity for students throughout the entire program
- It is essential to get college-wide buy-in. Grant-funded programs can sometimes be isolated, when run by staff that are newly hired to the college. For effective and efficient implementation, support from all levels of administration is needed to help navigate the program. Documenting processes and policies is also important.
  - Support by the Board of Trustees can ensure continued implementation in cases of staff turnover.
  - Board members can also help reach out into the community if that assistance is needed.

Implications for future research:

- Focus on work-based learning and skills transfer. What types of work-based learning opportunities might fill short-term workforce needs? How could these be structured to serve employers and the students? Particularly due to the cyclical nature of aviation manufacturing, the NAC colleges also recognized the value of connecting with other sectors. How can future projects be more deliberate in identifying and promoting how skills might transfer to other employers/industries?
- Focus on dedicated efforts to build stronger employer relationships and strategic partnerships.
    - One college staff member reported, "I think previously we just ran ourselves around in circles, but never took the time to sit down and [make a plan to work with employers]. It's like when you keep stuffing your shoe strings down in your shoes, instead of taking the time to tighten all the strings and pull them back up, so you have more than two inches of strings to adequately tie your shoes. I feel like that's what we did."
    - Be as conscious as possible about why you are coming together as a partnership or consortium. Be very clear about what it means to be a part of the consortium and what you hope to get out of being a part of a group as opposed to figuring stuff out on your own.
- Employment and wage data are important for documenting outcomes and impact. Many community colleges experienced difficulty in accessing these data. Ongoing collaboration and discussion between the US Departments of Education and Labor, among others, will be important in addressing this issue.
- Ongoing discussions at the federal level about financial aid will also be important for future programs. At the beginning of this grant cycle, short-term training programs were not eligible for federal financial aid. Although policies are changing, continued work of this issue will be important to ensure working adults and students interested in short-term training have access to necessary resources.

National Aviation Consortium

Trade Adjustment Assistance Community College and Career Training Grant Program
Third-Party Evaluator - Final Report
September 30, 2016

Overview of the National Aviation Consortium

The United States Department of Labor (DOL) initiated the Trade Adjustment Assistance Community College and Career Training (TAACCCT) program in 2011. A second round of funding was made available in 2012 to eligible institutions of higher education, with the purpose of expanding or improving their ability to deliver education and career training programs that can be completed in two years or less. As described in the Solicitation for Grant Applications (SGA), these programs were to be designed to operate in conjunction with the Trade Adjustment Assistance (TAA) for Workers Program, helping TAA-eligible workers and other adults succeed in obtaining the skills, degrees, and credentials needed for high-wage, high-skill employment while also meeting the needs of employers for skilled workers.

In September 2012, the DOL announced a round two award for the National Aviation Consortium (NAC). The NAC had a goal to train more than 2,500 individuals for careers in aviation and manufacturing. The NAC website (http://naccareers.com) lists the consortium partners and includes a link to each institution.

- Wichita Area Technical College (WATC) in Kansas [lead institution]
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The NAC programs are structured to deliver accelerated training, using on-line, hybrid, and traditional delivery to fill current aviation manufacturing jobs that remain open due to an unskilled workforce. Program staff provide student support, including job search and placement assistance. A sector-based strategy builds on the previous success of the National Association of Manufacturers (NAM) Manufacturing Institute's Skills Certification System, and expands it with six aviation endorsed manufacturing credentials.

Career pathways utilize stacked and latticed credentials to align educational certificates with industry-recognized credentials. The approach offers multiple on-and-off ramps to enter employment so trade-impacted and other workers can continue to advance in the education pathway. The partner colleges have worked to incorporate prior learning assessments in their programs to support accelerated training for experienced adult learners. Continued development of transfer and articulation agreements with universities that build on industry-recognized credentials has also been a focus.

As a DOL requirement, all TAACCCT round two grantees were to engage a third-party evaluator. The Office of Educational Innovation and Evaluation (OEIE) at Kansas State

University (K-State) served as the third-party evaluator for the NAC and collaborated with the NAC Project Management team (PM team) to integrate evaluation activities throughout the grant's implementation. The evaluation was designed to assess project progress and processes, to understand successes and stumbling blocks, and to answer DOL questions about project implementation. The evaluation assessed the project's progress through: data on program implementation; documentation of course implementation; perspectives via interviews from the project staff, college partners, administrators, and stakeholders; document analysis of project records; review of project outputs and activities related to the timeline and work plan; and assessment of project strategies (e.g., curriculum, delivery methods, assessment of employer engagement). Attention was given to understanding how each college/co-grantee implemented the NAC program. The evaluation also addressed the partnership collaboration process, leveraging resources, and the contributions of each partner toward project success, all factors especially important for a multi-state program.

This final report provides a description of the evaluation for the NAC, as well as a summary of progress and impacts through the duration of grant implementation (October 1, 2012 to September 30, 2016).

Overview of the Evaluation Design

The evaluation of the NAC was designed and implemented by OEIE, and guided by the evaluation plan submitted with the NAC application to DOL. See Appendix 1 for the evaluation plan, which contains more details about the evaluation design and OEIE evaluation team. Additional information about OEIE also is available online (http://oeie.ksu.edu/).

The purpose of the third-party evaluation was to collect and report data on the implementation progress and outcomes of the NAC project to inform policy and program decision-making. Strategies for assessing the program's effectiveness included both formative and summative evaluations that: 1) utilized multiple evaluation approaches, 2) drew on both qualitative and quantitative methodologies, and 3) triangulated data for more robust findings where possible. Through the evaluation, OEIE did not compare the sites, but sought to understand the context in which the project was being implemented in order to best capture the successes, challenges, and lessons learned. The evaluation focused on the following program elements:

- Student support services
- Industry partnerships
- Career pathways and curriculum
    - Articulation agreements
    - Industry certifications
- Professional development
- Capacity building
    - Community college policy
    - Accountability and evaluation

Logic Model

During the proposal stage of the project, OEIE created a logic model for the NAC that could be used as a planning tool, to clarify and graphically display what the project intended to do, and to describe anticipated accomplishments and impacts. Throughout the implementation period, the logic model was revised and updated to reflect the evolution of the programs. The initial strategies remained constant through the grant period, and the medium-term outcomes were achieved. These included:

- Core set of skills & industry certifications to establish consistent foundation in aviation/ aerospace & related manufacturing for entry-level workforce
- Enhanced data collection & assessment capacity at community colleges
- Local employers positioned to interview/hire students in aviation & related industries
- Improved learning outcomes & retention rates for TAA-eligible workers, veterans & other adults
- Over 2500 students increase skills, earn aviation related & industry-recognized credentials/certificates
- New opportunities for workers in: sheet metal trades; electrical assemblers; aircraft mechanics; service technicians; manufacturing engineering technologists; avionics technicians; aircraft structure assemblers; and aerospace engineering & operations technicians

Progress was made on the long-term outcomes, and ongoing work will continue to address these in the future. The final revised logic model for the NAC is provided in Appendix 2.

NAC Evaluation Approach

The table below page presents the comprehensive evaluation matrix for the NAC that was included in the original evaluation plan.

Table 2.1.NAC Evaluation Matrix.

Evaluation Plan Components & Indicators	**Evaluation Methods**
1) Analysis of Participant Outcomes (DOL Metrics)	
Participant Outcomes - Metrics include number of participants: served by the program, completing program, retained in program, completing credit hours, earning credentials, enrolled in further education, employed after program, retained employment, and realized wage increases.	Collection and analysis of data on participant outcomes, including comparison to cohort group of non-participants as available
2) Project-Specific Assessment of Outcomes (in addition to DOL Metrics)	
Student feedback and satisfaction with curriculum, feedback on format and delivery, online learning tools, career guidance, pathway program, job placement, etc.	Surveys of student participants
Faculty and stakeholder feedback/assessment of curriculum and program	Surveys or interviews with faculty and stakeholders
Faculty professional development outcomes	Surveys of faculty participants
Institutional change	Surveys of college/co-grantee representatives
Industry and stakeholder outcomes/feedback	Interviews or surveys
3) Assessment of Project Implementation (Evaluation of Process & Implementation)	
SGA Implementation Evaluation Questions: 1) Curriculum created/used 2) Program design, Delivery method, Administrative structure, Support Services 3) Assessment tools, Assess participant skills/interests, Program sequence, Career guidance 4) Partner contributions, Factors contributing to involvement, Most critical involvement, Most/least impact	Evaluation Tools/Methods: • Review of project outputs and activities related to the timeline • Document analysis of curriculum materials and project records • Interviews with administrators • Interviews with project staff and stakeholders
4) Formative Feedback to Project Partnership (from all results above)	
5) Evaluation Capacity Building for Project Partnership	

In addition to addressing the implementation questions included in the DOL SGA, OEIE also used the following questions to guide the evaluation:

1) To what extent have the stated program goals and objectives been accomplished?
2) Which components of the program are most influential on the curriculum, national credential development, and overall project implementation? What measurable evidence demonstrates that these components are effective?
3) What challenges were encountered during the program's implementation and how were they addressed?
4) To what extent will the program components be sustained?

As shown in item five on the evaluation matrix, capacity building within the project teams, at both the national and site levels was also a focus of the evaluation. The intent was to support the colleges/co-grantees of the NAC partnership to build their capacity for understanding the benefits of the evaluation process, using evaluation feedback for project planning and implementation, and assessing and tracking program outcomes. Throughout the grant, OEIE worked with the partner colleges to develop surveys locally and incorporate feedback loops into their ongoing programs. Appendix 3 contains a list of sample questions used with the NAC partners during the evaluation that they or other programs could continue to use for evaluative purposes. The enhanced capacity will assist the partnership in continuing to track important data post-project.

Over the course of the project, OEIE regularly attended meetings and events, both virtually and in person, within the consortium to build context and collect data. These included national meetings, training events, employer and community partner events, and regularly scheduled grant administration meetings. The evaluation used a mixed-methods approach, incorporating surveys, interviews, focus groups, document review, site visits, and observations. OEIE collected and analyzed feedback from NAC project staff, faculty, students, college administrators, and employers and other external partners to: 1) monitor program start-up processes; 2) document the evolution of relationships with external partners, such as employers, and internal partners within colleges; 3) help keep the project on track operationally; 4) document strategic components of the program; and ultimately 5) capture outcomes and impacts of the grant. This ongoing feedback was also used to adjust and improve the evaluation process over the course of the project. Survey methodologies were based on the Dillman Method (2014)[1] and focus groups utilized the Krueger and Casey (2000)[2] approach to effective qualitative research. Data collection began with the consortium-level and site-level kick-off meetings in spring 2013 and was on-going throughout the implementation period. The final end-of-project interviews were completed in July of 2016.

[1] Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, phone, mail and mixed-mode surveys: The tailored design method*, 4th Edition. Hoboken, MJ: John Wiley & Sons, Inc.
[2] Krueger, R. A., & Casey, M. A. (2000). *Focus groups: A practical guide for applied research*. Thousand Oaks, CA: Sage Publications.

OEIE incorporated a range of reporting options for the PM team, partner sites, and other stakeholders. Examples of reporting formats included:

- handouts describing the purpose of the evaluation and how evaluation results and services can be useful to team members
- narrative reports containing comprehensive results, and including tables, charts, graphs, or other visuals
- brief narrative summaries containing results highlights
- one-page visual representations (e.g., timelines and Geographic Information Systems (GIS) maps)
- creation of infographics to display outcomes at both the national and site levels, including data points such as demographics and certificate completions

Findings from the implementation evaluation will be presented in later sections of this report. Appendix 4 provides a comprehensive list of evaluation products provided to the NAC team over the duration of the grant. The list of products is organized in three categories: evaluation plan design, instruments, and reports/documents. Timelines identifying evaluation activities are located in Appendix 5.

Outcomes Analysis

As noted above, another component of the NAC evaluation is the outcomes/impacts analysis. The initial objective for this assessment was to understand the NAC's impact on student participants in terms of training and employment outcomes, compared to students not served by the grant program.

To help prepare for collecting DOL metrics, as well as conducting the outcomes analysis, OEIE worked with the PM team to establish a consortium-wide system of data tracking and reporting. Early in the first year of the project, a representative from the evaluation team collaborated with the PM team to develop and post a Request for Proposals (RFP) to procure a data management system. Given that the partnering colleges are located throughout the U.S., with different student information systems, it seemed most efficient to develop a system in which common data for the project could be entered.

Working through the official procurement process for the lead college (WATC), the project secured the Apricot data management system in spring 2013. Over the course of that semester, the evaluation team:

- Worked with the NAC PM team to identify data points to include in the student intake, enrollment, completion, and follow-up processes
- Worked with the NAC PM team to ensure these data points were captured in the Apricot data management system
- Participated in training sessions led by CTK (the developer of Apricot) to gain a general orientation to the system, including how to create reports
- Participated in sessions with CTK and the NAC PM team to develop reports required by DOL (related to reporting on the DOL metrics)

Over the course of the project, OEIE continued to work with the PM team on project reporting through Apricot. While participant tracking and reporting is an ongoing process to refine and improve, all partner colleges submitted participant data for the outcomes analysis.

In the first year of the grant, the project also contracted with America's Job Link Alliance (AJLA) to obtain employment and wage data for the project participants. Although early discussions indicated that student-level data might be available, AJLA was only able to report aggregate results for the partner colleges. NAC submitted data quarterly to AJLA, to identify program participants that had exited the program and found employment, as well as those who were retained in employment and received a wage increase. AJLA returned the first report for September of 2013, which only contained data for six students. As the quarters progressed, the reports showed an increase in the number of students with these outcomes, but it still was a very small proportion of the population the grant served overall. Some of this limitation may be due to the lag in reporting Unemployment Insurance (UI) data and whether employers in NAC partnership reported data available through AJLA. The data tables from each of the reporting quarters can be found in Appendix 6 of this report. Although this process did not provide the comprehensive reporting that the project had hoped, it does represent the project's additional efforts to obtain these data.

However, as reported in the interim evaluation report, the proposed approach for the outcomes analysis was modified. The partner sites were diverse in that some offered for-credit programs, while others were non-credit customized training, and some colleges provided both short-term and traditional courses. As a result, it was not possible to identify comparison groups for the analysis across the consortium. In the second year of the project, OEIE met with the Director of Institutional Research at WATC to initiate conversations about accessing college data and identifying potential "comparable" programs based on length of study, credential earned, and field of study, etc. which might have been appropriate to use in a benchmarking analysis.

However, after further conversations with the college, it did not appear that this was a viable approach. The initial program identified as a potential benchmarking group – welding – had a very small number of participants during the study period, which would have impacted the comparison. Adding this to the fact that the analysis would only include one college, the evaluation team adjusted the analysis plans once again.

Rather than comparing TAACCCT student outcome data to another group, the analysis focused on the following questions:

- What was the average time to employment for NAC program participants?
    - Did time to employment vary by gender or veteran status?
- What was the average time to employment for participants in each of the partner colleges?
- What the average final earning for NAC program participants?
- What was the average final earning for participants in each of the partner colleges?
- What was the average wage gain for NAC program participants?
- What was the average wage gain for participants in each of the partner colleges?

Additionally, supplemental information is presented throughout this section. This information details:

- Whether or not time to employment varied as a function of participant age
- Differences in wage change as a function of occupation area (manufacturing vs. non-manufacturing occupations)
- Differences in average final earnings for incumbent vs. non-incumbent workers

Results, including narrative summaries, data tables, and charts, from these analyses are reported in the outcomes section of this report.

Strategy Implementation Review

Based on a review of the NAC quarterly reports submitted to DOL and data collected throughout the project, OEIE compiled the following table to document progress on the NAC's strategies and activities aligned with the DOL TAACCCT Core Elements as defined in the SGA.

Table 3.1. Strategy Implementation Review.

National Aviation Consortium October 1, 2012 – September 30, 2016	
NAC Strategies and Activities	**Implementation Progress**
Core Element 1: Evidence-Based Design	
Strategy 1.1 Deploy robust tracking system and engage 3rd party evaluator for comprehensive program evaluation/feedback.	**Achieved**
Develop design for tracking system in alignment with third party evaluator's outcomes based logic model.	Implemented
Engage third party evaluator to design and implement a comprehensive plan.	Implemented
Core Element 2: Stacked and Latticed Credentials	
Strategy 2.1: Align and deliver seven educational certificates with industry-recognized credentials resulting in standardized credentials.	**Achieved**
Implementation of career pathways to meet industry needs.	Implemented
Validation of National Standardized Credentials.	Implemented
Development of recruitment and outreach tools.	Implemented
Implementation of Prior Learning Assessment (PLA) protocols.	Modified implementation
Core Element 3: Online Technology-Enabled Learning	
Strategy 3.1: Integrate accelerated on-line learning environment.	**Achieved**
Development of online, open source curriculum offering industry-endorsed certifications.	Modified implementation
Integrate accelerated interactive online learning environment.	Modified implementation
Core Element 4: Transferability and Articulation	
Strategy 4.1: Build articulation and transferability agreements with national and local partners.	**Made Progress**
Expand credit transfer among co-grantees.	Modified implementation
Expand articulation agreements with 2 & 4 year colleges (including NAC co-grantees).	Modified implementation
Core Element 5: Strategic Alignment	
Strategy 5.1: Strengthen employer and workforce partnerships.	**Achieved**
Assemble partner councils with each of the five co-grantees.	Modified implementation
Hire retention specialist(s) at each college.	Implemented
Coordinate with Air Washington (round 1 TAACCCT awardee).	Modified implementation

Additional details about each college's implementation are provided in those respective sections of this report. However, key highlights from the overall consortium to note from this table include:

- The NAC released an RFP in the winter of 2013 to procure access to an online system to facilitate data collection and reporting throughout the project. Having an online system made it possible for the leadership team to pull real-time reports throughout the project; however, sites indicated that the system was difficult to learn and navigate.

- All of the NAC partner colleges developed and deployed stackable and latticed aviation maintenance and manufacturing programs. Due to the nature of the short-term (less than one year) program, some partner colleges had difficulty in addressing Prior Learning Assessments (PLA) within the implementation period. The project engaged the Council for Adult and Experiential Learning (CAEL) to work with the consortium members, which raised awareness of this strategy for helping adults progress towards a degree. The progress on this particular activity varied across colleges.

- The NAC programs incorporated online learning. In some cases, the online portion of the courses allowed for flexibility in scheduling so students could accelerate their learning. For other students, having the online materials provided an accessible resource to reinforce what they learned in the classes and lab projects. Having multiple program delivery methods allowed the NAC to address different learning styles and the need for anytime/anywhere access of the program materials. While one site did not extensively implement this element, the four other colleges successfully incorporated online learning in their programs.

- Given that the NAC colleges are located throughout the country, with each operating within a unique system in different states, the work on developing transferability and articulation agreements has been challenging. The partner colleges have developed both credit and non-credit programs to address industry needs in their local communities, resulting in stronger partnerships and student success. The distinct characteristics of the colleges and their programs have made it somewhat difficult to establish these agreements across the consortium. However, some progress has been made, with 2 colleges signing an official NAC Articulation Agreement and Memorandum of Understanding.

- All of the NAC partner colleges engaged in strategic alignment throughout the grant. At a national level, the project initially communicated with the Air Washington Round 1 grantee about the TAACCCT project. However, throughout the implementation period, the NAC developed a stronger relationship with the TRAC-7 project at Washburn University, another Round 1 grantee. The TRAC-7 project hosted an annual meeting, called *TAACCC On!*, which provided an opportunity for networking and peer learning from other TAACCCT grantees. Locally, each of the consortium colleges worked toward establishing partner councils. Throughout the project, the colleges have identified the best methods for engaging employers and industry partners in their local communities. Specific examples are provided by college in later sections of this report.

Consortium-Level Results

After attending the initial kick-off meetings for the grant at each partner site in spring 2013 and further discussions with the colleges about their programs, it became evident to the evaluation team that each market has a different context. Employer and community needs, institutional culture, and program structure varied as each site came on board. As a result, the evaluation team also needed to adjust plans and strategies to be able to document the collective progress and impact of the project, while at the same time capture the unique nature of each site.

This section of the report provides an overview of the aggregate findings across the consortium. The following tables and infographics show the program areas implemented, as well as a summary of the participants in the training programs. Additional details about site specific implementation are provided in those respective sections of this evaluation report.

Programs Areas Implemented

As originally envisioned, each of the five partner schools was to implement short-term certificates in one or more concentration areas, in addition to the core skills certificate. The NAC concentration areas are:

- Assembly Mechanic
- Electrical Assembler
- Composite Repair
- Quality Assurance
- Tooling
- CNC

The table below shows which programs were implemented by the NAC partner colleges.

Table 4.1. NAC Program Implementation Status by Partner Site.

NAC Program	EdCC/WATR	GTCC	Ivy Tech	Tulsa CC	WATC
Core Skills	Implemented	Implemented	Implemented	Implemented	Implemented
Assembly Mechanic	Implemented	Implemented	Implemented	Implemented	Implemented
Electrical Assembler	Implemented	Implemented	Planned - No Industry Need	--	Implemented
Composite Repair	Implemented	Planned - No Industry Need	--	Implemented	Implemented
Quality Assurance	Implemented	--	--	--	Implemented
Tooling	Implemented	--	--	--	Planned - No Industry Need
CNC	Planned - No Industry Need	--	Implemented	Implemented	Implemented

Throughout the grant, project staff tracked participants to report on the DOL metrics identified for the TAACCCT program. The following table presents a brief summary of these data as of August 2016. Please note, the project continued to track and clean data through early September 2016. As a result, the numbers included in this final evaluation report may not be identical to the final participant outcomes reported in NAC's final report to the DOL.

Table 4.2. NAC DOL Metrics – as of August 2016.

DOL Metrics	Count
Unique Participants Served	3,019
Participants who have Completed a TAACCCT-Funded Program	2,296
Participants Still Retained in Their Program of Study or Another TAACCCT-Funded Program	121
Participants Completing Credit Hours	2,508
Participants Earning Credentials	2,563
Participants Enrolled in Further Education After Grant-Funded Program of Study Completion	101
Participants Employed After Grant-Funded Program of Study Completion	309
Participants Retained in Employment After Program of Study Completion	155
Participants Employed at Enrollment who Receive a Wage Increase Post-Enrollment	423

- Of the total NAC participants served (*N*=3,019), just over three-quarters of them (*n*=2,296, 76.1%) completed a TAACCCT-funded program.
    - Slightly more than half (*n*=1,212, 52.8%) of the participants that completed a NAC program were incumbent workers.
    - Of all (incumbent and non-incumbent workers) those who did not complete a program, 121 (4.0%) are still retained in their program of study or another TAACCCT-funded program.
- 2,508 (83.1%) of the participants have completed credit hours in one or more NAC programs.
- 2,563 (84.9%) of the participants have earned college and industry-recognized credentials.
- 101 (4.4%) of the participants who completed a program are enrolled in further education.
- 309 non-incumbent workers gained employment in the first quarter after completing an NAC program.
    - Of these, 155 retained employment in the second and third quarter after exit from the program.
- 423 incumbent workers received a wage increase post-enrollment.

The evaluation team created infographics summarizing these metrics. The consortium-level infographic is provided on the following page. College specific infographics are included in their respective sections.

Department of Labor (DOL) Trade Adjustment Assistance Community College and Career Training (TAACCCT)

The project aims to increase the education and skill attainment of TAA-eligible, veterans, and other dislocated workers for employment in the aviation industry. Industry credentials are attained in a short period of time, and recipients enter the job market ready to work.

Demographic Snapshot

NAC National Aviation Consortium

3018 Students served

Gender Distribution

Average Age **33**

Incumbent Workers served **626**

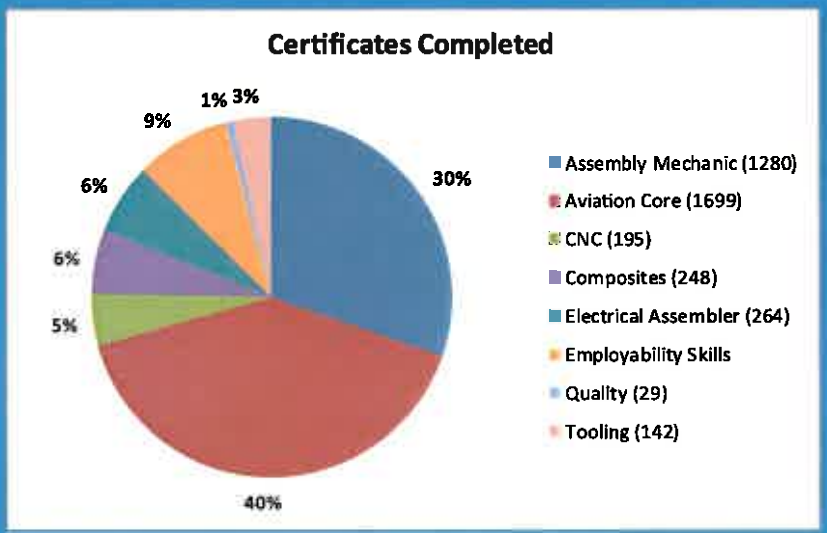
44 TAA served

332 Veterans served

1110 Students Employed

Average Wage Increase **$4.51**

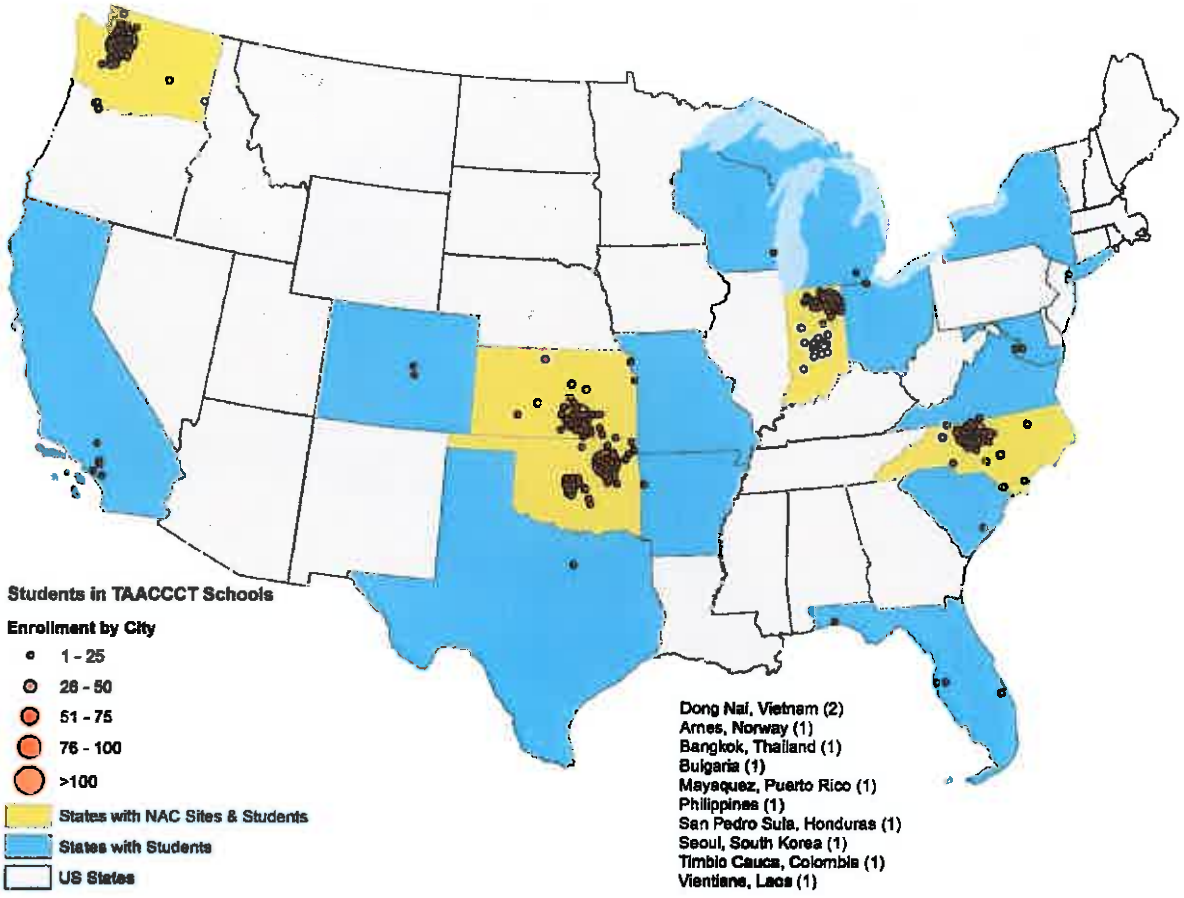
Program Completion Snapshot

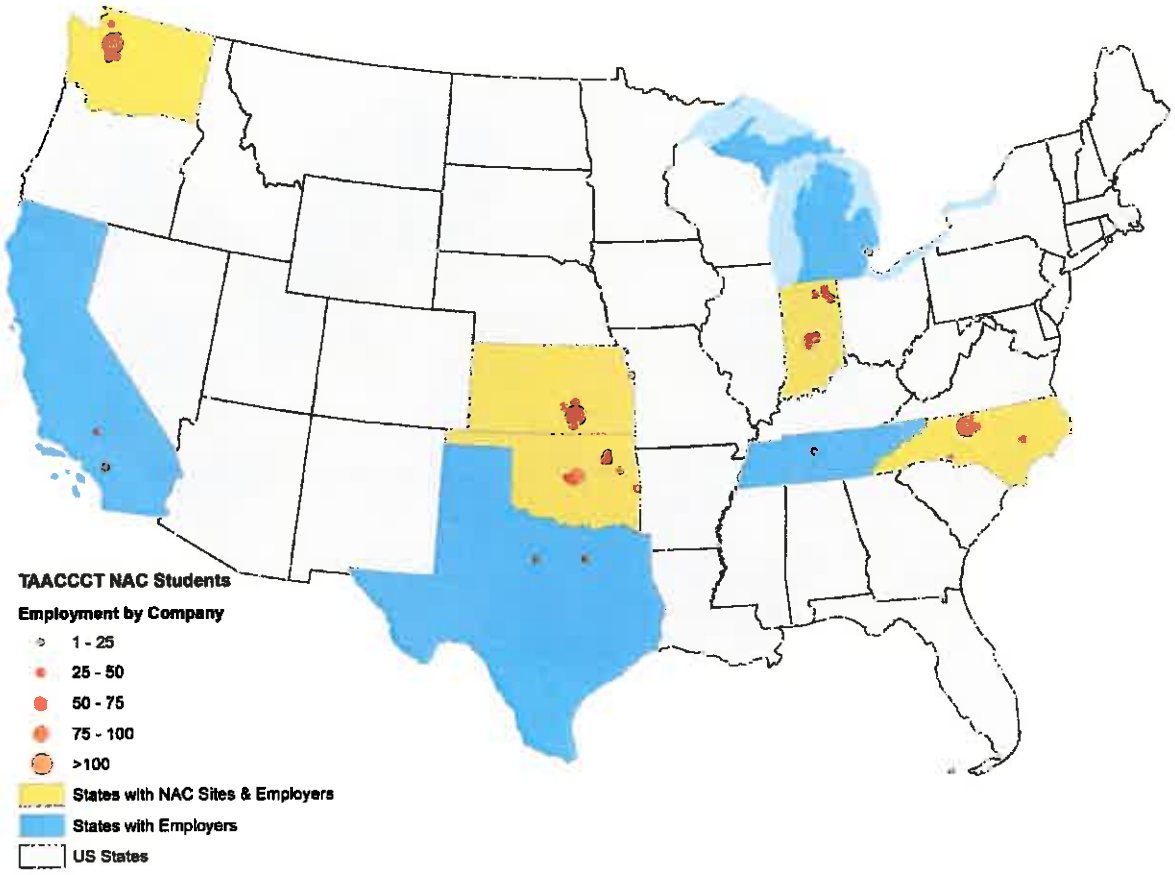


Industry Certificates

62 CertTEC - Aviation Mechanic Assembly Technician
167 CertTEC - Aviation Structures Technician
6 CertTEC - Composites
6 MSSC - CPT
5 MSSC - Maintenance Awareness
5 MSSC - Manufacturing Processes and Production
1 MSSC - Quality
18 MSSC - Quality Practices and Measurement
31 MSSC - Safety
866 NCRC
146 NIMS: CNC Milling - Operations
123 NIMS: CNC Turning - Operations
55 NIMS: Job Planning, Bench Work & Layout
25 NIMS: Manual Milling Skills I
144 NIMS: Measurement, Materials & Safety
518 OSHA

oeie Office of Educational Innovation and Evaluation


Students in TAACCCT Schools
Enrollment by City
1 - 25
26 - 50
51 - 75
76 - 100
>100
States with NAC Sites & Students
States with Students
US States
Dong Nai, Vietnam (2)
Ames, Norway (1)
Bangkok, Thailand (1)
Bulgaria (1)
Mayaguez, Puerto Rico (1)
Philippines (1)
San Pedro Sula, Honduras (1)
Seoul, South Korea (1)
Timbio Cauca, Colombia (1)
Vientiane, Laos (1)


TAACCCT NAC Students
Employment by Company
1 - 25
25 - 50
50 - 75
75 - 100
>100
States with NAC Sites & Employers
States with Employers
US States

The following table presents the demographic breakdown for NAC participants.

Table 4.3. NAC Demographics.

College	Number of Students						Percentage of Students					
	All NAC	EdCC/ WAIR	Ivy Tech	GTCC	Tulsa CC	WATC	All NAC	EdCC/ WATR	Ivy Tech	GTCC	Tulsa CC	WATC
Gender												
Men	**2,436**	664	199	438	416	719	**80.8**	79.9	83.6	82.8	82.9	78.8
Women	**565**	166	37	90	86	186	**18.8**	20.0	15.5	17.0	17.1	20.4
Not Self-Identified	**12**	1	2	1	--	8	**0.4**	0.1	0.8	0.2	--	0.9
Race/Ethnicity												
American Indian / Alaskan Native	**85**	11	--	2	44	28	**2.8**	1.3	--	0.4	8.8	3.1
Asian	**351**	212	3	14	41	81	**11.6**	25.5	1.3	2.6	8.2	8.9
Black	**522**	43	43	182	106	148	**17.3**	5.2	18.1	34.4	21.1	16.2
Latino	**266**	66	22	44	31	103	**8.8**	7.9	9.2	8.3	6.2	11.3
Multi-race	**80**	21	5	12	15	27	**2.7**	2.5	2.1	2.3	3.0	3.0
Native Hawaiian / Pacific Islander	**25**	15	--	3	4	3	**0.8**	1.8	--	0.6	0.8	0.3
White	**1,645**	454	161	160	157	513	**54.6**	54.6	67.6	49.1	51.2	56.2
Not Self-Identified	**39**	9	4	12	4	10	**1.3**	1.1	1.7	2.3	0.8	1.1
Age at NAC Intake												
18-19	**83**	27	13	13	--	30	**2.8**	3.2	5.5	2.5	--	3.3
20-21	**232**	87	24	40	18	63	**7.7**	10.5	10.1	7.6	3.6	6.9
22-24	**416**	147	26	59	52	132	**13.8**	17.7	10.9	11.2	10.4	14.5
25-29	**574**	167	38	96	78	195	**19.1**	20.1	16.0	18.1	15.5	21.4
30-34	**451**	119	26	75	81	150	**15.0**	14.3	10.9	14.2	16.1	16.4
35-49	**860**	188	70	169	180	253	**28.5**	22.6	29.4	37.9	35.9	27.7
50+	**385**	91	41	76	90	87	**12.8**	11.0	17.2	14.4	17.9	9.5
Unknown	**12**	5	--	1	3	3	**0.4**	0.6	--	0.2	0.6	0.3
Veteran Status												
Yes	**332**	65	38	67	76	92	**11.0**	7.8	16.0	11.5	15.1	10.1
No	**2,681**	766	200	468	426	821	**89.0**	92.2	84.0	88.5	84.9	89.9
Disabled												
Yes	**55**	14	3	11	16	11	**1.8**	1.7	1.3	2.1	3.2	1.2
No	**2,634**	784	228	496	453	865	**93.8**	94.3	95.8	93.8	90.2	94.7
Not Self-Identified	**132**	33	7	22	33	37	**4.4**	4.0	2.9	4.2	6.6	4.1
Pell Eligibility												
Eligible	**100**	11	39	8	16	26	**3.3**	1.3	17.0	1.5	3.2	2.8
Not eligible	**2,634**	642	191	517	485	799	**87.4**	77.3	16.4	97.7	96.6	87.5
Unknown	**279**	178	8	4	1	88	**9.3**	21.4	3.4	0.8	0.2	9.6
Highest Level of Education Completed												
Did not complete high school	**88**	10	1	19	13	45	**4.9**	1.2	0.4	3.6	2.6	4.9
High school	**2128**	567	193	329	363	676	**74.0**	68.2	81.1	62.2	72.3	74.0
2-yr college degree	**498**	155	31	86	98	128	**14.0**	18.7	13.0	16.3	19.5	14.0
4-yr college degree or more	**299**	99	13	95	28	64	**7.1**	11.9	5.4	17.9	5.6	7.0

- Of the 3,019 participants served, demographics data were available for 3,013 (99.9%) participants.
- Of these, 2,436 (80.8%) were male, 565 (18.8%) were female, and 12 (0.4%) did not self-identify.
- Overall, participants reported their race and ethnicity as:
    - American Indian or Alaskan Native – 85 (2.8%)
    - Asian – 351 (11.6%)
    - Black – 522 (17.3%)
    - Latino – 266 (8.8%)
    - Multi-race – 80 (2.7%)
    - Native Hawaiian or Pacific Islander – 25 (0.8%)
    - White (non-Latino) – 1,645 (54.6%)
    - Not self-identified – 39 (1.3%)
- This pattern held across all sites with one notable exception; 212 (60.4%) of the participants who identified as Asian attended EdCC/WATR, making up 25.5% of the sample from that school.
- Adults of all ages participated in these programs. Overall, participants' ages at enrollment:
    - Ranged from 18 to 75 (spanning 57 years)
    - Averaged 34.2 years (*SD*=11.42)
- While some veterans participated in these programs (*n*=332), the majority of participants were non-veterans (*n*=2,681).
- Additionally, most of the participants in these programs indicated that they were not disabled (*n*=2,634). However, 55 participants did indicate that they were disabled, and a considerable number (*n*=132) chose not to identify their disability status.
- 100 (3.3%) of the participants were Pell Grant eligible, with 2,634 (87.4%) indicating that they were not eligible for the grant. However, data was not available for 279 (9.3%) of participants.
- Participants with diverse educational backgrounds participated in these programs. However, the vast majority of the participants in this program reported completing high school as their highest level of education (*n*=676, 74.0%).
    - 45 (4.9%) participants reported that they did not complete high school.
    - 128 (14.0%) reported completing a two-year college degree.

Major Implementation Activities

In addition to developing aviation and advanced manufacturing programs, major implementation activities designed at the consortium level included developing operation structures across sites, investigating Prior Learning Assessment (PLA) policies at each of the partner colleges, and building capacity for colleges to work with industry partners. Progress on these activities are summarized briefly below.

Operation and Communication Structure

In order to coordinate activities across the five partner states, the project leadership developed a number of communication teams related to different aspects of the grant. These teams, along with their designated purposes, included the:

- Steering committee – to provide leadership to the NAC and hold partners accountable for project deliverables
- Grant administration/compliance team – to meet the fiscal compliance and reporting requirements of DOL
- Curriculum team – to facilitate the integration of the Right Skills Now-Aviation curriculum at all partner colleges and assist in advancing the content to the Employer Roundtable to seek support for national standardized credentials
- Recruitment/Outreach team – to support the development and execution of an outreach plan that effectively recruits students and engages aviation employers and results in a developed workforce (credentialed students) that meets industry needs
- Strategy team – to provide strategic counsel and operational support to the national project staff
- National Industry Council – to inform NAC of current and future aviation workforce needs and provide feedback to NAC on setting the competency standards required for employment in the aviation sector.
- Regional Partner Councils – ground-level implementation and coordination of local assets to support success, and report local metrics and best-practices.

This structure was generally effective in the early phase of the grant to keep the consortium partners informed of program design issues, such as integrating the curriculum in the Learning Management Systems (LMSs) at each college, as well as timelines and reporting requirements. The use of video conferencing for bi-weekly meetings also helped connect the consortium partners. As the project moved further into implementation, however, the number of groups and frequency of meetings were not efficiently addressing the needs of the sites or the project overall. Based on feedback from the partners, the communication structure was re-designed to allow for more targeted discussions, with a focus on college-specific solutions.

Credit for Prior Learning

A core element of the TAACCCT grants is a focus on stacked and latticed credentials. To address this element, NAC engaged the Council for Adult and Experiential Learning (CAEL) to provide technical assistance to the partner colleges. This included working on policies related to prior learning assessment (PLA) professional development with faculty and staff to help build their PLA programs. To gauge where each college was in their understanding and implementation of PLA, CAEL conducted telephone interviews with administrators and reviewed supporting documents, including content on each college's website. Once CAEL had this context, they worked with a broader group of stakeholders, including NAC program personnel, Registrars, and adult and continuing education program staff in order to:

1. Understand each college's aspirations and goals related to PLA, and how the aviation programs are currently or could soon act upon these aspirations

2. Determine the nature of PLA activities at the colleges and the extent of utilization of the current policies both generally and within the NAC-related programming
3. Begin the discussion around what types of technical assistance, training, and capacity building might be implemented to further the consortium's PLA objectives

Through this process, it was evident that needs related to PLA varied across colleges. This situation made it difficult to take a consortium approach to developing these programs; rather it was more site specific. Another challenge was that, in some cases, working through the grant program staff was not an effective strategy as often these individuals were new to the college or were not familiar with policies or processes at the college level, so they were not in a position to lead change. In other cases, where the programs were non-credit, it was challenging to see how the PLA elements would fit with their operations.

However, one college in particular, Tulsa Community College, did make progress on the PLA programs. At the beginning of the grant, they were familiar with PLA but lacked a cohesive approach. As one of the stakeholders explained, "The hard thing about PLA is that in most places it's kind of an orphan, and it makes it easy for nobody at an institution to take responsibility for it. I see Tulsa really taking responsibility, thinking carefully at the broader institutional level. I think their work really sparked a careful [consideration] about what they are doing via the adult learners and dislocated workers."

The NAC made some progress on implementing PLA, but output from this work varied across colleges.

Building Relationships with Employers

The NAC partnered with the Manufacturing Institute (MI) to help guide the employer engagement components in the grant. As the education arm of the National Association of Manufacturers (NAM), MI was well positioned to provide guidance at a national level in the consortium, while also being able to work locally with each partner school. Two key strategies within the employer engagement component were:

- Hire Retention Specialists – as part of the grant structure, each partner school hired at least one Retention Specialist who was to help the student's transition from college classes into employment and career advancement. As designed, this position has two primary customers: the student who is seeking employment and the employer.

- Establish Regional Partnership Councils – partner schools were also to establish local employer partnership councils that could provide feedback and guidance to the programs as they were implemented. As the project is a multi-state consortium, it was also planned that representatives from the local councils would convene periodically as a National Industry Council to provide feedback across sites/states.

In addition to these specific activities, the MI also provided additional support by connecting local programs with NAM-affiliated manufacturers in those communities. Throughout the grant, MI also provided technical assistance at a national level by hosting events such as the "Minding

the Gap: Preparing a Manufacturing Workforce" summit in Fall 2013. Jobs for the Future hosted a similar event in Fall 2014.

As implementation continued, each of the partner schools found that they needed to modify activities to best serve their students and communities. Throughout the project, OEIE conducted interviews with key project staff members at the partner colleges to document ongoing progress and reflections on how each site has ramped up their programs. Comments from the staff members illustrated some of the challenges that the schools faced. For example, one individual shared:

> "We are hoping [these activities] will encourage a more true partnership, a more true integration of business into the educational practice. I'll give you an example: When industry needs something, they need it. When production rates go up in industry, they need to hire people. Now, they have a need and they need to take care of it. But it takes us a few weeks to get people in the pipeline and get them coming out with the skills they need to go to work. So, what happens is that they may have an immediate need to hire 200 people. If we could marry those two things [education and business] together in a more partnered way, it would help us be able to create a better pipeline for the employers. And, it would help the employers in the end because they would have a little bit more of a trained workforce instead of just taking people off the street. But it's hard to orchestrate; it's just very difficult. Business and education are not necessarily natural partners. That true integration, the true blending in the fabric of the organizations, that's naturally difficult."

Another staff member commented:

> "The thing is that aerospace is definitely cyclical. It's just hard sometimes to stay positive whenever you see when [Employer] is hiring; it's going gang busters. Whenever they start advertising that they are laying off, then it directly impacts us. Being closely associated with [Employer] is beneficial sometimes and sometimes it's not. So, just don't get discouraged by the cyclical nature because it does ebb and flow. There are enough people who are retiring that it typically comes back. It may drop off for six months or so, but it's going to come back."

Employers also participated in interviews for the evaluation. One local partner explained, "I think by working [together] we've developed a closer relationship over the years, being involved in more open communication. Just realizing the quicker we address any problems the sooner we can all get back on track. It's been a very functioning, open relationship. And it just keeps getting stronger."

Employers also reported their perceptions of the NAC program in a survey in 2015.

Figure 4.1. Benefits for Employers.

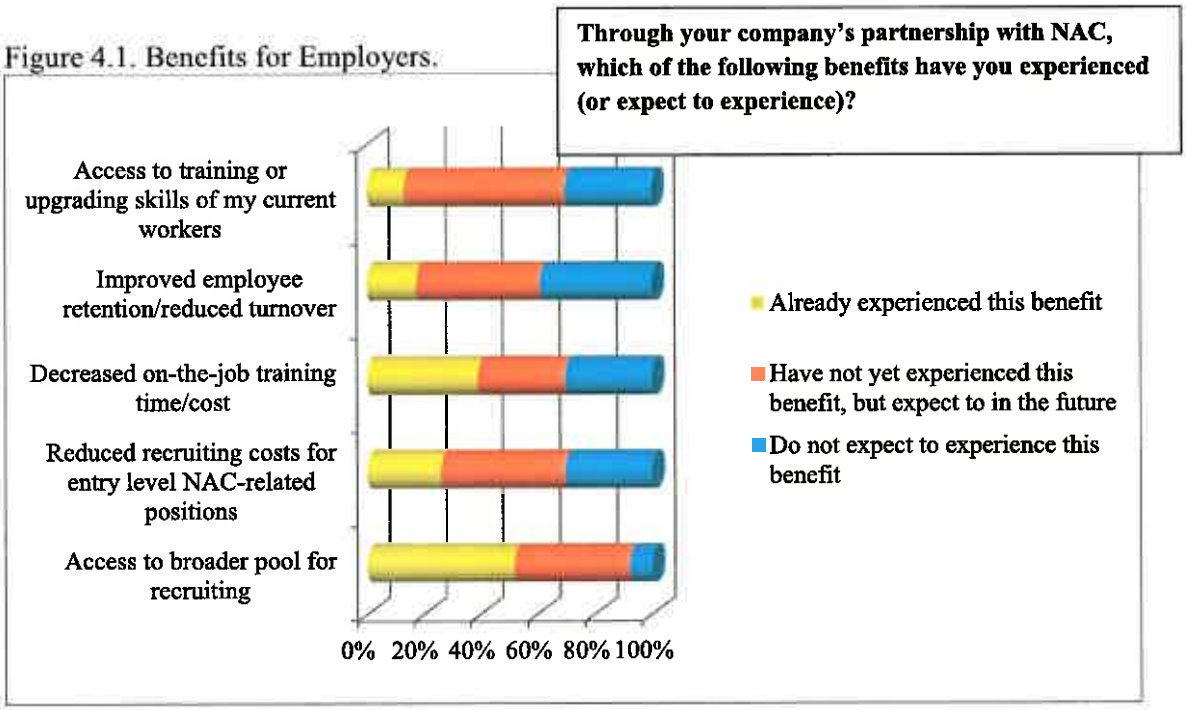
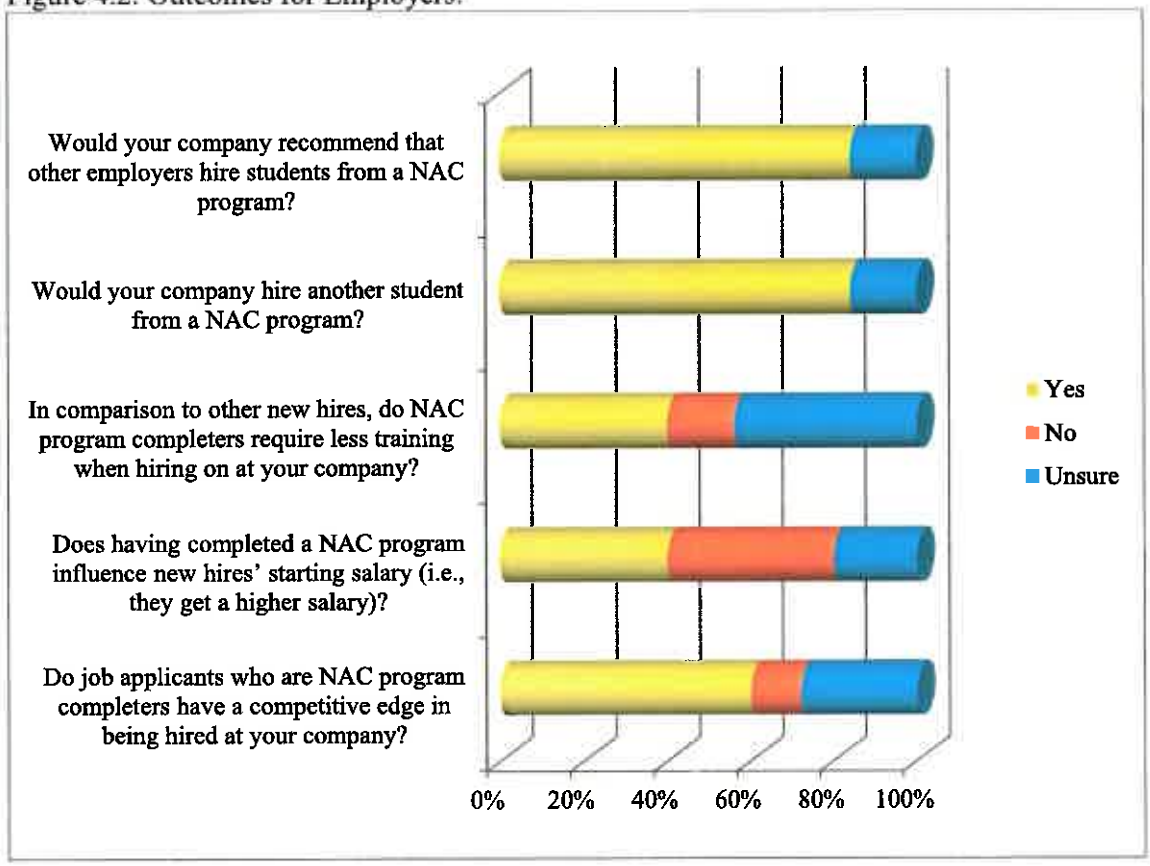


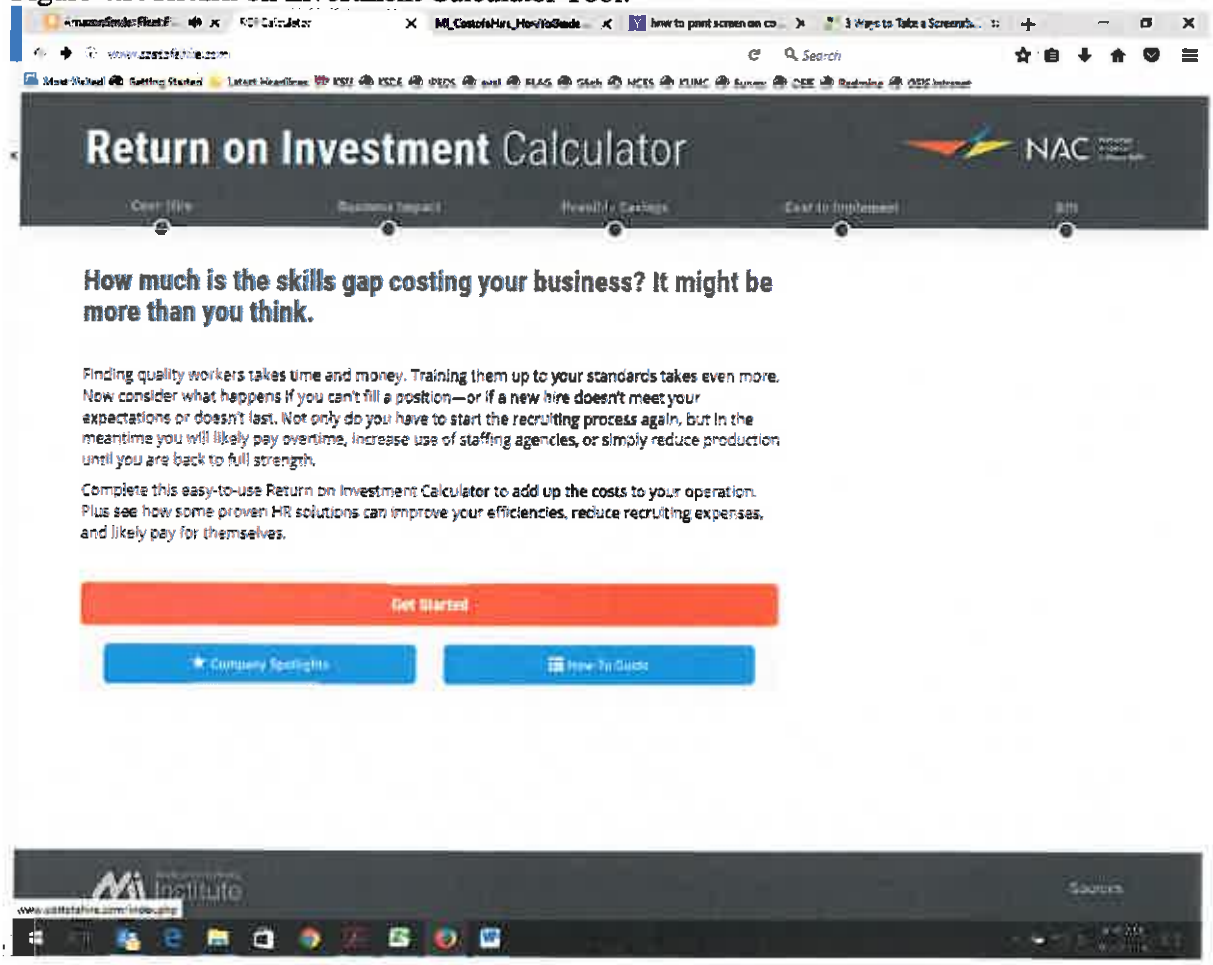
Figure 4.2. Outcomes for Employers.



While sites experienced both successes and challenges, all five states have been able to move forward in their implementation. A major accomplishment was the development of a return on investment (ROI) calculator, available online at http://www.costofahire.com/.

This tool was developed for educators and employers as a way to look at the various steps and costs involved in hiring and training personnel in advanced manufacturing.

Figure 4.3. Return on Investment Calculator Tool.



Edmonds Community College/Washington Aerospace Training & Research Center (EdCC/WATR) Results

The first evaluation question asks **1) To what extent have the stated program goals and objectives been accomplished?** In response, the following table summarizes the implementation status of NAC programs at EdCC/WATR compared to what was proposed for this partner college in the NAC application.

EdCC/WATR implemented six NAC programs. Four programs were already in existence at EdCC prior to the grant, and two additional programs were implemented for the TAACCCT grant, those being Quality Assurance and Tooling. EdCC also originally proposed implementing a seventh program (CNC), but ultimately they did not due to lack of industry need in the area.

National Aviation Consortium Program Status for EdCC/WATR			
Program	Existing Prior to Grant	Planned Timeline for Implementation	Status
Core Skills	X	Existing Program	Implemented
Assembly Mechanic	X	Existing Program	Implemented
Electrical Assembler	X	Existing Program	Implemented
Composite Repair	X	Existing Program	Implemented
Quality Assurance	X	Pilot	Implemented
Tooling	X	June 2012	Implemented
CNC	--	Fall 2012	No Industry Need

Participant Description

Achievement of program goals and objectives also can be measured through meeting proposed counts of participant outcomes (i.e., DOL metrics) and student population characteristics (e.g., TAA eligible, Veterans). The table below presents EdCC/WATR's counts of students for each of the outcomes, and the next page presents a one-page infographic highlighting key DOL performance metrics, including academic and employment outcomes, and demographic information.

DOL Metrics for EdCC/WATR	Count
Unique Participants Served	832
Participants who have Completed a TAACCCT-Funded Program	732
Participants Still Retained in Their Program of Study or Another TAACCCT-Funded Program	8
Participants Completing Credit Hours	823
Participants Earning Credentials	770
Participants Enrolled in Further Education After Grant-Funded Program of Study Completion	23
Participants Employed After Grant-Funded Program of Study Completion	88
Participants Retained in Employment After Program of Study Completion.	34
Participants Employed at Enrollment who Receive a Wage Increase Post-Enrollment	144

Department of Labor (DOL) Trade Adjustment Assistance Community College and Career Training (TAACCCT)

The project aims to increase the education and skill attainment of TAA-eligible, veterans, and other dislocated workers for employment in the aviation industry. Industry credentials are attained in a short period of time, and recipients enter the job market ready to work.

Edmonds Community College

Demographic Snapshot

NAC National Aviation Consortium

832 Students served

Gender Distribution

Washington Aerospace Training & Research Center

Incumbent Workers served 223

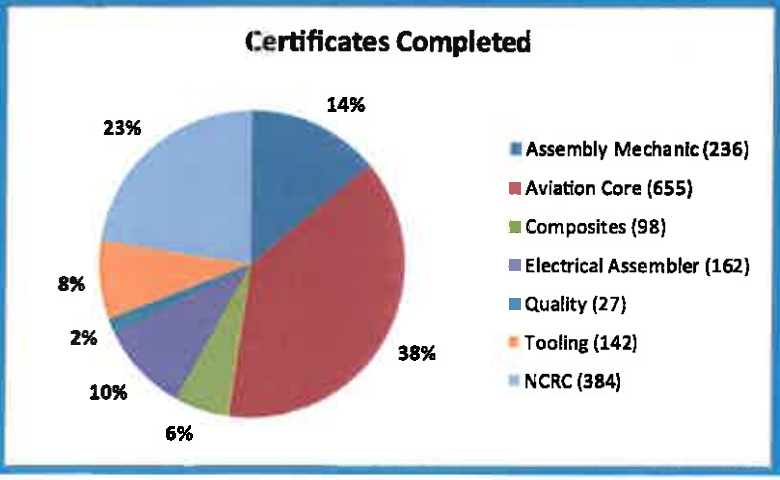
14 TAA served

Average Age 31

65 Veterans served

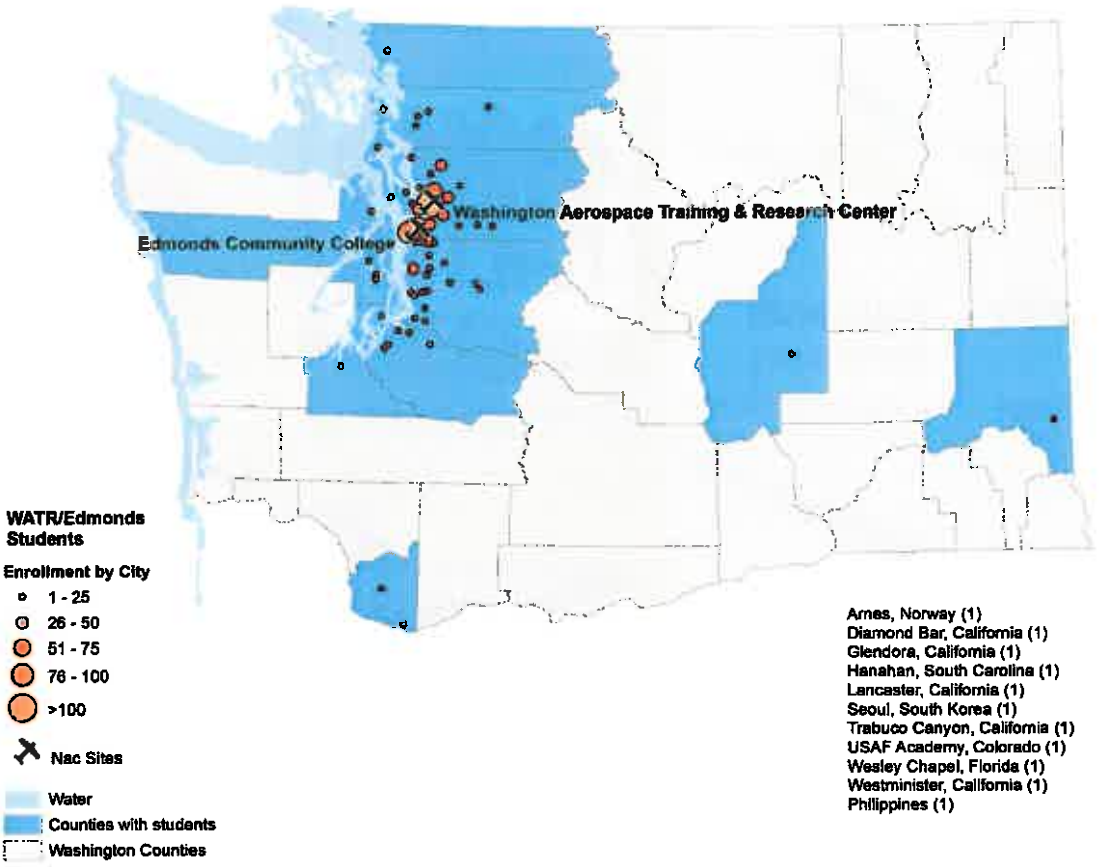
350 Students Employed

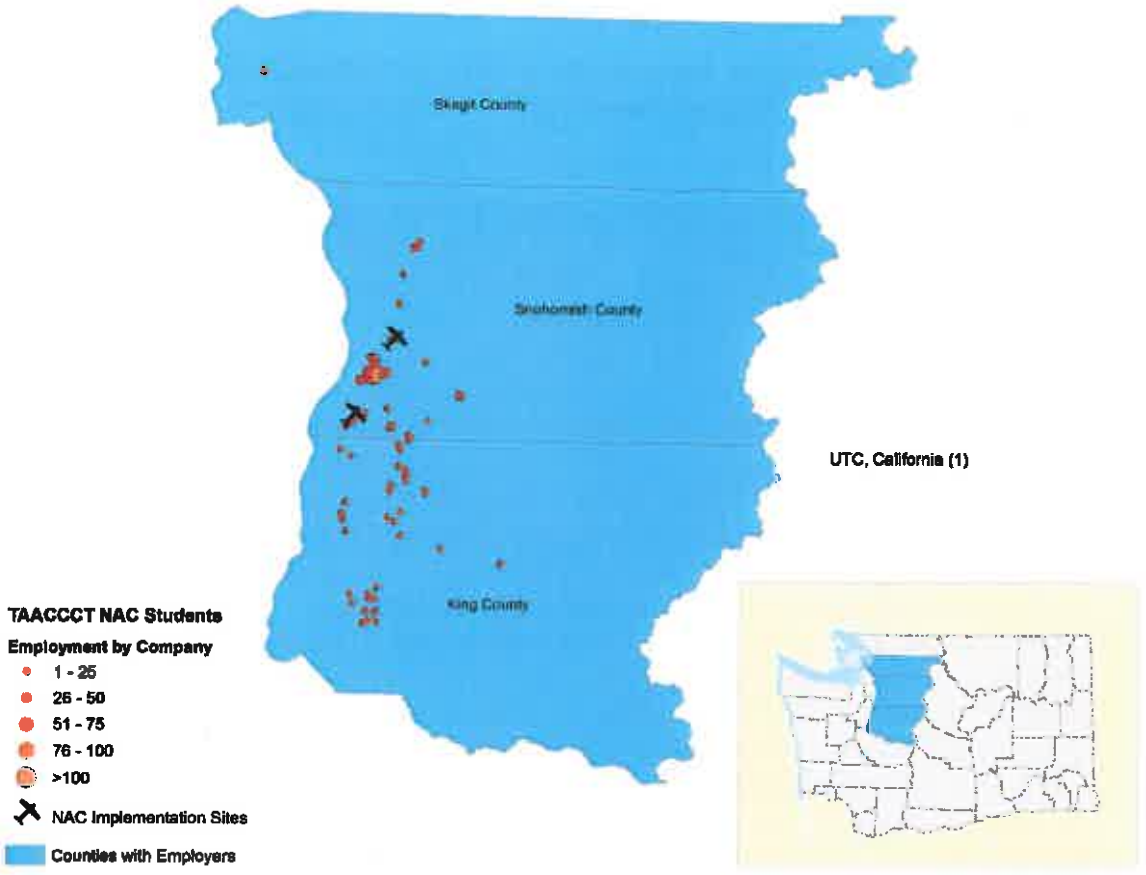
Program Completion Snapshot



$4.15 Average Wage Increase

oeie Office of Educational Innovation and Evaluation

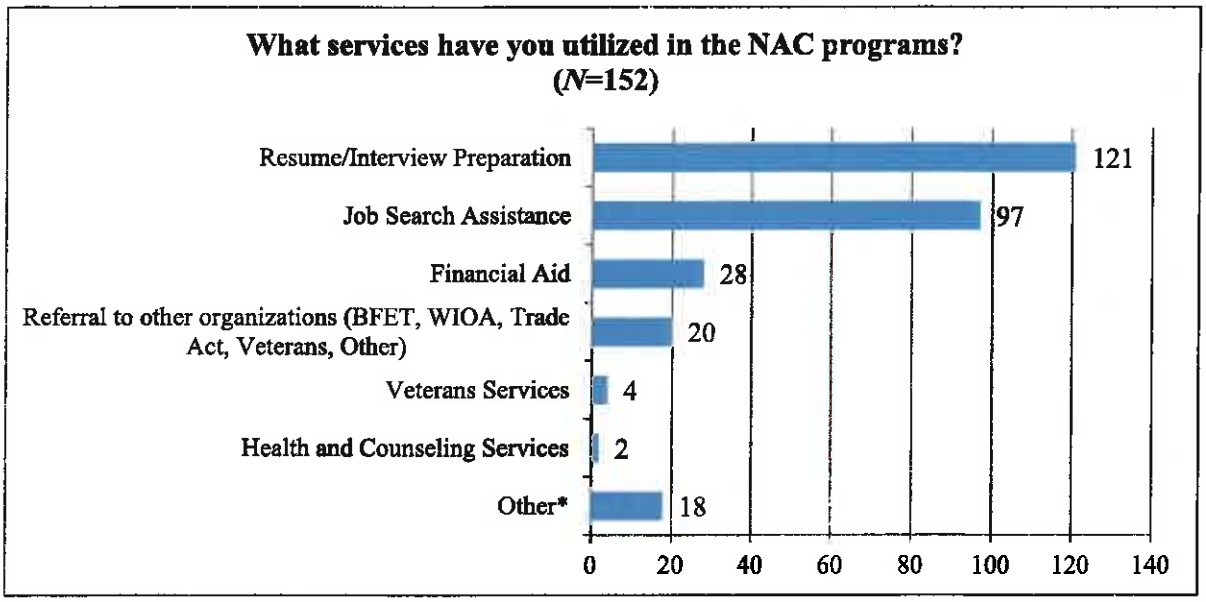

Washington Aerospace Training & Research Center
Edmonds Community College
WATR/Edmonds Students
Enrollment by City
1 - 25
26 - 50
51 - 75
76 - 100
>100
Nac Sites
Water
Counties with students
Washington Counties
Ames, Norway (1)
Diamond Bar, California (1)
Glendora, California (1)
Hanahan, South Carolina (1)
Lancaster, California (1)
Seoul, South Korea (1)
Trabuco Canyon, California (1)
USAF Academy, Colorado (1)
Wesley Chapel, Florida (1)
Westminister, California (1)
Philippines (1)


Skagit County
Snohomish County
King County
UTC, California (1)
TAACCCT NAC Students
Employment by Company
1 - 25
26 - 50
51 - 75
76 - 100
>100
NAC Implementation Sites
Counties with Employers

Student Feedback

The evaluation team administered an online survey to EdCC/WATR students to collect feedback on their experiences, including program impact, interactions with employers, and use of student services. Highlights include:

- Though most respondents indicated they were either not employed in their field of study (n=30, 44.8%) or not currently employed (n=20, 29.9%), they did report that the Aerospace Manufacturing program at the WATR Center prepared them 'Moderately Well' to 'Very Well' for their current careers.
- Overall, respondents are satisfied with the NAC programs and 'Agree' or 'Strongly Agree' that the program is worth their time, is interesting, and provides a clear route to a technical certificate, and that they would recommend the program to others. As well, respondents indicate they took an active role in their own learning, the assignments allowed them to demonstrate what they learned in the program, and that the academic and technical components of the program were well integrated in the classroom.
- Respondents reported that the most enjoyable aspects of the program are the hands-on components of the courses, the curriculum, and the instructors.
- Most respondents said that as a result of participating in the Aerospace Manufacturing program, they felt confident to apply for a job in their field (n=49, 80.3%), applied for a position in their field (n=45, 73.8%), increased confidence in the workplace (n=33, 54.1%), and felt prepared to work in their field (n=41, 67.2%).
- In Year 3, students reported that, of the student services related to the NAC program available to students, the most often used include resume and interview preparation (n=121, 79.6%), job search assistance (n=97, 63.8%), and financial aid (n=28, 18.4%). Generally, student services are utilized on a daily, weekly, or monthly basis.



Note. Other responses include Division of Vocational Rehabilitations; DVR; job fairs (2); job search information from my instructor; Kelly Services will help you find a job in your field to that is how I found my job where I work now. It is a temp to hire. I was the only one during the testing to complete the task at hand in our; loan money for it; morale support!; n/a (2); none; none yet; qttp, Boeing; schooling; still trying to make appointments for resume help; Vocational Rehabilitations; WA St. L&I.

SGA Implementation Questions

On April 20, 2016, OEIE conducted an interview with EdCC/WATR TAACCCT staff to gain their answers to the implementation questions that were included in the SGA. A summary of EdCC/WATR's responses are below.

1) How was the curriculum selected, used, or created?

Prior to receiving funding for the TAACCCT program, EdCC/WATR had developed a successful training model based upon industry needs and the 180 Skills curriculum that was used as the model for the consortium. This curriculum was the foundation for the program, with new courses added to further meet local industry need.

With TAACCCT program funds, EdCC/WATR began its Composites program. Grant funding allowed the Center to build lab facilities and purchase supplies necessary for providing Composites instruction. Local industry needs drive program design and flexibility in courses. EdCC/WATR is able to accommodate businesses with this flexibility in program design, ultimately building a strong reputation for the program.

The curriculum was delivered through both face-to-face and online instruction methods. The first class trained 20 students in three months. Online instruction was integrated into the curriculum from the beginning. Online coursework replaced lectures, and students received hands-on lab training following the online content.

2) How were programs and program design improved or expanded using grant funds?

- **What delivery methods were offered?**
- **What was the program administrative structure?**
- **What support services and other services were offered?**

EdCC/WATR's TAACCCT programs were delivered through online coursework paired with hands-on lab instruction. The online 180 Skills curriculum replaced lecture time. Most courses were offered in two shifts, based upon the scheduling needs of incumbent workers. Most day classes started at 7 a.m. and ran to 3 p.m., with an evening shift that ran from 3 p.m. to 11 p.m. The tooling course shifts started at 5:30 a.m. and 1:30 p.m.

All courses were 12 weeks in duration, with approximately three to four weeks at the beginning for online instruction. The remainder of the course was then spent in the lab completing different projects depending on the particular course. The course structure remained consistent to what was done prior to the start of the grant.

Grant staff initiated contact with prospective students through email, phone, and drop-in inquiries, a noted improvement from the previous email only communication. The TAACCCT program expanded student support at EdCC/WATR through hiring Retention Specialists (RSs). This staff position was dedicated to improving student services including student intake processes and the new program orientation, then following up with registration personnel and instructors. The RSs gathered feedback from students, supported their needs, and prepared them for job interviews. In addition, the RSs tracked student job placement upon program completion.

Support and other services offered to students focused on transition to the workforce. Students were provided assistance on how to use employer staffing websites, which included setting up their profile, downloading certificates, and attaching their resume. Through the TAACCCT program, students were provided with mock interviews, resume-building, job search support, and feedback on timing the job search and applying to multiple companies. Instructors built in face-to-face resume building in each course and, during times when labs were slow, had grant staff touch base with students on the importance of resume writing and mock interviewing.

EdCC/WATR grant staff provided referrals to students who needed food assistance, which then gave those students access to additional financial resources through the Workforce office. Additionally, veteran status students received financial aid through Basic Food and Employment Training (BFET).

3) Did the grantees conduct an in-depth assessment of participant's abilities, skills and interests to select participants into the grant program?

- **What assessment tools and process were used?**
- **Who conducted the assessment?**
- **How were the assessment results used?**
- **Were the assessment results useful in determining the appropriate program and course sequence for participants?**
- **Was career guidance provided and if so, through what methods?**

All students also took the Core to assess strengths and weaknesses in math, reading, and locating information. Assessment of student's abilities, skills, and interests was done with the National Career Readiness Certificate (NCRC) test. All students who signed up for the program took this test free of charge. The assessment was conducted by one of three staff members trained as proctors for the NCRC exam. The results of the exam were used to determine the appropriate program and course sequence for the student. The Prior Learning Assessment was deemed as not a good fit for assessing students for placement at WATR Center due to the focus on foundational learning at the entry-level.

The RS was responsible for providing students with career guidance. This guidance was delivered through mock interviews, resume-building, job search support, and assistance for students on how to use employers' staffing websites. The program focused on constant improvement of career services through utilizing feedback from both students and employers.

4) What contributions did each of the partners (employers, workforce system, other training providers and educators, philanthropic organizations, and others as applicable) make in terms of: a) program design, b) curriculum development, c) recruitment, d) training, e) placement, f) program management, g) leveraging of resources, and h) commitment to program sustainability.

- **What factors contributed to partners' involvement or lack of involvement in the program?**
- **Which contributions from partners were most critical to the success of the grant program?**
- **Which contributions from partners had less of an impact?**

Employers are the foundation of program design. The program had an advisory board, representing 20-30 aerospace companies, who reviewed the curriculum and offered feedback on changes within the industry.

During the development of the curriculum, monthly meetings were held with company recruiters who provided feedback that allowed instructors to add more detailed instruction on specific tools and safety issues. Feedback from program graduates also allowed instructors to refine training.

Several partners assisted with recruitment of students into the program. Veterans were recruited into the program through word-of-mouth and a good relationship with BFET. Referrals were received from the workforce system, Washington State Department of Labor and Industries (L&I), and the Washington State Department of Social and Health Services Division of Vocational Rehabilitation (DVR). EdCC/WATR had a partnership with the North Shore School District to recruit high school students, and the high school level Sno-Isle Tech Center referred its graduates. Although these students were not counted as participants in the NAC program while they were in high school, they represent an important part of the pipeline for ongoing programming.

Partners assisted with placing students. Relationships were developed with industry recruiters, who, once a month, meet with project staff to get feedback, both positive and negative about program graduates who had been hired. This feedback was used to improve the program so that

future graduates will better meet industry needs. Because EdCC/WATR understands both student and industry needs, they were able to provide feedback to industry on improving parts of the hiring process. Program graduates also often provided information on the types of questions asked in the interview setting, allowing EdCC/WATR to improve the mock interview process and student preparation. Student feedback also allowed the instructor to utilize industry terminology and visuals in sessions regarding tools and safety.

EdCC/WATR was responsible for program management without contributions from other partners.

Program resources were leveraged from several partners. The State of Washington provided discretionary funds for student tuition, building renovation, and equipment. Additionally, Boeing donated $2.5 million worth of equipment and supplies. The Workforce Development Council of Seattle – King County and Workforce Snohomish also provided discretionary funds to train several cohorts (groups of ten) students. Contributions from the Workforce system were facilitated by the Aerospace Futures Alliance, representing 1,300 aerospace companies, who served as a key advocate for legislative funding.

Student financial assistance was also leveraged through the United Way, who provided $100,000 in tuition assistance for students eligible for BFET, and through Rotary Club scholarships. The leveraging of available scholarship resources to support program participation was reported to improve students' lives. For example, one student "lived on his brother's couch. He rode his bicycle, went to high school, worked at Jack in the Box, and went through soft skills center, and as soon as he graduated from high school, the next week he was in our assembly class." That student is now working as lead, inspecting work of other EdCC/WATR graduates going through the company's orientation training. The project also leveraged visibility of the community college system among industry partners to advance leveraging of resources.

Regarding a commitment to sustainability, the flexibility of the program and ability to make changes as suggested by industry feedback has created a positive reputation that will support future programs. The ability to meet industry workforce needs ensures industry commitment to EdCC/WATR's success.

Employer observation and improved retention were important factors contributing to partner involvement in the program. Boeing sent a trial group of new hires to the EdCC/WATR training program and found that EdCC/WATR graduates were three to four weeks ahead of other company trainees and had received additional types of training that Boeing found useful. Employee retention also improved with this experimental cohort. After this experience, Boeing then began actively providing feedback on curricular changes to better qualify students for particular job codes.

Several partner contributions were noted as most critical to the program's success. Feedback from advisory committee members, company recruiters, and program graduates provided multiple, ongoing opportunities to improve lab instruction and placement preparation. The creation of a pipeline from high school to industry allowed students to do their core work in high school, the 180 skills component when they moved to EdCC/WATR, and then receive support

and advising when applying for jobs within industry. Staffing companies in the industry are requiring job applicants to come to EdCC/WATR for training and NCRC testing and, finally, employers who are committed to interviewing and hiring students.

The partner contribution that had less of an impact on the program was noted as lack of student scholarships. The United Way scholarships were wonderful for students who met the narrow qualification for food assistance, but it would have been more helpful to widen the scholarship requirements in order to reach a broader base of students. In addition, there was initial resistance from smaller companies in the region. Through word of mouth, these companies realized that the skills being taught at EdCC/WATR were transferrable to many different types of companies in the aerospace field. This opened up opportunities to work with a wide variety of companies.

Additional Evaluation Questions

In addition to the questions from the SGA, the evaluation also addressed other specific questions related to the design, progress, and outcomes of the program. Data have been collected throughout the life of the project to address the formative aspects of these questions. During the fourth year of the grant, OEIE conducted the final data collections with students, faculty, college administrators, local employers, and project staff to capture the summative feedback on the program. These responses have been synthesized to address the evaluation questions listed below.

2) Which components of the program are most influential on the curriculum, national credential development, and overall project implementation? What measurable evidence demonstrates that these components are effective?

- National-level resources have been helpful.
    - The national team did a great job making connections between colleges so they could learn from each other, answer questions, and get on the same page. These relationships have helped with implementation by sharing successful strategies/best practices across sites.
    - The national team remains in touch and are very responsive in providing guidance/support.
    - Apricot offered a central place to track key student data, including interactions and resumes.
    - The Manufacturing Institute assisted with visibility of NAC at a national level, providing a voice in Washington, D.C. This was valuable for increasing federal officials' understanding of the importance of aerospace and manufacturing and keeping people caring about these issues.
    - 180 Skills has been very responsive in updating curriculum and testing content, as requested.
    - OEIE offered an impartial avenue to share opinions, to assist with working through challenges.

- The grant allowed EdCC/WATR to expand employer partnerships.
    - Over 100 employers have hired EdCC/WATR graduates; 30-40 employers partnered after NAC started.
    - Both RSs came from a workforce background, and they reached out to their contacts to expand partnerships for NAC. Ownership has relaxed over who contacts employers; it is a team effort.
    - EdCC/WATR built more visibility beyond Boeing. Employers see that EdCC/WATR provides needed training, and produces workers with technical and soft skills who are easier to onboard, saving money.
    - Some employers provide input on needed skills, guarantee interviews to EdCC/WATR graduates, only accept applications from EdCC/WATR graduates, and donate equipment/supplies.
    - EdCC/WATR has stronger relationships with organizations focused on women, Hispanics, and veterans.
- The RSs have been key to students' success in completing the program and gaining employment.
    - RSs provide wrap-around services, including in-person orientations, resume preparation, mock interviews, support with the job application process, and one-on-one problem-solving consultations.
    - Students learn to better articulate their EdCC/WATR-related skills and experience in interviews.
    - Increased contact with students keeps them motivated and aware of next steps, so they do not feel alone, helping with retention, employability, and placement.
    - RSs provide another point of contact for students, including follow-up/tracking efforts. RSs take pressure off instructors/facilitators, so they can focus on teaching and providing encouragement/support in the classroom. Instructors and RSs work together, communicating about student-related issues and identifying solutions.
    - One student commented that the support received from the RS was helpful, "I cannot leave out the great Sam Samano. She really helped me get my resume together and work on my interviewing skills." Another student offered, "...the resume Sam did for me was, by itself, nearly worth the entire tuition. I have a long and varied resume and nobody else was helpful [previously]." Faculty concur that the RS position has been instrumental in student success, "The addition of the Retention Specialist on site" is an aspect of the NAC that has been most successful.
- The grant prompted EdCC/WATR to strengthen student policies/guidelines to better prepare students for employment, thus meeting employer needs.
    - Programs/classes model a real job, with instructors as supervisors. They are stricter on attendance and behavior, and they have students sign a new disciplinary action policy. They focus on global professional standards and student expectations.
    - Students are better prepared for the job market. They are ready to look for work, hit the ground running, adapt to the job, be safe on the job, and move up more quickly into higher positions.

- EdCC/WATR helps employers get skilled, qualified, prepared applicants. Employers have broader access to the right candidates, and they gravitate toward EdCC/WATR graduates.
- Faculty report assisting with the placement of NAC students into the local workforce by assisting with mock interviews and resume development, as well as providing advice regarding certificate and credentials as they apply to specific positions. One faculty member shared, "on graduation day, we (our organization's staff) facilitate meetings with graduates and managers from local industry."

3) What challenges were encountered during the program's implementation and how were they addressed?

- Some challenges exist at the national level, related to operating as a consortium.
  - Due to differences at NAC partner colleges, they each operate NAC differently, making them not directly comparable. Some differences include class structure, amount of emphasis placed on the online portion, and how staff input data into Apricot.
  - Partner colleges are spread out geographically, making face-to-face collaboration a challenge. The grant provided some opportunities to gather in person, like through Peer-to-Peer Meetings, but it would have been helpful to have more time together during the initial set-up process.
  - Not many grant processes were in place at the beginning, and learning all the grant requirements and processes was difficult (e.g., using Apricot). Further, grant requirements changed over time (e.g., documentation requirements), so they were moving targets.
  - The national credential did not work out as expected. Following the technical certificate, students are required to take an additional test and pay an additional $400 fee to gain the national credential, instead of automatically receiving it after completing the training at EdCC/WATR, even though the tests contain the same questions. It was expected that the certificate would be recognized as the achievement, with student completers receiving the national certificate.
  - There was no funding for students, and there were challenges locating funding for some students. Some funding is limited because students have to fit into certain categories (e.g., qualify for food assistance). Several students identified funding as an issue. One indicated the feeling of disappointment, "I feel like I wasted $4,800 in tuition." Another suggested, "I think this should be a state-funded option for high schoolers! This would greatly boost the workforce and economy!"
  - Articulations between partner colleges were not established.
- Some challenges were internal to EdCC/WATR.
  - Early grant staff turnover created some difficulties. It is always a challenge to attract quality people to temporary grant positions and retain them through the course of the grant. Grants need people who can talk about the grant, but also take action. Once EdCC/WATR found the correct people to lead, the grant was much more successful.
  - EdCC/WATR's alliance with Boeing is a double-edged sword. Smaller companies do not automatically recognize that the training could apply to their

company, so EdCC/WATR has begun bringing them in to the center to show them what the training entails. Also, students frequently have a "Boeing mentality" when seeking a job; they think they will be making a lot more money than they are offered for their first position. It is important to communicate to students that they will not necessarily start out making what they would at Boeing, to avoid having students walk into employment feeling let down. They need to learn that Boeing does not have to be their future; there are plenty of other companies that support Boeing that are phenomenal.

- Initially, there were challenges gaining current staff's acceptance of the new RS positions. There was resistance to the RSs' role of working with students because it seemed to compete with and change the ownership that instructors felt over student interactions. This situation would have benefited from better communication at the outset, to assist in gaining current employees' buy-in for the grant and for the RS role specifically.

4) To what extent will the program components be sustained?

- Almost everything that has been happening under the grant will continue when the grant ends because these components have a proven track record of helping students.
  - The RS positions will be retained, and they will continue to offer the same services, such as orientations and resume/interview preparation.
  - Partnerships with industry will continue growing and maturing. Current relationships will be maintained, and new relationships will be pursued. Employers will remain committed as long as EdCC/WATR continues producing quality hires.
  - The programs will be continued, and the facilitators will be retained.
  - Use of 180 Skills curriculum will continue, although costs may have to be passed to the student.
- Exceptions that will not continue "as is" relate to DOL data collection requirements, including:
  - Collection of student paperwork for documentation purposes – This paperwork will no longer be requested.
  - Personal quarterly follow up with students after they exit to track placement - Follow up will continue, but maybe not quarterly, and it may be conducted through a group email blast.
- The college is looking for additional funding methods to continue the components the grant afforded (e.g., RS, tools, equipment, curriculum).
- EdCC/WATR staff recognize the importance of educating the community that the programs are not specific to Boeing, which should expand partnerships and encourage enrollments.
- Employers expressed a desire for the programs to continue because EdCC/WATR is equipping students with short-term training certificates and needed technical and soft skills. The center was praised for holding students accountable and mimicking a real work environment.
- There is a hope that EdCC/WATR will be able to stay in touch with the other four NAC colleges, so they can hear about changes being made and stay aware of similarities and

differences. However, there is a concern related to being able to continue these opportunities when NAC grant funds are gone.

EdCC/WATR Lessons Learned

The final data collections also collected some lessons learned by EdCC/WATR's team, based on the successes and challenges faced during the program as well as effective practices that have been put in place. EdCC/WATR shared the following lessons learned:

- Working as a consortium was a great idea because it allowed working on the skills gap at a national level and leveraging key employers to get a flavor of what is happening across the country. Another step would be to take the consortium to a global level, to have a global presence and recruit global employers. The key is to serve as many employers as possible, within the U.S. and beyond.
- The model developed at EdCC/WATR does not work in all markets. The other four NAC colleges implemented the program using different models, based on challenges experienced and what worked best in their local areas to meet employer needs. For example, some did not utilize the online portion to it full capability, and some offered different certificates.
- Working on a national grant with multiple partners requires flexibility and adaptability. Sometimes there were moving targets as implementation unfolded, because the team was "building it as we go". In such circumstances, it is important to accept that change is okay and not let it lead to frustration.
- Marketing the program is very important for gaining employer partnerships and student enrollments, so having money for marketing is essential. More should be done on the front end (i.e., big advertising campaign) to kick off the grant and gain more leverage and visibility. This campaign could highlight the grant as an elite opportunity, assist in fixing stigma about the aerospace industry, and get people interested in the field.
- Always keep focused on helping students because they are why the grant exists. Having money for student tuition would have been beneficial.
- Having two RSs was important. The grant focused on getting students employment, and that is too big of a role for one person. It helped that the two RSs had complementary styles and that they were up front and honest with their feedback to students.
- Communication between grant staff (RSs), instructors, and students is very helpful when trying to work through student issues and prepare them for employment. Establishing a partnership that acknowledges the value of each staff person's role, rather than struggling with overlapping roles (i.e., ownership), will allow team members to share with/learn from each other and better contribute to student success.
- A conscious decision was made not to award PLA credit, for business and safety reasons. Given that it is a short-term entry-level program, EdCC/WATR wanted everyone to get an introduction to new terminology and gain a refresher on the content, rather than allow people to test out. This way, everyone is sure to gain the foundational knowledge that has been identified by employers as important.

Guilford Tech Community College (GTCC) Results

The first evaluation question asks **1) To what extent have the stated program goals and objectives been accomplished?** In response, the following table summarizes the implementation status of NAC programs at GTCC compared to what was proposed for this partner college in the NAC application.

GTCC implemented three NAC programs, including the Core Skills, Assembly Mechanic, and Electrical Assembler. This site had originally proposed implementing the Composite Repair program instead of the Electrical Assembler, but plans changed based on industry needs.

National Aviation Consortium Program Status for GTCC			
Program	Existing Prior to Grant	Planned Timeline for Implementation	Status
Core Skills	--	Yr 1	Implemented
Assembly Mechanic	--	Yr 1	Implemented
Electrical Assembler	--	--	Implemented
Composite Repair	--	Yr 2	No Industry Need
Quality Assurance	--	--	--
Tooling	--	--	--
CNC	--	--	--

Participant Description

Achievement of program goals and objectives also can be measured through meeting proposed counts of participant outcomes (i.e., DOL metrics) and student population characteristics (e.g., TAA eligible, Veterans). The table below presents GTCC's counts of students for each of the outcomes, and the next page presents a one-page infographic highlighting key DOL performance metrics, including academic and employment outcomes, and demographic information.

DOL Metrics for GTCC	Count
Unique Participants Served	529
Participants who have Completed a TAACCCT-Funded Program	330
Participants Still Retained in Their Program of Study or Another TAACCCT-Funded Program	4
Participants Completing Credit Hours	0
Participants Earning Credentials	425
Participants Enrolled in Further Education After Grant-Funded Program of Study Completion	19
Participants Employed After Grant-Funded Program of Study Completion	79
Participants Retained in Employment After Program of Study Completion.	63
Participants Employed at Enrollment who Receive a Wage Increase Post-Enrollment	85

Department of Labor (DOL) Trade Adjustment Assistance Community College and Career Training (TAACCCT)

The project aims to increase the education and skill attainment of TAA-eligible, veterans, and other dislocated workers for employment in the aviation industry. Industry credentials are attained in a short period of time, and recipients enter the job market ready to work.

Guilford Technical Community College
Demographic Snapshot

NAC National Aviation Consortium

529
Students served

Gender Distribution

Average Age
36

Incumbent Workers served
108

0
TAA served

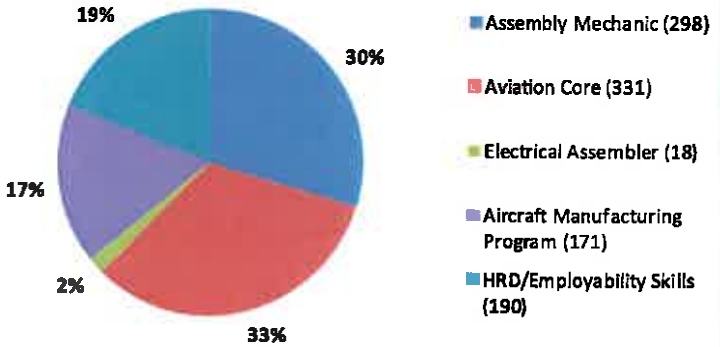
61
Veterans served

218
Students Employed

$5.41
Average Wage Increase

Program Completion Snapshot

Certificates Completed



Industry Certificates

12 MSSC - Quality Practices and Measurement
16 MSSC - Safety
13 NCRC

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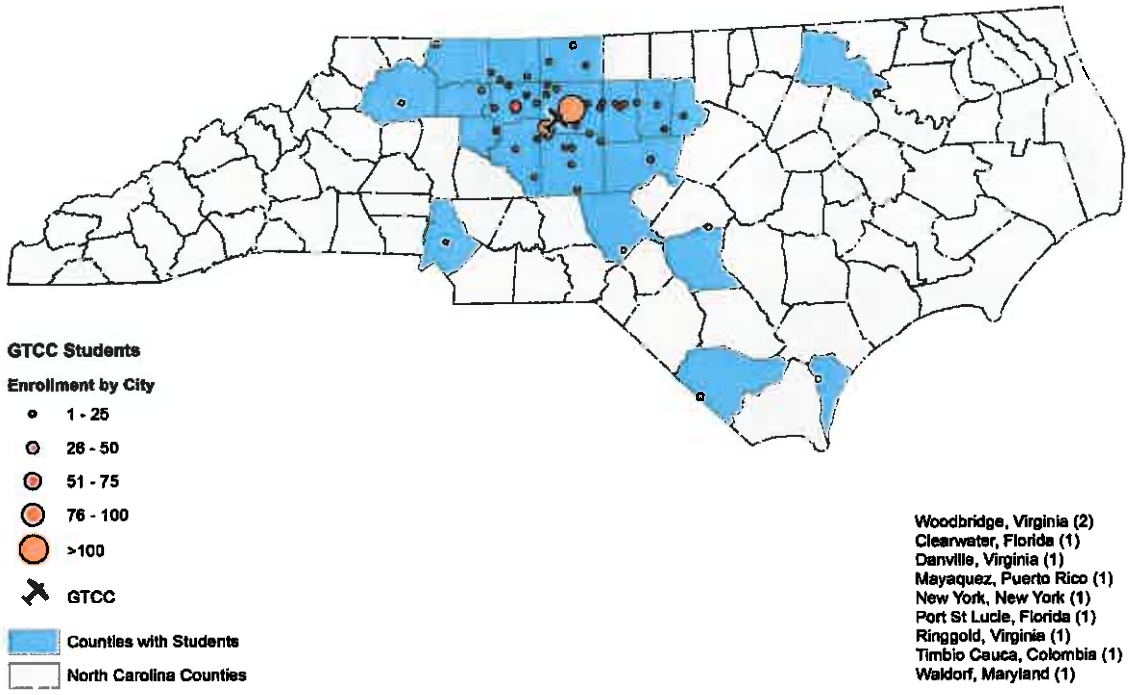
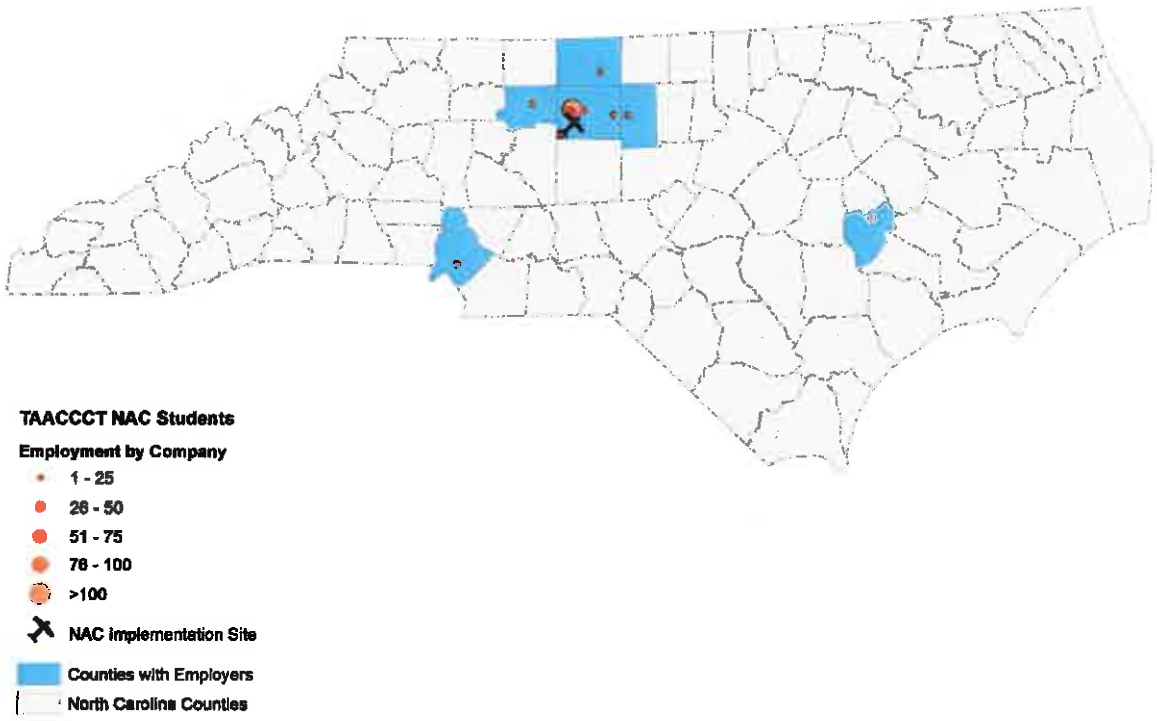
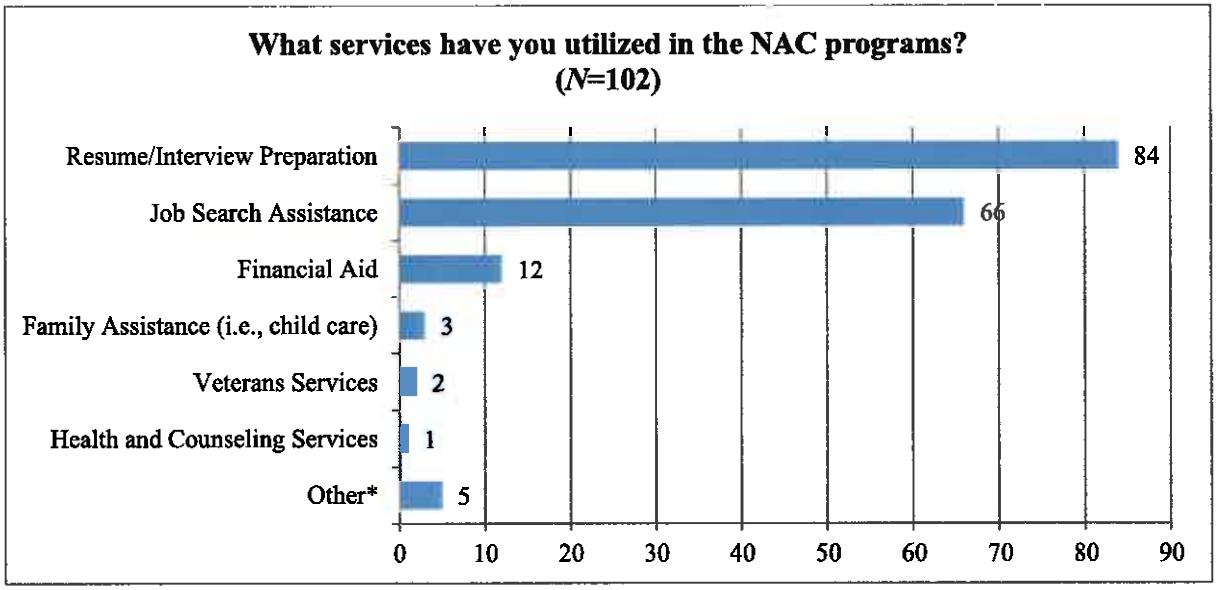

GTCC Students
Enrollment by City
1 - 25
26 - 50
51 - 75
76 - 100
>100
GTCC
Counties with Students
North Carolina Counties
Woodbridge, Virginia (2)
Clearwater, Florida (1)
Danville, Virginia (1)
Mayaquez, Puerto Rico (1)
New York, New York (1)
Port St Lucie, Florida (1)
Ringgold, Virginia (1)
Timbio Cauca, Colombia (1)
Waldorf, Maryland (1)


TAACCCT NAC Students
Employment by Company
1 - 25
26 - 50
51 - 75
76 - 100
>100
NAC implementation Site
Counties with Employers
North Carolina Counties

Student Feedback

The evaluation team administered an online survey to GTCC students to collect feedback on their experiences, including program impact, interactions with employers, and use of student services. Highlights include:

- Though most respondents indicated they were either not employed in their field of study (*n*=15, 40.5%) or not currently employed (*n*=12, 32.4%), they did report that the NAC Aviation program at GTCC prepared them 'Moderately Well' to 'Very Well' for their current careers.
- Overall, respondents are satisfied with the NAC Aviation programs and 'Agree' or 'Strongly Agree' that the program is worth their time, is interesting, provides a clear route to a technical certificate, and that they would recommend the program to others. As well, respondents indicate they took an active role in their own learning, the assignments allowed them to demonstrate what they learned in the program, and that the academic and technical components of the program were well integrated in the classroom.
- Respondents reported that the most enjoyable aspects of the program are the course content and design, hands-on training and labs, and the relevance of the skills learned.
- Most respondents said that as a result of participating in the Aviation program, they felt confident to apply for a job in their field (*n*=21, 61.8%), applied for a position in their field (*n*=24, 70.6%), and felt prepared to work in the field of Aviation (*n*=21, 61.8%).
- In Year 3, students reported that, of the student services related to the NAC program available to students, the most often used include resume and interview preparation (*n*=84, 82.4%), job search assistance (*n*=66, 64.7%), and financial aid (*n*=12, 11.8%). One student explained that these services "helped me to organize my resume and hone my interview skills, which has increased my confidence and preparedness for interviews."



Note. Other responses include Access to Honda Aircraft Company; none (2); some government program paid for the class; Windows 7, Outlook and PowerPoint programs.

SGA Implementation Questions

On March 3, 2016, OEIE conducted an interview with GTCC TAACCCT staff to gain their answers to the implementation questions that were included in the SGA. A summary of GTCC's responses are below.

1) How was the curriculum selected, used, or created?

GTCC's curriculum was selected from one already produced by EdCC/WATR. GTCC provided enhancements to support local practice, business, and industry. GTCC modified the courses due to the different needs between EdCC/WATR and GTCC as well as their local industry. GTCC was able to reduce costs by reproducing materials. The curriculum, drawings, class list, revision order instructions, and labs were produced on site for students specifically to enhance transitions to the workforce. The curriculum was used in 14 day and five night classes with approximately 20 different cohorts of students.

2) How were programs and program design improved or expanded using grant funds?

- **What delivery methods were offered?**
- **What was the program administrative structure?**
- **What support services and other services were offered?**

GTCC understood that the training program had to align with the local needs and practices of industry. Projects in the lab were designed to meet these needs of area employers, focusing on the materials, equipment, and processes commonly used. The program was delivered face-to-face in the lab in conjunction with the online portion, resulting in a cohesive bond between the two elements. Students were brought into the lab to reinforce the online learning.

GTCC's NAC project included three instructional staff members, with one serving as a lab technician to reinforce the larger courses, and two Retention Specialists (RSs) who assisted with student performance assessments and career counseling. RSs also provided career counseling through resume writing assistance, mock interviews, and referrals to other agencies as needed and before students graduated from the program.

3) Did the grantees conduct an in-depth assessment of participant's abilities, skills and interests to select participants into the grant program?

- **What assessment tools and process were used?**
- **Who conducted the assessment?**
- **How were the assessment results used?**
- **Were the assessment results useful in determining the appropriate program and course sequence for participants?**
- **Was career guidance provided and if so, through what methods?**

In conjunction with the Office of Workforce Development, GTCC provided assessment of participant abilities, skills, and interests prior to referral and participation in the NAC program. Assessments included the CRC assessment, Bennett Mechanical Comprehension Test, and the Computer Operator Aptitude Battery (COAB). If potential participants met benchmarks set by

workforce for these assessments, they were referred to the NAC training program. If they did not meet the benchmarks, they were offered developmental education to bring them up to that level so they would have the necessary foundational skills to be successful in the program.

4) What contributions did each of the partners (employers, workforce system, other training providers and educators, philanthropic organizations, and others as applicable) make in terms of: a) program design, b) curriculum development, c) recruitment, d) training, e) placement, f) program management, g) leveraging of resources, and h) commitment to program sustainability.

- **What factors contributed to partners' involvement or lack of involvement in the program?**
- **Which contributions from partners were most critical to the success of the grant program?**
- **Which contributions from partners had less of an impact?**

GTCC's NAC program design was initiated by employers and the recognition of a skills gap in the local workforce. Employers also contributed to the development of curriculum through providing insight and clarification into the level of training needed to ensure students were successful.

While the local workforce office initially assisted with recruitment, they did not provide the numbers of students needed. The Office of Workforce Development had existing standards and benchmarks for prospective recruits, making it difficult to find potential candidates that already met these predefined levels.

GTCC had faculty experienced with industry requirements, which allowed them the ability to conduct faculty training internally, making faculty aware of the level they needed to reach.

Employer partners and the Workforce Development Office assisted with placement of students into employment. GTCC gained buy-in with employers to hire GTCC graduates, and the Office of Workforce Development offered information to employers looking for trained workers. GTCC also hosted internal job fairs that included employers and workforce participation.

Although no partners were involved with program management, several provided leveraged resources for the NAC project. Two employers provided some specialty materials used in the industry, while workforce provided financial resources for students and made office space available to grant staff as needed.

As grant funding ends, GTCC has received letters of support from HAECO and Honda Jet regarding the need for the program and their existing need for skilled employees. Additionally, the workforce office continues to receive inquiries from potential students about the program and will continue to refer these individuals to GTCC.

Initially, lack of involvement was due to partners' not understanding the GTCC program. GTCC provided extensive outreach about the program to bring partners in and help them understand

what GTCC was doing. Once partners saw that GTCC was producing quality graduates that had the skillset they were looking for, they came on board.

Workforce had specific parameters that they had to work within as far as benchmarks. Workforce stringently imposed the benchmarks to ensure that students met the requirements before allowing them into the program. This created some difficulty in finding candidates for the program. Further, as the NAC project progressed, another similar training program was offered by GTCC, creating difficultly in prioritization of individuals into training programs. Again, due to the limited understanding of the GTCC NAC program, in some cases, students were directed to the other program instead of NAC.

Hiring graduates was the most critical contribution partners made to the success of the GTCC grant program. Employers accepted and recognized the quality of GTCC graduates. Students knew that there was an industry job, not just a certificate, at the end of the program.

GTCC scholarships and funding from the workforce office allowed a large number of students without financial means to complete the program.

All contributions by partners were impactful in some way, just some more so than others. As discussed previously, in an effort to fully meet community needs, GTCC offered two programs that were somewhat similar in design. While the college was providing multiple opportunities for participation, the internal competition between the two programs at GTCC may have constrained some of the impact that the NAC program could have had if it had been the only option available. The college also reported that employer engagement is achieved through dedicated, sustained efforts. GTCC hosted a number of employer and community events throughout the project. While it was important to meet employers at these events and make connections, ongoing support and follow through required additional interaction.

Additional Evaluation Questions

In addition to the questions from the SGA, the evaluation also addressed other specific questions related to the design, progress, and outcomes of the program. Data have been collected throughout the life of the project to address the formative aspects of these questions. During the fourth year of the grant, OEIE conducted the final data collections with students, faculty, college administrators, local employers, and project staff to capture the summative feedback on the program. These responses have been synthesized to address the evaluation questions listed below.

2) Which components of the program are most influential on the curriculum, national credential development, and overall project implementation? What measurable evidence demonstrates that these components are effective?

- Consortium resources and structure have been helpful to GTCC and industry.
    - The consortium provided information resources and shared best practices across members.

- Having similar training programs in other areas of the nation provides GTCC students options for employment outside of North Carolina.
- Faculty was able to visit existing programs to learn about set-up and implementation of NAC.
- Industry partners had the opportunity to meet other aviation companies across the country and better understand industry needs and challenges.
- The national team provided metrics that could be used locally for data-based decision making.
- GTCC's NAC program is scalable for creating training problems to address shortages in the skilled labor workforce. GTCC has implemented scalability with other training programs at GTCC.
- Everything, the NAC model of program design, staffing, and structure, was done as a catalyst for student success.
- 180 Skills allowed GTCC the ability to teach at an accelerated rate. Of this, a participant commented, "I liked the fast-track."

- The NAC programs are preparing students for employment.
  - Employers reported that NAC students are more willing to learn, have better morale, and are more motivated than others. Additionally, GTCC students are skilled and ready for entry-level positions, coming to industry without a need for retraining to correct bad habits.
  - Employers have an immediate need for employees. Upon program completion, students were given a plate assessment and interview and, if they passed, were quickly hired.
  - GTCC's relationships with external partners and the quality of graduates have been critical toward success and the hiring of NAC students.
  - GTCC's program allows students to develop skills and gain hands-on experience with the projects, providing them with expectations and standards for the course that prepare them for the workplace. Students agree, stating, "Hands-on learning in a well-organized atmosphere. Teachers and staff were excellent in preparing students for working in the aviation field."
  - Some NAC students started the program homeless or working on a GED. Completing NAC gave them the opportunity to earn a living wage through employment.
- GTCC offers student services that are responsive to NAC students' needs.
  - The PC and RSs played critical roles in helping students, including:
    - creating individual guidance plans and staying in constant contact with students to monitor progress
    - enhancing soft skills to prepare students for employment, by hosting interviewing and employability skills workshops through the HRD class, assisting with resume writing and conducting mock interviews
    - following up with students on program progression and placement upon completion
    - addressing student issues, identified by instructors, that could lead to failure, such as personal or family matters
    - networking with employers to promote NAC, resulting in student employment

- GTCC's foundation provided students with scholarship funds and partnered with the workforce development office to assist students with funding for transportation and childcare.
- Instructors interacted with students in labs, monitored grades, and conducted general assessments to identify any issues as soon as possible to reinforce learning or try other teaching techniques.
- Placing the NAC within Continuing Education as a fast-track program was beneficial to student success.

- GTCC is focused on assisting local industry with their needs.
  - GTCC gained local employers' input on knowledge/skills needed and current skills gaps for entry-level positions.
  - The NAC program has provided a broader recruiting pool for employment in local industry, allowing employers to better manage their flow of man power.
  - NAC students are better prepared for entry-level positions, reducing industry training costs and improving morale.
  - Hiring local candidates improves employee retention and strengthens the local community.
  - The NAC program's close relationship with employers, specifically Honda and HAECO, allowed them to close the skills gap quickly for local industry.

3) What challenges were encountered during the program's implementation and how were they addressed?

- Some challenges exist at the national level, related to operating as a consortium.
  - While the initial national team was a good resource for the project, the team had staff transition and new team members were disengaged with GTCC.
  - Information from the national team was not always readily available and was not always clear. Additionally, information came late that would have been more helpful to have earlier.
  - Working with the Apricot tracking system was difficult to use, and SharePoint did not work well for GTCC staff. An additional challenge was that the data requirements and documentation repeatedly changed in Apricot throughout the grant.
  - The lack of consistency in programs across NAC sites made it difficult to understand what other programs were offering and how they were implementing NAC.
  - GTCC and Lee Media had different perceptions of Facebook's purpose. Lee Media wanted to use Facebook for recruitment, while GTCC had been using and wanted to continue using Facebook for student recognition.
- Some challenges were internal to GTCC.
  - GTCC's structure was not conducive to PLA and articulation strategies.
    - The NAC training program was offered through continuing education rather than credit, so classes will not transfer to other institutions.
    - Administration was not interested to exploring options for incorporating Prior Learning Assessment.

- Initially, buy-in from management was missing as they were skeptical of the short-term training.
- GTCC's infrastructure was not ready when NAC was launched, and a key administrator came on board after the grant was already in place, causing the project to start late.
- Some instructors prepared students better than other instructors. Employers noticed a difference.
- GTCC's strict policy on attendance and tardiness resulted in many students' removal from the program regardless of the nature of the missed or late day (i.e., family death or emergency). One student commented on the attendance policy indicating, "I guess the only unexpected outcome would be the fact that I got my 3rd strike on project 7, and was removed from the program. I was under the impression that I could pick up where I left off from when the classes started back, but I was informed that the program has changed, and I would have to start over from the beginning…and not just the hands-on portion of the class."
- North Carolina changed how the workforce development board operated, causing a strained relationship. Their system was not forgiving and provided no exceptions for students (i.e., entry assessments and requirements were rigid limiting student access into the program).
- Some employers would have liked to see more hands-on projects in the lab. From a student perspective, the program may have focused on a single employer, as identified by this quote, "I did not expect so much single-employer focus during the program. If the employer didn't hire you, you were essentially adrift."

4) To what extent will the program components be sustained?

- The Assembly Mechanic training program will continue at GTCC, but with a new name (Aviation Manufacturing Quick Careers Program). In addition, GTCC is developing a composite component based upon the NAC model.
- Due to student success and word-of-mouth advertising, GTCC currently has two classes that are filled with students who are self-paid, allowing for retention of instructors.
- NAC programs brought in the same level of funding that credit programs would bring in, making the program sustainable for GTCC. The grant has made a million dollars in FTE.
- The workforce office will continue to sponsor students.
- Industry and employer partnerships will continue.
- The partnership with the Manufacturing Institute will be sustained, but under another initiative (Dream it, Do it).
- Many recognized the importance and need for the RS position, suggesting this position could be beneficial across all college programs. However, there is uncertainty if GTCC will be able to fund this position beyond the NAC grant.
- Typically, GTCC does not have someone recruiting students, though recruitment is essential to program sustainability.

GTCC Lessons Learned

The final data collections also collected some lessons learned by GTCC's team, based on the successes and challenges faced during the program as well as effective practices that have been put in place. GTCC shared the following lessons learned:

- Reaching out to employers earlier regarding their training needs can ensure the curriculum is tailored to their needs and can help get management and industry support, improving buy-in and implementation.
- Providing cooperative training with industry could provide students with experience in the real work environment and experience with hands-on projects.
- Determining staff skills earlier can ensure the right people are on the team who can engage students and understand the impact of training programs to employers.
- Working closely with industry to ensure that instructors are properly trained prior to instructors training students is important. Instructors must understand the impact of training on industry and ensure students have skills, not just knowledge.
- The college should implement an assessment for students' capabilities and skill sets prior to training students to ensure the program is a good fit for students.
- The RS position is critical for improving student retention. Having a one-on-one relationship can make a difference. There is a need for a staff position to continuously get information to workforce.
- Hiring grant staff early and administration offering full support of the program could allow for quicker implementation.
- Staffing needs to be a priority and needs support at the college administration level.
- Offering classes in a hybrid format can reach a broader audience. Flexible scheduling allows the underemployed to maintain jobs and take courses.
- Word-of-mouth, based upon student success and employment, is an effective form of advertising for both student recruitment and industry partnerships.
- Make sure that employer standards are clear in the beginning.
- The college needs to understand where the population is for any given program and have a core common message and people who understand program model.
- Success is due to the dedication of the people involved. Everyone's role was relevant to making it happen.

Ivy Tech Community College (Ivy Tech) Results

The first evaluation question asks **1) To what extent have the stated program goals and objectives been accomplished?** In response, the following table summarizes the implementation status of NAC programs at Ivy Tech compared to what was proposed for this partner college in the NAC application.

Ivy Tech implemented three NAC programs, including the Core Skills, Assembly Mechanic, and CNC. This site had originally proposed implementing the Electrical Assembler program instead of the CNC program, but plans changed based on industry needs identified in the state.

National Aviation Consortium Program Status for Ivy Tech			
Program	Existing Prior to Grant	Planned Timeline for Implementation	Status
Core Skills	--	Yr 1	Implemented
Assembly Mechanic	--	Yr 1	Implemented
Electrical Assembler	--	Yr 1	Not implemented
Composite Repair	--	--	--
Quality Assurance	--	--	--
Tooling	--	--	--
CNC	--	--	Implemented

Participant Description

Achievement of program goals and objectives also can be measured through meeting proposed counts of participant outcomes (i.e., DOL metrics) and student population characteristics (e.g., TAA eligible, Veterans). The table below presents Ivy Tech's counts of students for each of the outcomes, and the next page presents a one-page infographic highlighting key DOL performance metrics, including academic and employment outcomes, and demographic information.

DOL Metrics for Ivy Tech	Count
Unique Participants Served	242
Participants who have Completed a TAACCCT-Funded Program	131
Participants Still Retained in Their Program of Study or Another TAACCCT-Funded Program	11
Participants Completing Credit Hours	241
Participants Earning Credentials	183
Participants Enrolled in Further Education After Grant-Funded Program of Study Completion	26
Participants Employed After Grant-Funded Program of Study Completion	6*
Participants Retained in Employment After Program of Study Completion.	0*
Participants Employed at Enrollment who Receive a Wage Increase Post-Enrollment	10*

**Limited availability of data relating to employment and wage metrics. These numbers reflect information collected through student follow-up and case notes generated at the Ivy Tech sites.*

Department of Labor (DOL) Trade Adjustment Assistance Community College and Career Training (TAACCCT)

The project aims to increase the education and skill attainment of TAA-eligible, veterans, and other dislocated workers for employment in the aviation industry. Industry credentials are attained in a short period of time, and recipients enter the job market ready to work.

Ivy Tech Community College of Indiana

Demographic Snapshot

NAC National Aviation Consortium

241 Students served

Gender Distribution

Average Age **34**

13 Incumbent Workers served

1 TAA served

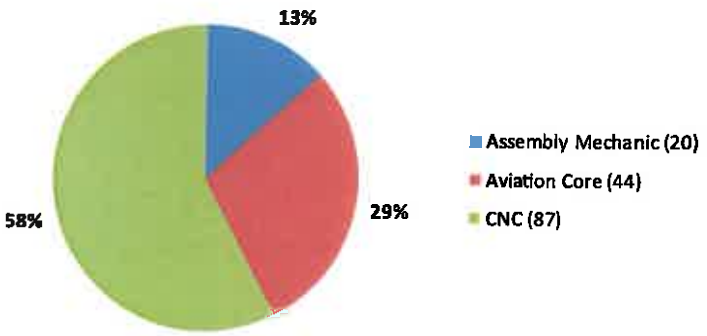
38 Veterans served

32 Students Employed

$4.88 Average Wage Increase

Program Completion Snapshot

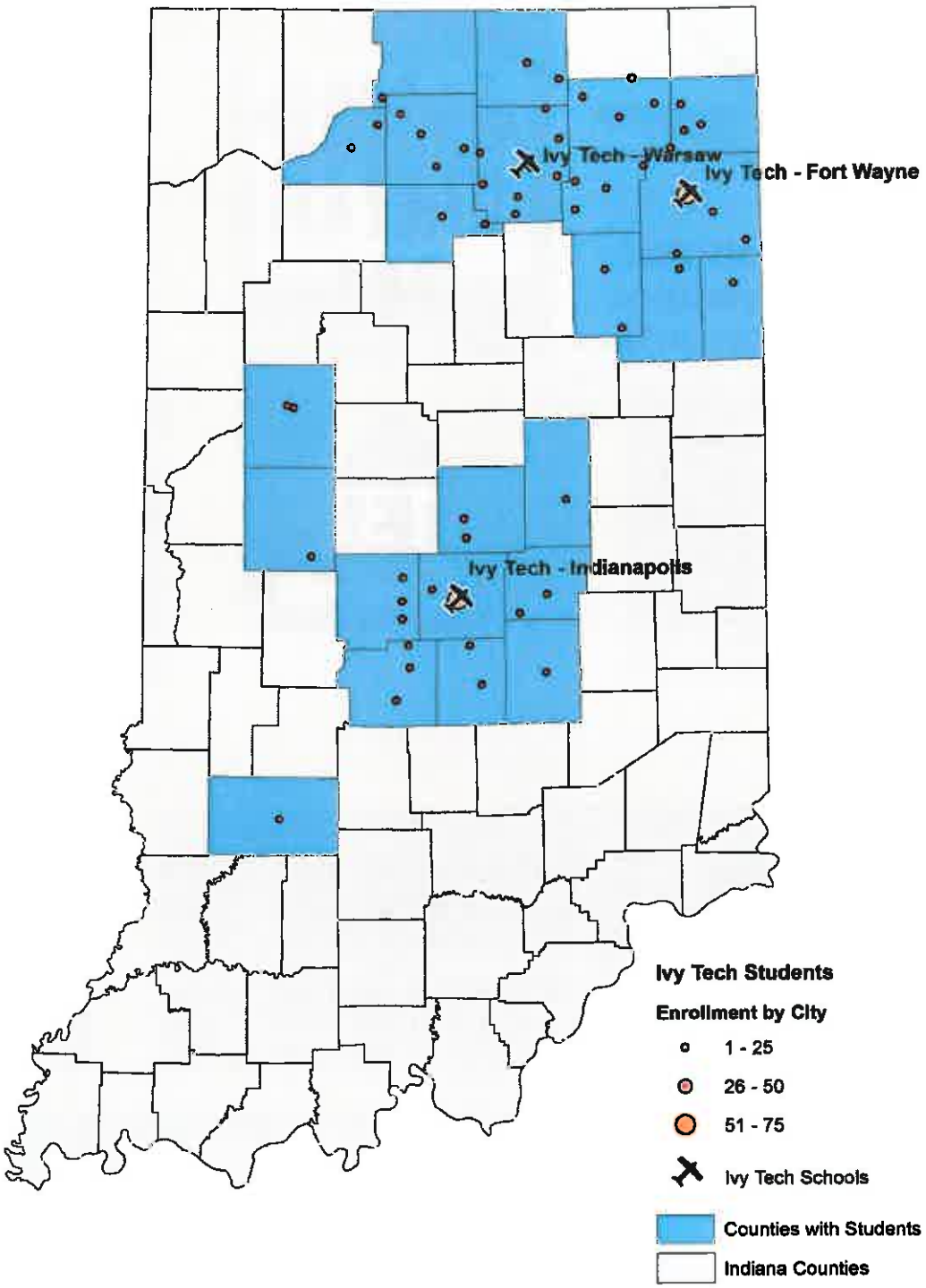
Certificates Completed

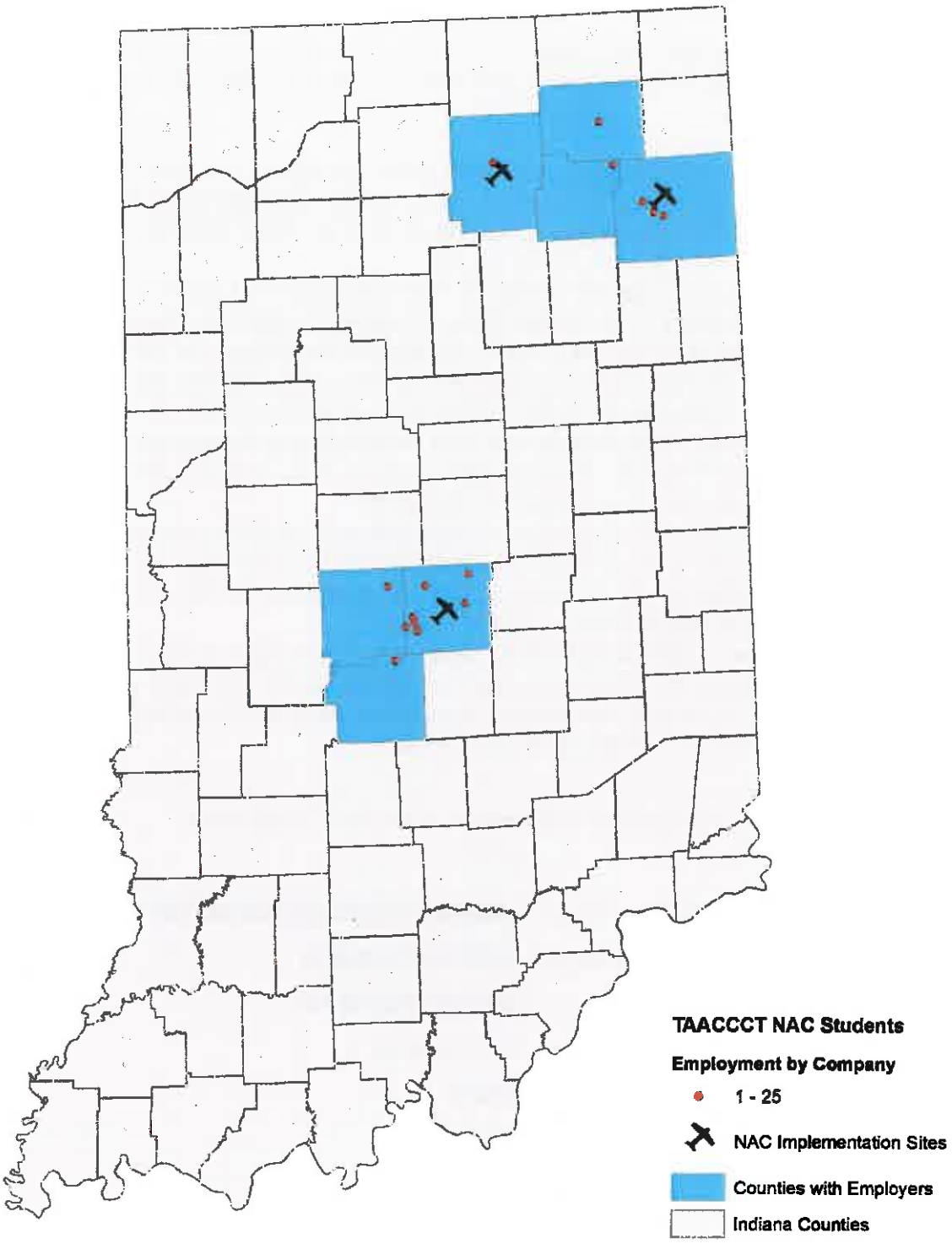


Industry Certificates

5	MSSC - CPT
5	MSSC - Maintenance Awareness
5	MSSC - Manufacturing Processes and Production
1	MSSC - Quality
6	MSSC - Quality Practices and Measurement
5	MSSC - Safety
90	NIMS: CNC Milling - Operations
64	NIMS: CNC Turning - Operations
55	NIMS: Job Planning, Bench Work & Layout
24	NIMS: Manual Milling Skills I
93	NIMS: Measurement, Materials & Safety

oeie Office of Educational Innovation and Evaluation

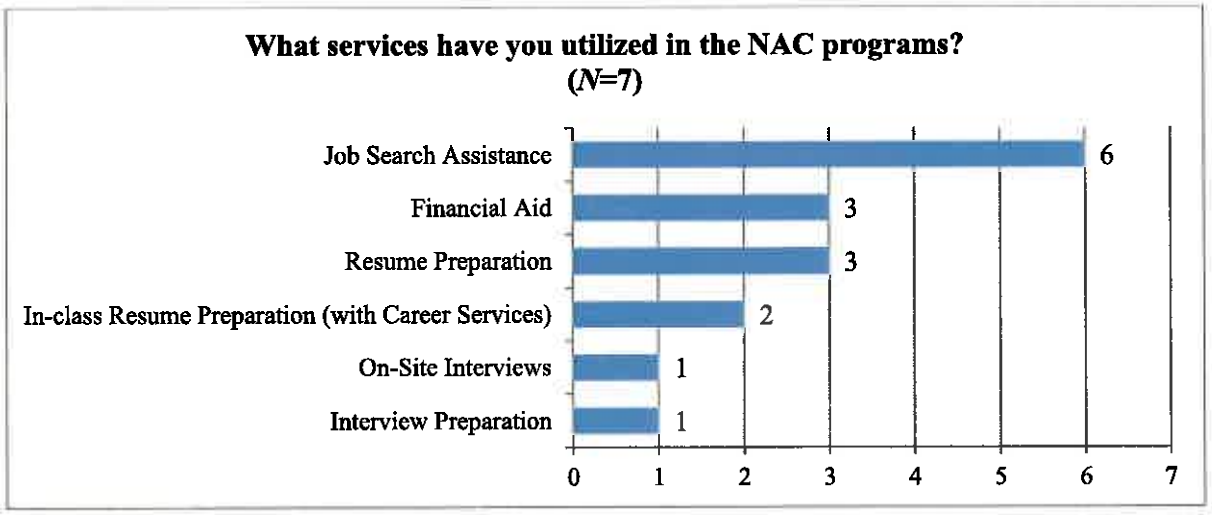

Ivy Tech - Warsaw
Ivy Tech - Fort Wayne
Ivy Tech - Indianapolis
Ivy Tech Students
Enrollment by City
1 - 25
26 - 50
51 - 75
Ivy Tech Schools
Counties with Students
Indiana Counties


TAACCCT NAC Students
Employment by Company
1 - 25
NAC Implementation Sites
Counties with Employers
Indiana Counties

Student Feedback

The evaluation team administered an online survey to Ivy Tech students to collect feedback on their experiences, including program impact, interactions with employers, and use of student services. Highlights include:

- Though most respondents indicated they were either not employed in their field of study (*n*=10, 47.6%) or not currently employed (*n*=3, 14.3%), they did report that the NAC programs at Ivy Tech prepared them 'Moderately Well' to 'Very Well' for their current careers.
- Overall, respondents are satisfied with the NAC programs and 'Agree' or 'Strongly Agree' that the program is worth their time, is interesting, provides a clear route to a technical certificate, and that they would recommend the program to others. As well, respondents indicate they took an active role in their own learning, the assignments allowed them to demonstrate what they learned in the program, and that the academic and technical components of the program were well integrated in the classroom.
- Respondents reported that the most enjoyable aspects of the program are the hands-on and lab components of the courses, and the instructors.
- Most respondents said that as a result of participating in the NAC programs, they felt confident to apply for a job in their field (*n*=12, 63.2%), applied for a position in their field (*n*=13, 65.0%), increased confidence in the workplace (*n*=14, 73.7%), and felt prepared to work in their field (*n*=11, 55.0%).
- In Year 3, students reported that, of the student services related to the NAC program available to students, the most often used include job search assistance (*n*=6, 85.7%), financial aid (*n*=3, 42.9%), and resume preparation (*n*=3, 42.9%). Generally, student services are utilized on a weekly or monthly basis.



SGA Implementation Questions

On March 15, 2016, OEIE conducted an interview with Ivy Tech TAACCCT staff to gain their answers to the implementation questions that were included in the SGA. A summary of Ivy Tech's responses are below.

1) How was the curriculum selected, used, or created?

The Assembly Mechanic program was selected due to the market needs in Indianapolis. Ivy Tech did not offer this program before the grant, and the curriculum required a few tweaks to fit into the college. Initially, it was going to be offered as a non-credit program. With the transition of the program to include Fort Wayne and Indianapolis, Ivy Tech decided to pursue the credit approval process through the Higher Learning Commission and State Board of Education. Offering Assembly Mechanic for credit allowed students to qualify for financial aid. The first two or three iterations of the Assembly Mechanic program were offered as 16-week classes. Now, it is a one-year (two-semester) program, with 24 required credits.

With the length of time needed to get the Assembly Mechanic program through the credit approval process, there was not sufficient time to deploy the Electrical Assembly program using grant funds as originally planned. Ivy Tech did use the CNC program, although its curriculum development was not supported by grant funds. Ivy Tech tapped into the CNC portion of other programs already in use at Ivy Tech (S&E, Consumable Goods). Ivy Tech already had a NIMS (National Institute of Metalworking Skills) credential embedded in the coursework as well.

2) How were programs and program design improved or expanded using grant funds?

- **What delivery methods were offered?**
- **What was the program administrative structure?**
- **What support services and other services were offered?**

The Assembly Mechanic program was improved and expanded using grant funds. It is a new program for Ivy Tech, and embeds the MSSC Certified Production Technician (CPT), a growing and very reputable certification that encompasses five distinct certifications. There are four modules (safety, production processes, quality, and introduction to maintenance), and students can receive a certification in each. If a student obtains all four, the student also qualifies for the CPT. The MSSC Certification is on an approved crosswalk list at the college, so students who already have that certification (prior learning), and can provide documentation for this, can crosswalk out of six credit hours.

The CNC program was not improved or expanded using grant funds.

All classes were offered in a traditional face-to-face classroom format. There was no online-only portion. With the core content and 180 Skills materials, students complete the online curriculum in a facilitated classroom setting.

Ivy Tech's TAACCCT program administrative structure was initially facilitated by the Chancellor in Fort Wayne/Northeast Region who had some first-hand knowledge of the program

and requirements, as she was involved in the development of the overall proposal and budget. The original budget included a Retention Specialist (RS) and Project Coordinator (PC), and instructors. Part of the initial budget was used for an instructional designer.

The administrative structure evolved to match the laboratories and equipment available at the different locations. The project started in Fort Wayne, which has the CNC career path, then migrated to Indianapolis with the Assembly Mechanic program. With this migration, the Office of the President and the grants office got more involved with overseeing the grant between regions. An administrative representative was partially funded by the grant to navigate the multi-regional structure for the central office.

A third location, Warsaw in North Central Indiana, offered the CNC path. The RS in Fort Wayne absorbed all activities in the South Bend/North Central region because, at the time it was added to the program, there was nothing budgeted for additional grant positions.

The RSs worked with resume building and identifying available job openings through searching the internet and e-mails received from employers. Program staff were able to provide referrals to community resources such as for food assistance, which removed barriers to participation for some students.

At the Indianapolis campus, services were leveraged similar to what is provided to every traditional student through Career Services, financial aid, and the Ivy Help Line. The Warsaw campus focused on the orthopedics industry, so services were more focused on placement within that industry. Non-credit programming was added, including quality assurance and regulatory issues that are relevant to that industry.

Students in the program relied on PCs for advising. Those who wanted to go on to earn a degree were connected to the Academic Advisor for technology.

3) Did the grantees conduct an in-depth assessment of participant's abilities, skills and interests to select participants into the grant program?

- **What assessment tools and process were used?**
- **Who conducted the assessment?**
- **How were the assessment results used?**
- **Were the assessment results useful in determining the appropriate program and course sequence for participants?**
- **Was career guidance provided and if so, through what methods?**

For students referred to the program though the local workforce offices, Ivy Tech's program used WorkOne and Goodwill to assess math skills and mechanical aptitude. The student must receive a bronze-level score on the National Career Readiness Certificate (NCRC) assessment to enter the Indianapolis campus Assembly Mechanic program. Placement into the CNC non-credit program was done by WorkOne through a two-week qualifying process. Ivy Tech's for-credit admissions followed typical procedures for institutions working with individuals with a high school diploma or GED.

The assessments were conducted by WorkOne and Assessment Centers at each campus in the state. The Department of Workforce Development website has a tool to upload data about programs and get individuals pre-approved before they qualify using WIA, a displaced workers program. Suggested pre-requisites for these students included shop-math, computer literacy, and mechanical aptitude.

Assessment results were used by the program to determine who was accepted and into which program. WorkOne provided sponsorship of students who passed assessments. Students received a voucher attesting the fact that they were authorized to participate in the program. Students who were not sponsored by WorkOne were given the NCRC and those with bronze-level scores (and higher) were admitted.

Given the pre-formatted, compressed, regimented course model, a variety of assessment methods was necessary. However, they were challenging to manage at the college level as the PCs did not always know how many or which students would show up at the beginning of a new course. Depending on the student's point of entry, their assessments and paperwork would vary, requiring some degree of flexibility by the program to ensure students had the appropriate documentation for enrollment.

Career guidance was provided throughout the program. A major component at Ivy Tech was guaranteed job interviews for NAC participants. The program reported that the availability of guaranteed interviews was a major selling point for participants. Additionally, the TAACCCT programs were designed so students could achieve credit in the Advanced Manufacturing program, as well as transferring some credit to other degree programs. This gave students options for different career paths.

4) What contributions did each of the partners (employers, workforce system, other training providers and educators, philanthropic organizations, and others as applicable) make in terms of: a) program design, b) curriculum development, c) recruitment, d) training, e) placement, f) program management, g) leveraging of resources, and h) commitment to program sustainability.

- **What factors contributed to partners' involvement or lack of involvement in the program?**
- **Which contributions from partners were most critical to the success of the grant program?**
- **Which contributions from partners had less of an impact?**

In Indiana, employers were involved with the design of the NAC program. Ivy Tech's Associate Vice President of Technology also worked with an advisory board consisting of individuals with institutional procedure expertise and from industry regarding program development.

Initially program staff at Fort Wayne were in charge of curriculum development. A staff person in the Office of the President, who worked with program chairs across the state, as well as regional program chairs and academic deans, was also involved in curriculum development. The non-credit Ivy Tech Corporate College identified the skill sets needed in aviation and

manufacturing. Ivy Tech's existing relationships with employers informed the regional aviation industry's curriculum needs.

Program recruitment messages focused on building awareness of the program. An open house in Fort Wayne was held to educate employers on program benefits for potential and current employees. Student recruiting tools were guaranteed interviews after certification and the awareness of job availability after certification. Program participants also came as a result of recruitment done by Directors of the Excel Center who run training programs for high school drop outs of all ages. Several employers through the regional partnership spoke to program staff about recruitment, then facilitated and engaged others in recruitment. Additionally, because the training for Assembly Mechanic was not only for aviation, other contacts in manufacturing, such as with allied suppliers, were made to facilitate the recruitment process.

All training was conducted by Ivy Tech without partner assistance. The program provided transferrable skill sets, so credit in one program would count in another. For example, the Aerospace Manufacturing (AVIM) program credit also counts toward an Associated Degree in Advanced Manufacturing. The transferability of skills also provides multiple job opportunities.

Partners provided support for job placement, with many different industry partners guaranteeing job interviews. Ivy Tech had success placing Assembly Mechanic students with the AAR company. AAR had the highest job placement for students from the Ivy Tech programs. Fastenal, a distributor in Indiana, was not part of the program's initial industry partnerships. However, since the beginning of the grant, they have an increased need for certain components used in aviation manufacturing and maintenance. As a result, they too have hired a significant number of graduates. The regional partnership with ACE Composites and other small manufacturing shops also provided outlets for job placement.

The program had hoped to place graduates at the GE jet engine plant in Lafayette. However, GE was looking for federally regulated approved programs or the A&P programs and could not use the skill set this program was training. A future focus for the program is on industry internships for students.

In-kind contributions of supplies were received from industry partners (e.g., brooms, table wipes, light metals, and airplane parts). Internal college resources were used to renovate the building to house the TAACCCT program and purchase a compressor system needed for the facilities. Ivy Tech Corporate College also purchased two brand new Hoss Milling machines.

Ivy Tech has committed to funding the faculty program chair, and a sustainability plan has been formulated. The project has requested funding for the recruitment position from the State Board of Trustees. However, there is a statewide effort to cut budgets. It is anticipated that a program by program review, required by the Higher Learning Commission, will identify programs that are underperforming to cut. Funding allocations from the state are driven by completion rates as well as enrollment.

Profits from the Ivy Tech Corporate College will be reinvested into capacity-building. All infrastructure is in place to sustain a program, and there are lots of opportunities for Ivy Tech to

build upon. Ivy Tech is specifically looking at crosswalk certification to help sustain programs. For example, a few orthopedics companies in the North Central/Warsaw Region needed employees, but they did not see relevance of aviation training programming, even though it was providing the same skill set needed. These companies did not recognize that CNC skills may transfer to their manufacturing needs. As an ongoing focus, the college will work on building awareness of transferrable skills.

Additional Evaluation Questions

In addition to the questions from the SGA, the evaluation also addressed other specific questions related to the design, progress, and outcomes of the program. Data have been collected throughout the life of the project to address the formative aspects of these questions. During the fourth year of the grant, OEIE conducted the final data collections with students, faculty, college administrators, local employers, and project staff to capture the summative feedback on the program. These responses have been synthesized to address the evaluation questions listed below.

2) Which components of the program are most influential on the curriculum, national credential development, and overall project implementation? What measurable evidence demonstrates that these components are effective?

- There was strong participation in the regional partnership, leading to important impacts at Ivy Tech.
    - The NAC program is gaining credibility among employers and the community. The regional partnership started out meeting twice a year, but it now meets quarterly due to strong interest. It includes employers, employment agencies, workforce, and community partners.
    - Ivy Tech gained employers' input on knowledge/skills needed and current skills gaps in entry-level employees.
    - Some employers guarantee interviews for NAC students, and employers are hiring students as well. These are strong selling points for the program that help Ivy Tech with marketing and recruitment.
    - Workforce partners are training sponsors for NAC CNC students, contributing to increased enrollments.
    - Employers have donated equipment and supplies for NAC programs, offered advice on materials and tools, and provided cost savings on materials by routing purchases through their suppliers.
    - Regional partnership members have participated in career/job fairs, and some are working with Ivy Tech to develop students' interviewing and communication skills.
- Consortium resources have been helpful to grant implementation at Ivy Tech.
    - The team appreciates opportunities to share best practices across partner colleges (e.g., at Peer-to-Peer, site visits to established programs, by telephone and email).
    - An MOU is in place between the NAC partner colleges, allowing the awarding of credits for programs taken elsewhere.

- Having the backing of the consortium increases confidence when educating prospective partners and students about NAC.
- The national team was cooperative and responsive to Ivy Tech's needs. The national team assisted Ivy Tech in changing directions, adding career paths, facilitating conversations with leadership, and setting solid deadlines to ensure changes happened.
- The national team purchased some tools and equipment Ivy Tech needed for the programs.

- The NAC programs are preparing students for employment.
  - The NAC programs utilize a stringent industry-based attendance policy modeled off the EdCC/WATR's and take attendance every day, simulating a workplace environment.
  - There is dedicated building/lab space in Indianapolis where students gain hands-on skills.
  - Credentials are embedded in the programs (CNC has NIMS, Assembly Mechanic has MSSC).
  - Employers/recruiters report building a relationship with the PC/RS makes their job easier. They get a list of NAC students who fit their job postings. It also is relatively easier to onboard NAC students because they possess a basic understanding and more experiences than other hires.
  - Employers indicate that Ivy Tech students have skills that are relevant to positions in their companies and a foundational knowledge of aviation that allows them to hit the floor running.
  - Ivy Tech has been very successful with job placement. Everyone who wants a job is working, including students with backgrounds that typically preclude them gaining jobs.
  - NAC students are also being retained better than other hires.
  - More than half (n = 11, 61.1%) of Spring 2016 Student Survey respondents indicate the NAC programs prepared them 'Moderately Well' to 'Very Well' for their current careers.
  - NAC faculty 'Agree' or 'Strongly Agree' the program content meets industry needs in the local community. One faculty member reported, "Local aviation industry has shifted from one requiring highly skilled labor supporting commercial air carriers to one looking for unskilled labor to support third-party maintenance providers."
- Ivy Tech offers student services that are responsive to NAC students' needs.
  - The PC/RS played critical roles in helping students, including:
    - developing relationships and working one-on-one with students to ensure they have what they need to stay in the class.
    - preparing students for employment, by sharing job postings, assisting with resume/cover letter preparation, and organizing mock interviews.
    - finding funders for NAC programs, to ease the financial burden on students.
  - The Assembly Mechanic program is now on the academic for-credit side, so students have access to financial aid and career services.

- Aspect of the NAC programs liked best was hands-on learning/training (e.g., operating CNC machine).
- Several students commented they were satisfied with the program's instructors. One responded that as a student you were "made to feel like you were a part of a family."
- NAC faculty seek to identify students' academic need by "paying attention to each student, [and] talking to [and] engaging with them." To assist those students who may be struggling academically, one faculty reported, "I provided one-on-one assistance where I thought [it was] needed."

- Ivy Tech established articulation agreements with other schools. For example, Indiana State University has programs in aviation technology management, including bachelor's degrees.

3) What challenges were encountered during the program's implementation and how were they addressed?

- The DOL metrics have been difficult to meet.
  - Gaining participation has been difficult because Indiana is more focused on automobile manufacturing than aviation. Ivy Tech had to educate the community that there are aviation employers.
  - Initially, there were difficulties getting the program up and running due to not identifying the programs with the best fit in the markets.
  - They have had issues with low enrollment, so they decided to:
    - expand to additional markets (Indianapolis, Warsaw)
    - expand to offer more programs (CNC, Machine Tooling)
    - broaden the manufacturing focus (in Warsaw, the CNC relates to orthopedics)
  - There are always more jobs open than there are students. Employers want students immediately, so they do not want to wait for students to complete the program. Ivy Tech sets up interviews during spring break, allowing students not to miss class.
  - When students gain jobs, they are not motivated to stay in touch to provide updates.
  - Definitions about who can be counted as a participant and documentation requirements changed over time. Early on in the project, they had to turn away potential participants that later they could have counted.
  - When turnover occurred on the national team, metric goals changed (i.e., went back up to 501 participants served).
  - The timeline slowed when programs went through the academic accreditation approval process.
  - Recruitment of Veterans has been challenging, although not for lack of trying.
- There have been some resource limitations.
  - Initially, direction and support from upper-level leadership was lacking.
  - Initially, Ivy Tech did not have a building to house the programs.
  - Insufficient funds were budgeted for a compressor ($5,000 but needed $80,000).
  - There was grant staff turnover.

- There is no marketing budget for NAC program recruitment. Marketing is handled at the program level, and is handled differently for credit vs. non-credit programs. Extra complications included working with two marketing vendors during the grant, and even working with multiple marketing departments within Ivy Tech due to the college's size.
- There were no training funds for students in the NAC programs, which created recruitment challenges.
- Insufficient funds were budgeted for recruitment.
- The Apricot tracking system is complex and difficult to navigate, and step-by-step resources were not available.
- Ivy Tech is a large college, and animosity/resistance was encountered when navigating across territories/regions.
- A student survey respondent indicated the desire for more information about the job search program.

- There are limitations to the curriculum.
  - The curriculum is based on Boeing (e.g., some part numbers and equipment are Boeing-specific), making for a tough transition to other markets.
  - Short-term classes (i.e., four weeks) hinder the opportunity for students to complete an internship, which are desirable to build relationships with employers. This is causing pushback from some students.
  - The 180 Skills curriculum is good, but it is expensive/overpriced. Further, the curriculum is heavy on the online side (67%). Students may be better engaged if there was an even balance between the online and hands-on lab components (e.g., 50/50 split). For example, the Aviation Core could benefit from inclusion of hands-on components.
  - The five partner colleges have different markets and are implementing the curriculum in vastly different ways (e.g., credit vs. non-credit), making articulation challenging, and each partner's efforts (e.g., on metrics) incomparable.
  - Some students identified that instructors were ill-prepared. One student remarked that the instructor focused most of their attention on the student who understood the material. They wanted better training in Geometric Tolerancing, as well as better software.

4) To what extent will the program components be sustained?

- The NAC grant has given Ivy Tech exposure to and helped them create a presence in the field of aviation, with a new career path in a high-demand field with high-paying jobs.
- In-demand programs will continue to be offered. They have moved forward with fall 2016 enrollments.
- Ivy Tech is looking to expand to other related programs that will have crosswalks with NAC programs (e.g., unmanned aerial vehicle program, composites).
- Ivy Tech has created crosswalks with the NAC programs feeding into an AAS degree.
- Ivy Tech's investments to date are driving sustainability of the NAC programs. They have invested in the building, equipment, machines, and faculty, and they plan to reinvest profits back into the program.

- Ivy Tech will seek grant funding to support the programs (e.g., equipment, student funding) until they are self-sustaining. They have already received another grant, which will be an enhancement of NAC.
- The cost of 180 Skills will be passed to the student now that the grant is ending.
- There is financial aid available for credit programs (e.g., Assembly Mechanic). Partners are funding students in the non-credit CNC program. Funding options help with sustainability.
- The PC/RS position in Indianapolis will continue, but they have not yet decided if the PC/RS will be retained in Fort Wayne.
- Employers would like to see the program and relationship continue.

Ivy Tech Lessons Learned

The final data collections also collected some lessons learned by Ivy Tech's team, based on the successes and challenges faced during the program as well as effective practices that have been put in place. Ivy Tech shared the following lessons learned:

- At the start, the college should have been more strategic about which programs to offer, based on which programs are in-demand in each location.
- Each location where programs are offered needs to have grant staff.
- Having someone, such as the retention specialist, coordinate recruitment efforts is key.
- It is important to have buy-in/support and leadership in the central office at the beginning and throughout the project. Education/communication should come from the top down.
- There is a need to expand marketing efforts, including education and recruitment efforts of students (e.g., with high schools) and employer partners.
- It is very helpful for gaining participants to have funds to sponsor them (i.e., pay for training).
- It is important to make sure the budget reflects the program's actual costs.
- There has been a policy change in Ivy Tech's central grants office whereby all grant proposals must now go through the central grants office, to allow Ivy Tech to be more strategic about grants, including paying close attention to proposed budgets and metric goals.

Tulsa Community College (Tulsa CC)/Tulsa Tech Results

The first evaluation question asks **1) To what extent have the stated program goals and objectives been accomplished?** In response, the following table summarizes the implementation status of NAC programs at Tulsa CC compared to what was proposed for this partner college in the NAC application.

Tulsa CC implemented four NAC programs, including the Core Skills, Assembly Mechanic, Composite Repair, and CNC, as originally proposed.

National Aviation Consortium Program Status for Tulsa			
Program	Existing Prior to Grant	Planned Timeline for Implementation	Status
Core Skills	--	Yr 1	Implemented
Assembly Mechanic	--	Yr 1	Implemented
Electrical Assembler	--	--	--
Composite Repair	--	Yr 1	Implemented
Quality Assurance	--	--	--
Tooling	--	--	--
CNC	--	Yr 1	Implemented

Participant Description

Achievement of program goals and objectives also can be measured through meeting proposed counts of participant outcomes (i.e., DOL metrics) and student population characteristics (e.g., TAA eligible, Veterans). The table below presents Tulsa CC's counts of students for each of the outcomes, and the next page presents a one-page infographic highlighting key DOL performance metrics, including academic and employment outcomes, and demographic information.

DOL Metrics for Tulsa CC	Count
Unique Participants Served	503
Participants who have Completed a TAACCCT-Funded Program	474
Participants Still Retained in Their Program of Study or Another TAACCCT-Funded Program	0
Participants Completing Credit Hours	531
Participants Earning Credentials	495
Participants Enrolled in Further Education After Grant-Funded Program of Study Completion	23
Participants Employed After Grant-Funded Program of Study Completion	48
Participants Retained in Employment After Program of Study Completion.	15
Participants Employed at Enrollment who Receive a Wage Increase Post-Enrollment	57

Department of Labor (DOL) Trade Adjustment Assistance Community College and Career Training (TAACCCT)

The project aims to increase the education and skill attainment of TAA-eligible, veterans, and other dislocated workers for employment in the aviation industry. Industry credentials are attained in a short period of time, and recipients enter the job market ready to work.

Tulsa Community College

Demographic Snapshot

NAC National Aviation Consortium

503 Students served

Gender Distribution

Average Age **36**

Incumbent Workers served **95**

5 TAA served

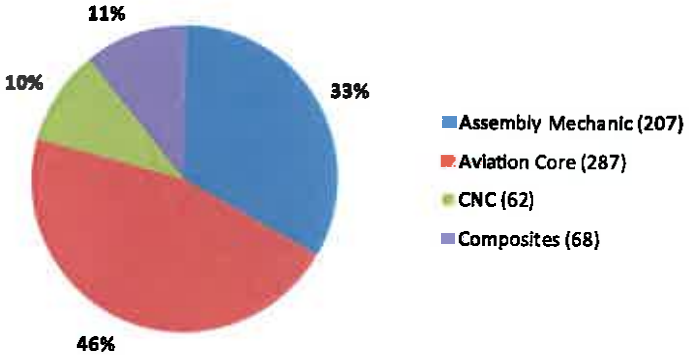
77 Veterans served

159 Students Employed

$3.38 Average Wage Increase

Program Completion Snapshot

Certificates Completed



Industry Certificates

144	CertTEC - Aviation Structures Technician
1	MSSC - CPT
1	MSSC - Quality
10	MSSC - Safety
8	NCRC
14	NIMS: CNC Milling - Operations
15	NIMS: CNC Turning - Operations

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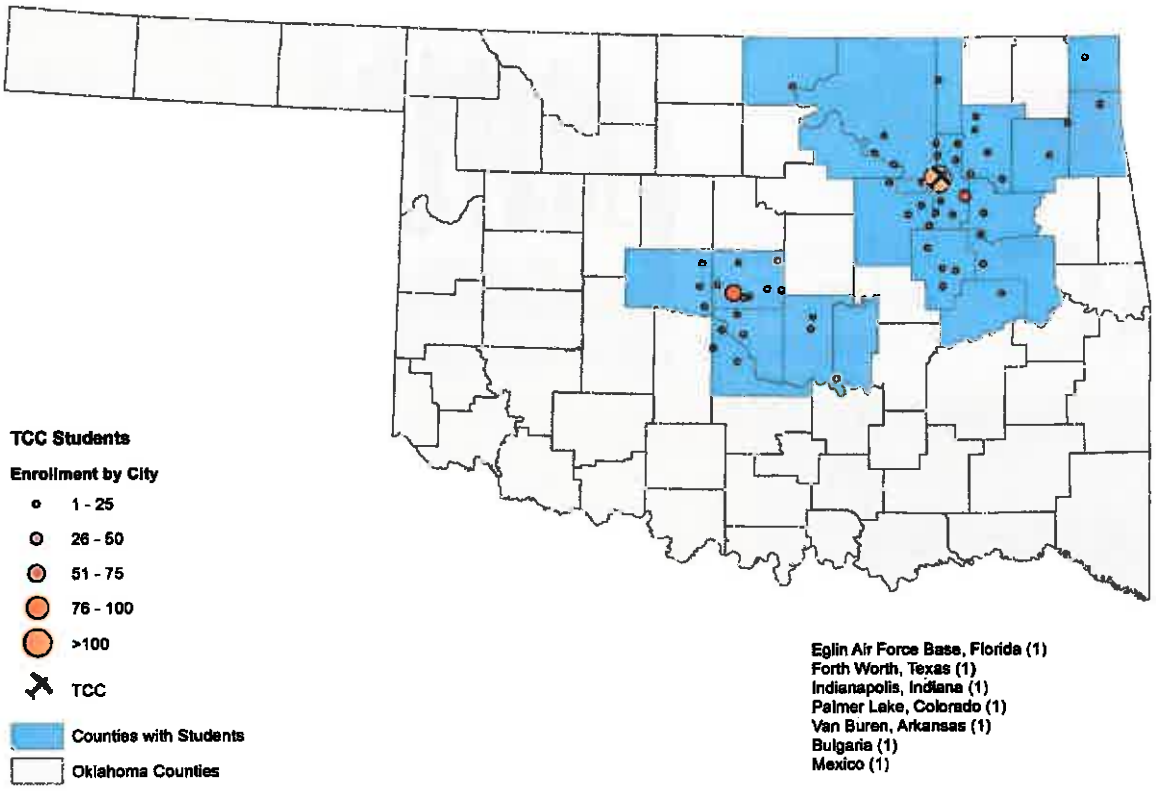
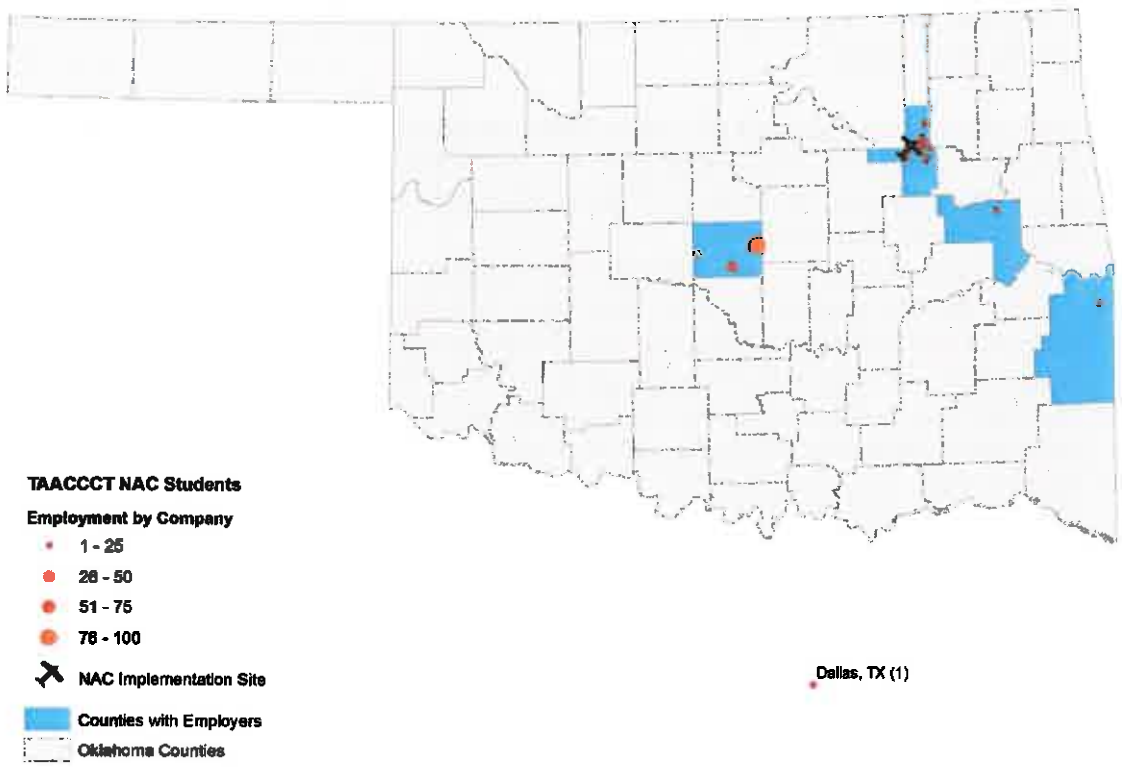
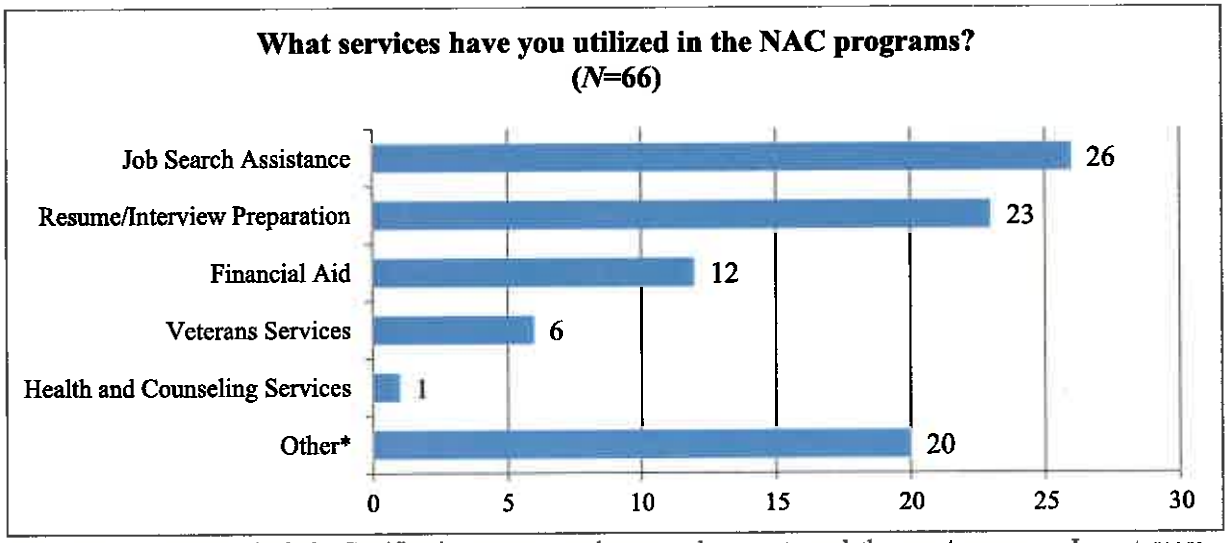

TCC Students
Enrollment by City
1 - 25
26 - 50
51 - 75
76 - 100
>100
TCC
Counties with Students
Oklahoma Counties
Eglin Air Force Base, Florida (1)
Forth Worth, Texas (1)
Indianapolis, Indiana (1)
Palmer Lake, Colorado (1)
Van Buren, Arkansas (1)
Bulgaria (1)
Mexico (1)


TAACCCT NAC Students
Employment by Company
1 - 25
26 - 50
51 - 75
76 - 100
NAC Implementation Site
Counties with Employers
Oklahoma Counties
Dallas, TX (1)

Student Feedback

The evaluation team administered an online survey to Tulsa CC students to collect feedback on their experiences, including program impact, interactions with employers, and use of student services. Highlights include:

- Most respondents indicated they were either not employed in a field of study related to Assembly Mechanic, Composites, or CNC (n=16, 84.2%). Moreover, they reported that the Aviation program at Tulsa CC/Tulsa Tech prepared them 'Moderately Well' to 'Very Well' for their current careers.
- Overall, respondents are satisfied with the Aviation program and 'Agree' or 'Strongly Agree' that the program is worth their time, is interesting, provides a clear route to a technical certificate, and that they would recommend the program to others. As well, respondents indicate they took an active role in their own learning, the assignments allowed them to demonstrate what they learned in the program, and that the academic and technical components of the program were well integrated in the classroom.
- Respondents reported that the most enjoyable aspects of the program are the faculty/instructors/staff, course content and design, and the hands-on training received.
- Most respondents said that as a result of participating in the Aviation program, they felt confident to apply for a job in their field (n=17, 89.5%), applied for a position in their field (n=19, 100.0%), obtained a position in the field (n=17, 89.5%), received a promotion (n=10, 52.6%) and/or wage increase (n=11, 57.9%), increased confidence in the workplace (n=16, 84.2%), and felt prepared to work in their field (n=18, 94.7%).
- In Year 3, students reported that, of the student services related to the NAC program available to students, the most often used include job search assistance (n=26, 39.4%), resume and interview preparation (n=23, 34.8%), and financial aid (n=12, 18.2%). One student explained that the services "prepared me for proper interview techniques and how to get myself into the best position and job for me."



Note. Other responses include Certification grant; employment; have not used the grant program; I want more training; job (2); job advancement; n/a; none (10); sheet metal; tcw has helped me.

SGA Implementation Questions

On December 5, 2015, OEIE conducted an interview with Tulsa CC TAACCCT staff to gain their answers to the implementation questions that were included in the SGA. A summary of Tulsa CC's responses are below.

1) How was the curriculum selected, used, or created?

NAC chose to use a curriculum that was developed at EdCC/WATR, which was essentially an agreed upon set of learning outcomes based on industry feedback. This existing basic aviation manufacturing curriculum fit well within the NAC certificate structure. Tulsa CC modified the curriculum's delivery time tables, with some courses as short as three weeks to meet industry needs in the region.

2) How were programs and program design improved or expanded using grant funds?

- **What delivery methods were offered?**
- **What was the program administrative structure?**
- **What support services and other services were offered?**

The TAACCCT grant helped Tulsa CC partner with Tulsa Tech to align some course learning outcomes and to align with what Tulsa Tech was already teaching. The program was initially offered with some online coursework, but that was not very successful for Tulsa CC as students had difficulty with access. As a result, the face-to-face curriculum delivery worked better for the students.

Tulsa CC's TAACCCT program administrative structure included a Retention Specialist (RS) and a Program Manager/Project Coordinator (PC) who reported to the Dean.

Support services that were offered focused on transition to the workforce. Tulsa CC offered some job assistance through guaranteed interviews with a few employers and preferential hiring at Spirit. Job search assistance and referrals to other community organizations within Tulsa CC's service area were also provided.

3) Did the grantees conduct an in-depth assessment of participant's abilities, skills and interests to select participants into the grant program?

- **What assessment tools and process were used?**
- **Who conducted the assessment?**
- **How were the assessment results used?**
- **Were the assessment results useful in determining the appropriate program and course sequence for participants?**
- **Was career guidance provided and if so, through what methods?**

Tulsa Tech had a robust front-end assessment that aligns with industry needs. Students were assessed on their academic skills, particularly in math. WorkKeys was done for everyone as well to assess workplace skills. Assessment results were communicated to students to let them know if they had the academic foundation and skills necessary to successfully complete the program.

However, students made their own enrollment decisions based upon their results. Students with low scores were referred to the local workforce office for tutoring to increase their assessment scores and better prepare them for the program. Tulsa CC reported that they felt the assessments were considered useful in letting students know their likelihood of success in the program.

Tulsa CC provided career guidance through one-on-one counseling done by the RS. Additionally, community agencies (i.e., Workforce Tulsa and Tulsa Community WorkAdvance) have a staff position, similar to the RS, who recommends students to the program and helps with job searches. These job agencies already had job placements open and worked to fill those positions.

Tulsa CC's staff noted that the program has taught the college to work more closely with community partners to leverage expertise.

4) What contributions did each of the partners (employers, workforce system, other training providers and educators, philanthropic organizations, and others as applicable) make in terms of: a) program design, b) curriculum development, c) recruitment, d) training, e) placement, f) program management, g) leveraging of resources, and h) commitment to program sustainability.

- **What factors contributed to partners' involvement or lack of involvement in the program?**
- **Which contributions from partners were most critical to the success of the grant program?**
- **Which contributions from partners had less of an impact?**

The program design was completed with the help of an advisory committee consisting of several large aviation manufacturing facilities in Tulsa, the workforce system, and the Chamber of Commerce. The three-week, short-term training was designed to meet the needs of one particular employer who also provided the majority of students for the program.

Tulsa CC's curriculum development consisted of modifying the existing curriculum into short courses and aligning learning outcomes with certificate requirements. WATC and employers were involved in curriculum design along with faculty from Tulsa Tech who helped with modifying existing curriculum to create shorter courses that met industry need.

Students were recruited with assistance from the workforce system, by the RS who assisted with recruitment throughout the program, and by employers. When the program launched, Spirit offered guaranteed interviews for certificate holders, providing a recruitment incentive for students. The Francis Tuttle Technology Center in Oklahoma City (which also adopted the CertTEC ®certification) and Transportations Connection Work Advance, a non-profit agency, also assisted with program recruitment.

Industry partners assisted with training students in the program. Spirit AeroSystems provided on-site classrooms and lab facilities for students, and much of the classroom training took place at Francis Tuttle Technology Center and Tulsa Tech. Because Francis Tuttle Tech Center and Tulsa Tech offered robust lab space, this arrangement avoided duplication of services.

The NAC training is a requirement to be hired at Spirit Aerosystems, and students had a high placement rate with this employer. Tinker Air Force Base, in partnership with Francis Tuttle Technology Center, also placed many participants. To be eligible to apply for a position at Tinker Air Force Base, individuals must either be currently enrolled in or have completed the NAC program. Some other partners placed program participants, but not to the degree that Spirit Aerosystems and Tinker Air Force Base did. If a worker completed the credit program and could not get placed, the workforce system provided assistance to that individual. Having a Human Resources representative from American Airlines who was very active in the aviation community serve on the advisory board created buy-in early from the workforce system.

Partners did not make contributions to program management. However, Spirit Aerosystems collected some employment data to assist with program management.

Tulsa Tech provided several resources to leverage Tulsa CC's grant funds. They provided lab space and equipment, paid for faculty, and validated the certification provided by Francis Tuttle Technology Center. Employers donated a lot of consumables to classrooms, and Nordam and Spirit AeroSystems donated composite material and sheet metal.

Factors that contributed to partners' levels of involvement in the program were based upon the local industry's cyclical nature. The economy was a big factor. Employers needed the partnership and 400 employees when the grant was being designed. However, by the time funds were received and the grant was implemented, their need was gone. Industry employee needs were expressed as immediate and changing. They would need composites one day, and then the next day need a mechanic, and then 15 composites, and then they would express a need to change based on their current standing of what jobs were needed right then and there.

Employment waves in the manufacturing industry take place in a matter of months. The supply and demand structure of the industry means if composites are not needed, they cannot afford to keep on composites workers. If a mechanic was needed, that helped the recruitment process because students who were already NAC certified could be recalled instead of having to train new employees.

Pre-employment training offered by Spirit AeroSystems was most critical to the success of Tulsa CC's intervention. Training offered by Francis Tuttle Technology Center and Tinker Air Force Base also led to the program's success. Another critical partner contribution was Transportation Connections Work Advance's employment assistance and student referrals.

Additional Evaluation Questions

In addition to the questions from the SGA, the evaluation also addressed other specific questions related to the design, progress, and outcomes of the program. Data have been collected throughout the life of the project to address the formative aspects of these questions. During the fourth year of the grant, OEIE conducted the final data collections with students, faculty, college administrators, local employers, and project staff to capture the summative feedback on the

program. These responses have been synthesized to address the evaluation questions listed below.

2) Which components of the program are most influential on the curriculum, national credential development, and overall project implementation? What measurable evidence demonstrates that these components are effective?

- Tulsa CC offers student services that are responsive to NAC students' needs.
  - The PC and RSs played critical roles in helping students, including:
    - creating individual guidance plans and staying in constant contact with students to monitor progress
    - following up with students on program progression and placement upon completion
  - Online delivery method was not successful for the Tulsa students. Internet access was an issue for some students; rather, the college instituted face-to-face delivery. The face-to-face method allowed for greater interaction with students. One student commented, "[I] felt like the instructor was able to see what the student was struggling with and concentrate on improving those skills."
  - For student orientation, the program offered a two-fold approach to introduce students into the program. This flexibility gave students options for participation:
    - completing it individually
    - completing it as a group on the first night of class
  - A TAACCCT staff member explained, "We take it a step further…if it's not something we can assist the student with or it's not something that our campus has the ability to take care of then we reach out to community partners. [For example], veterans' assistance or we've had some students come in and they're struggling so we try to help them reach out to the community to help get them assistance that's available and out there for them. We don't just leave them hanging, which having been a student, I know a lot of time happens. That's a lot of students' fears, that they can't go to school and meet ends in other areas."
- Tulsa CC developed strong partnerships, including:
  - strong working relationships with community agencies such as Transportation Workforce Connections. "They have a person there that is kind of like the NAC retention specialist. They recommend individuals to our program, and then help them with job assistance afterwards. They already have job placements open, and are filling those positions."
  - relationships with industry. "Spirit provided on-site classrooms and lab facilities for those students that were going through. You're not guaranteed a job going through the training, but it's required (to participate in the program) to get hired on to work there now."
  - partnerships with Oklahoma Army National Guard and the Tulsa Works Program. "[We] started with working with Oklahoma Workforce and reaching out to different organizations in Tulsa. Talking about training, getting people trained, recruiting, talking to local military leaders to try to encourage more veterans in the Reserves, National Guard to be a part of the program."

- Tulsa CC utilized assessments.
  - The students referred through the local Workforce office took the WorkKeys assessment to gauge whether they had the necessary math skills and other skills to successfully participate in the program. If the students' scores were lower than required, they were referred to get short-term tutoring to increase their skills.
  - One staff member explained, "[the program had] pretty robust front-end assessments. This let the students know whether they had the ability to make it through the program."
- Tulsa CC leveraged resources.
  - Tulsa CC was able to secure donations on consumables, such as composite material and sheet metal from local partners.
  - Tulsa CC formed a partnership with Tulsa Tech. The NAC programs were new to Tulsa CC. Through the grant, the college worked with Tulsa Tech, which offered not-for-credit technical programs. "[We partnered with Tulsa Tech], which is where a lot of the classroom training took place. Those tech centers have a lot more robust lab space and things than we do at the college, so we didn't want to duplicate services." Another team member explained, "The grant helped us partner with Tulsa Tech to align some learning outcomes of college courses and what Tech was already teaching."

3) What challenges were encountered during the program's implementation and how were they addressed?

- Tulsa CC was challenged by swings in the economy and production.
  - Like many of the other NAC sites, demand for workers in Tulsa aviation manufacturing was cyclical. One of Tulsa CC staff explained, "They [employers] are going to need 200 people/employees to fill these positions. Then you give it six months, and okay they have to lay people off because they need something else right now. So one day they're needing 200 assembly mechanics, and the next day they're needing 150 for bonding composites or they need CNC machinists. So it's really just that wave within the industry that really affects the growth of the grant. But even then, the grant wasn't just set for one specific thing. We were allowed to grow with our partners and grow with our employers to what they needed. So that overall gave us multiple areas to educate students."
  - While guaranteed interviews with employers helped with recruitment, there was a realization that if the company experienced a hiring freeze those interviews would not result in a job. The largest complaint from students was that training does not protect employees from layoffs. Unions have a first-hired, first-fired policy, leaving new workers vulnerable in an economic downturn.
- Tulsa CC also experienced issues with continuity throughout the grant.
  - There were changes in staff at the local and national levels. One stakeholder explained, "you're kind of losing time as you're in that adjustment process, whether it be the national office or at any specific college. It kind of delays the grant, kind of puts it at a pause until we can all pick back up and get going again." Changing staff at the local level also required the program to re-build relationships and make new connections, which slowed progress.

- There were also changes in data/documentation requirements from the Department of Labor. Throughout the course of the grant, shifts in required documentation (i.e., incumbent workers) and differences in program data across sites resulted in staff having to change their processes for reporting.
- There were challenges to using the online data system (Apricot). The system was not set up to create electronic folders for students, so hard-copy records still had to be kept at all the sites. However, having the online system allowed the national team and each college access to real-time data on the project (i.e., number of participants, completers, etc.).

- Communicating across distance rather than face-to-face led to issues.
  - Having consortium members located across the country was challenging. "Whenever you're working with five different colleges, five different states, each with their own state board of regents, their own policies and procedures… when it's all said and done, I think they've done fairly well at being able to work together and come up with a game plan moving forward." Regular conference calls and annual meetings helped with the communication issues.
  - Having such a widespread consortium also made it difficult to deliver a standardized program/curriculum across markets with different employer needs. The market analysis done during the proposal stage of the project was not able to predict the up- and down-turns experienced locally. Ultimately, each college designed their programs to address local needs, focusing on the common skills and competencies across all sites. As a result, the programs looked slightly different, but did have common elements. One staff member noted, "The colleges struggled to get on the same page for the number of college credits you give for each section. Whereas TCC gives 12 credit hours, Edmonds gives 27, and for Ivy Tech, it's X amount. Because there was not a clear-cut consensus, we elected to just have third-party certification and say if you have third-party certification, we will accept it at whatever our college accepts it at. At Edmonds that may be 27, at TCC that may be 12, at WATC that may be 15, or whatever the case may be."

4) To what extent will the program components be sustained?

- Spirit Aerosystems requires all prospective employees to take the class. The certificate is more marketable for gaining industry employment in the region than an associate's degree. In addition, the portability of the certificates and the validation of CertTEC ® ensures the training will be sustainable.
- Having strong partnerships with employers is a valuable recruitment tool. Having these relationships builds student trust in the program, such as through guaranteed interviews for program completers.
- Partnerships with community agencies, such as Transportation Connections Workforce, also helps with sustainability.
- The grant cemented the relationship between Tulsa CC and Tulsa Tech. As a result of the grant, the institutions now have a cooperative rather than competitive relationship. "The overall most important goal was to meet with industry and try to work with companies. We also worked with our partners at Tulsa Tech. That was the most important thing.

Without Tulsa Tech in this program, we would not have served 503 students. We would still be at 51."

- The pathways developed for students will be sustained. Through the grant, the college has developed options for students to "go through our program and obtain college credit for that so in the event in the future if they want to come back and obtain a college degree here at Tulsa Community College, then they would get college credit toward their degree."

Tulsa CC Lessons Learned

The final data collections also collected some lessons learned by Tulsa CC's team, based on the successes and challenges faced during the program as well as effective practices that have been put in place. Tulsa CC shared the following lessons learned:

- Focus on promotion and outreach earlier in the program. Ideally that would start in the first year of the project.
- The projects need staff that can design, implement, and wrap up the activities. Look at the ultimate goal, and be prepared to come up with different ways of getting there if the project runs into challenges. A good leader always has multiple points of entry and multiple points of execution.
- Take what you learn from the project and move it forward. Share the processes you developed, and what you've done. Having the team conference calls with the PCs and RSs was very helpful.
- Open dialogue and communication is important throughout a project, and particularly during staff transitions.
- The RS is a critical role. Through their interactions, they get students in the door, educated, and out the door in the end. As well as working with the program's partners, that position fills an important need.
- Building relationships with multiple partners is important. If the program gets too employer-specific, it limits options if one company experiences downturns. It has been valuable to be able to work with a variety of employers.

Wichita Area Technical College (WATC) Results

The first evaluation question asks **1) To what extent have the stated program goals and objectives been accomplished?** In response, the following table summarizes the implementation status of NAC programs at WATC compared to what was proposed for this partner college in the NAC application.

WATC implemented six NAC programs. All six programs were already in existence at WATC prior to the grant. This site had originally proposed implementing the Tooling program as well, but plans changed based on lack of industry needs in the area.

National Aviation Consortium Program Status for WATC			
Program	Existing Prior to Grant	Planned Timeline for Implementation	Status
Core Skills	X	Existing Program	Implemented
Assembly Mechanic	X	Pilot	Implemented
Electrical Assembler	X	Year 1	Implemented
Composite Repair	X	Year 1	Implemented
Quality Assurance	X	Year 2	Implemented
Tooling	--	Year 2	No Industry Need
CNC	X	Year 2	Implemented

Participant Description

Achievement of program goals and objectives also can be measured through meeting proposed counts of participant outcomes (i.e., DOL metrics) and student population characteristics (e.g., TAA eligible, Veterans). The table below presents WATC's counts of students for each of the outcomes, and the next page presents a one-page infographic highlighting key DOL performance metrics, including academic and employment outcomes, and demographic information.

DOL Metrics for WATC	Count
Unique Participants Served	913
Participants who have Completed a TAACCCT-Funded Program	629
Participants Still Retained in Their Program of Study or Another TAACCCT-Funded Program	98
Participants Completing Credit Hours	913
Participants Earning Credentials	690
Participants Enrolled in Further Education After Grant-Funded Program of Study Completion	26
Participants Employed After Grant-Funded Program of Study Completion	89
Participants Retained in Employment After Program of Study Completion.	43
Participants Employed at Enrollment who Receive a Wage Increase Post-Enrollment	127

Department of Labor (DOL) Trade Adjustment Assistance Community College and Career Training (TAACCCT)

The project aims to increase the education and skill attainment of TAA-eligible, veterans, and other dislocated workers for employment in the aviation industry. Industry credentials are attained in a short period of time, and recipients enter the job market ready to work.

Wichita Area Technical College Demographic Snapshot

NAC National Aviation Consortium

913 Students served

Gender Distribution

Average Age **32**

Incumbent Workers served **187**

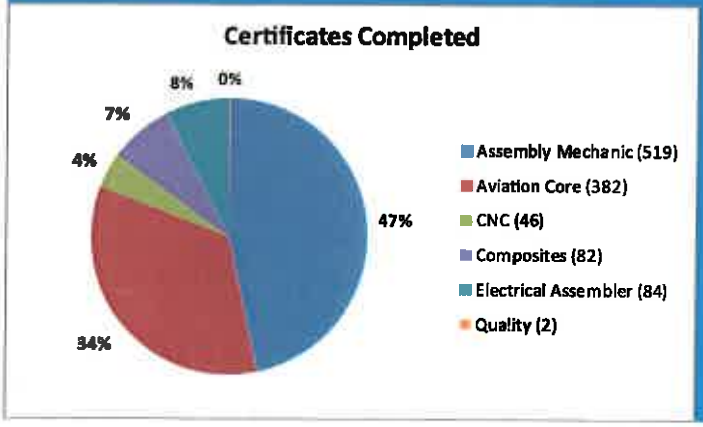
24 TAA served

91 Veterans served

351 Students Employed

$4.82 Average Wage Increase

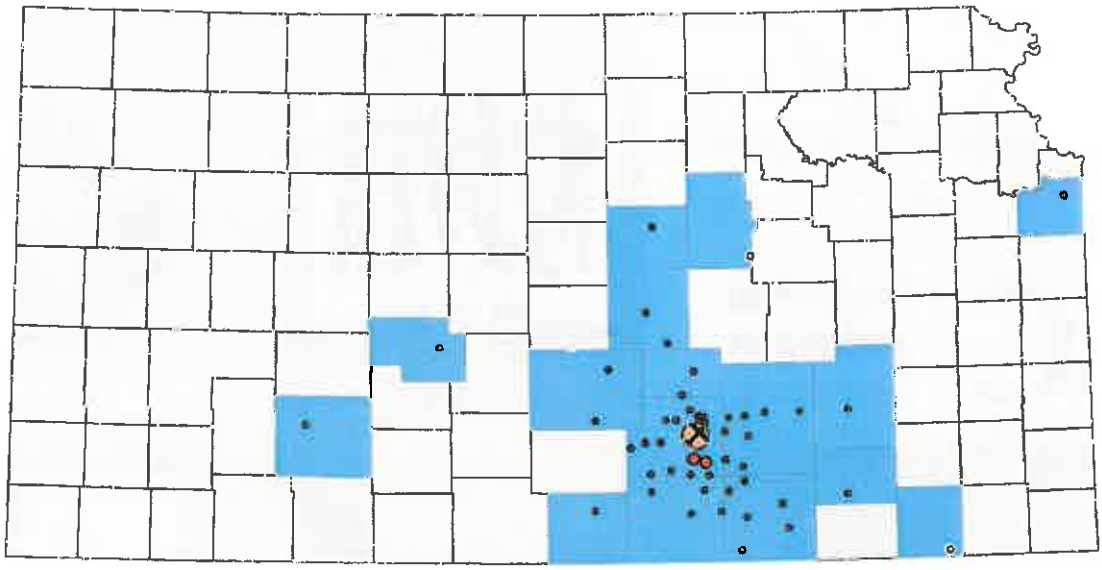
Program Completion Snapshot



Industry Certificates

62 CertTEC - Aviation Mechanic Assembly Technician
23 CertTEC - Aviation Structures Technician
6 CertTEC - Composites
261 NCRC
42 NIMS: CNC Milling - Operations
44 NIMS: CNC Turning - Operations
1 NIMS: Manual Milling Skills I
51 NIMS: Measurement, Materials & Safety
518 OSHA

oeie Office of Educational Innovation and Evaluation



WATC Students

Enrollment by City

- 1 - 25
- 26 - 50
- 51 - 75
- 76 - 100
- >100
- WATC

- Counties with Students
- Kansas Counties

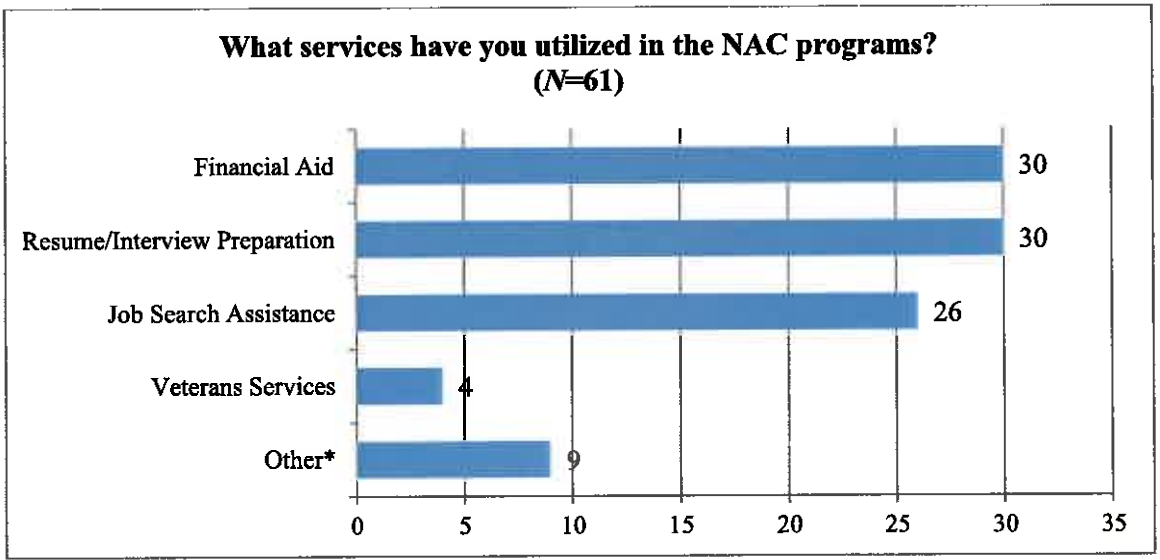
Dong Nai, Vietnam (2)
Ada, Oklahoma (1)
Bangkok, Thailand (1)
De Kalb, Missouri (1)
Milwaukee, Wisconsin (1)
San Pedro Sula, Honduras (1)
Toledo, Ohio (1)
Vientiane, Laos (1)


Harvey County
Reno County
Butler County
Sedgwick County
Sumner County
Neal Harris Service Experts, Johnson County, Kansas (1)
The Spaceship Company, California (1)
Matthews Aviation, Tennessee (1)
Ezell Aviation, Texas (1)
Flex n Gate, Michigan (1)
TAACCCT NAC Students
Employment by Company
1- 25
26 - 50
51 - 75
76 - 100
>100
NAC Implementation Site
Counties with Employers

Student Feedback

The evaluation team administered an online survey to WATC students to collect feedback on their experiences, including program impact, interactions with employers, and use of student services. Highlights include:

- More than one-third of respondents indicated they were employed in their field of study (n=15, 37.5%). Further, they reported that the Aviation or Manufacturing programs at WATC prepared them 'Moderately Well' to 'Very Well' for their current careers.
- Overall, respondents are satisfied with the NAC programs and 'Agree' or 'Strongly Agree' that the program is worth their time, is interesting, provides a clear route to a technical certificate, and that they would recommend the program to others. As well, respondents indicate they took an active role in their own learning, the assignments allowed them to demonstrate what they learned in the program, and that the academic and technical components of the program were well integrated in the classroom.
- Respondents reported that the most enjoyable aspects of the program are the hands-on components of the courses, the curriculum, and the instructors.
- Most respondents said that as a result of participating in the Aviation or Manufacturing program, they felt confident to apply for a job in their field (n=23, 65.7%), applied for a position in their field (n=28, 80.0%), increased confidence in the workplace (n=21, 60.0%), and felt prepared to work in their field (n=24, 70.6%).
- In Year 3, students reported that, of the student services related to the NAC program available to students, the most often used include financial aid (n=30, 30.3%), resume and interview preparation (n=30, 30.3%), and job search assistance (n=26, 26.3%). One student described, "Before attending WATC, I... helped individuals find gainful employment and training. I, myself, had taught resume writing and interview skills, but your staff opened my eyes to new techniques. They were very knowledgeable, helpful, and willing to go the extra mile for me. Kudos."



Note. Other responses include have not used any at this point; I have used none of these services; n/a; none (3); sheet metal project.

SGA Implementation Questions

In June 2016, OEIE conducted an interview with WATC TAACCCT staff to gain their answers to the implementation questions that were included in the SGA. A summary of WATC's responses are below.

1) How was the curriculum selected, used, or created?

NAC was designed to use a sector-based strategy to address training needs. The curriculum was originally designed with input from a major employer, WATC, and EdCC/WATR. Prior to being awarded the TAACCCT grant, WATC offered programs related to aviation maintenance and manufacturing, and the college was already working with 180 Skills to incorporate online content in some of their courses. Based on the results of a market study, the TAACCCT funding allowed the college to expand the programs into other areas such as tooling, quality, and CNC.

2) How were programs and program design improved or expanded using grant funds?

- **What delivery methods were offered?**
- **What was the program administrative structure?**
- **What support services and other services were offered?**

The NAC programs used a hybrid delivery, with some course content online in addition to traditional classroom and lab work. The increased focus on online learning also allowed the college to dedicate resources to help faculty build in those components. One of the project staff explained, "At a minimum, faculty have to have their syllabi in there [the learning management system (LMS)], and contact information. But with the new course formats with NAC, the face-to-face courses in machining, for example, had to integrate that online content, so we had to help the faculty. We had questions like, 'well, what do I do with that? How do I structure a class so they go to a computer lab and do that work? Or is that homework? What does that look like?' So that is essentially what we were working with. At that point, our role was primarily, 'what do you need?' and helping them figure that out." The instructional designers then worked with faculty to help them use the LMS and online content, engaging their textbooks and online resources. They created an entire course template for the faculty to facilitate implementation of the program.

The administrative structure at WATC consisted of a Program Coordinator (PC), two Retention Specialists (RSs), and a part-time administrative contact who serves as a direct link between the college's administration and the project team, and as a liaison between the project team, the instructional design team, and the instructors. The RS positions were a partnership between the Workforce Alliance and WATC, with one position intending to focus on student engagement and the second position working primarily with employers to serve as a link between the program and industry. Over time, as student enrollment grew and partnerships expanded, and as the project has experienced staff transitions, the roles become more blended and less delineated between students and employers.

Although WATC did offer some similar programs prior to 2012, substantive student support services were added through the TAACCCT grant. These strategic activities were designed to

increase student success in the program, as well as build capacity within the college to sustain ongoing efforts. These included:

- Offering student orientations. Orientation provides a first look into the college's online LMS, overview of student and academic code of conduct, overall expectation of the student, touring of the college, and collection of books and student badges. The day also includes an overview of the NAC grant and how it impacts the students. Online enrollment into the grant and collection of I-9 documentation occurs at this point as well.
- Developing a social media campaign. The college developed a social media campaign to promote the program, focusing on students and employers.
- Collecting and sharing monthly student success stories (through NAC newsletter and campus email).
- Gaining industry sponsors for a student recruitment campaign (media spots, billboards).
- Building students' professional skills. One successful activity implemented early in the project was preparing interview packets that contain NAC students' resume, cover letter, transcripts, information about skills obtained through NAC training, work ethic grade, and a completed lab project. Employers expressed interest in expanding this strategy to non-NAC programs.
- Offering Lunch and Learn events. The RS works with students to help develop the soft skills and work ethics that employers are looking for. As an opportunity to apply these skills, the college hosts Lunch and Learn events, such as bringing in some local employers for networking.
- Securing guaranteed interviews for NAC graduates of the sheet metal assembly program by local employers.
- Developed a military welcome center. The college hosted a military/veteran open house, and continues to discuss ways to reach out to and enroll more military and their families.

In addition to these student support services, WATC also initiated a number of activities aimed at building stronger industry partnerships through the NAC project. These included:

- Organizing a regional partnership council to consolidate partners' efforts amongst multiple committees/councils.
- Joining professional associations, such as the Wichita Manufacturing Association and the Wichita Aero Club. These memberships will provide a retention specialist with access to new networking opportunities for NAC and WATC, leading ultimately to increased opportunities for students.
- Surveying employers to identify skill needs of their employees, and then tailoring NAC training to that specific employer's needs.

3) Did the grantees conduct an in-depth assessment of participant's abilities, skills and interests to select participants into the grant program?

- **What assessment tools and process were used?**
- **Who conducted the assessment?**
- **How were the assessment results used?**
- **Were the assessment results useful in determining the appropriate program and course sequence for participants?**
- **Was career guidance provided and if so, through what methods?**

As part of the enrollment process, students at WATC have to take the COMPASS placement test. This computerized test assesses reading, writing, and math skills to help determine if the student is prepared for the programs. If the student does not achieve the minimum score on these assessments, they are referred for additional tutoring to develop the necessary skills to be successful in the program. The college also utilizes the WorkKeys assessment.

As noted above, WATC instituted a variety of career guidance activities for their students. The college offers a Global Professional Standards course that focuses on helping students develop their resumes and improve interviewing skills. There are multiple opportunities to interact with prospective employers, not only through regular job fairs and the Lunch and Learn events, but also through tours at local employer facilities. Faculty members also work to set up tours or bring industry representatives into the classroom. These introductions help students prepare for careers in the field of aviation manufacturing.

4) What contributions did each of the partners (employers, workforce system, other training providers and educators, philanthropic organizations, and others as applicable) make in terms of: a) program design, b) curriculum development, c) recruitment, d) training, e) placement, f) program management, g) leveraging of resources, and h) commitment to program sustainability.

- **What factors contributed to partners' involvement or lack of involvement in the program?**
- **Which contributions from partners were most critical to the success of the grant program?**
- **Which contributions from partners had less of an impact?**

WATC worked extensively with employer partners throughout the project. As part of the curriculum design and development, the college worked with a number of subject matter experts from industry. WATC explained, "So as we work with CNC Machining, we're bringing subject matter experts in to work with our faculty, to make sure what we're putting into the curriculum and into the lab... that the content and implementation is what industry wants. We're also pretty unique in the fact that we have several Board members that are part of the aviation industry." As part of the college's Board of Trustees, these industry representatives give feedback and guidance to the ongoing implementation of the project. By sharing these updates at their monthly meetings, the college was better able to develop buy-in from the Board, as well.

The South Central Kansas Workforce Alliance was a valuable collaborator throughout the grant. At the beginning of the project, an administrator from WATC met with the executive director of the Alliance. "[We] sat down and brainstormed, saying, 'okay, what could be something really sustainably different that we could create in this grant.' And that's why we hired the Retention Specialist-Director of Employer Engagement."

WATC also worked with employers to expand training and placement. Whether it is through formally arranged events like a job fair, or a more informal setting like a Lunch and Learn, WATC has built relationships with local employers, emphasizing how these partnerships can show a return on investment (ROI) for the companies. For example, as the curriculum aligns

with skills for entry-level positions, students in the program are a pool for recruitment. WATC explained, "We get them the information [about the program], so when they need employees they think, 'Hey, maybe we should go and do campus interviews, they have 30 graduates ready to work. Or we can sit here all day and hope that they'll answer our $2,000 Career Builder ad.' So if they come in and can see 80 students, maybe call in 20 and hire 10, how does that compare to what they would spend on Monster.com?"

In terms of sustainability, the college reports that everything is in place to sustain the curriculum. The courses and online content have been integrated into the programs. The credentials and certifications will continue to be offered. Many of the strategies – such as sector-specific career guidance and employer engagement – have been adopted by Career Services at the college and will be sustained going forward.

Additional Evaluation Questions

In addition to the questions from the SGA, the evaluation also addressed other specific questions related to the design, progress, and outcomes of the program. Data have been collected throughout the life of the project to address the formative aspects of these questions. During the fourth year of the grant, OEIE conducted the final data collections with students, faculty, college administrators, local employers, and project staff to capture the summative feedback on the program. These responses have been synthesized to address the evaluation questions listed below.

2) Which components of the program are most influential on the curriculum, national credential development, and overall project implementation? What measurable evidence demonstrates that these components are effective?

- Employer engagement
  - Guaranteed interviews are very attractive to potential students
  - Provided company tours through contacts with faculty and Career Services
  - Engaged employers to influence program design and the range of training programs offered. Flexibility to meet real-world needs was key.
- Support provided to students by the RSs
  - Worked with students from beginning (enrollment) to end (employment)
  - Were available in the classroom to answer any questions students might have
  - Helped facilitate the WorkKeys implementation
  - Provided resume assistance and job search guidance
    - Career workshops
    - Mock interviews
    - Changing a whole view on work ethics and employability skills
  - Dedicated a Student Services Specialist & financial aid specialist for veterans
  - Collaborated with the Career Services Department
- Enhanced instructional support to students
  - Worked to improve instructor focus on identifying student aptitude for "the areas that students might not even know that they have capability in." One student commented about the program faculty, "I love [redacted] because s/he is a very

supportive teacher who helps me a lot in learning Sheet Metal. I respect [redacted] who made me work hard and had self-discipline, so I could become a successful learner."

- Increased the opportunities to bring the workplace into the classroom: company tours, bringing former students in to talk about their jobs, networking with employers ("how to turn a job fair into a job offer")
- Used multiple delivery methods for courses to address different learning styles (i.e., three days online, three days in the lab applying concepts, working hands-on with the tools)
  - Helpful to have first look at material online, then reinforced in the lab
- Focused on employment
- Equipped with transferrable skills
- One student applied for and got a job with NASCAR, and another opened his own repair shop with the goal of inventing a patentable product

Project staff reported that another element of success was having faculty attend conferences to maintain state-of-the-art knowledge in the field, such as CAMEX, ACMA, and SAMPE (Society for Advanced Material Engineers).

3) What challenges were encountered during the program's implementation and how were they addressed?

- Tracking students and documenting outcomes
  - The college administers surveys to track student success.
  - The Apricot system (online data reporting system) was complicated and asked for more data than was required by DOL.
  - Gathering follow-up data on graduates is difficult without a mechanism to access DOL data.
    - An instructor set up a Facebook page dedicated to students with job postings, etc. Former students post about their job experiences; however, these data could not be included as employment outcomes as the required documentation was not available.
- Meeting industry needs, specifically identifying what is needed for an entry-level employee to be successful
  - One team member reflected, "It's funny, when you look at designing a project or what a company wants in their people that they hire, quite often the people that you interact with are the human resources folks. They are so far removed from the floor manager. What's the guy on the floor really need to have a successful employee? One thing that's always been lacking is getting timely and accurate feedback from the employer. What can we do better, what did we miss?" With expanded employer engagement, the project was able to better address these issues.
- Ambitious work plan developed initially
  - The timeline was too tight. WATC needed more time to implement everything as planned.

- It was difficult to hire necessary staff. WATC experienced turnover, which impacted implementation.

- Engaging faculty. In the early part of the grant, most communication went through the PCs and administrators. As the courses were developed, the project realized that the instructors needed to have an opportunity to connect.
  - One team member reported, "I don't think enough emphasis has been placed on the instructors to be honest with you. I think they need to get together more often and discuss challenges and ways of meeting objectives. I think that would increase what I call the buy-in." As a result, faculty became part of the annual meetings and regular conference calls. Another team member added, "It helped our instructors to get to know a peer group, someone to talk with. [It gave them a different perspective] 'oh we didn't think about doing this and that's a great idea'."
- Obtaining employment projections from industry partners and integrating the certifications into employers' hiring practices. Progress was made, but there continues to be a need for educating employers about the benefits of incorporating the certifications in hiring practices. Employment projections were a continued frustration reported by students in the program. "I was supposed to be starting at Spirit, and it's now been seven months, and [I] still have not heard a word about any start dates." Another student reported, "Employment assistance could be greatly improved, expanded. Employment counselors should be assigned students…Students would benefit to attend a 'Prospective Employers' fair before classes start and at the completion of [the] course. Producing greater targeted outcomes for the students would result in a win-win for [the] school and students."
- Some challenges exist at the national level, related to operating as a consortium, such as getting all consortium partners on the same page. An team member explained, "We did things that are really transformational and hard, but we skipped down to how we're going to do it and did not spend enough time on the why… I think we kind of failed in saying you know here is the overall common good for everybody and here is why. We spent a lot of time on how and I have learned since, from that five years ago, that if you have an adaptive challenge that's really going to create transformational change in your organization, you have to spend 50% of your time on the why, 25% on the how and 25% on the what."

4) To what extent will the program components be sustained?

- Career coaches positions, which give students a better look at what it takes to be whatever they want to be.
- Dedicated center for veterans, providing student support and assistance with financial aid processes
- Utilizing labor market data for planning. The college is using Chimera to monitor trends and identifying potential new program areas.
  - One staff member noted, "I think this software has tremendous potential in identifying students to fill certain roles. You can look at it for those unemployed, or you can look at with for what other skills, occupations are out there of similar

capabilities that the college could provide some limited training to get them into areas of need."

- Building off the big picture. This includes continuing the relationships started in this grant, such as with the Workforce Alliance locally and the Manufacturing Institute at a national level. It also includes continuing to expand the pipeline of students, reaching out to other agencies, and including veterans' organizations in the community as well as local high schools.
- Grant participation produced institutional self-efficacy. WATC applied for and received a Department of Education Title III grant and is participating in a Round 4 TAACCCT grant. In addition, they are exploring other grant opportunities.
- Short-term training programs that meet the needs of employers will be continued.

One team member explained, "Looking back over five years, we see that employers' job forecasting is a struggle: start and stop on a dime, start and stop on a dime, start and stop on a dime. And so far, we've been able to respond [with shorter programs]. Now as we've been through the grant, we're looking back through the successes and where the barriers may be for students. We're going to be morphing those programs into what is really needed out of all of that information in order to meet their needs – students and employers - in the workplace now. Whether it is for machining, whether it is for electrical assembly, whether it's for composites, whether it's for sheet metal, or whether it's for quality. This next year is really tweaking that and saying, okay we have this much on the smorgasbord and we ate the whole buffet. Now, how do we start skinning that down and how do we know exactly this is what we need to do. Through that process, I think our quality will go up. I think we will be really much more focused. We'll continue that strategic focus on pinpointing exactly what needs to be done in those areas of acceleration to work."

WATC Lessons Learned

The final data collections also collected some lessons learned by WATC's team, based on the successes and challenges faced during the program as well as effective practices that have been put in place. WATC shared the following lessons learned:

- Professional development for faculty will help in integrating online content into existing courses. This may include a focus strictly on the LMS, as well as ways to evaluate performance and provide feedback.
- Document processes and contacts in writing for program continuity, particularly in case of staff turnover.
- In the midst of day-to-day activities, team members strive to keep in mind the overall purpose of the project (meeting employer and student needs).
- Have an engaged administrator who is a local champion for the project strongly facilitates implementation; document grant processes at the local level; and gain college-wide support for project strategies.
- You have to have leadership support and you have to have cheerleading from your leadership to make it work.
- Join professional associations locally to provide access to new networking opportunities.
- Develop referral sheets and informational materials for various stakeholder groups to provide outreach and promotion.
- When possible, focus on implementing things in stages, rather than all at once. It will be easier to manage and less overwhelming.
- Get the Board of Trustees involved. "Your Board has to be involved, because the Board has to help drive it. If your leadership changes, if your Board is involved, then they re-emphasize to the next leader that it's important. Often times in grants, Boards are not involved. But positions and people change. They change constantly. There has to be a constant someplace, for continuity."
- Restructure communication strategies as needed throughout the project. The frequency and type of meetings needed during the first year of the project may need to shift focus as the implementation moves forward.

Outcomes Analysis

As outlined earlier in the evaluation process section of this report, the evaluation team sought to examine factors related to average time to employment, average final earnings, and average wage gains for participants in this study. This report begins generally, detailing the average time to employment across the entire participant pool, information on the demographics of the participants as a whole, and how time to employment varied by these demographic factors. At this point, the report becomes more detailed, examining time to employment in a similar fashion as above but within each school individually. Then, the scope of the report broadens again to examine overall earnings information for the entire participant pool before narrowing its focus again to individual schools. Specifically, the report focuses on the following questions:

- What was the average time to employment for NAC program participants?
    - Did time to employment vary by gender or veteran status?
- What was the average time to employment for participants in each of the partner colleges?
- What was the average final earning for NAC program participants?
- What was the average final earning for participants in each of the partner colleges?
- What was the average wage gain for NAC program participants?
- What was the average wage gain for participants in each of the partner colleges?

Additionally, supplemental information is presented throughout this section. This information details:

- Whether or not time to employment varied as a function of participant age
- Differences in wage change as a function of occupation area (aviation/manufacturing vs. non-aviation/manufacturing occupations)
- Differences in average final earnings for incumbent vs. non-incumbent workers

Consortium-level Analysis: Time to Employment

Definition: Time to Employment

Time to employment was measured for each program participant. Specifically, time to employment was measured as the number of days taken to first obtain any form of employment after exiting the earliest NAC program.

Method

As of August, 23 2016, there were 925 unique NAC program participants reporting employment data. Each of these had a time to employment value. Notably, some of these values were negative. That is, some participants were employed prior to program participation or completion. Omitting records with negative time to employment values reduced the sample size to 846 respondents. The results presented in this report are based on responses from these 846 respondents.

Results

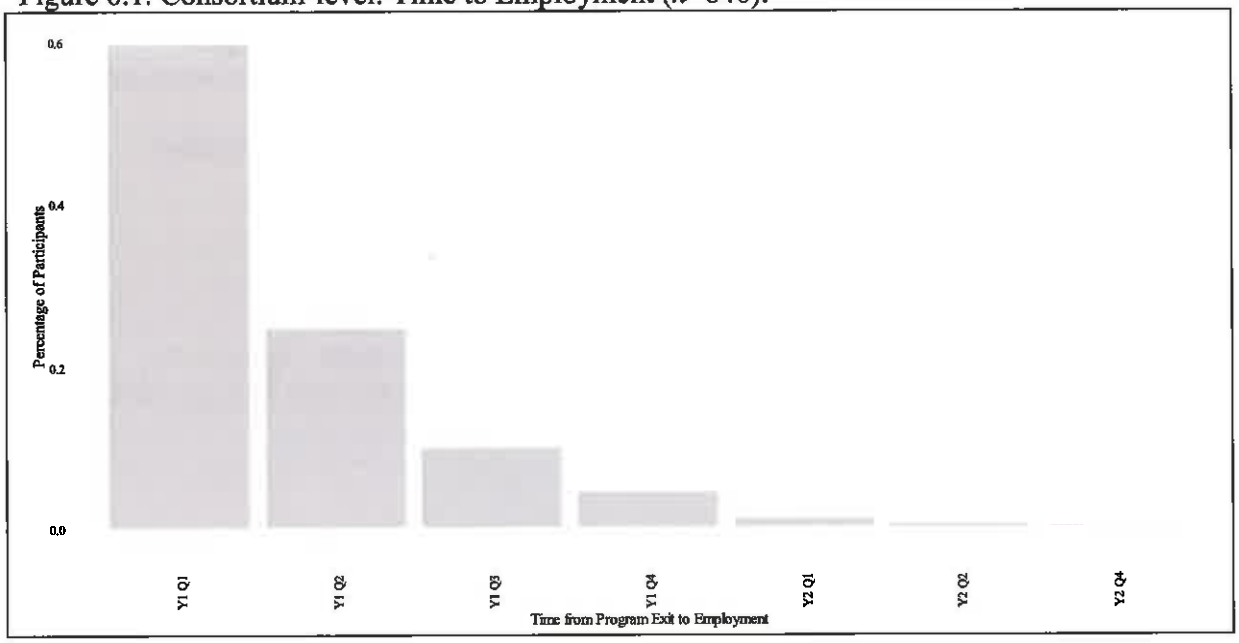
Table 6.1 shows summary statistics for the time to employment values. On average, respondents obtained employment 94.35 days after exiting a program. The median, however, shows a faster turnaround, with half of all participants obtaining employment within 66 days. At most, it took one project participant 659 days to obtain employment after their earliest program completion.

Table 6.1. Consortium-level: Summary Statistics of Time to Employment.

	Maximum Time to Employment	Mean Time to Employment	Median Time to Employment	*N*
Overall	659	94.35	66	846

Time to employment among participants is presented in Figure 6.1 by quarter year increments. From the bar chart, over 60 percent of program participants in the consortium obtained employment within the first 90 days of completing their earliest NAC program. The percentage of participants obtaining employment after exiting a program increased further as more time passed, to over 80% by the second quarter and approximately 90% by the third quarter. While participants continued to gain employment as time went on, the percentage obtaining employment decreased with every additional quarter that passed after the 3rd quarter after exiting from the program.

Figure 6.1. Consortium-level: Time to Employment (*n*=846).



The analysis also examined whether this pattern of time to employment varied across the sites due to different employers in each of the local communities. Statistics on time to employment were calculated for the different sites. Summary statistics and quarterly bar charts are provided in Tables 6.1-6.20 and Figures 6.1-6.17, found later in this section of the evaluation report.

Consortium-level Analysis: Demographics

Demographic information was available for all 846 NAC participants reporting employment data. Of these individuals, 158 (18.7%) were female, 684 (80.9%) were male, and 4 (1.8%) did not self-identify as either. Additionally, 97 (11.5%) of these participants indicated that they were veterans, while 749 (88.5%) indicated that they were not. Of the 97 veteran participants, seven (7.2%) indicated that they had served fewer than 180 days and 90 (92.8%) indicated that they had served over 180 days. Participants were on average 32.74 years of age at the time of enrollment (see Table 6.2).

Table 6.2. Consortium-level: Summary Statistics of Age.

	Maximum Age	Mean Age	Median Age	*N*
Overall	63	32.74	30	846

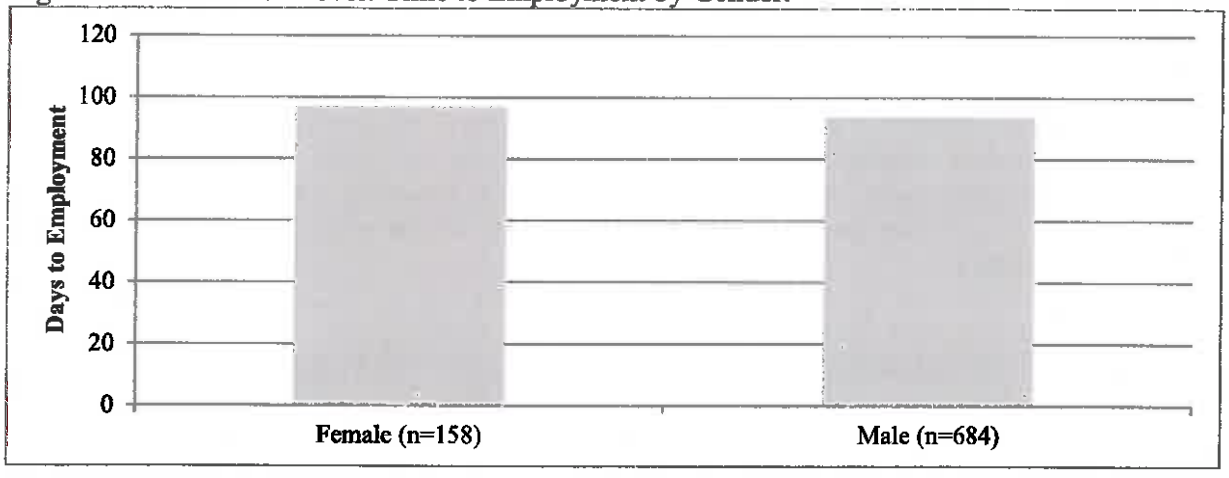
Consortium-level Analysis: Time to employment by demographics

The outcomes analysis questions addressed whether time to employment was different for various groups of people. To examine this, time to employment was analyzed for men and women, as a function of age, and for a participant's military status.

Gender:

- Time to employment did not differ considerably for men and women. Women (n=158) on average found employment 97.09 days (SD=85.19) post-program while men (n=684) found employment on average 93.79 days (SD=93.69) post-program; an average difference of less than four days (see Figure 6.2).

Figure 6.2. Consortium-level: Time to Employment by Gender.



Age:

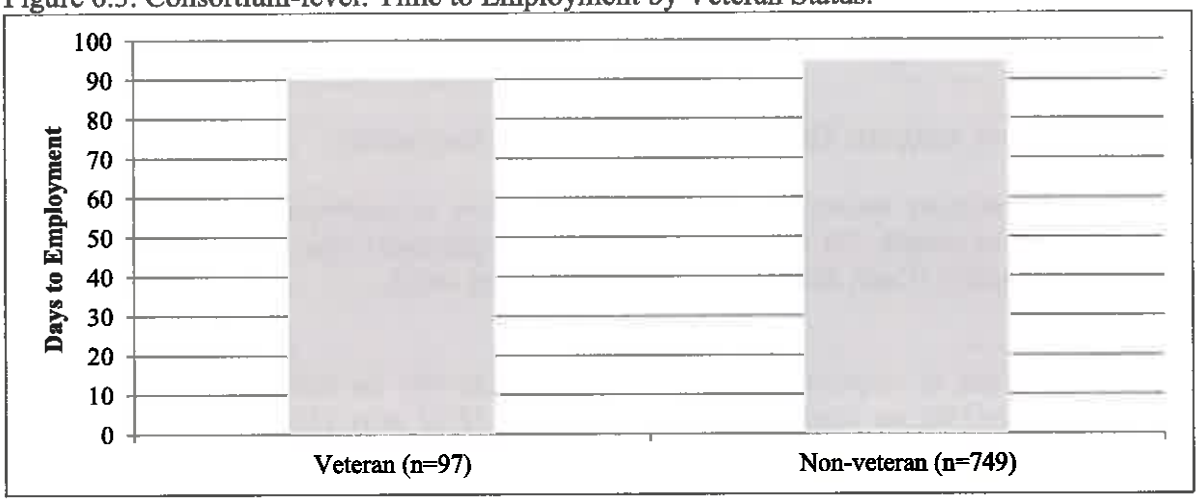
- Time to employment did not vary as a function of the participants' age. Specifically, there was a very small negative correlation, $r(844)$=-.02, but a relationship of this magnitude is functionally nonexistent. Therefore, the rate at

which participants found employment was not different for participants of different ages.

Veteran Status:

- Time to employment did not differ considerably for veterans and non-veterans. Veterans (n=97) on average found employment 90.15 days (SD=101.60) post-program while non-veterans (n=749) found employment on average 94.89 days (SD=90.81) post-program; an average difference of less than five days (see Figure 6.3).

Figure 6.3. Consortium-level: Time to Employment by Veteran Status.



College-level Analyses: Time to Employment by Demographics

Results: EdCC/WATR

Table 6.3 shows summary statistics for EdCC/WATR time to employment values. On average, respondents obtained employment 110.22 days after exiting a program. The median, however, shows a faster turnaround, with half of all participants obtaining employment within 88.5 days. At most, it took one project participant 659 days to obtain employment after the earliest program completion.

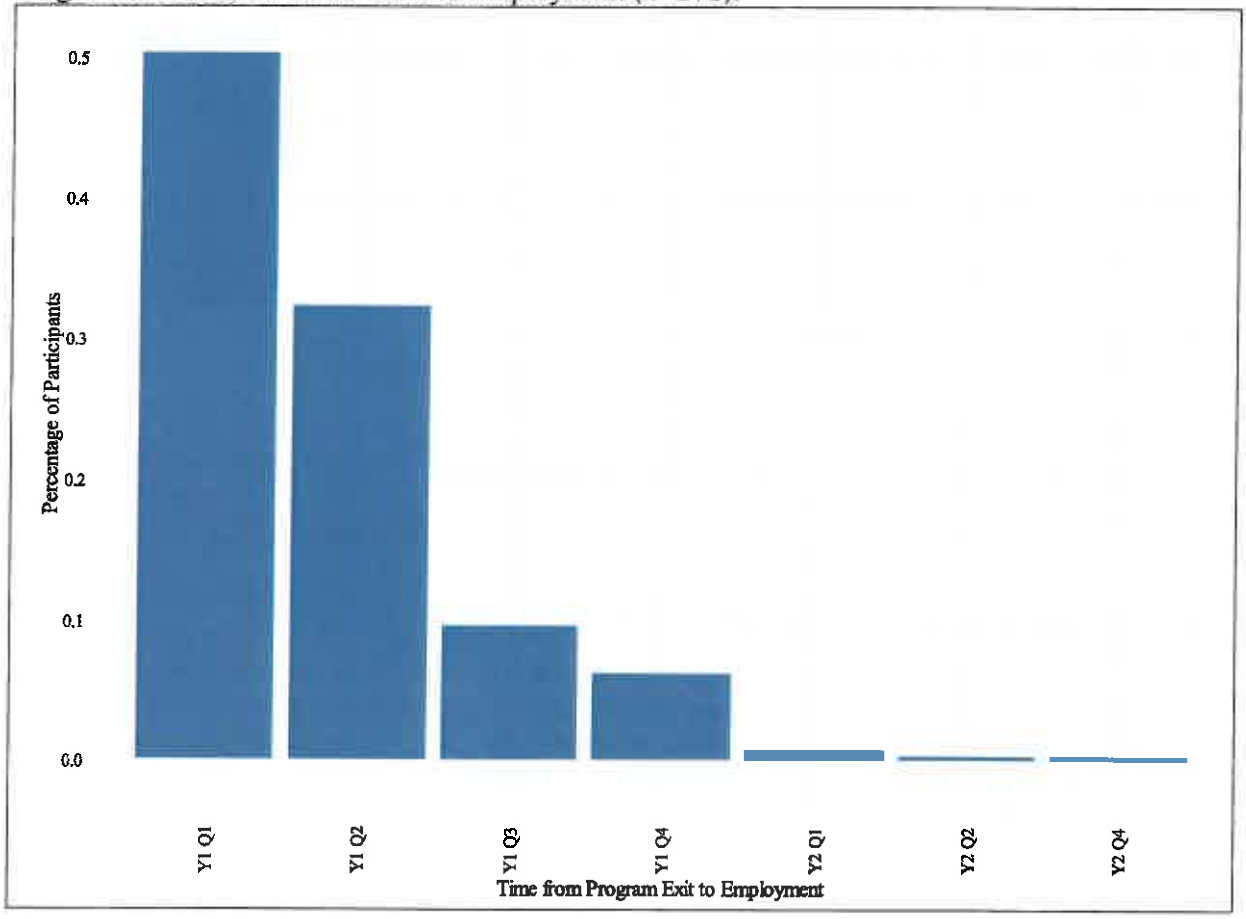
Table 6.3. EdCC/WATR: Summary Statistics of Time to Employment.

	Maximum Time to Employment	Mean Time to Employment	Median Time to Employment	*N*
EdCC/ WATR	659	110.22	88.5	272

As can be seen in Figure 6.4, the rate at which participants from EdCC/WATR found employment is similar to the overall pattern seen in Figure 6.4. Here, 51% of the participants found employment within one quarter post-program. Then, the rate of employment slowed with 32% of participants finding employment in the second quarter post-program (83% of total), 10% in the third quarter (93% of total), 6% in the fourth quarter (99% of total), and 1%, combined, in the remaining quarters (100% of total). It should be noted that participants at EdCC/WATR often

enrolled in subsequent courses. However, to capture the greatest amount of data, calculations for the overall time to employment were made using the earliest program exit date to first employment date. This generated the largest dataset for the analysis, but over-estimates the time to employment for some of these students.

Figure 6.4. EdCC/WATR: Time to Employment (n=272).



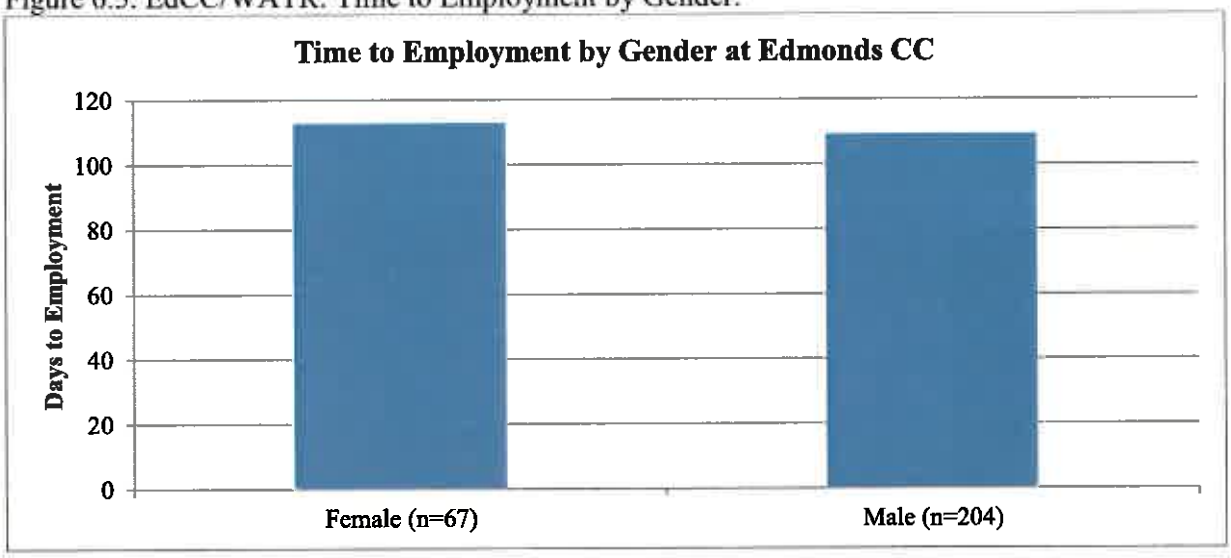
Time to employment by demographics – EdCC/WATR

Various factors may influence the rate at which a graduate of EdCC/WATR finds employment. Some of these are a participant's gender, age, and veteran status. Below is information describing the relationship between these various demographics and the rate at which graduates of this program found employment. Overall, participants at EdCC/WATR found employment after an average of 110.22 days (n=272, SD=93.58).

Gender:

- Time to employment did not differ considerably for men and women at EdCC/WATR. Women (n=67) on average found employment 113.00 days (SD=69.74) post-program while men (n=204) found employment on average 109.45 days (SD=100.51) post-program; an average difference of less than four days (see Figure 6.5).

Figure 6.5. EdCC/WATR: Time to Employment by Gender.



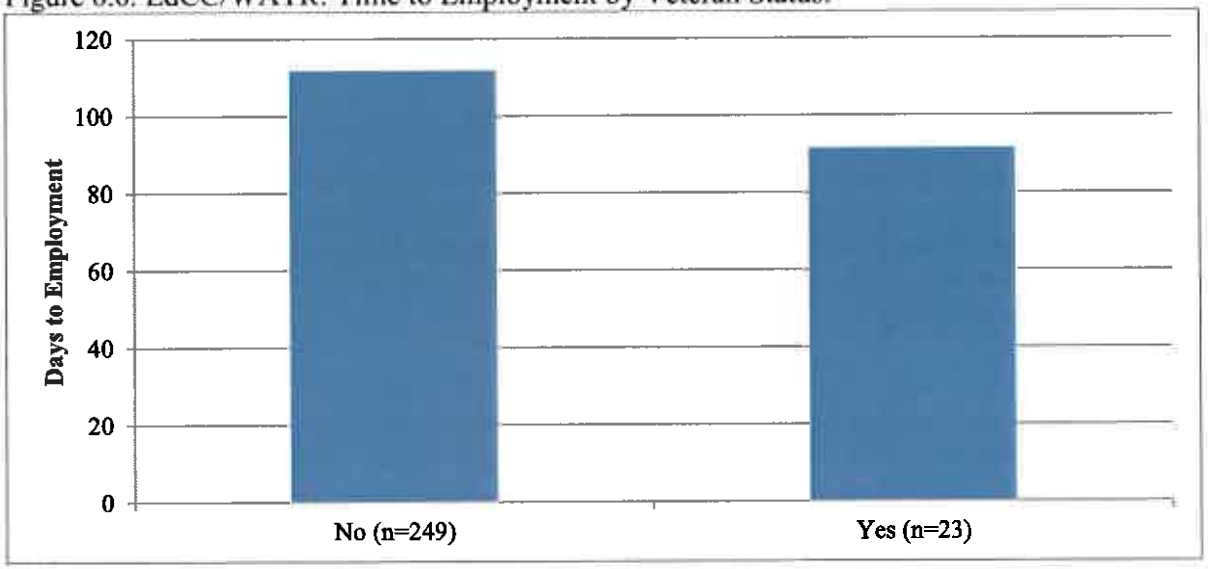
Age:

- Time to employment did not vary as a function of the participants' age (M=30.43, SD=10.61), $r(270)$=.00. Therefore, the rate at which participants found employment was not different for participants of different ages.

Veteran Status:

- Time to employment did not differ considerably for veterans and non-veterans. Veterans (n=23) on average found employment 91.61 days (SD=82.39) post-program while non-veterans (n=249) found employment on average 111.94 days (SD=94.51) post-program; an average difference of about 20 days (see Figure 6.6).

Figure 6.6. EdCC/WATR: Time to Employment by Veteran Status.



Results: Ivy Tech

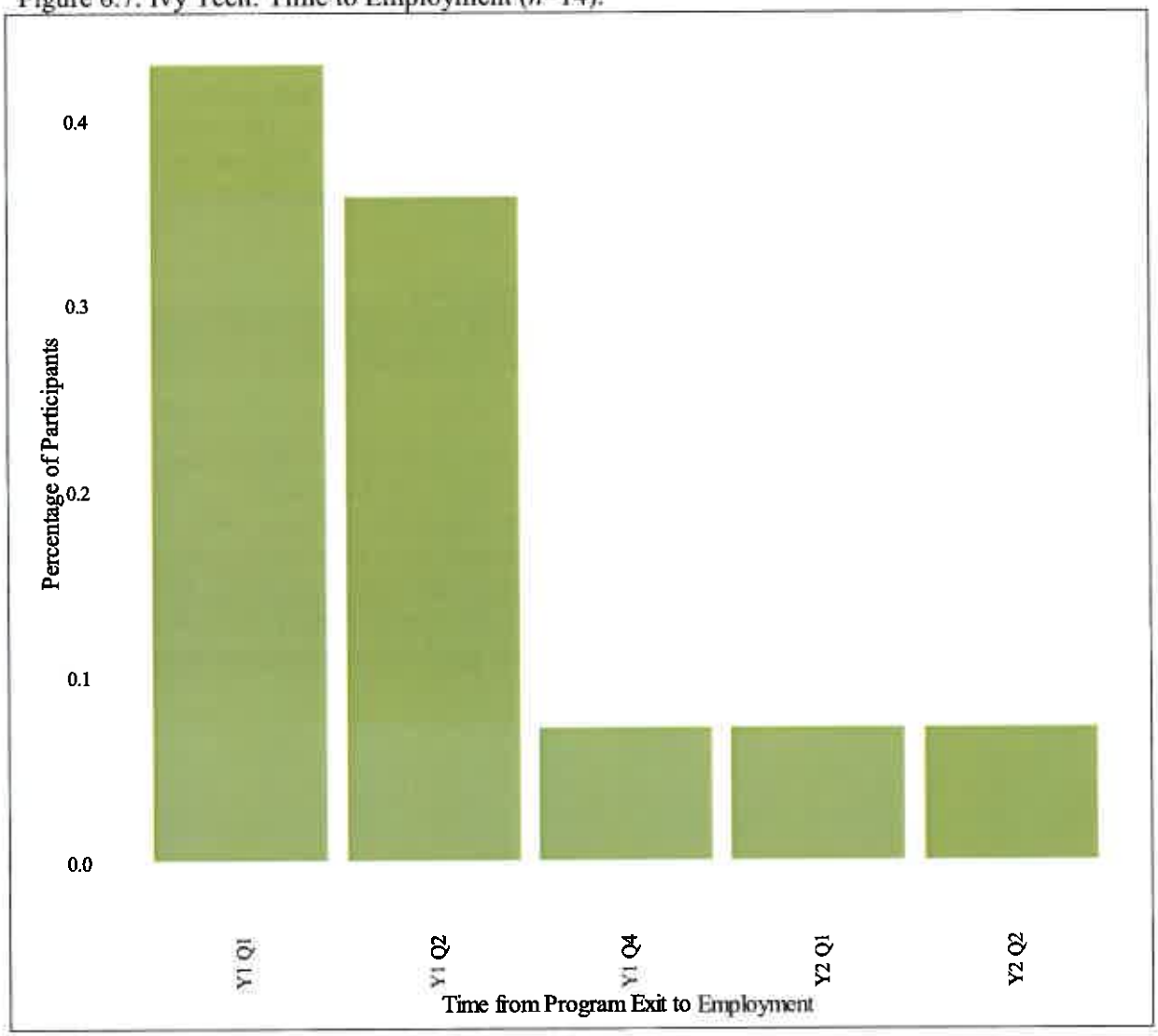
Table 6.4 shows summary statistics for Ivy Tech time to employment values. On average, respondents obtained employment 163.93 days after exiting a program. The median, however, shows a faster turnaround, with half of all participants obtaining employment within 103 days. At most, it took one project participant 479 days to obtain employment after the earliest program completion.

Table 6.4. Ivy Tech: Summary Statistics of Time to Employment.

	Maximum Time to Employment	Mean Time to Employment	Median Time to Employment	*N*
Ivy Tech	479	163.93	103	14

The rate at which participants from Ivy Tech found employment is detailed in Figure 6.7. As can be seen there, 43% of participants found employment within the first quarter post-program. The rate at which participants found employment then began to decrease with 36% finding employment in the second quarter (79% of total). After this, the rate at which participants found employment decreased, with approximately 7% of participants finding employment in the fourth, fifth, and sixth quarters post-program. This is similar to the overall pattern detailed in Figure 6.7 where the rate of employment was greatest immediately post-program and then tapered off over time.

Figure 6.7. Ivy Tech: Time to Employment (n=14).



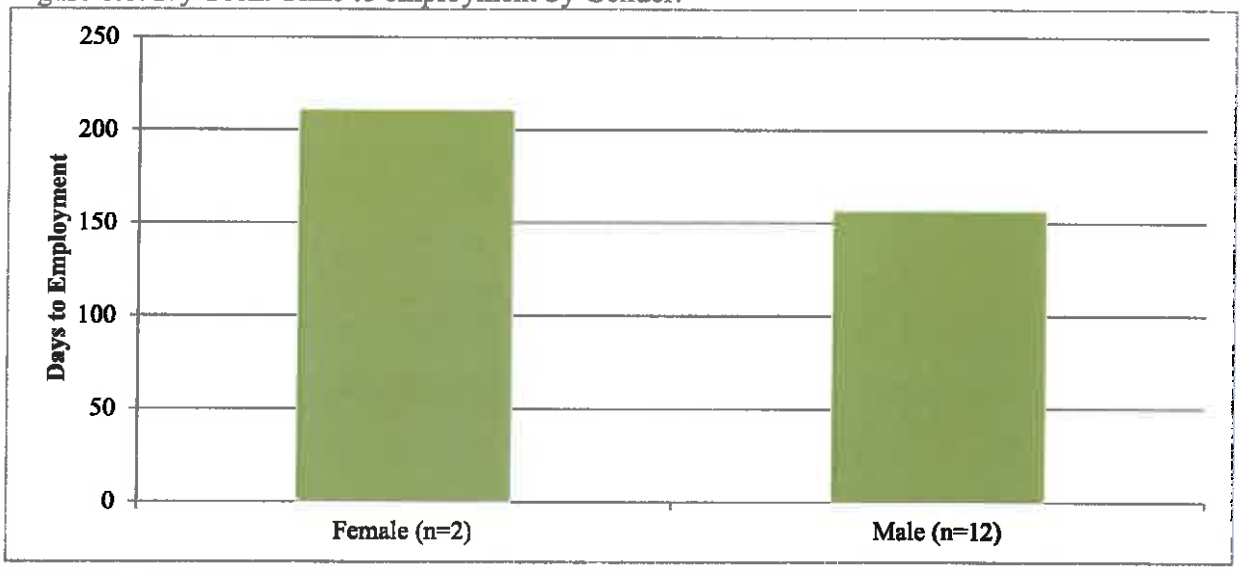
Time to employment by demographics – Ivy Tech

Various factors may influence the rate at which a graduate of Ivy Tech finds employment. Some of these are a participant's gender, age, and veteran status. Because of the limited number of participants, graduates from all three Ivy Tech locations were considered together for these analyses. Unfortunately, only 14 individuals provided employment data from these locations. As such, there is not enough data to make meaningful comparisons between these different demographic groups or to examine the relationship between age and time to employment. Specifically, while there are 12 males, there are only two females in this sample. Additionally, there are only non-veteran participants in this sample. Therefore, these data are likely not representative of the typical graduate of this program and should not be used as a basis for any conclusions. Overall, participants at Ivy Tech found employment after an average of 163.93 days (SD=137.81).

Gender:

- Time to employment did not differ considerably for men and women. Women (n=2) on average found employment 210.50 days (SD=201.53) post-program while men (n=12) found employment on average 156.17 days (SD=135.25) post-program; an average difference of about 65 days (see Figure 6.8). This difference should be interpreted with great caution, however, in light of the very small sample sizes involved.

Figure 6.8. Ivy Tech: Time to employment by Gender.



Age:

- Time to employment did not vary as a function of the participants' age. Specifically, there was a very small negative correlation (r=-.31), but a relationship of this magnitude is functionally nonexistent. Therefore, the rate at which participants found employment was not different for participants of different ages.

Results: GTCC

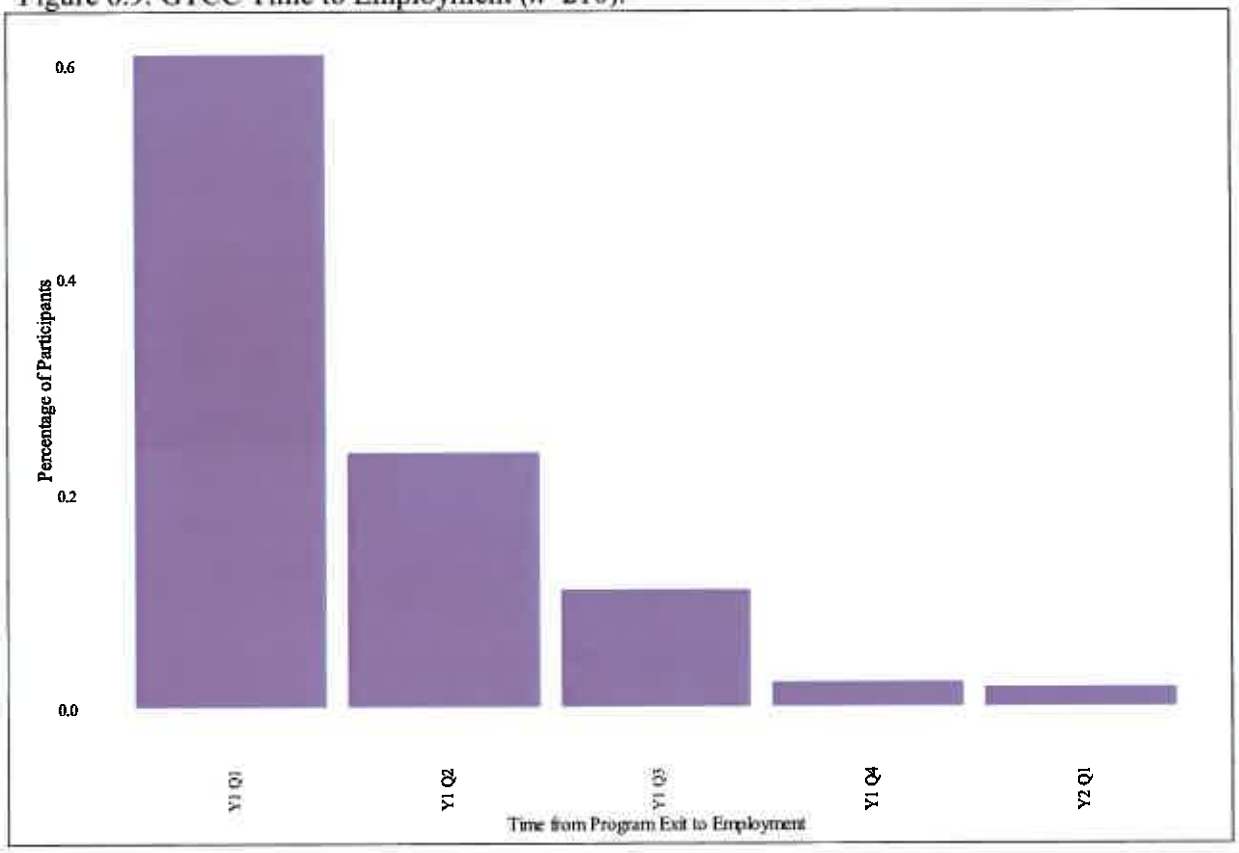
Table 6.5 shows summary statistics for GTCC time to employment values. On average, respondents obtained employment 98.06 days after exiting a program. The median, however, shows a faster turnaround, with half of all participants obtaining employment within 61 days. At most, it took one project participant 444 days to obtain employment after the earliest program completion.

Table 6.5. GTCC: Summary Statistics of Time to Employment.

	Maximum Time to Employment	Mean Time to Employment	Median Time to Employment	*N*
GTCC	444	98.06	61	210

The rate at which participants from GTCC found employment is detailed in Figure 6.9. As can be seen there, 61% of participants found employment within the first quarter post-program. The rate at which participants found employment then began to decrease with 24% finding employment in the second quarter (85% of total), 11% of participants finding employment in the third quarter (96% of total), 2% in the fourth quarter (98% of total), and 2% in the fifth quarter (100% of total). This is consistent with the overall pattern detailed in Figure 6.9 where the rate of employment was greatest immediately post-program and then tapered off over time.

Figure 6.9. GTCC Time to Employment (n=210).



Time to employment by demographics – GTCC

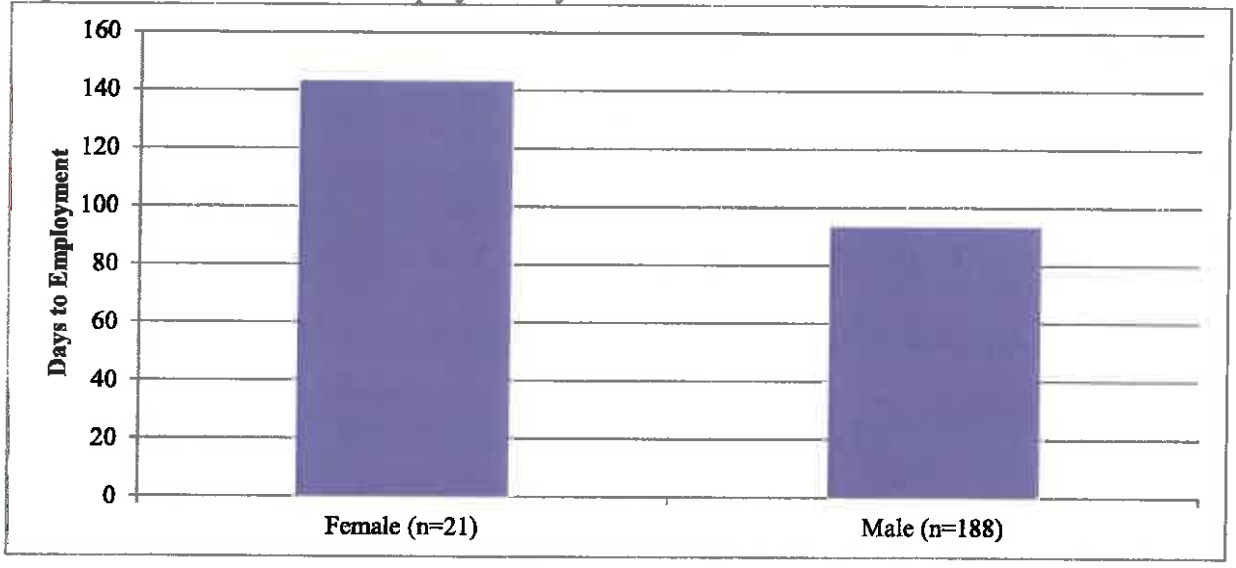
Various factors may influence the rate at which a graduate of GTCC finds employment. Some of these are a participant's gender, age, and veteran status. Below is information describing the relationship between these various demographics and the rate at which graduates of this program found employment. Overall, participants at GTCC found employment after an average of 98.06 days (n=210, SD=83.23).

Gender:

- Time to employment differed considerably for men and women. Women (n=21) on average found employment 143.29 days (SD=108.25) post-program while men (n=188) found employment on average 93.36 days (SD=78.82) post-program; an average difference of about 50 days (see Figure 6.10). These data suggest that

male graduates of this program tend to find employment more quickly than do female graduates. However, this difference should be considered with some caution as the number of female participants was relatively low (n=21); if a larger number of females had responded it is possible that the average times to employment would have been more similar.

Figure 6.10. GTCC: Time to Employment by Gender.



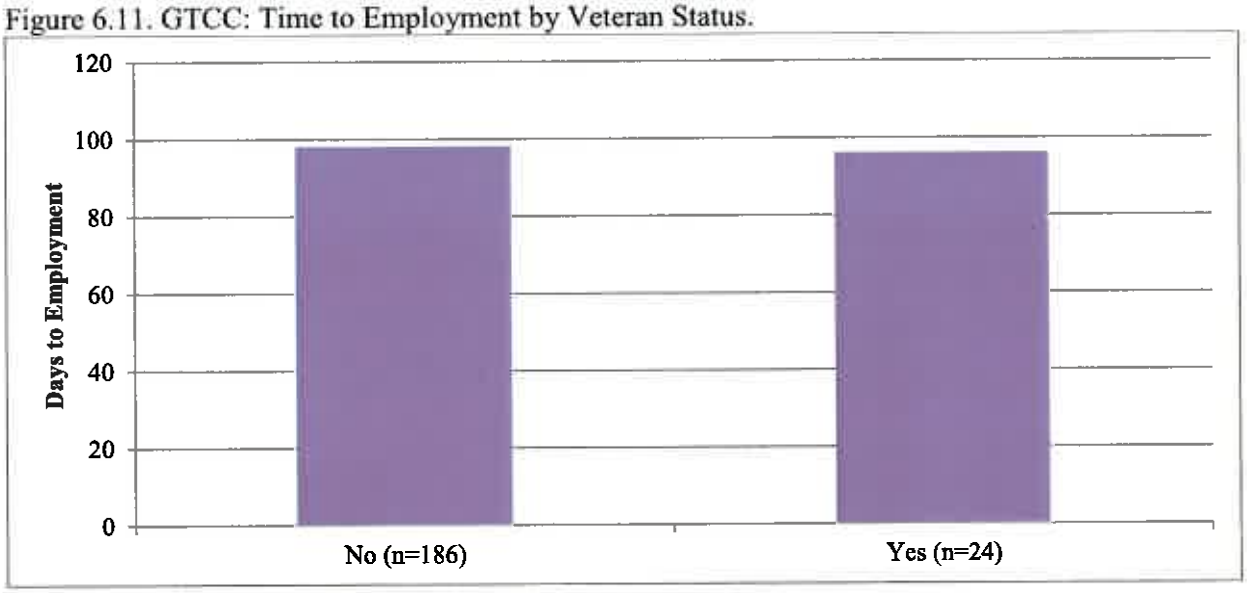
Age:

- Time to employment did not vary as a function of the participants' age (M=33.95, SD=11.11). Specifically, there was a small positive correlation (r=.13), but a relationship of this magnitude is most likely inconsequential. Therefore, the rate at which participants found employment was not different for participants of different ages.

Veteran Status:

- Time to employment did not differ considerably for veterans and non-veterans. Veterans (n=24) on average found employment 96.29 days (SD=82.54) post-program while non-veterans (n=186) found employment on average 98.29 days (SD=83.53) post-program; an average difference of only two days (see Figure 6.11).

Figure 6.11. GTCC: Time to Employment by Veteran Status.



Results: Tulsa CC

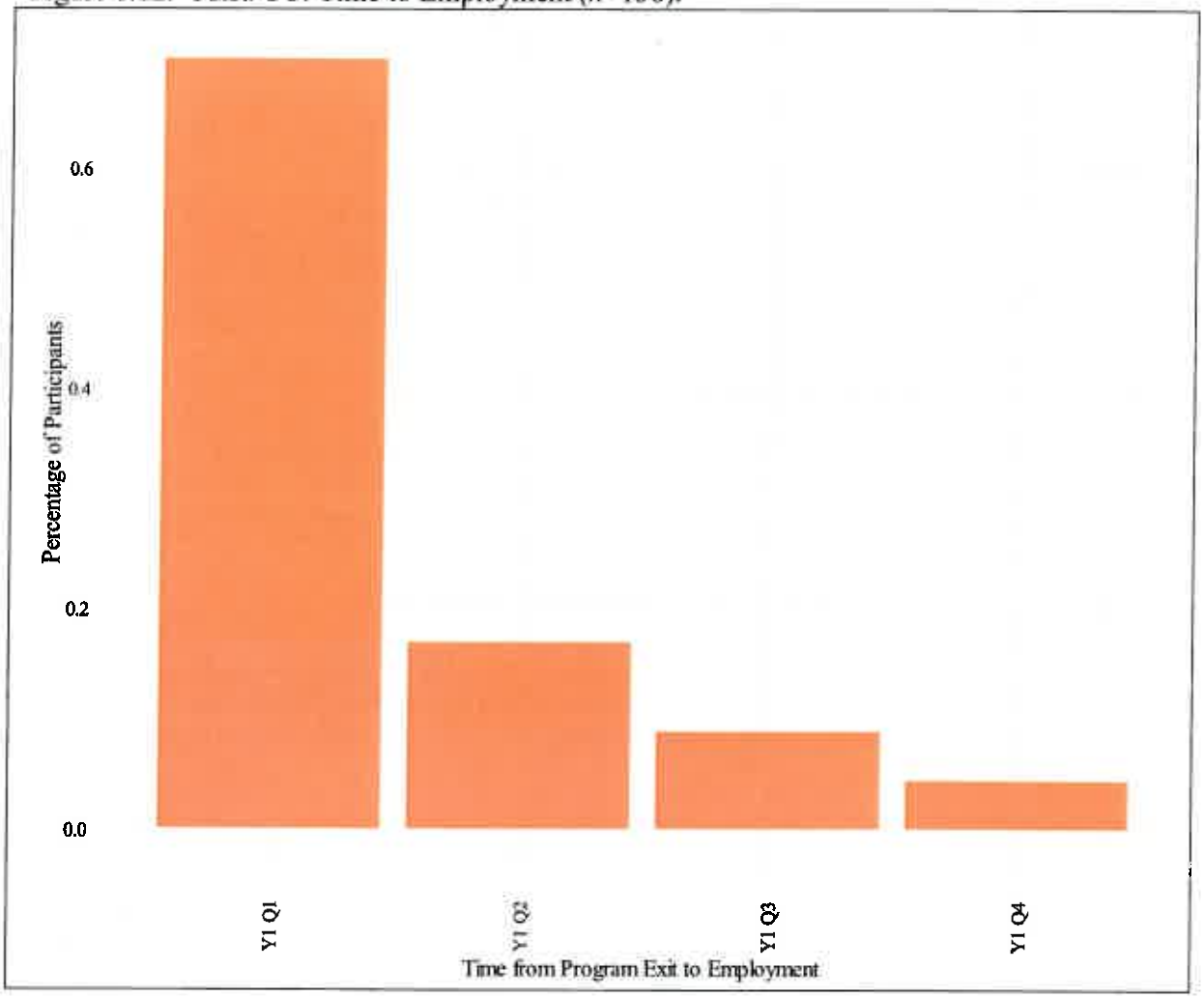
Table 6.6 shows summary statistics for Tulsa CC time to employment values. On average, respondents obtained employment 66.71 days after exiting a program. The median, however, shows a faster turnaround, with half of all participants obtaining employment within 25.5 days. At most, it took one project participant 360 days to obtain employment after the earliest program completion.

Table 6.6. Tulsa CC: Summary Statistics of Time to Employment.

	Maximum Time to Employment	Mean Time to Employment	Median Time to Employment	*N*
Tulsa CC	360	66.71	25.5	136

The rate at which participants from Tulsa CC found employment is detailed in Figure 6.12. As can be seen there, 70% of participants found employment within the first quarter post-program. The rate at which participants found employment then began to decrease with 17% finding employment in the second quarter (87% of total), 9% of participants finding employment in the third quarter (96% of total), and 4% in the fourth quarter (100% of total). This is consistent with the overall pattern detailed in Figure 6.12 where the rate of employment was greatest immediately post-program and then tapered off over time.

Figure 6.12. Tulsa CC: Time to Employment (n=136).



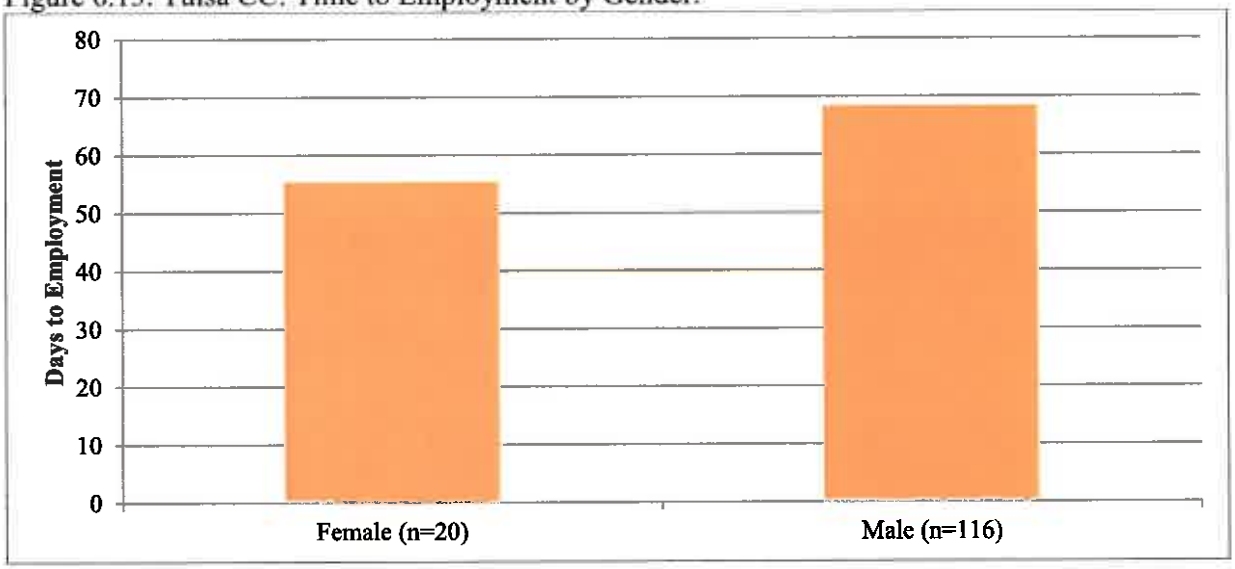
Time to employment by demographics – Tulsa CC

Various factors may influence the rate at which a graduate of Tulsa CC finds employment. Some of these are a participant's gender, age, and veteran status. Below is information describing the relationship between these various demographics and the rate at which graduates of this program found employment. Overall, participants at Tulsa CC found employment after an average of 66.71 days (n=136, SD=87.04).

Gender:

- Time to employment did not differ considerably for men and women. Women (n=20) on average found employment 56.55 days (SD=75.90) post-program while men (n=116) found employment on average 68.46 days (SD=89.00) post-program; an average difference of about 13 days (see Figure 6.13).

Figure 6.13. Tulsa CC: Time to Employment by Gender.



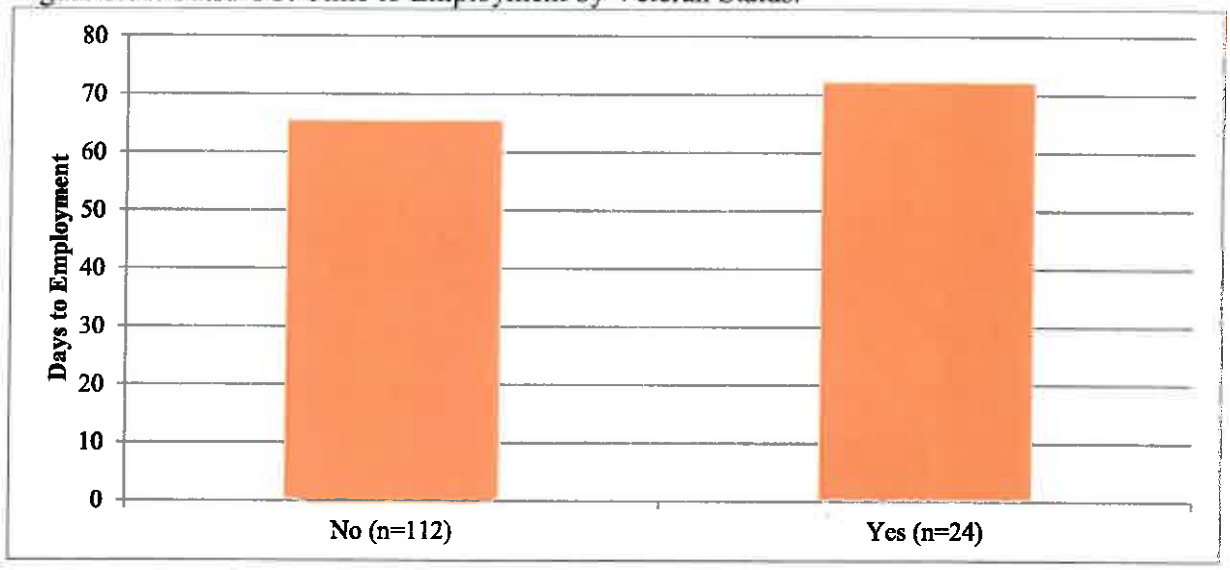
Age:

- Time to employment did not vary as a function of the participants' age (M=35.41, SD=11.62). Specifically, there was a very small positive correlation, $r(134)$=.02, but a relationship of this magnitude is functionally nonexistent. Therefore, the rate at which participants found employment was not different for participants of different ages.

Veteran Status:

- Time to employment did not differ considerably for veterans and non-veterans. Veterans (n=24) on average found employment 72.25 days (SD=94.00) post-program while non-veterans (n=112) found employment on average 65.52 days (SD=85.88) post-program; an average difference of about seven days (see Figure 6.14).

Figure 6.14. Tulsa CC: Time to Employment by Veteran Status.



Results: WATC

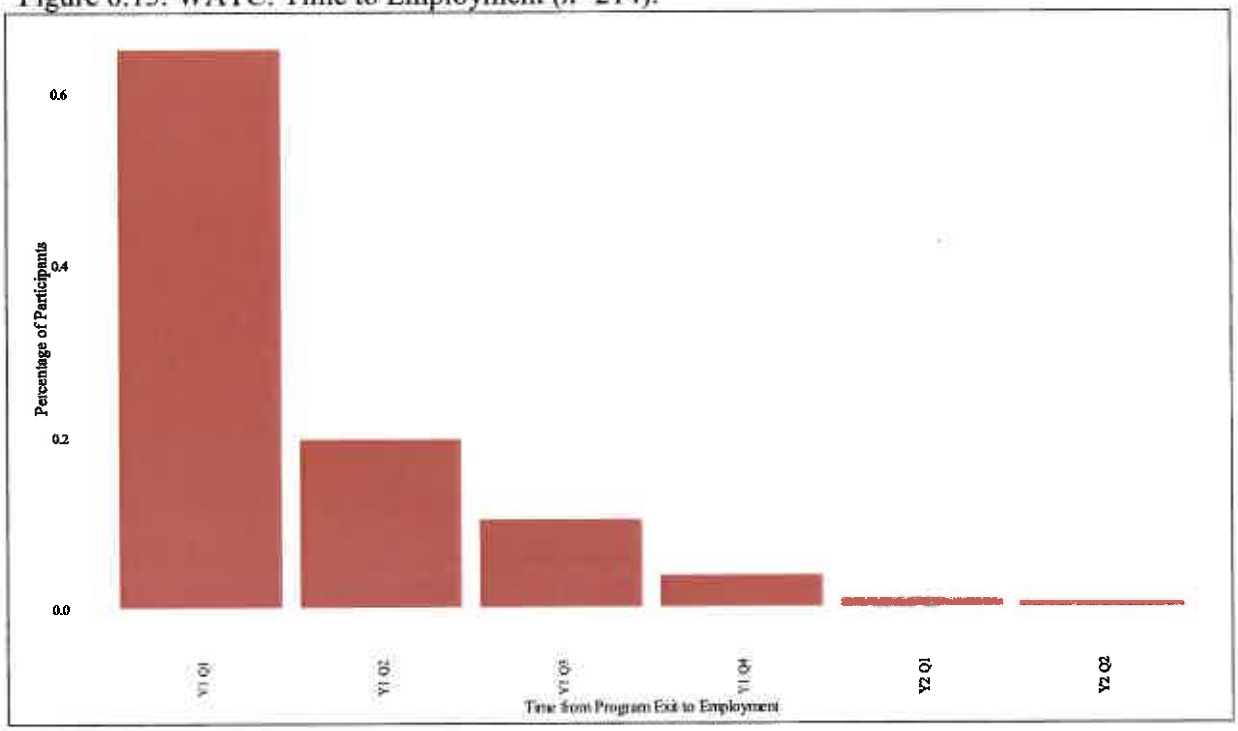
Table 6.7 shows summary statistics for WATC time to employment values. On average, respondents obtained employment 83.55 days after exiting a program. The median, however, shows a faster turnaround, with half of all participants obtaining employment within 48 days. At most, it took one project participant 514 days to obtain employment after the earliest program completion.

Table 6.7. WATC: Summary Statistics of Time to Employment.

	Maximum Time to Employment	Mean Time to Employment	Median Time to Employment	*N*
WATC	514	83.55	48	214

The rate at which participants from WATC found employment is detailed in Figure 6.15. As can be seen there, 65% of participants found employment within the first quarter post-program. The rate at which participants found employment then began to decrease with 20% finding employment in the second quarter (85% of total), 10% of participants finding employment in the third quarter (95% of total), 4% in the fourth quarter (99% of total), and approximately 1% in the remaining quarters (100% of total). This is consistent with the overall pattern detailed in Figure 6.15 where the rate of employment was greatest immediately post-program and then tapered off over time.

Figure 6.15. WATC: Time to Employment (n=214).



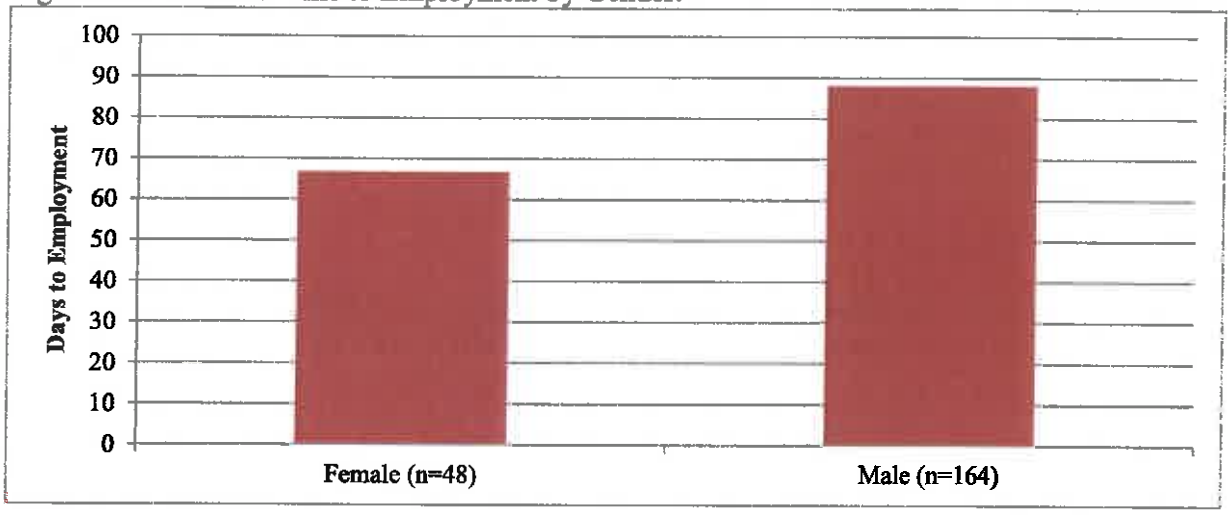
Time to employment by demographics – WATC

Various factors may influence the rate at which a graduate of WATC finds employment. Some of these are a participant's gender, age, and veteran status. Below is information describing the relationship between these various demographics and the rate at which graduates of this program found employment. Overall, participants of WATC found employment after an average of 83.55 days (n=214, SD=91.98).

Gender:

- Time to employment did not differ considerably for men and women. Women (n=48) on average found employment 66.83 days (SD=75.75) post-program while men (n=164) found employment on average 88.14 days (SD=95.73) post-program; an average difference of about 21 days (see Figure 6.16).

Figure 6.16. WATC: Time to Employment by Gender.



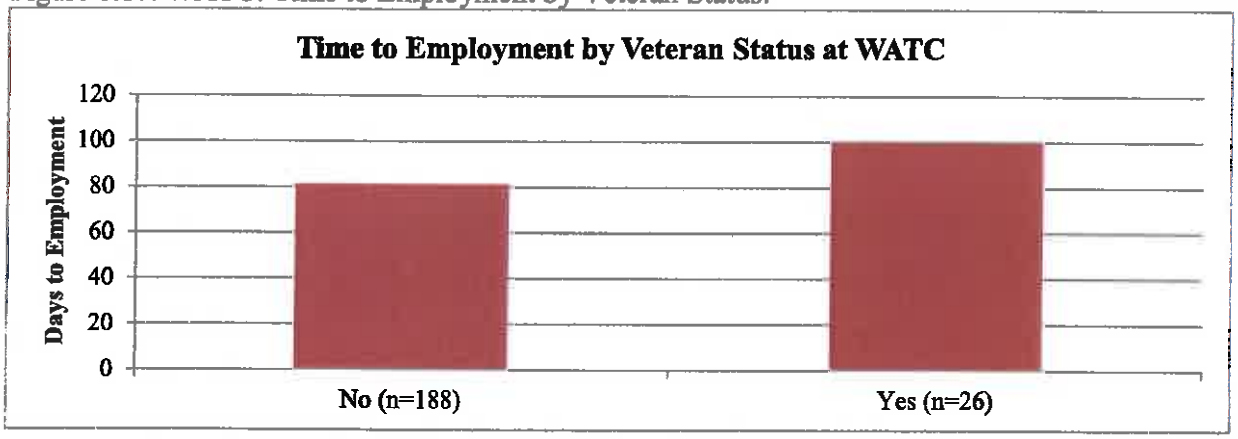
Age:

- Time to employment did not vary as a function of the participants' age (M=32.86, SD=10.00). Specifically, there was a very small negative correlation, $r(212)$=-.08, but a relationship of this magnitude is most likely not meaningful. Therefore, the rate at which participants found employment was not different for participants of different ages.

Veteran Status:

- Time to employment did not differ considerably for veterans and non-veterans. Veterans (n=26) on average found employment 99.73 days (SD=137.22) post-program while non-veterans (n=188) found employment on average 81.31 days (SD=84.13) post-program; an average difference of about 18 days (see Figure 6.17).

Figure 6.17. WATC: Time to Employment by Veteran Status.



Consortium-level Analysis: Earnings

Definition: Final Earnings Difference

Final earnings difference was calculated by taking the difference between wages earned by program participants prior to program participation and just after earliest employment.

Definition: Earnings Gain

Earnings gain was calculated as the non-negative, non-zero difference in wages earned by program participants prior to program participation and just after earliest employment.

Method

There were 1,137 unique program participants with employment data available for analysis. Every participant was asked to report two earnings values: hourly wage at intake and hourly wage after program completion. Notably, several intake wage values reported were much greater than expected (n=36), suggesting they were not reported in hourly increments. Other respondents failed to report either intake (n=131) or exit (n=32) earnings or both (n=2). Missing wage values were imputed when possible. Missing wage values were replaced with average wage values based on job titles and ONET codes found elsewhere in the data set. After imputation, there were 140 participants without intake wage values and 3 without exit wage values. Omitting records with missing or non-hourly earning values reduced the sample size to 994 respondents. The results presented in this report are based on responses from these 994 participants.

Results

Table 6.8 shows overall program summary statistics for the reported final earnings difference and earnings gain values. On average, final earnings increased by $1.35 from intake to earliest employment. The median, however, showed a higher final earnings increase, with half of all participants receiving a wage increase of two dollars. Among those participants who had earnings gains, wages increased from intake to earliest employment by an average of $4.22. On the other hand, the median earnings gain was less than the average earnings gain at $3.73. Among project participants, the maximum earnings difference observed between intake and earliest employment was an increase of $37.50.

Table 6.8. Consortium-level: Summary Statistics of Earnings.

	For All Students Reporting Both an Intake and Post-program Wage				***For All Students Showing a Wage Increase from Intake to Post-Program Employment***		
	Maximum Earnings Difference	**Mean Final Earnings Difference**	**Median Final Earnings Difference**	***N***	**Mean Earnings Gain**	**Median Earnings Gain**	***N***
Overall	$37.50	$1.35	$2.00	994	$4.22	$3.73	662

Project participants were asked to report their field of employment before and after program participation. Project participants reported they were employed in either aviation/manufacturing (AM) or some other non-aviation/manufacturing (non-AM) field prior to participating in the program. Likewise, project participants reported they were employed in either AM or some other non-AM field after program completion. For each stage, ONET codes were obtained to identify whether or not participants were employed in an AM or non-AM field. Project participants missing intake or exit (or both) ONET codes were omitted from this and subsequent analyses, reducing the size of the data set to 795 participants. Table 6.9 shows changes in wages relative to these two pre/post program employment field indicators.

Table 6.9 shows summary statistics for final earnings difference and earnings gain by field change. Among the different field changes, mean ($2.60) and median ($3.00) final earnings differences were largest among those who were employed in a non-AM field before program participation and an AM field after program completion. Measures of central tendency for final earnings difference across field changes ranged between $0.87 and $3.00.

Considering only participants who reported an earnings gain, the largest median wage increases were among those who either entered an AM field from an AM field ($3.20) or who entered an AM field from a non-AM field ($4.50). Notably, the distribution of these earnings gain values were skewed positively, with fewer participants reporting larger wage increases. Because of this skew, the median earnings gain better represents these data than the mean. Medians for earnings gain across the different field changes ranged between $1.63 and $4.50.

The maximum earnings difference observed was greatest among participants who left an AM field for a non-AM field ($37.50) followed by participants who remained in an AM field ($37.02). Compared to those employed in an AM field prior to program participation, maximum earnings differences were lower among those who started in a non-AM field then entered an AM field ($16.00) or remained in a non-AM field ($12.00).

Table 6.9. Consortium-level: Summary Statistics Earnings by Field Change.

Field Change	Maximum Earnings Difference	Mean Final Earnings Difference	Median Final Earnings Difference	*N*	Mean Earnings Gain	Median Earnings Gain	*N*
AM[1] to AM	$37.02	$0.94	$1.21	436	$3.91	$3.20	269
AM to Non-AM[2]	$37.50	$1.15	$1.57	16	$5.45	$1.90	11
Non-AM to AM	$16.00	$2.60	$3.00	320	$4.76	$4.50	243
Non-AM to Non-AM	$12.00	$1.49	$0.87	23	$2.80	$1.63	17

[1,2]The abbreviations AM and Non-AM stand, respectively, for Aviation/Manufacturing and Non-Aviation/ Manufacturing.

Table 6.10 shows summary statistics on earnings by worker status. Prior to program completion, participants were asked to self-identify as either an incumbent or non-incumbent worker. Responses show previously incumbent workers earned more on average ($15.26) after program completion than those who previously identified as non-incumbent ($15.01). While incumbent workers made more on average, maximum earnings were higher among non-incumbent workers. The maximum exit earnings among non-incumbent workers was $61.00 compared to $57.50 among incumbent workers.

Table 6.10. Consortium-level: Summary Statistics Earnings by Worker Status.

Worker Status	Maximum Exit Earnings	Mean Exit Earnings	Median Exit Earnings	*N*
Incumbent	$57.50	$15.26	$15.00	603
Non-incumbent	$61.00	$15.01	$14.81	416

By Site Analyses: Earnings

Results: EdCC/ WATR

Table 6.11 shows the EdCC/WATR summary statistics for the reported final earnings difference and earnings gain values. On average, final earnings increased by $0.34 from intake to earliest employment. The median, however, showed a higher final earnings increase, with half of all participants receiving a wage increase of $1.50. Among those participants who had earnings gains, wages increased from intake to earliest employment by an average of $3.79. On the other hand, the median earnings gain was less than the average earnings gain at $3.50. Among project participants, the maximum earnings difference observed between intake and earliest employment was $23.05.

Table 6.11. EdCC/WATR: Summary Statistics of Earnings.

Site	Maximum Earnings Difference	Mean Final Earnings Difference	Median Final Earnings Difference	*N*	Mean Earnings Gain	Median Earnings Gain	*N*
EdCC/ WATR	$23.05	$0.34	$1.50	346	$3.79	$3.50	212

Project participants were asked to report their field of employment before and after program participation. Project participants reported they were employed in either aviation/manufacturing (AM) or a non-aviation/manufacturing (non-AM) field prior to participating in the program. Likewise, project participants reported they were employed in either an AM or non-AM field after program completion. For each stage, ONET codes were obtained to identify whether or not participants were employed in an AM or non-AM field. Project participants missing intake or exit (or both) ONET codes were omitted from this and subsequent analyses, reducing the size of the data set to 263 participants. Table 6.12 shows changes in wages relative to these two pre/post program employment field indicators.

Table 6.12 shows summary statistics for final earnings difference and earnings gain by field change. Among the different field changes, mean and median final earning differences were largest among those who were employed in a non-AM field prior to program participation. Those employed in a non-AM field before project participation and an AM field afterward showed mean and median final earning changes of $1.45 and $2.00, respectively. Similarly, those employed in a non-AM field before project participation and a non-AM field afterward showed, respectively, mean and median final earning changes of $2.40 and $2.27. Measures of central tendency for final earnings difference across field changes ranged between -$3.74 and $2.40.

Considering only participants who reported an earnings gain, these increases were largest among those who were employed in a non-AM field prior to program participation. Notably, the distribution of these earnings gain values were skewed positively, with fewer participants reporting larger wage increases. Because of this skew, the median earnings gain better represents these data than the mean. Those employed in a non-AM field before project participation and an AM field afterward showed a median earnings gain increase of $4.00. Similarly, those employed in a non-AM field before project participation and a non-AM field afterward showed a median earnings gain increase of $3.66. Medians for earnings gain increase across the different field changes ranged between $1.36 and $4.00.

The maximum earnings difference observed was greatest among participants who remained in an AM or non-AM field. The maximum earnings difference was $23.05 among those who remained in AM, followed by $12.00 among those who remained in non-AM. Maximum earnings were lower among those who entered an AM field ($8.81) or entered a non-AM field ($4.00).

Table 6.12. EdCC/WATR: Summary Statistics of Earnings by Field Change.

Field Change	Maximum Earnings Difference	Mean Final Earnings Difference	Median Final Earnings Difference	*N*	Mean Earnings Gain	Median Earnings Gain	*N*
AM[1] to AM	$23.05	-$0.60	$0.00	103	$3.76	$2.95	51
AM to Non-AM[2]	$4.00	-$3.74	$0.73	7	$1.86	$1.36	4
Non-AM to AM	$8.81	$1.45	$2.00	141	$3.97	$4.00	96
Non-AM to Non-AM	$12.00	$2.40	$2.27	12	$4.17	$3.66	9

[1,2]The abbreviations AM and Non-AM stand, respectively, for Aviation/Manufacturing and Non-Aviation/ Manufacturing.

Table 6.13 shows summary statistics on earnings at Edmonds CC/WATR Center by worker status. Prior to program completion, participants were asked to self-identify as either an incumbent or non-incumbent worker. Responses show previously incumbent workers earned more on average ($14.95) after program completion than those who previously identified as non-incumbent ($14.75). Similarly, maximum earnings were highest among incumbent workers. The maximum earnings after program exit among incumbent workers was $36.05 compared to $28.00 among non-incumbent workers.

Table 6.13. EdCC/WATR: Summary Statistics of Center Earnings by Worker Status.

Worker Status	Maximum Exit Earnings	Mean Exit Earnings	Median Exit Earnings	*N*
Incumbent	$36.05	$14.95	$15.00	215
Non-incumbent	$28.00	$14.75	$14.72	156

Results: Ivy Tech

Table 6.14 shows the Ivy Tech summary statistics for the reported final earnings difference and earnings gain values. On average, final earnings increased by $0.49 from intake to earliest employment. The median, however, showed a lower final earnings increase, with half of all participants receiving a wage increase of $0.45. Among those participants who gained earnings, wages increased from intake to earliest employment by an average of $3.41. On the other hand, the median earnings gain was less than the average earnings gain at $3.00. Among project participants, the maximum earnings difference observed between intake and earliest employment was $9.29.

Table 6.14. Ivy Tech: Summary Statistics of Earnings.

Site	Maximum Earnings Difference	Mean Final Earnings Difference	Median Final Earnings Difference	*N*	Mean Earnings Gain	Median Earnings Gain	*N*
Ivy Tech	$9.29	$0.49	$0.45	26	$3.41	$3.00	16

Due to the limited amount of employment data from this college, it was not possible to disaggregate data by field (aviation/manufacturing or non-aviation/manufacturing).

Table 6.15 shows summary statistics on earnings at Ivy Tech by worker status. Prior to program completion, participants were asked to self-identify as either an incumbent or non-incumbent worker. Responses show previously incumbent workers earned less on average ($13.21) after program completion than those who previously identified as non-incumbent ($14.53). Similarly, maximum earnings were highest among non-incumbent workers. The maximum earnings after program exit among non-incumbent workers was $21.00 compared to $19.29 among incumbent workers.

Table 6.15. Ivy Tech: Summary Statistics of Earnings by Worker Status.

Worker Status	Maximum Exit Earnings	Mean Exit Earnings	Median Exit Earnings	*N*
Incumbent	$19.29	$13.21	$13.00	10
Non-incumbent	$21.00	$14.53	$13.50	16

Results: GTCC

Table 6.16 shows the GTCC summary statistics for the reported final earnings difference and earnings gain values. On average, final earnings increased by $2.77 from intake to earliest employment. The median, however, showed a higher final earnings increase, with half of all participants receiving a wage increase of $3.39. Among those participants who gained earnings,

wages increased from intake to earliest employment by an average of $4.97. On the other hand, the median earnings gain was less than the average earnings gain at $4.50. Among project participants, the maximum earnings difference observed between intake and earliest employment was $13.83.

Table 6.16. GTCC: Summary Statistics of Earnings.

Site	Maximum Earnings Difference	Mean Final Earnings Difference	Median Final Earnings Difference	*N*	Mean Earnings Gain	Median Earnings Gain	*N*
GTCC	$13.83	$2.77	$3.39	169	$4.97	$4.50	131

Due to the limited amount of employment data from this college, it was not possible to disaggregate data by field (aviation/manufacturing or non-aviation/manufacturing).

Table 6.17 shows summary statistics on earnings at GTCC by worker status. Prior to program completion, participants were asked to self-identify as either an incumbent or non-incumbent worker. Responses show previously incumbent workers earned more on average ($15.46) after program completion than those who previously identified as non-incumbent ($14.90). While incumbent workers made more on average, maximum earnings were highest among non-incumbent workers. The maximum earnings after program exit among non-incumbent workers was $19.50 compared to $17.30 among incumbent workers.

Table 6.17. GTCC: Summary Statistics of Earnings by Worker Status.

Worker Status	Maximum Exit Earnings	Mean Exit Earnings	Median Exit Earnings	*N*
Incumbent	$17.30	$15.46	$16.00	101
Non-incumbent	$19.50	$14.90	$16.00	68

Results: Tulsa CC

Table 6.18 shows the Tulsa CC summary statistics for the reported final earnings difference and earnings gain values. On average, final earnings increased by $1.01 from intake to earliest employment. The median, however, showed a lower final earnings increase, with half of all participants receiving a wage increase of $0.89. Among those participants who gained earnings, wages increased from intake to earliest employment by an average of $3.83. On the other hand, the median earnings gain was less than the average earnings gain at $3.00. Among project participants, the maximum earnings difference observed between intake and earliest employment was $37.50.

Table 6.18. Tulsa CC: Summary Statistics of Earnings.

Site	Maximum Earnings Difference	Mean Final Earnings Difference	Median Final Earnings Difference	*N*	Mean Earnings Gain	Median Earnings Gain	*N*
Tulsa CC	$37.50	$1.01	$0.89	141	$3.83	$3.00	85

Due to the limited amount of employment data from this college, it was not possible to disaggregate data by field (aviation/manufacturing or non-aviation/manufacturing).

Table 6.19 shows summary statistics on earnings at Tulsa CC by worker status. Prior to program completion, participants were asked to self-identify as either an incumbent or non-incumbent worker. Responses show previously incumbent workers earned more on average ($15.17) after program completion than those who previously identified as non-incumbent ($14.46). Similarly, maximum earnings were highest among incumbent workers. The maximum earnings after program exit among incumbent workers was $57.50 compared to $19.50 among non-incumbent workers.

Table 6.19. Tulsa CC: Summary Statistics of Earnings by Worker Status.

Worker Status	Maximum Exit Earnings	Mean Exit Earnings	Median Exit Earnings	*N*
Incumbent	$57.50	$15.17	$14.75	93
Non-incumbent	$19.50	$14.46	$14.72	48

Results: WATC

Table 6.20 shows the WATC summary statistics for the reported final earnings difference and earnings gain values. On average, final earnings increased by $1.93 from intake to earliest employment. The median, however, showed a higher final earnings increase, with half of all participants receiving a wage increase of $2.28. Among those participants who gained earnings, wages increased from intake to earliest employment by an average of $4.41. On the other hand, the median earnings gain was less than the average earnings gain at $3.83. Among project participants, the maximum earnings difference observed between intake and earliest employment was $37.02.

Table 6.20. WATC: Summary Statistics of Earnings.

Site	Maximum Earnings Difference	Mean Final Earnings Difference	Median Final Earnings Difference	*N*	Mean Earnings Gain	Median Earnings Gain	*N*
WATC	$37.02	$1.93	$2.28	312	$4.41	$3.83	218

Project participants were asked to report their field of employment before and after program participation. Project participants reported they were employed in either aviation/manufacturing (AM) or a non-aviation/manufacturing (non-AM) field prior to participating in the program. Likewise, project participants reported they were employed in either a AM or non-AM field after program completion. For each stage, ONET codes were obtained to identify whether or not participants were employed in an AM or non-AM field. Project participants missing intake or exit (or both) ONET codes were omitted from this and subsequent analyses, reducing the size of the data set to 230 participants. Table 6.21 shows changes in wages relative to these two pre/post program employment field indicators.

Table 6.21 shows summary statistics for final earnings difference and earnings gain by field change. Among the different field changes, final earning changes were largest among those who

were employed in a non-AM field prior to program participation and an AM field afterward, showing mean and median final earning changes of $3.55 and $3.76, respectively. Measures of central tendency for final earnings difference across field changes ranged between $0.27 and $3.76.

Considering only participants who reported an earnings gain, these increases were largest among those in an AM field after program completion. Notably, the distribution of these earnings gain values were skewed positively, with fewer participants reporting larger wage increases. Because of this skew, the median earnings gain better represents these data than the mean. Those employed in an AM field before project participation and an AM field afterward showed a median earnings gain of $3.50. Similarly, those employed in a non-AM field before project participation and an AM field afterward showed a median earnings gain of $4.36. Medians for earnings gains across the different field changes ranged between $1.06 and $4.36.

The maximum earnings difference observed was greatest among participants who were in an AM field after completion. The maximum earnings difference was $37.02 among those starting and staying in an AM field, followed by $16.00 among those coming from a non-AM into an AM field. Maximum earnings differences were lower among those in a non-AM field after completion, including those who came from an AM field ($3.60) and those who were already in a non-AM field ($2.50).

Table 6.21. WATC: Summary Statistics of Earnings by Field Change.

Field Change	Maximum Earnings Difference	Mean Final Earnings Difference	Median Final Earnings Difference	*N*	Mean Earnings Gain	Median Earnings Gain	*N*
AM[1] to AM	$37.02	$1.90	$2.00	141	$4.34	$3.50	96
AM to NAM[2]	$3.60	$1.96	$2.12	4	$2.61	$2.42	3
NAM to AM	$16.00	$3.55	$3.76	76	$4.87	$4.36	66
NAM to NAM	$2.50	$0.27	$0.64	9	$1.19	$1.06	6

[1,2]The abbreviations AM and Non-AM stand, respectively, for Aviation/Manufacturing and Non-Aviation/ Manufacturing.

Table 6.22 shows summary statistics on earnings at WATC by worker status. Prior to program completion, participants were asked to self-identify as either an incumbent or non-incumbent worker. Responses show previously incumbent workers earned more on average ($15.67) after program completion than those who previously identified as non-incumbent ($15.65). While incumbent workers made more on average, maximum earnings were highest among non-incumbent workers. The maximum earnings after program exit among non-incumbent workers was $61.00 compared to $57.50 among incumbent workers.

Table 6.22. WATC: Summary Statistics of Earnings by Worker Status.

Worker Status	Maximum Exit Earnings	Mean Exit Earnings	Median Exit Earnings	*N*
Incumbent	$57.50	$15.67	$14.74	184
Non-incumbent	$61.00	$15.65	$14.49	128

Conclusions

Based on the successes and challenges faced during the program as well as effective practices that have been put in place, the NAC identified the following lessons learned:

- It is not enough to just reach out to employers; a dedicated focus is needed to build authentic partnerships.
    - At the beginning of the grant, NAC had letters of intent from a number of manufacturers from the executive level. It may have been helpful to also include other representatives, such as Human Resources, for broader engagement.
    - The relationship between the community college and employer needs to be mutually beneficial.
- Be strategic and focused in implementation.
    - Understand employer demand in the local region and design a program that matches demand. Think ahead, and look for a broad range of industry partners, so that program is not too narrow.
    - Develop an outreach strategy to facilitate enrollment.
    - Pay close attention to budgets and anticipate real costs to college.
    - Allow for multiple points of entry in a program. As one stakeholder explained, "[the program should be designed] so where ever an individual steps on the path, they won't end up with door closed in their face."
- The retention specialist was identified as a critical role across the consortium partners. Responsibilities included:
    - Coordinated recruitment for the program
    - Served as a dedicated liaison between students, employers and community partners, with detailed knowledge of the NAC program
    - Provided continuity for students throughout the entire program
- It is essential to get college-wide buy-in. Grant-funded programs can sometimes be isolated, when run by staff that are newly hired to the college. For effective and efficient implementation, support from all levels of administration is needed to help navigate the program. Documenting processes and policies is also important.
    - Support by the Board of Trustees can ensure continued implementation in cases of staff turnover.
    - Board members can also help reach out into the community if that assistance is needed.

Implications for future research:

- Focus on work-based learning and skills transfer. What types of work-based learning opportunities might fill short-term workforce needs? How could these be structured to serve employers and the students? Particularly due to the cyclical nature of aviation manufacturing, the NAC colleges also recognized the value of connecting with other sectors. How can future projects be more deliberate in identifying and promoting how skills might transfer to other employers/industries?
- Focus on dedicated efforts to build stronger employer relationships and strategic partnerships.

- One college staff member reported, "I think previously we just ran ourselves around in circles, but never took the time to sit down and [make a plan to work with employers]. It's like when you keep stuffing your shoe strings down in your shoes, instead of taking the time to tighten all the strings and pull them back up, so you have more than two inches of strings to adequately tie your shoes. I feel like that's what we did."
- Be as conscious as possible about why you are coming together as a partnership or consortium. Be very clear about what it means to be a part of the consortium and what you hope to get out of being a part of a group as opposed to figuring stuff out on your own.

- Employment and wage data are important for documenting outcomes and impact. Many community colleges experienced difficulty in accessing these data. Ongoing collaboration and discussion between the US Departments of Education and Labor, among others, will be important in addressing this issue.
- Ongoing discussions at the federal level about financial aid will also be important for future programs. At the beginning of this grant cycle, short-term training programs were not eligible for federal financial aid. Although policies are changing, continued work of this issue will be important to ensure working adults and students interested in short-term training have access to necessary resources.

Appendix 1: Original Program Evaluation Plan (Submitted with Proposal)

Program Evaluation Plan

This **National Aviation Consortium** project will implement a comprehensive plan for program evaluation that is informed by current research, integrated into all components of the project, and designed with the rigor and complexity needed for meaningful assessment of this TAACCCT project. Components of the evaluation plan include: **1)** analysis of participant outcomes based on quantitative metrics consistent with DOL outcome measures, including comparison to non-participants, **2)** additional analysis and project-specific assessment of project impact on students, industry, and educational partners based on qualitative methods and analysis of learning outcomes; **3)** assessment of program implementation, **4)** formative feedback throughout the project to improve the outcomes and **5)** capacity building to project partnership for continuous improvement and program evaluation. This comprehensive approach is necessary to fully assess the project outcomes, process, and overall impacts of the project. (See the Evaluation Matrix, page 9.) The evaluation will be designed and implemented by an external evaluator, the Office of Educational Innovation and Evaluation (**OEIE**), in collaboration with the project team and Seedco. The methodology for participant outcome analysis, #1 above, will involve a quasi-experimental design with well-matched comparison cohorts. OEIE will provide reports of the evaluation results and recommendations as indicted in the following timeline.

Evaluation Reports and Products	Timeline
Evaluation activities: • Assess project outcomes, impact, and implementation • Formative feedback • Capacity building	On-going
Interim Evaluation Reports:	Annually (end of period)
1. Including analysis of participant outcomes - DOL metrics (beginning year 2 report for some metrics)	Annually beginning year 2
2. Including analysis interim outcomes and qualitative methods	Annually beginning year 2
3. Including assessment of project implementation and formative feedback	Annually – all years
Final Evaluation Report including quantitative and qualitative outcome measures, assessment of implementation, and evaluation recommendations	End of the project

The evaluation plan is aligned with the project goal "to increase industry-recognized credentials through a proven accelerated, online, interactive simulated approach that results in closing the skills gap for qualified workers within the aerospace and aviation industry" and the TAACCCT program priorities to "build educational programs that meet industry needs, improve retention and achievement, and strengthen online learning." The project logic model presented on page 10 provides a visual map of how components of this project accomplish these goals. The Evaluation is grounded on this logic model in order to fully assess the impact of the project compared to anticipated outcomes, project goals, and DOL-TAACCCT program goals and priorities. The purpose of the evaluation is to collect and report data on the implementation, progress, and outcomes of the project to inform policy and program decision-making. Strategies for assessing the program's effectiveness will include both formative and summative evaluations that: 1) utilize multiple evaluation approaches, 2) draw on both qualitative and quantitative methodologies, 3) employ multiple evaluative research methods, and 4) triangulate data for more robust findings where possible.

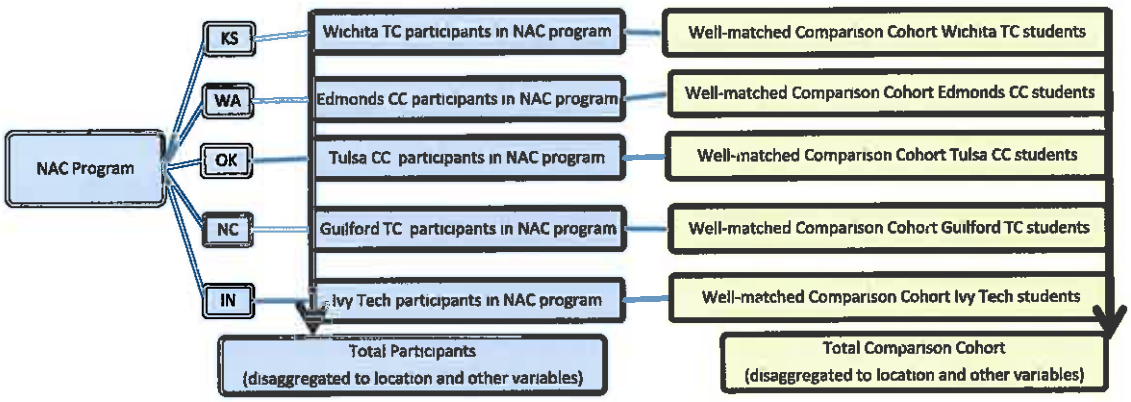
1) Participant Outcomes – DOL Metrics (SGA – B.1.i)

A critical component of the evaluation is assessing participant outcomes based on quantitative metrics consistent with specific DOL outcome measures, including comparison to non-participants. The project will collect and analyze DOL-defined metrics, support standardized methodology, and assure rigorous evaluation over the course of the grant period. The goal for the participant outcome evaluation design is to understand the NAC program's impact on student participants in terms of education retention and completion, and job placement, retention and earnings, compared to students not in the NAC program.

OEIE will implement a quasi-experimental design with well-matched comparison cohorts, including strategies to isolate the effects of the program. While experimental design

with randomized control trials are thought to be the preferred approach, there are a number of limiting factors that could impact the validity of the results in this situation. A rigorous alternative is the quasi-experimental comparison cohort approach. The "advantage of the quasi-experimental approach is that it is less intrusive to a program" and it is possible to "employ quasi-experimental methodologies without denying students the new support and services" (Campbell 2009). This evaluation design will assess the impacts of the NAC project by comparing outcomes for NAC participants with a matched comparison cohort. Careful cohort selection is fundamental to the study design and is a priority for this project.

The participant and cohort groups are matched on key attributes, including the variables that are most likely to affect the outcomes such as socioeconomic factors, years of employment, education level, age, race/ethnicity, and gender. Comparison cohorts at each college will be included in the design, as indicated in the graphic below. The comparison and participant cohorts will share similar technical fields of study for appropriate comparison of outcomes and matched on length of the program towards the acquired credentials. Both cohorts will have a sufficient number of students to conduct appropriate statistical analysis to determine the strength of the effect. These cohorts will have the same length of time to achieve outcomes. Each student in the comparison and participant cohorts will be tracked for reporting purposes through the end of the grant period. Outcome indicators that will be assessed and tracked for both participant and comparison cohorts from each college will include the number of participants: served by the program, completing program, retained in the program, completing credit hours, earning credentials, enrolled in further education, employed after program, retained in employment, and realizing wage increases. Regional-specific analysis as well as aggregate assessment of project outcomes will be available.



The OEIE evaluators and database design team will work in collaboration with Seedco and the project partners for a seamless approach to capturing and analyzing the outcome metrics listed above for participant and comparison cohorts, and will assure consistent, accurate, and comprehensive data collection at each project location regarding participant outcomes. The project will use Salesforce (www.salesforce.com), a web-based database interface that is extremely secure, highly customizable and easy to maintain. Salesforce offers powerful tools for team collaboration, case tracking, and real-time analysis. Benefits of this platform include: 1) sharing of participant-level data, 2) data security, 3) customized outcome tracking, 4) real time quality assurance, and 5) streamlined reporting. Data will be collected and tracked annually throughout the project period. Workforce data will be obtained from the Statewide Longitudinal Data System (SLDS) in each state with this capability and if needed, student information will be shared with the U.S. Department of Labor to track students' employment outcomes.

2) Project-Specific Assessment of Outcomes (in addition to DOL Metrics)

In addition to the outcome measures defined by DOL, the evaluation will assess the interim and ongoing impact of the NAC project related to project-specific variables, student learning outcomes, faculty professional development, student satisfaction, industry assessment and feedback from students, industry, and college representatives. This component of the evaluation

plan, to assess the impact on participants, colleges, and industry, is described in section 2 of the Evaluation Plan Matrix (page 9). Student learning outcomes will be assessed through surveys of participants as well as analysis of pre/post knowledge tests. Student surveys will also be used to assess student satisfaction with the curriculum, method of delivery, pathway programs, and other site-specific and program-wide variables. Surveys of participating faculty will provide an assessment of the value and impact of the professional development components. Interviews or surveys of industry representatives and stakeholders will provide feedback to the project. The results of these methods will be used to determine what aspects of the project are valuable and to provide information for improving the project during implementation. Survey methodology will be based on the Dillman Method (2009) and focus groups will incorporate the Krueger and Casey (2000) approach to effective qualitative research. Annual Evaluation Reports will provide the results of this assessment, including formative feedback, and the Final Evaluation Report will summarize and document these findings and recommendations.

3) Program Implementation Evaluation (SGA B.1.ii)

Evaluation of program implementation and formative feedback from OEIE is integrated into the project management and is designed to strengthen program planning and management over the course of this multi-state consortium project (See section 3 of the Evaluation Matrix). This assessment is also designed to evaluate project progress and processes, to understand successes and stumbling blocks, and to answer DOL questions about project progress (from SGA page 34). The evaluation will assess the project's progress through: data on program implementation, documentation of course implementation; perspectives via interviews from the project staff, college partners, administrators and stakeholders; document analysis of project records; review of project outputs and activities related to the timeline and workplan; assessment of project strategies (e.g. curriculum, delivery methods, assessment of participant skills/interests,

and career guidance). Attention will be given to understanding how each college/co-grantee implemented the student assessments and career guidance. The evaluation will also address the partnership collaboration process, leveraging resources, and the contributions of each partner toward project success; all factors especially important for a multi-state program.

OEIE will work with the Project Manager, the Strategy Team, and the project partners from each institution to assess performance and to provide ongoing feedback to improve project success. This assessment is also designed to provide information to funding agencies regarding outcomes and assessment of the program as a model for broader application. Formal documentation of the evaluation of program implementation will be provided with the annual and final evaluation reports.

4) Formative Evaluation and Feedback

Formative feedback is an overarching component of the evaluation, listed here as a separate heading to highlight the importance of this evaluation function. The goal of formative evaluation is to help programs use the evaluation results, make adjustments during project implementation, and to understand what works, and under what circumstances. OEIE will provide feedback based on evaluation components 1-3 listed above, including participant outcomes and program implementation. The formative feedback and evaluation recommendations will contribute to data-based decision-making as the project moves forward.

5) Evaluation Capacity Building

OEIE will bolster the colleges/co-grantees of the NAC partnership to build their capacity for 1) assessing and tracking program outcomes, 2) understanding the benefits of the evaluation process, and 3) using evaluation feedback for project planning and implementation. Evaluation will be a collaborative process between OEIE and project partners. Part of the goal in formative evaluation is to help programs use evaluation data to make adjustments during project

implementation by understanding what works, under what circumstances. Ongoing communication will be central to this approach.

This collaboration will engage key stakeholders in the data management process, establish their ownership in continued monitoring and program evaluation, and help each college/co-grantee to use the data collection system and maintain the process after the grant period for continued tracking of student outcomes. For collection of student outcome data, OEIE and Seedco will work in collaboration to help each college/co-grantee develop local infrastructure and staff capacity to use the Salesforce tool, understand the definitions and methods for consistent data entry, and establish a commitment to meaningful data and analysis. OEIE will also develop project-specific evaluation tools and instruments that can be used by project partners after the grant / formal evaluation period ends contributing to sustainability. These include instruments for surveying student participants, faculty involved in professional development, and administrators and project leadership.

Capacity-building includes capacity for: collecting and tracking student outcome data, using surveys and other tools to gain feedback, and using evaluation results to make data-based decisions for sustaining the program. This capacity within each of the consortium partner colleges will allow the partnership to continue to track important data and to report findings that will inform project stakeholders about the model's effectiveness and for continuous improvement and program evaluation.

6) Third-Party Evaluator (SGA B.1.iii)

The evaluation will be designed and implemented by an external evaluator, the **Office of Educational Innovation and Evaluation (OEIE)**, in collaboration with the project team and Seedco. OEIE at Kansas State University conducts program evaluations of both large- and small-scale projects for a broad range of clientele in educational institutions, governmental

agencies, and foundations. OEIE was established in 2000 and is affiliated with Kansas State University College of Education. OEIE has conducted evaluation services for over 200 projects totaling over $200 million sponsored by the National Science Foundation, U.S. Department of Education, U.S. Department of Agriculture, Kansas Board of Regents, private foundations, and many others. Additional details about funded projects and services can be found on the OEIE website at www.oeie.ksu.edu. OEIE has also provided evaluation capacity building services to various organizations; an example is available at: http://apps.oeie.ksu.edu/extension/ksreresources.php. OEIE adheres to the American Evaluation Associations Guiding Principles for Evaluators and Program Evaluation Standards of the Joint Committee on Standards for Educational Evaluation.

OEIE is a full service evaluation office with fifteen full-time professional staff members including evaluators, project development and computer specialists, as well as part-time graduate and undergraduate research assistants. This multidisciplinary team compliments each other's skills and possesses the education, fieldwork experience, and research abilities relevant to the nature and scope of diverse projects. OEIE has been involved with the Kansas initiatives toward a Statewide Longitudinal Data System. Professionals in the office have extensive experience working with and accessing higher education data systems.

OEIE will work with DOL and the national evaluation of program results should the NAC project be selected to participate in this process. The capabilities and integrated structure presented in this proposal for rigorous evaluation design, data collection, assessment methodologies, and reporting procedures, represents a strong commitment to **research-based decision-making** and rigorous evaluation methods.

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Comprehensive Evaluation Plan Matrix

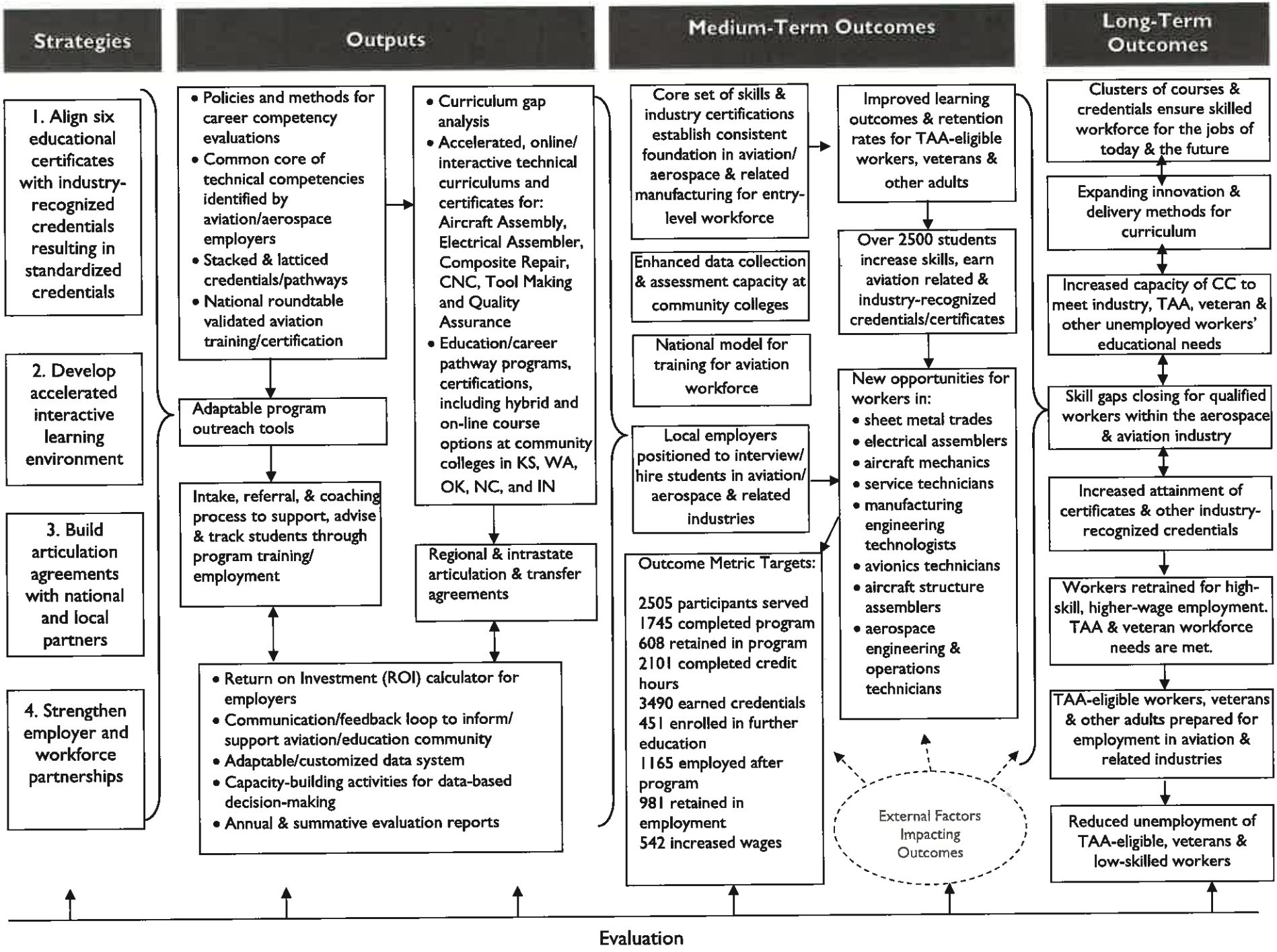
Evaluation Plan Components & Indicators	Evaluation Methods
1) Assessment of Participant Learning Outcomes (DOL Metrics)	
Participant Outcomes - Metrics include number of participants: served by the program, completing program, retained in the program, completing credit hours, earning credentials by type, enrolled in further education, employed after program, retained in employment, and realizing wage increases.	Collection and analysis of data on participant outcomes, including comparison to cohort group of non-participants
2) Project-Specific Assessment of Outcomes (in addition to DOL Metrics)	
Student feedback and learning outcomes, satisfaction with curriculum, feedback on format and delivery, online learning tools, career guidance, pathway program, job placement, etc.	Surveys of student participants
Faculty and stakeholder feedback/assessment of curriculum and program	Surveys or interviews with faculty and stakeholders
Student learning outcomes (tested results – specific educational components)	Assessment of pre/post knowledge tests
Faculty professional development outcomes	Surveys of faculty participants
Institutional change	Surveys of college/co-grantee representatives
Industry and stakeholder outcomes/feedback	Interviews or surveys
3) Assessment of Project Implementation (Evaluation of Process & Implementation)	
SGA Implementation Evaluation Questions: 1) Curriculum created/used 2) Program design, Delivery method, Administrative structure, Support Services 3) Assessment tools, Assess Participant skills/interests, Program sequence, Career guidance 4) Partner contributions, Factors contributing to involvement, Most critical involvement, Most/least impact Overall process evaluation of project implementation	Evaluation Tools/Methods • Review of project outputs and activities related to the timeline • Document analysis of curriculum materials and project records • Interviews with administrators • Records of course offerings and enrollment • Interviews with project staff, administrators and stakeholders
4) Formative Feedback to Project Partnership (from all results above)	
5) Evaluation Capacity Building for Project Partnership (see evaluation narrative)	

National Aviation Consortium Logic Model for Evaluation

Strategies ▶	Outputs ▶	Medium-Term Outcomes ▶	Long-Term Outcomes
1. Align seven educational certificates with industry-recognized credentials resulting in standardized credentials 2. Develop accelerated interactive learning environment 3. Build articulation agreements with national and local partners 4. Strengthen employer and workforce partnerships.	• Policies and methods for career competency evaluations • Curriculum gap analysis • Education/career pathway programs, certifications, and on-line course options at CCs in KS, WA, OK, NC, and IN. • Accelerated, online/interactive technical curriculums and certificates for: Aircraft Assembly, Electrical Assembler, Composite Repair, CNC, Tool Making and Quality Assurance • Adaptable program marketing tools • Stacked and latticing credentials/pathways • Common core of technical competencies identified by aviation/ aerospace employers • Regional and intrastate articulation and transfer agreements • Communication/feedback loop to inform/support aviation/education community • Intake, referral, and coaching process to advise and track students through program training/employment • Practices to avoid program duplication • National roundtable validated aviation training/certification • PLA portfolio training for faculty/students • Adaptable/customized data system • Capacity-building activities for data-based decision-making • Annual & summative evaluation reports	• Students in 5 states increase skills, earn aviation/related and industry-recognized credentials/certificates • New opportunities for workers in: sheet metal trades, electrical assemblers, aircraft mechanics, service technicians, manufacturing engineering technologists, avionics technicians, aircraft structure assemblers, aerospace engineering and operation technicians. • Local employers positioned to interview/hire students in aviation/aerospace and related industries. • Core set of skills and industry certifications establish consistent foundation in aviation /aerospace and related manufacturing for entry-level workforce • Outcome Metrics: 2500 participants served 1730 completed program 607 retained in the program 1758 completed credit hours 1419 earned credentials 450 enrolled in further education 1164 employed after program 980 retained in employment 541 increased wages • Improved learning outcomes and retention rates for TAA-eligible workers and other adults • Enhanced data collection and assessment capacity at community colleges • National model for training for aviation workforce	• A pool of trained, qualified workers to meet the needs of the aviation industry • Workers retrained for high-skill, higher-wage employment TAA workforce needs are met, • Pathways of courses and credentials ensure skilled workforce for the jobs of today and the future. • Increased attainment of certificates, and other industry-recognized credentials • TAA-eligible workers and other adults prepared for employment in aviation and related industries • Expanding innovation and delivery methods for curriculum • Reduced unemployment of TAA-eligible and low-skilled workers • Increased capacity of community colleges to meet industry, TAA and other unemployed workers educational needs

Appendix 2: Revised Logic Model

National Aviation Consortium Logic Model



Appendix 3: Sample Questions from Evaluation Instruments

Sample Questions from Evaluation Instruments

Administrator Questions

- Please describe how you were involved in the design and/or implementation of [insert project/program].
    - In one or two sentences, what was your role?
    - How were [insert position title] recruited/selected for their positions?
        - What challenges, if any, were experienced in filling these positions or retaining project staff?
- What was your role in communicating key information (intended purpose, outcomes, and expected impact) about [insert project/program] internally (college administration, staff and faculty) and externally (employers and workforce/community partners)?
    - Who did you receive information from?
    - Who did you share information with?
- What are the primary ways that your college conducts outreach and recruitment to attract students into [insert project/program]?
    - How have these strategies changed as a result of your involvement with [insert project/program]?
        - How have these strategies changed over the duration of the project?
    - Which of these recruitment strategies has been effective? Why?
- What lessons have been learned about effective practices in articulation?
- What challenges have been encountered in developing articulations?
- What have been the most significant outcomes or greatest impacts of the [insert project/program] for your school? (for college, for faculty/staff, for students, for external partners)
    - Have there been any changes in how your school partners with employers?
    - Have there been any changes with school policies or procedures (expanded career services, tracking students, following up with students)?
- Looking back at your expectations when [insert project/program] first started, to what extent have those been met (in what ways were they or not, why)? *Consider expectations you may have had related to students, the college, your partners (employer, community, etc.)*
- What critical roles did the [insert project/program] staff serve for the project to be successful?
- Please describe any significant challenges of working with the vendors on this [insert project/program].
- What grant activities and partnerships will be sustained at your college?
- If you were starting the project over today:
    - What two or three things would you implement differently?
        - What changes do you think would better contribute to success of the grant at your college?
    - What two or three things would you keep the same?
        - What have been the biggest lessons learned about implementing this grant?
        - What aspects of implementation have been most critical to success of the grant at your college?
- What grant activities and partnerships will be sustained at your college?

Employer Questions

- Please describe what your business/organization does, including which [insert project/program] is relevant.
- Please describe your involvement with the [insert project/program], including:
  - How long have you been involved?
  - What activities have you been involved with?
- Please describe any impacts on your organization due to your partnership with [insert project/program].

  Consider these potential impacts: Access to a broader pool of recruiting, Reduced recruiting costs for entry-level positions, Decreased on-the-job training time/cost, Improved employee retention/reduced turnover, Access to training or upgrading skills for current workforce.
- Based on your experience, what are strengths of the [insert project/program] students?
- What, if any, qualities or skills did you expect the [insert project/program] students to possess upon employment that they did not?
- Please describe any ways your relationship with the college has changed due to [insert project/program] (is there anything different about the way your business and the college work together?)
  - Now that the grant is coming to an end, how would you like the relationship to move forward?
- If the project started over today, is there anything you would do differently?
- Please provide any additional comments you may have about your experiences with the college for the [insert project/program] grant.

Faculty Questions

- How long have you been working with the [insert project/program] at your college?
- What have been your main responsibilities with the [insert project/program]? (What have you done to support [insert project/program]?)
- Please share your experiences with professional development related to the [insert project/program].
  - Which of the faculty development activities were most beneficial?
  - How could faculty development activities be improved?
- What strategies do you use to identify students that are struggling with academic success?
- What interventions have you implemented to address students struggling with academic success?
- Compared to your expectations when you first got involved in the [insert project/program] grant, to what extent has your experience met those expectations (in what ways did it or did it not)?
- In what ways do the content and structure/format of the [insert project/program] meet industry needs?
- What have been the most significant outcomes or greatest impacts of the NAC project (for the college, for students, for partners)?
- Describe any unanticipated outcomes, positive or negative, you have had related to this [insert project/program] project. (Has anything surprised you?)
- If you were starting the project over today:
  - What 2 or 3 things would you keep the same?

        - What aspects of implementation have been most critical to success of the grant at your college?
        - What grant components do you believe are most helpful to students achieving success (completion/employment)?
    - What 2 or 3 things would you do differently?
        - What changes do you think would better contribute to success of the grant at your college?
        - What would be more helpful to students for achieving success (completion/employment)?
- What do you think will happen with the initiative at your college after the grant ends (what does the future hold)?
- Please provide any additional comments you may have about your experience with the [insert project/program].

Grant Staff Questions

- What are the primary ways that your college conducts outreach and recruitment to attract students into [insert project/program]?
- What have been the most significant outcomes or greatest impacts of the [insert project/program] for your school? (for college, for faculty/staff, for students, for external partners)
    - Have there been any changes in how your school partners with employers?
    - Have there been any changes with school policies or procedures (expanded career services, tracking students, following up with students)?
- Which [insert project/program] components (support services, staff, etc.) do you think were most helpful to students and contributed to project/program completion?
- Please describe one or two of the [insert project/program] team's greatest contributions to the project/program for your school.

Consortium-Level Project Management Team Questions

- In general, what was the overall purpose of the [insert project/program]? How has that changed over time?
- Please describe how your role on the project provided leadership and oversight.
- In thinking about lessons learned from the [insert project/program], if you were starting the project/program over today:
    - What 2 or 3 things would you implement differently?
    - What 2 or 3 things would you keep the same?
- Now we would like you to reflect on your experiences as being part of a national consortium instead of a single institution project. Please describe one or two of the:
    - Greatest benefits of working in this consortium.
    - Greatest challenges of working in this consortium.
- Describe any unanticipated experiences, positive or negative, you have had related to this TAACCCT project. (Has anything surprised you?)
- What were 2 or 3 of the biggest successes of the NAC?
- What were 2 or 3 of the biggest challenges related to the NAC?
- What do you think will happen with the initiative after the grant ends (what does the future hold)?
- Do you have any additional comments about your experiences with the NAC?

Student Questions

- Are you currently employed in your field of study?
- How well did [insert the project/program] prepare you for your current career?
- Indicate agreement for the following:
    - The program is well worth my time.
    - The program is interesting.
    - The route to a [insert end goal] is clear.
    - I would recommend [insert the project/program] to others.
    - I took an active role in my own learning.
    - The assignments allowed me to demonstrate what I learned in the program.
    - The academic/technical components of this program were well integrated in the classroom.

General Questions

- Please describe how you were involved in the design and/or implementation of [insert project/program].
- Looking back at your expectations, to what extent has the [insert project/program] met your expectations (in what ways did it or did it not, why?)
- What would you consider one of the biggest successes of [insert project/program]?
- What would you consider one of the biggest challenges of [insert project/program]?
- Describe any unanticipated outcomes, positive or negative, you have had related to this [insert project/program]. (Has anything surprised you?)
- Please provide any additional comments you may have about your experiences with [insert project/program].

Appendix 4: OEIE Evaluation Deliverables

TAACCCT – National Aviation Consortium
OEIE Evaluation Deliverables
10/1/2012 to 9/30/2016

Products Delivered	Date
Evaluation Plan Design:	
Provided Initial Evaluation Plan and Project Timeline	1/24/2013
Completed Review Forms for Data Management System RFP	2/22/2013
NAC Evaluation Framework Components	4/1/2013
NAC Evaluation Framework Components – Revised with Vendor Assignments	5/13/2013
Completed Confidentiality Agreement Forms for OEIE Team	5/28/2013
Revised OEIE Implementation Plan (Year 1)	7/1/2013
Updated Evaluation Implementation Plan (Year 2)	5/8/2014
NAC Project Team Face-to-Face Meeting	8/7/2014
Budget Projections for Years 3 & 4	11/21/14
OEIE Implementation Work Plan	12/19/14
Revised Logic Model	1/30/15
OEIE Year 4 Implementation Work Plan	1/19/16
Year 4 Implementation Work Plan	2/10/16
Year 4 Amendment – proposed	2/10/16
Scope of Work Amendment	4/27/16

TAACCCT – National Aviation Consortium
OEIE Evaluation Deliverables
10/1/2012 to 9/30/2016

Products Delivered	Date
Evaluation Instruments:	
Peer-to-Peer (P2P) Kick-off Meeting Survey	2/15/2013
Edmonds Community College/WATR Center (EdCC/WATR) Kick-off Meeting Feedback Survey	4/12/2013
Tulsa Community College (Tulsa) Kick-off Meeting Feedback Survey	5/8/2013
Wichita Area Technical College (WATC) Kick-off Meeting Feedback Survey	5/8/2013
Guilford Technical Community College (GTCC) Kick-off Meeting Feedback Survey	5/22/2013
Ivy Tech Community College (Ivy Tech) Kick-off Meeting Feedback Survey	5/29/2013
Assembly Mechanic Instructor Training Feedback Survey	6/24/2013
Tulsa Regional Partnership Council Survey	8/6/2013
Project Coordinator/Retention Specialist (PC/RS) Focus Group Questions	10/7/2013
National Steering Committee Follow-up Survey	10/18/2013
National Industry Council Follow-up Survey	10/18/2013
PC/RS Training Feedback Survey	10/22/2013
Site-level Telephone Interview Protocols (Administrator, Instructional Designer, and PC/RS)	12/2/2013
PC Quarterly Report (Electronic)	1/13/2014
P2P Interest Inventory Survey	1/21/2014
Instructor Feedback Survey	2/14/2014
Project Management (PM) Team Interview Questions	2/19/2014
Y2Q2 PC Quarterly Report Form	3/17/2014
PC/RS Focus Group Questions	5/30/2014
Employer Validation Survey	5/30/2014
P2P Feedback Survey	6/12/2014
Assembly Mechanic Program Validation Tool (Survey)	6/18/2014
Y2Q3 PC Quarterly Report Form	6/20/2014
Ivy Tech Regional Partner Needs Assessment Survey (Indianapolis)	7/23/2014
National Team Performance Evaluation Survey	7/23/2014
Ivy Tech Regional Partner Needs Assessment Survey (Ft. Wayne)	8/5/2014
PC/RS Training Needs and Priorities Survey	8/12/2014
PC/RS Facilitated Discussion Protocol	9/5/2014
GTCC NAC Showcase Employer SMS Poll	9/5/2014

TAACCCT – National Aviation Consortium
OEIE Evaluation Deliverables
10/1/2012 to 9/30/2016

Products Delivered	Date
GTCC NAC Showcase Employer Survey	9/5/2014
PC/RS Training Feedback Survey	10/17/14
Student Survey	11/25/14-1/26/15
Y3Q1 PC Quarterly Report Form	12/17/14
Employer Survey	1/6/15-4/22/15
GTCC Student Survey	1/26/15
Ivy Tech Indianapolis Student Survey	2/17/15
Ivy Tech Fort Wayne Student Survey	2/23/15-4/14/15
Y3Q2 PC Quarterly Report Form	3/26/15
WATC Student Survey	3/26/15
Tulsa Student Survey	3/26/15
EdCC/WATR Student Survey	3/26/15
Ivy Tech Employer Survey	4/22/15
WATC Employer Survey	4/27/15
WATR Employer Survey	5/26/15
P2P Conference Feedback Survey	6/22/15-6/23/15
Y3Q3 PC Quarterly Report Form	6/22/15-6/23/15
Vendor Interview Protocol	8/18/15-3/22/16
PC/RS Interview Protocol	8/18/15-9/21/15
Y3Q4 PC Quarterly Report Form	9/22/15
Y4Q1 PC Quarterly Report Form	12/14/15
DOL SGA Implementation Interview Protocol	1/14/16-1/22/16
Administrator Interview Protocol	1/14/16-3/7/16
Employer Survey	1/14/16-4/22/16
Student Survey	1/14/16-4/25/16
Site Visit Checklist	2/9/16-2/11/16
Faculty Interview Protocol	2/15/16-3/7/16
High-level Administrator Interview Protocol	2/15/16-2/24/16
Faculty Survey	2/15/16-2/29/16
High-level Administrator Interview Protocol	3/1/16-3/7/16
PC/Administrator Interview Protocol	3/1/16-3/7/16
Employer Interview Protocol	3/1/16-3/7/16
Y4Q2 PC Quarterly Report Form	3/1/16-3/31/16
Registration Staff Interview Protocol	4/13/16
Y4Q3 PC Quarterly Report Form	6/20/16-6/28/16

TAACCCT – National Aviation Consortium
OEIE Evaluation Deliverables
10/1/2012 to 9/30/2016

Products Delivered	Date
Evaluation Reports/Documents:	
P2P Kick-off Meeting Survey Summary	3/25/2013
P2P Kick-off Meeting Survey Full Report	4/1/2013
EdCC/WATR – Preliminary Results	4/28/2013
EdCC/WATR Kick-off Meeting Feedback Survey Summary	6/28/2013
EdCC/WATR Kick-off Meeting Feedback Survey Full Report	6/28/2013
Tulsa Kick-off Meeting Feedback Survey Summary	6/28/2013
Tulsa Kick-off Meeting Feedback Survey Full Report	6/28/2013
WATC Kick-off Meeting Feedback Survey Summary	6/28/2013
WATC Kick-off Meeting Feedback Survey Full Report	6/28/2013
GTCC Kick-off Meeting Feedback Survey Summary	6/28/2013
GTCC Kick-off Meeting Feedback Survey Full Report	6/28/2013
Ivy Tech Kick-off Meeting Feedback Survey Summary	6/28/2013
Ivy Tech Kick-off Meeting Feedback Survey Full Report	6/28/2013
EdCC/WATR Kick-off Meeting Observation Report	7/1/2013
Tulsa Kick-off Meeting Observation Report	7/1/2013
WATC Kick-off Meeting Observation Report	7/1/2013
GTCC Kick-off Meeting Observation Report	7/1/2013
Ivy Tech Kick-off Meeting Observation Report	7/1/2013
Cross-site Observation Report Summary	7/17/2013
Summary Evaluation Document (for Strategic Planning Meeting)	7/17/2013
Assembly Mechanic Instructor Training Feedback Survey Full Report	8/9/2013
Assembly Mechanic Instructor Training Feedback Survey Summary	8/9/2013
NAC Year 1 Evaluation Services and Products Handout	8/16/2013
OEIE Notes for Strategy Team 8-16-13 with Tulsa Regional Partnership Council Survey Preliminary Results	8/16/2013
OEIE Current and Planned NAC Contributions Packet – Year 1	9/25/2013
Tulsa Regional Partnership Council Survey Full Report	9/30/2013
Tulsa Regional Partnership Council Survey Summary	9/30/2013
Apricot Wage Data Format Conversion for AJLA	10/3/2013
EdCC/WATR Site Visit Summary Notes	10/11/2013
Revised Critical Issues and Communication Needs Tool	10/25/2013

TAACCCT – National Aviation Consortium
OEIE Evaluation Deliverables
10/1/2012 to 9/30/2016

Products Delivered	Date
Evaluation Reports/Documents:	
PC/RS Focus Group Report	11/22/2013
PC/RS Training Feedback Survey Report	12/12/2013
National Steering Committee Follow-up Survey Report	12/18/2013
National Industry Council Follow-up Survey Report	12/18/2013
EdCC/WATR Interview Highlights	1/2/2014
Crosswalk of Program Model and PC Quarterly Report	1/8/2014
Apricot Wage Data Format Conversion for AJLA	1/14/2014
Y2Q1 PC Quarterly Report (Electronic) Responses by Site	1/21/2014
Y2Q1 Critical Issues and Communication Needs Tool	1/23/2014
Y2Q1 Critical Issues and Communication Needs Tool – Reformatted	2/6/2014
WATC Interview Highlights	2/11/2014
P2P Interest Inventory Survey Results	2/12/2014
GTCC Interview Highlights	2/28/2014
Tulsa Interview Highlights	3/17/2014
Ivy Tech Interview Highlights	4/1/2014
Emergent Issues and Communication Needs Tool - Updated for Y2Q2	4/1/2014
P2P Conference Agenda – OEIE Feedback	4/3/2014
Instructor Feedback Survey - Concentration Implementation Overall Results	4/7/2014
NAC Employer Survey – Sustainability/Growth – Options Table	4/9/2014
Y2Q2 PC Quarterly Report (Electronic) Responses by Site	4/14/2014-4/23/2014
Employer Engagement Matrix Suggestions	4/23/2014
Crosswalk of PC Quarterly Report and Student-Employer Matrices	4/24/2014
Ivy Tech – Program Outcomes – OEIE Review	4/25/2014
NAC Program Verification Procedures – OEIE Review	4/29/2014
Sustainability Elements (Resource Document for P2P)	5/1/2014
Instructor Feedback Survey – Selected Results Report	5/1/2014
Strategic Direction 2014 Worksheet	5/1/2014
P2P Framework/Guiding Questions	5/1/2014
Program Outcomes Crosswalk (All Concentration Areas)	5/30/2014
Assembly Mechanic Program Validation – Response Update	6/26/2014
Y2Q3 PC Quarterly Report (Electronic) Responses by Site	7/15/2014
Assembly Mechanic Program Validation Results (Aggregate and By Site)	7/16/2014
Assembly Mechanic Program Validation Participant GIS Map	7/16/2014

TAACCCT – National Aviation Consortium
OEIE Evaluation Deliverables
10/1/2012 to 9/30/2016

Products Delivered	Date
Evaluation Reports/Documents:	
P2P PC/RS Focus Group Report	7/17/2014
P2P Feedback Survey Report	7/17/2014
National Team Performance Evaluation Survey Results	7/28/2014
Ivy Tech Regional Partner Needs Assessment Survey (Indianapolis) Results	7/30/2014
Data Visualization Presentation	8/7/2014
Ivy Tech Regional Partner Needs Assessment Survey (Ft. Wayne) Results	8/20/2014
PC/RS Training Needs and Priorities Survey Results	8/21/2014
GTCC NAC Showcase Employer SMS Poll Results	9/15/2014
GTCC NAC Showcase Employer Survey Preliminary Results	9/16/2014
GTCC NAC Showcase Employer Survey Results	9/25/2014
PC/RS Facilitated Discussion Notes	9/25/2014
Apricot Wage Data Format Conversion for AJLA	10/6/14
Y2Q4 PC Quarterly Report (Electronic) Responses by Site	10/7/14-10/14/14
PC/RS Training TAA and Veterans Roundtable Notes	10/17/14
PC/RS Training Apricot Discussion Notes	10/17/14
PC/RS Training Feedback Survey Summary	11/5/14
Apricot Data - NAC Employers Hiring Graduates	1/6/15
Y3Q1 PC Quarterly Report (Electronic) Responses by Site	1/13/15-1/14/15
Third-Party Evaluator Interim Report	1/30/15
Apricot Wage Data Format Conversion for AJLA	2/2/15
Y3Q2 PC Quarterly Report (Electronic) Responses by Site	4/9/15-4/16/15
Student Survey – Preliminary Results	6/12/15
Employer Survey – Preliminary Results	6/12/15
Infographics by Site	6/12/15
Site Packets (provided to sites at P2P)	6/17/15
Employer Survey Summary (Aggregate)	6/17/15
P2P Evaluation Slide Deck	6/30/15
Y3Q3 PC Quarterly Report (Electronic) Responses by Site	7/15/15
Apricot Data Review – B1 and B2 metrics	7/30/15
Peer-to-Peer Conference Survey Results	8/11/15
Employer Survey Summary	8/31/15
Apricot Review Questions	9/28/15
Apricot Wage Data Format Conversion for AJLA	10/1/15
Y3Q4 PC Quarterly Report (Electronic) Responses by Site	10/13/15-10/15/15

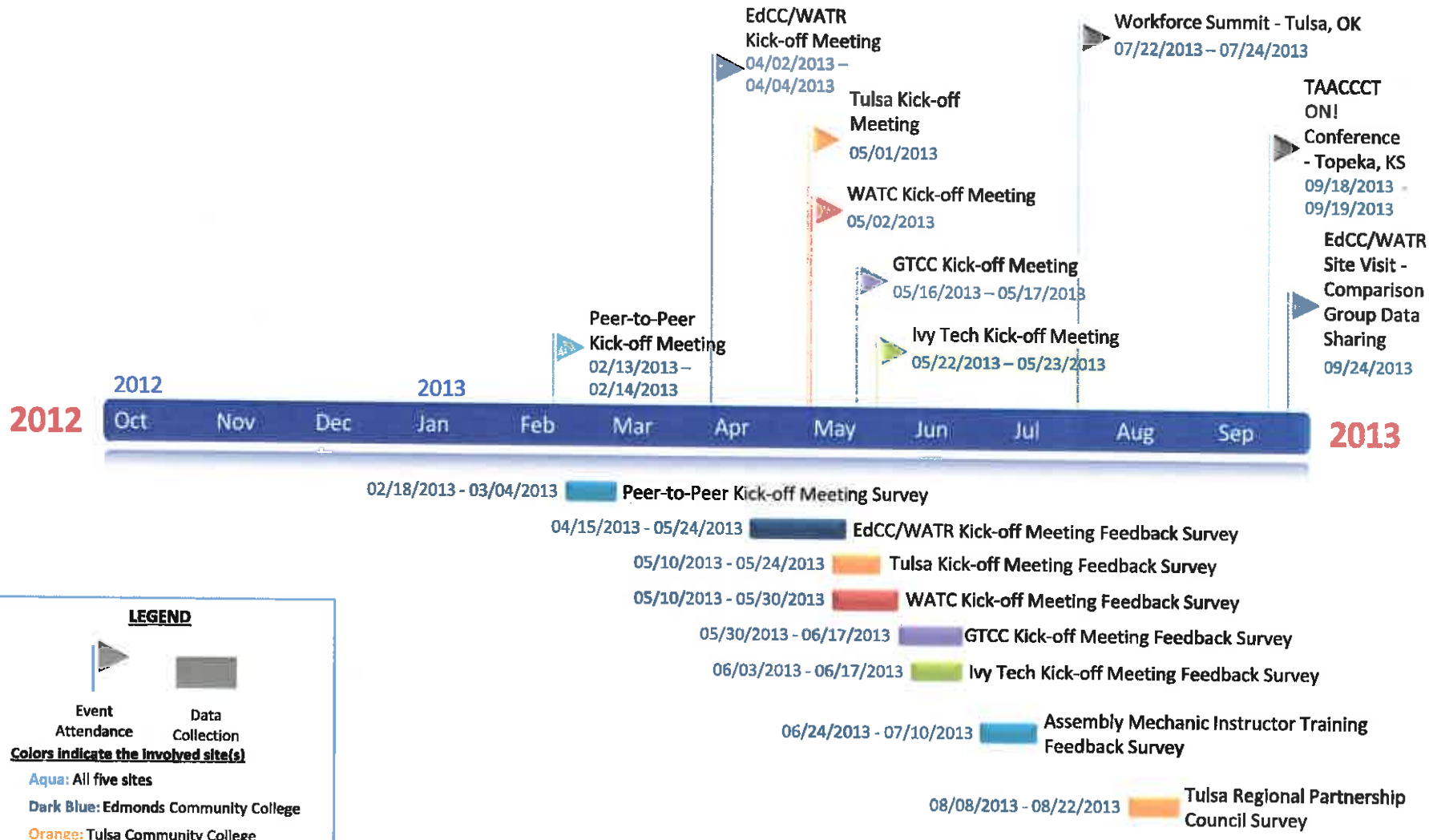
TAACCCT – National Aviation Consortium
OEIE Evaluation Deliverables
10/1/2012 to 9/30/2016

Products Delivered	Date
Evaluation Reports/Documents:	
Y3Q4 PC Quarterly Report Responses to Ivy Tech	10/15/15
NAC Graduates Employer Data by State	10/22/15
Ivy Tech Student Survey Summary	10/30/15
GTCC Student Survey Summary	10/31/15
Transformative Change Initiative PowerPoint Presentation	11/16/15
Tulsa Student Survey Summary	12/30/15
WATC Student Survey Summary	12/30/15
Apricot Wage Data Format Conversion for AJLA	1/4/16
Y4Q1 PC Quarterly Report (Electronic) Responses by Site	1/13/16-1/19/16
Apricot modifications – tracking form (emailed and saved on SharePoint in OEIE/Apricot folder)	2/22/16
Apricot Monthly Metric Reports by Site	3/1/16-3/12/16
Apricot Monthly Metric Reports by Site	4/1/16-4/14/16
Y4Q2 PC Quarterly Report (Electronic) Responses by Site	4/5/16-4/15/16
Apricot Wage Data Format Conversion for AJLA	4/12/16
NAC Quarterly Report	4/18/16-4/28/16
Apricot Monthly Metric Reports by Site	5/1/16-5/13/16
Review Quarterly Report (DOL)	5/9/16-5/13/16
Apricot Monthly Metric Reports by Site	6/1/16-6/18/16
Metrics/Outcomes for Manufacturing Institute summaries	6/3/16-6/28/16
Employment Reports from Apricot by Site	6/20/16-6/28/16
Y4Q3 PC Quarterly Report (Electronic) Responses by Site	7/7/16-7/18/16
Apricot outline of proposed fields	7/11/16
Apricot Monthly Metric Reports by Site	7/11/16-7/18/16
Employment Reports from Apricot by Site	7/25/16-7/29/16
Apricot monthly metric reports by site	8/5/16-8/15/16
Apricot download for Access Database (initial for review by WATR)	8/22/16
Tulsa outcomes data (for DOL grant application)	8/23/16
Revised Access database (further review by WATR)	8/27/16
Apricot download for Access Database (final version)	9/21/16
DOL Final Report metrics from Apricot	9/25/16
Third-Party Evaluator Final Evaluation Report	9/28/16

Appendix 5: OEIE Evaluation Activities Timeline

OEIE Year 1 Evaluation Activities

Event Attendance & Data Collection



LEGEND

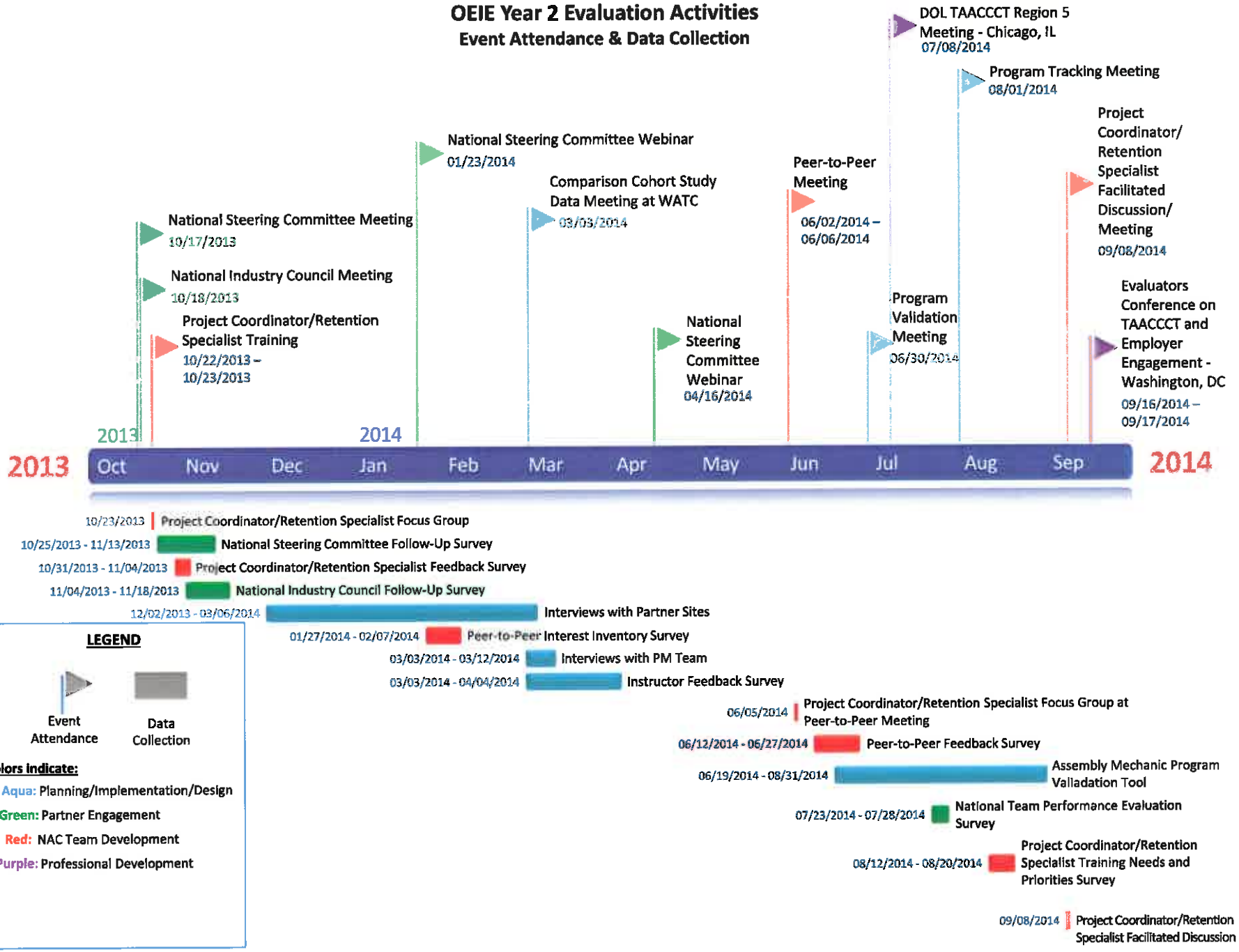
Event Attendance

Data Collection

Colors indicate the involved site(s)

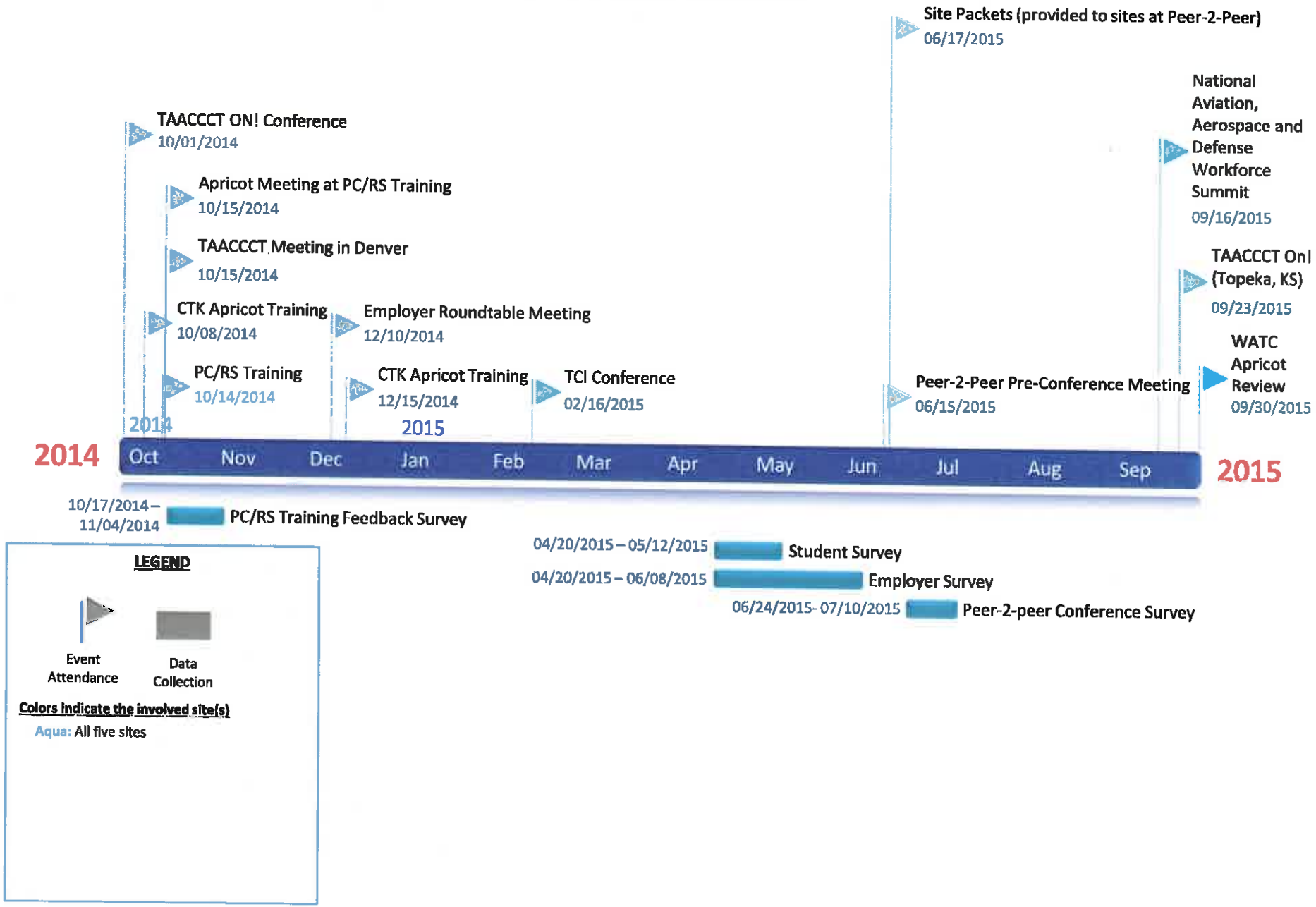
- **Aqua:** All five sites
- **Dark Blue:** Edmonds Community College
- **Orange:** Tulsa Community College
- **Red:** Wichita Area Technical College
- **Purple:** Guilford Technical Community College
- **Green:** Ivy Tech Community College
- **Gray:** Professional Development

OEIE Year 2 Evaluation Activities
Event Attendance & Data Collection



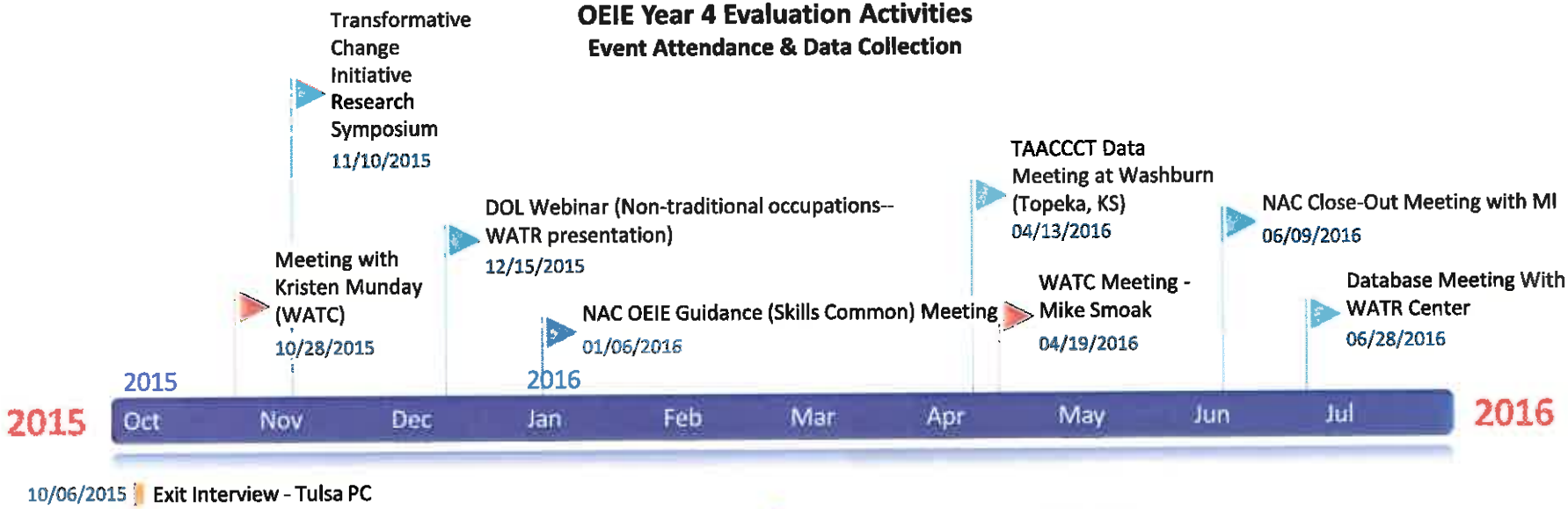
OEIE Year 3 Evaluation Activities

Event Attendance & Data Collection



OEIE Year 4 Evaluation Activities

Event Attendance & Data Collection



10/06/2015 Exit Interview - Tulsa PC

02/29/2016 – 03/01/2016 Tulsa Telephone Interviews (RS/SGA)

02/29/2016 – 03/03/2016 GTCC Telephone Interview (Group/PC/RS)

03/31/2016 Ivy Tech High-Level Admin Telephone Interview

03/15/2016 – 03/16/2016 Ivy Tech Site Visit and 9 Face-to-Face Interviews

03/04/2016 – 05/03/2016 Faculty Feedback Survey

04/11/2016 Vendor Telephone Interview (Joel, CAEL)

04/13/2016 – 04/14/2016 GTCC Telephone Interviews (High-Level Admin/Employer)

07/18/2016 – 07/20/2016 WATC Interviews (Instructor/NAC staff)

04/28/2016 GTCC Employer Telephone Interview

04/29/2016 – 05/06/2016 WATR Site Visit and 10 Face-to-Face Interviews

04/25/2016 – 05/13/2016 Student Feedback Survey

05/24/2016 WATR High-Level Admin Telephone Interview

06/29/2016 – 07/29/2016 WATC High-Level Admin Interview

05/26/2016 – 06/29/2016 Telephone Interviews (Vendor/High-Level Admin/PM Team)

05/25/2016 – 05/31/2016 GTCC Telephone Interviews (Employer/Faculty)

LEGEND

Event Attendance

Data Collection

Colors indicate the involved site(s)

- Aqua: All five sites
- Dark Blue: Edmonds Community College
- Orange: Tulsa Community College
- Red: Wichita Area Technical College
- Purple: Guilford Technical Community College
- Green: Ivy Tech Community College

Appendix 6:
AJLA Data Tables

PROGRAM: TAAWK1 NATIONAL SUMMARY
For Report Quarter Ending: 09/30/2013

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2012 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 01/01/2012 - 12/31/2012	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 04/01/2012 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 07/01/2011 - 06/30/2012	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 04/01/2012 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 07/01/2011 - 06/30/2012	0 / 0	#DIV/0!

[1] Based on UI and supplemental grantee data

[2] Based on UI information only

Annotations are the same throughout

Grantee: CA
For Report Quarter Ending: 09/30/2013

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2012 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 01/01/2012 - 12/31/2012	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 04/01/2012 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 07/01/2011 - 06/30/2012	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 04/01/2012 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 07/01/2011 - 06/30/2012	0 / 0	#DIV/0!

Grantee: KS
For Report Quarter Ending: 09/30/2013

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2012 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 01/01/2012 - 12/31/2012	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 04/01/2012 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 07/01/2011 - 06/30/2012	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 04/01/2012 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 07/01/2011 - 06/30/2012	0 / 0	#DIV/0!

Grantee: NC
For Report Quarter Ending: 09/30/2013

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2012 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 01/01/2012 - 12/31/2012	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 04/01/2012 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 07/01/2011 - 06/30/2012	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 04/01/2012 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 07/01/2011 - 06/30/2012	0 / 0	#DIV/0!

Grantee: WA
For Report Quarter Ending: 09/30/2013

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2012 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 01/01/2012 - 12/31/2012	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 04/01/2012 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 07/01/2011 - 06/30/2012	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 04/01/2012 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 07/01/2011 - 06/30/2012	0 / 0	#DIV/0!

PROGRAM: TAAWK1 NATIONAL SUMMARY
For Report Quarter Ending: 12/31/2013

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 01/01/2013 -	6 / 10	60.00%	**Entered Employment**[1] Exit Cohort: 04/01/2012 - 03/31/2013	6 / 10	60.00%
Employment Retention[1] Exit Cohort: 07/01/2012 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 10/01/2011 - 09/30/2012	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 07/01/2012 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 10/01/2011 - 09/30/2012	0 / 0	#DIV/0!

Grantee: State
For Report Quarter Ending: 12/31/2013

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 01/01/2013 -	6 / 10	60.00%	**Entered Employment**[1] Exit Cohort: 04/01/2012 - 03/31/2013	6 / 10	60.00%
Employment Retention[1] Exit Cohort: 07/01/2012 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 10/01/2011 - 09/30/2012	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 07/01/2012 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 10/01/2011 - 09/30/2012	0 / 0	#DIV/0!

PROGRAM: TAAWK1 NATIONAL SUMMARY
For Report Quarter Ending: 03/31/2014

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 04/01/2013 -	23 / 63	36.51%	**Entered Employment**[1] Exit Cohort: 07/01/2012 - 06/30/2013	29 / 77	37.66%
Employment Retention[1] Exit Cohort: 10/01/2012 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 01/01/2012 - 12/31/2012	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 10/01/2012 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 01/01/2012 - 12/31/2012	0 / 0	#DIV/0!

Grantee: CA
For Report Quarter Ending: 03/31/2014

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 04/01/2013 -	0 / *	#VALUE!	**Entered Employment**[1] Exit Cohort: 07/01/2012 - 06/30/2013	0 / *	#VALUE!
Employment Retention[1] Exit Cohort: 10/01/2012 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 01/01/2012 - 12/31/2012	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 10/01/2012 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 01/01/2012 - 12/31/2012	0 / 0	#DIV/0!

Grantee: KS
For Report Quarter Ending: 03/31/2014

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 04/01/2013 -	22 / 32	68.75%	**Entered Employment**[1] Exit Cohort: 07/01/2012 - 06/30/2013	28 / 46	60.87%
Employment Retention[1] Exit Cohort: 10/01/2012 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 01/01/2012 - 12/31/2012	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 10/01/2012 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 01/01/2012 - 12/31/2012	0 / 0	#DIV/0!

Grantee: NC
For Report Quarter Ending: 03/31/2014

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 04/01/2013 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 07/01/2012 - 06/30/2013	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 10/01/2012 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 01/01/2012 - 12/31/2012	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 10/01/2012 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 01/01/2012 - 12/31/2012	0 / 0	#DIV/0!

Grantee: OK
For Report Quarter Ending: 03/31/2014

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 04/01/2013 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 07/01/2012 - 06/30/2013	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 10/01/2012 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 01/01/2012 - 12/31/2012	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 10/01/2012 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 01/01/2012 - 12/31/2012	0 / 0	#DIV/0!

Grantee: WA
For Report Quarter Ending: 03/31/2014

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 04/01/2013 -	* / 30	#VALUE!	**Entered Employment**[1] Exit Cohort: 07/01/2012 - 06/30/2013	* / 30	#VALUE!
Employment Retention[1] Exit Cohort: 10/01/2012 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 01/01/2012 - 12/31/2012	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 10/01/2012 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 01/01/2012 - 12/31/2012	0 / 0	#DIV/0!

PROGRAM: TAAWK1 NATIONAL SUMMARY
For Report Quarter Ending: 06/30/2014

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 07/01/2013 -	5 / 27	18.52%	**Entered Employment**[1] Exit Cohort: 10/01/2012 - 09/30/2013	34 / 105	32.38%
Employment Retention[1] Exit Cohort: 01/01/2013 -	11 / 11	100.00%	**Employment Retention**[1] Exit Cohort: 04/01/2012 - 03/31/2013	11 / 11	100.00%
Average Earnings[2] Exit Cohort: 01/01/2013 -	170,419 / 11	$15,493	**Average Earnings**[2] Exit Cohort: 04/01/2012 - 03/31/2013	170,419 / 11	$15,493

Grantee: CA
For Report Quarter Ending: 06/30/2014

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 07/01/2013 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 10/01/2012 - 09/30/2013	0 / *	#VALUE!
Employment Retention[1] Exit Cohort: 01/01/2013 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 04/01/2012 - 03/31/2013	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 01/01/2013 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 04/01/2012 - 03/31/2013	0 / 0	#DIV/0!

Grantee: IN
For Report Quarter Ending: 06/30/2014

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 07/01/2013 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 10/01/2012 - 09/30/2013	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 01/01/2013 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 04/01/2012 - 03/31/2013	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 01/01/2013 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 04/01/2012 - 03/31/2013	0 / 0	#DIV/0!

Grantee: KS
For Report Quarter Ending: 06/30/2014

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 07/01/2013 -	4 / 8	50.00%	**Entered Employment**[1] Exit Cohort: 10/01/2012 - 09/30/2013	32 / 55	58.18%
Employment Retention[1] Exit Cohort: 01/01/2013 -	11 / 11	100.00%	**Employment Retention**[1] Exit Cohort: 04/01/2012 - 03/31/2013	11 / 11	100.00%
Average Earnings[2] Exit Cohort: 01/01/2013 -	170419 / 11	$15,493	**Average Earnings**[2] Exit Cohort: 04/01/2012 - 03/31/2013	170419 / 11	$15,493

Grantee: MO
For Report Quarter Ending: 06/30/2014

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 07/01/2013 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 10/01/2012 - 09/30/2013	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 01/01/2013 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 04/01/2012 - 03/31/2013	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 01/01/2013 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 04/01/2012 - 03/31/2013	0 / 0	#DIV/0!

Grantee: NC
For Report Quarter Ending: 06/30/2014

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 07/01/2013 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 10/01/2012 - 09/30/2013	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 01/01/2013 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 04/01/2012 - 03/31/2013	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 01/01/2013 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 04/01/2012 - 03/31/2013	0 / 0	#DIV/0!

Grantee: OK
For Report Quarter Ending: 06/30/2014

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 07/01/2013 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 10/01/2012 - 09/30/2013	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 01/01/2013 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 04/01/2012 - 03/31/2013	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 01/01/2013 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 04/01/2012 - 03/31/2013	0 / 0	#DIV/0!

Grantee: TX
For Report Quarter Ending: 06/30/2014

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 07/01/2013 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 10/01/2012 - 09/30/2013	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 01/01/2013 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 04/01/2012 - 03/31/2013	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 01/01/2013 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 04/01/2012 - 03/31/2013	0 / 0	#DIV/0!

Grantee: WA
For Report Quarter Ending: 06/30/2014

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 07/01/2013 -	* / 19	#VALUE!	**Entered Employment**[1] Exit Cohort: 10/01/2012 - 09/30/2013	* / 49	#VALUE!
Employment Retention[1] Exit Cohort: 01/01/2013 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 04/01/2012 - 03/31/2013	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 01/01/2013 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 04/01/2012 - 03/31/2013	0 / 0	#DIV/0!

PROGRAM: TAAWK1 NATIONAL SUMMARY
For Report Quarter Ending: 09/30/2014

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2013 -	33 / 64	51.56%	**Entered Employment**[1] Exit Cohort: 01/01/2013 - 12/31/2013	75 / 168	44.64%
Employment Retention[1] Exit Cohort: 04/01/2013 -	57 / 58	98.28%	**Employment Retention**[1] Exit Cohort: 07/01/2012 - 06/30/2013	71 / 72	98.61%
Average Earnings[2] Exit Cohort: 04/01/2013 -	1,192,767 / 57	$20,926	**Average Earnings**[2] Exit Cohort: 07/01/2012 - 06/30/2013	1,387,683 / 71	$19,545

Grantee: AR
For Report Quarter Ending: 09/30/2014

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2013 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 01/01/2013 - 12/31/2013	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 04/01/2013 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 07/01/2012 - 06/30/2013	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 04/01/2013 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 07/01/2012 - 06/30/2013	0 / 0	#DIV/0!

Grantee: CA
For Report Quarter Ending: 09/30/2014

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2013 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 01/01/2013 - 12/31/2013	0 / *	#VALUE!
Employment Retention[1] Exit Cohort: 04/01/2013 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 07/01/2012 - 06/30/2013	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 04/01/2013 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 07/01/2012 - 06/30/2013	0 / 0	#DIV/0!

Grantee: CO
For Report Quarter Ending: 09/30/2014

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2013 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 01/01/2013 - 12/31/2013	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 04/01/2013 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 07/01/2012 - 06/30/2013	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 04/01/2013 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 07/01/2012 - 06/30/2013	0 / 0	#DIV/0!

Grantee: FL
For Report Quarter Ending: 09/30/2014

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2013 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 01/01/2013 - 12/31/2013	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 04/01/2013 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 07/01/2012 - 06/30/2013	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 04/01/2013 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 07/01/2012 - 06/30/2013	0 / 0	#DIV/0!

Grantee: IN
For Report Quarter Ending: 09/30/2014

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2013 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 01/01/2013 - 12/31/2013	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 04/01/2013 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 07/01/2012 - 06/30/2013	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 04/01/2013 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 07/01/2012 - 06/30/2013	0 / 0	#DIV/0!

Grantee: KS
For Report Quarter Ending: 09/30/2014

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2013 -	14 / 22	63.64%	**Entered Employment**[1] Exit Cohort: 01/01/2013 - 12/31/2013	54 / 76	71.05%
Employment Retention[1] Exit Cohort: 04/01/2013 -	56 / 57	98.25%	**Employment Retention**[1] Exit Cohort: 07/01/2012 - 06/30/2013	70 / 71	98.59%
Average Earnings[2] Exit Cohort: 04/01/2013 -	1124417 / 56	$20,079	**Average Earnings**[2] Exit Cohort: 07/01/2012 - 06/30/2013	1319334 / 70	$18,848

Grantee: MO
For Report Quarter Ending: 09/30/2014

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2013 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 01/01/2013 - 12/31/2013	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 04/01/2013 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 07/01/2012 - 06/30/2013	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 04/01/2013 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 07/01/2012 - 06/30/2013	0 / 0	#DIV/0!

Grantee: NC
For Report Quarter Ending: 09/30/2014

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2013 -	15 / 16	93.75%	**Entered Employment**[1] Exit Cohort: 01/01/2013 - 12/31/2013	15 / 16	93.75%
Employment Retention[1] Exit Cohort: 04/01/2013 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 07/01/2012 - 06/30/2013	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 04/01/2013 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 07/01/2012 - 06/30/2013	0 / 0	#DIV/0!

Grantee: OK
For Report Quarter Ending: 09/30/2014

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2013 -	* / 6	#VALUE!	**Entered Employment**[1] Exit Cohort: 01/01/2013 - 12/31/2013	* / 6	#VALUE!
Employment Retention[1] Exit Cohort: 04/01/2013 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 07/01/2012 - 06/30/2013	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 04/01/2013 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 07/01/2012 - 06/30/2013	0 / 0	#DIV/0!

Grantee: TX
For Report Quarter Ending: 09/30/2014

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2013 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 01/01/2013 - 12/31/2013	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 04/01/2013 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 07/01/2012 - 06/30/2013	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 04/01/2013 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 07/01/2012 - 06/30/2013	0 / 0	#DIV/0!

Grantee: WA
For Report Quarter Ending: 09/30/2014

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2013 -	* / 20	#VALUE!	**Entered Employment**[1] Exit Cohort: 01/01/2013 - 12/31/2013	* / 69	#VALUE!
Employment Retention[1] Exit Cohort: 04/01/2013 -	* / *	#VALUE!	**Employment Retention**[1] Exit Cohort: 07/01/2012 - 06/30/2013	* / *	#VALUE!
Average Earnings[2] Exit Cohort: 04/01/2013 -	* / *	#VALUE!	**Average Earnings**[2] Exit Cohort: 07/01/2012 - 06/30/2013	* / *	#VALUE!

PROGRAM: TAAWK NATIONAL SUMMARY
For Report Quarter Ending: 03/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 04/01/2014 -	88 / 139	63.31%	**Entered Employment**[1] Exit Cohort: 07/01/2013 - 06/30/2014	159 / 287	55.40%
Employment Retention[1] Exit Cohort: 10/01/2013 -	81 / 89	91.01%	**Employment Retention**[1] Exit Cohort: 01/01/2013 - 12/31/2013	164 / 175	93.71%
Average Earnings[2] Exit Cohort: 10/01/2013 -	1,477,527 / 81	$18,241	**Average Earnings**[2] Exit Cohort: 01/01/2013 - 12/31/2013	3,044,488 / 164	$18,564

Grantee: AR
For Report Quarter Ending: 03/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 10/01/2013 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 01/01/2013 - 12/31/2013	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 10/01/2013 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 01/01/2013 - 12/31/2013	0 / 0	#DIV/0!

Grantee: CA
For Report Quarter Ending: 03/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 07/01/2013 - 06/30/2014	0 / *	#VALUE!
Employment Retention[1] Exit Cohort: 10/01/2013 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 01/01/2013 - 12/31/2013	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 10/01/2013 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 01/01/2013 - 12/31/2013	0 / 0	#DIV/0!

Grantee: CO
For Report Quarter Ending: 03/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 10/01/2013 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 01/01/2013 - 12/31/2013	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 10/01/2013 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 01/01/2013 - 12/31/2013	0 / 0	#DIV/0!

Grantee: FL
For Report Quarter Ending: 03/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 10/01/2013 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 01/01/2013 - 12/31/2013	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 10/01/2013 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 01/01/2013 - 12/31/2013	0 / 0	#DIV/0!

Grantee: IN
For Report Quarter Ending: 03/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 04/01/2014 -	* / *	#VALUE!	**Entered Employment**[1] Exit Cohort: 07/01/2013 - 06/30/2014	* / *	#VALUE!
Employment Retention[1] Exit Cohort: 10/01/2013 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 01/01/2013 - 12/31/2013	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 10/01/2013 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 01/01/2013 - 12/31/2013	0 / 0	#DIV/0!

Grantee: KS
For Report Quarter Ending: 03/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 04/01/2014 -	27 / 36	75.00%	**Entered Employment**[1] Exit Cohort: 07/01/2013 - 06/30/2014	54 / 73	73.97%
Employment Retention[1] Exit Cohort: 10/01/2013 -	24 / 26	92.31%	**Employment Retention**[1] Exit Cohort: 01/01/2013 - 12/31/2013	104 / 109	95.41%
Average Earnings[2] Exit Cohort: 10/01/2013 -	358540 / 24	$14,939	**Average Earnings**[2] Exit Cohort: 01/01/2013 - 12/31/2013	1833017 / 104	$17,625

Grantee: MO
For Report Quarter Ending: 03/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 04/01/2014 -	* / *	#VALUE!	**Entered Employment**[1] Exit Cohort: 07/01/2013 - 06/30/2014	* / *	#VALUE!
Employment Retention[1] Exit Cohort: 10/01/2013 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 01/01/2013 - 12/31/2013	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 10/01/2013 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 01/01/2013 - 12/31/2013	0 / 0	#DIV/0!

Grantee: NC
For Report Quarter Ending: 03/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 04/01/2014 -	15 / 29	51.72%	**Entered Employment**[1] Exit Cohort: 07/01/2013 - 06/30/2014	41 / 65	63.08%
Employment Retention[1] Exit Cohort: 10/01/2013 -	20 / 22	90.91%	**Employment Retention**[1] Exit Cohort: 01/01/2013 - 12/31/2013	21 / 23	91.30%
Average Earnings[2] Exit Cohort: 10/01/2013 -	313664 / 20	$15,683	**Average Earnings**[2] Exit Cohort: 01/01/2013 - 12/31/2013	327135 / 21	$15,578

Grantee: OK
For Report Quarter Ending: 03/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 04/01/2014 -	43 / 45	95.56%	**Entered Employment**[1] Exit Cohort: 07/01/2013 - 06/30/2014	59 / 63	93.65%
Employment Retention[1] Exit Cohort: 10/01/2013 -	37 / 40	92.50%	**Employment Retention**[1] Exit Cohort: 01/01/2013 - 12/31/2013	37 / 40	92.50%
Average Earnings[2] Exit Cohort: 10/01/2013 -	805323 / 37	$21,765	**Average Earnings**[2] Exit Cohort: 01/01/2013 - 12/31/2013	805323 / 37	$21,765

Grantee: TX
For Report Quarter Ending: 03/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 10/01/2013 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 01/01/2013 - 12/31/2013	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 10/01/2013 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 01/01/2013 - 12/31/2013	0 / 0	#DIV/0!

Grantee: VA
For Report Quarter Ending: 03/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 10/01/2013 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 01/01/2013 - 12/31/2013	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 10/01/2013 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 01/01/2013 - 12/31/2013	0 / 0	#DIV/0!

Grantee: WA
For Report Quarter Ending: 03/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 04/01/2014 -	0 / 25	0.00%	**Entered Employment**[1] Exit Cohort: 07/01/2013 - 06/30/2014	* / 80	#VALUE!
Employment Retention[1] Exit Cohort: 10/01/2013 -	0 / *	#VALUE!	**Employment Retention**[1] Exit Cohort: 01/01/2013 - 12/31/2013	* / *	#VALUE!
Average Earnings[2] Exit Cohort: 10/01/2013 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 01/01/2013 - 12/31/2013	* / *	#VALUE!

PROGRAM: TAAWK NATIONAL SUMMARY
For Report Quarter Ending: 06/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 07/01/2014 -	91 / 131	69.47%	**Entered Employment**[1] Exit Cohort: 10/01/2013 - 09/30/2014	284 / 393	72.26%
Employment Retention[1] Exit Cohort: 01/01/2014 -	97 / 104	93.27%	**Employment Retention**[1] Exit Cohort: 04/01/2013 - 03/31/2014	323 / 344	93.90%
Average Earnings[2] Exit Cohort: 01/01/2014 -	1,668,501 / 97	$17,201	**Average Earnings**[2] Exit Cohort: 04/01/2013 - 03/31/2014	5,699,804 / 323	$17,646

Grantee: AR
For Report Quarter Ending: 06/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 01/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 04/01/2013 - 03/31/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 01/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 04/01/2013 - 03/31/2014	0 / 0	#DIV/0!

Grantee: CA
For Report Quarter Ending: 06/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 07/01/2014 -	0 / *	#VALUE!	**Entered Employment**[1] Exit Cohort: 10/01/2013 - 09/30/2014	* / *	#VALUE!
Employment Retention[1] Exit Cohort: 01/01/2014 -	0 / *	#VALUE!	**Employment Retention**[1] Exit Cohort: 04/01/2013 - 03/31/2014	0 / *	#VALUE!
Average Earnings[2] Exit Cohort: 01/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 04/01/2013 - 03/31/2014	0 / 0	#DIV/0!

Grantee: CO
For Report Quarter Ending: 06/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 07/01/2014 -	* / *	#VALUE!	**Entered Employment**[1] Exit Cohort: 10/01/2013 - 09/30/2014	* / *	#VALUE!
Employment Retention[1] Exit Cohort: 01/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 04/01/2013 - 03/31/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 01/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 04/01/2013 - 03/31/2014	0 / 0	#DIV/0!

Grantee: FL
For Report Quarter Ending: 06/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 01/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 04/01/2013 - 03/31/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 01/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 04/01/2013 - 03/31/2014	0 / 0	#DIV/0!

Grantee: IN
For Report Quarter Ending: 06/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 07/01/2014 -	* / *	#VALUE!	**Entered Employment**[1] Exit Cohort: 10/01/2013 - 09/30/2014	4 / 5	80.00%
Employment Retention[1] Exit Cohort: 01/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 04/01/2013 - 03/31/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 01/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 04/01/2013 - 03/31/2014	0 / 0	#DIV/0!

Grantee: KS
For Report Quarter Ending: 06/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 07/01/2014 -	31 / 46	67.39%	**Entered Employment**[1] Exit Cohort: 10/01/2013 - 09/30/2014	79 / 113	69.91%
Employment Retention[1] Exit Cohort: 01/01/2014 -	9 / 10	90.00%	**Employment Retention**[1] Exit Cohort: 04/01/2013 - 03/31/2014	99 / 105	94.29%
Average Earnings[2] Exit Cohort: 01/01/2014 -	136428 / 9	$15,159	**Average Earnings**[2] Exit Cohort: 04/01/2013 - 03/31/2014	1774529 / 99	$17,925

Grantee: MD
For Report Quarter Ending: 06/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 01/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 04/01/2013 - 03/31/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 01/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 04/01/2013 - 03/31/2014	0 / 0	#DIV/0!

Grantee: MO
For Report Quarter Ending: 06/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 10/01/2013 - 09/30/2014	* / *	#VALUE!
Employment Retention[1] Exit Cohort: 01/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 04/01/2013 - 03/31/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 01/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 04/01/2013 - 03/31/2014	0 / 0	#DIV/0!

Grantee: NC
For Report Quarter Ending: 06/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 07/01/2014 -	6 / 18	33.33%	**Entered Employment**[1] Exit Cohort: 10/01/2013 - 09/30/2014	48 / 83	57.83%
Employment Retention[1] Exit Cohort: 01/01/2014 -	20 / 22	90.91%	**Employment Retention**[1] Exit Cohort: 04/01/2013 - 03/31/2014	41 / 45	91.11%
Average Earnings[2] Exit Cohort: 01/01/2014 -	318684 / 20	$15,934	**Average Earnings**[2] Exit Cohort: 04/01/2013 - 03/31/2014	645819 / 41	$15,752

Grantee: OH
For Report Quarter Ending: 06/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 01/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 04/01/2013 - 03/31/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 01/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 04/01/2013 - 03/31/2014	0 / 0	#DIV/0!

Grantee: OK
For Report Quarter Ending: 06/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 07/01/2014 -	38 / 41	92.68%	**Entered Employment**[1] Exit Cohort: 10/01/2013 - 09/30/2014	97 / 104	93.27%
Employment Retention[1] Exit Cohort: 01/01/2014 -	36 / 38	94.74%	**Employment Retention**[1] Exit Cohort: 04/01/2013 - 03/31/2014	73 / 78	93.59%
Average Earnings[2] Exit Cohort: 01/01/2014 -	632271 / 36	$17,563	**Average Earnings**[2] Exit Cohort: 04/01/2013 - 03/31/2014	1437594 / 73	$19,693

Grantee: TX
For Report Quarter Ending: 06/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 01/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 04/01/2013 - 03/31/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 01/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 04/01/2013 - 03/31/2014	0 / 0	#DIV/0!

Grantee: VA
For Report Quarter Ending: 06/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 01/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 04/01/2013 - 03/31/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 01/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 04/01/2013 - 03/31/2014	0 / 0	#DIV/0!

Grantee: WA
For Report Quarter Ending: 06/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 07/01/2014 -	13 / 22	59.09%	**Entered Employment**[1] Exit Cohort: 10/01/2013 - 09/30/2014	53 / 83	63.86%
Employment Retention[1] Exit Cohort: 01/01/2014 -	32 / 33	96.97%	**Employment Retention**[1] Exit Cohort: 04/01/2013 - 03/31/2014	110 / 115	95.65%
Average Earnings[2] Exit Cohort: 01/01/2014 -	581117 / 32	$18,160	**Average Earnings**[2] Exit Cohort: 04/01/2013 - 03/31/2014	1841861 / 110	$16,744

PROGRAM: TAAWK NATIONAL SUMMARY

For Report Quarter Ending: 09/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2014 -	103 / 151	68.21%	**Entered Employment**[1] Exit Cohort: 01/01/2014 - 12/31/2014	341 / 481	70.89%
Employment Retention[1] Exit Cohort: 04/01/2014 -	211 / 223	94.62%	**Employment Retention**[1] Exit Cohort: 07/01/2013 - 06/30/2014	445 / 475	93.68%
Average Earnings[2] Exit Cohort: 04/01/2014 -	3,744,518 / 211	$17,747	**Average Earnings**[2] Exit Cohort: 07/01/2013 - 06/30/2014	7,660,661 / 445	$17,215

Grantee: AR

For Report Quarter Ending: 09/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 01/01/2014 - 12/31/2014	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!

Grantee: CA
For Report Quarter Ending: 09/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 01/01/2014 - 12/31/2014	* / *	#VALUE!
Employment Retention[1] Exit Cohort: 04/01/2014 -	* / *	#VALUE!	**Employment Retention**[1] Exit Cohort: 07/01/2013 - 06/30/2014	* / *	#VALUE!
Average Earnings[2] Exit Cohort: 04/01/2014 -	* / *	#VALUE!	**Average Earnings**[2] Exit Cohort: 07/01/2013 - 06/30/2014	* / *	#VALUE!

Grantee: CO
For Report Quarter Ending: 09/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 01/01/2014 - 12/31/2014	* / *	#VALUE!
Employment Retention[1] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!

Grantee: FL
For Report Quarter Ending: 09/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 01/01/2014 - 12/31/2014	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!

Grantee: IN
For Report Quarter Ending: 09/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2014 -	8 / 11	72.73%	**Entered Employment**[1] Exit Cohort: 01/01/2014 - 12/31/2014	12 / 16	75.00%
Employment Retention[1] Exit Cohort: 04/01/2014 -	* / *	#VALUE!	**Employment Retention**[1] Exit Cohort: 07/01/2013 - 06/30/2014	* / *	#VALUE!
Average Earnings[2] Exit Cohort: 04/01/2014 -	* / *	#VALUE!	**Average Earnings**[2] Exit Cohort: 07/01/2013 - 06/30/2014	* / *	#VALUE!

Grantee: KS
For Report Quarter Ending: 09/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2014 -	45 / 62	72.58%	**Entered Employment**[1] Exit Cohort: 01/01/2014 - 12/31/2014	110 / 154	71.43%
Employment Retention[1] Exit Cohort: 04/01/2014 -	44 / 49	89.80%	**Employment Retention**[1] Exit Cohort: 07/01/2013 - 06/30/2014	82 / 92	89.13%
Average Earnings[2] Exit Cohort: 04/01/2014 -	628052 / 44	$14,274	**Average Earnings**[2] Exit Cohort: 07/01/2013 - 06/30/2014	1177253 / 82	$14,357

Grantee: MD
For Report Quarter Ending: 09/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 01/01/2014 - 12/31/2014	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!

Grantee: MI
For Report Quarter Ending: 09/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 01/01/2014 - 12/31/2014	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!

Grantee: MO
For Report Quarter Ending: 09/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 01/01/2014 - 12/31/2014	* / *	#VALUE!
Employment Retention[1] Exit Cohort: 04/01/2014 -	* / *	#VALUE!	**Employment Retention**[1] Exit Cohort: 07/01/2013 - 06/30/2014	* / *	#VALUE!
Average Earnings[2] Exit Cohort: 04/01/2014 -	* / *	#VALUE!	**Average Earnings**[2] Exit Cohort: 07/01/2013 - 06/30/2014	* / *	#VALUE!

Grantee: NC
For Report Quarter Ending: 09/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2014 -	17 / 28	60.71%	**Entered Employment**[1] Exit Cohort: 01/01/2014 - 12/31/2014	50 / 94	53.19%
Employment Retention[1] Exit Cohort: 04/01/2014 -	27 / 27	100.00%	**Employment Retention**[1] Exit Cohort: 07/01/2013 - 06/30/2014	68 / 72	94.44%
Average Earnings[2] Exit Cohort: 04/01/2014 -	414156 / 27	$15,339	**Average Earnings**[2] Exit Cohort: 07/01/2013 - 06/30/2014	1059975 / 68	$15,588

Grantee: NJ
For Report Quarter Ending: 09/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 01/01/2014 - 12/31/2014	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!

Grantee: NY
For Report Quarter Ending: 09/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 01/01/2014 - 12/31/2014	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!

Grantee: OH
For Report Quarter Ending: 09/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 01/01/2014 - 12/31/2014	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!

Grantee: OK
For Report Quarter Ending: 09/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 01/01/2014 - 12/31/2014	91 / 98	92.86%
Employment Retention[1] Exit Cohort: 04/01/2014 -	101 / 105	96.19%	**Employment Retention**[1] Exit Cohort: 07/01/2013 - 06/30/2014	174 / 182	95.60%
Average Earnings[2] Exit Cohort: 04/01/2014 -	1996923 / 101	$19,772	**Average Earnings**[2] Exit Cohort: 07/01/2013 - 06/30/2014	3425111 / 174	$19,685

Grantee: SC
For Report Quarter Ending: 09/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 01/01/2014 - 12/31/2014	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!

Grantee: TX
For Report Quarter Ending: 09/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 01/01/2014 - 12/31/2014	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!

Grantee: VA
For Report Quarter Ending: 09/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 01/01/2014 - 12/31/2014	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!

Grantee: WA
For Report Quarter Ending: 09/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2014 -	33 / 50	66.00%	**Entered Employment**[1] Exit Cohort: 01/01/2014 - 12/31/2014	75 / 114	65.79%
Employment Retention[1] Exit Cohort: 04/01/2014 -	35 / 38	92.11%	**Employment Retention**[1] Exit Cohort: 07/01/2013 - 06/30/2014	117 / 124	94.35%
Average Earnings[2] Exit Cohort: 04/01/2014 -	659880 / 35	$18,854	**Average Earnings**[2] Exit Cohort: 07/01/2013 - 06/30/2014	1952815 / 117	$16,691

Grantee: WI
For Report Quarter Ending: 09/30/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 10/01/2014 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 01/01/2014 - 12/31/2014	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 04/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 07/01/2013 - 06/30/2014	0 / 0	#DIV/0!

PROGRAM: TAAWK1 NATIONAL SUMMARY
For Report Quarter Ending: 12/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 01/01/2015 -	57 / 87	65.52%	**Entered Employment**[1] Exit Cohort: 04/01/2014 - 03/31/2015	357 / 509	70.14%
Employment Retention[1] Exit Cohort: 07/01/2014 -	82 / 91	90.11%	**Employment Retention**[1] Exit Cohort: 10/01/2013 - 09/30/2014	259 / 286	90.56%
Average Earnings[2] Exit Cohort: 07/01/2014 -	3,303,617 / 196	$16,855	**Average Earnings**[2] Exit Cohort: 10/01/2013 - 09/30/2014	10,666,299 / 616	$17,315

Grantee: AK
For Report Quarter Ending: 12/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 01/01/2015 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 04/01/2014 - 03/31/2015	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0	#DIV/0!

Grantee: AR
For Report Quarter Ending: 12/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 01/01/2015 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 04/01/2014 - 03/31/2015	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 07/01/2014 -	* / *	#VALUE!	**Average Earnings**[2] Exit Cohort: 10/01/2013 - 09/30/2014	* / *	#VALUE!

Grantee: CA
For Report Quarter Ending: 12/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 01/01/2015 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 04/01/2014 - 03/31/2015	0 / *	#VALUE!
Employment Retention[1] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 10/01/2013 - 09/30/2014	0 / *	#VALUE!
Average Earnings[2] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 10/01/2013 - 09/30/2014	* / *	#VALUE!

Grantee: CO
For Report Quarter Ending: 12/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter		Cumulative 4 Quarter Period	
Entered Employment[1] Exit Cohort: 01/01/2015 -	0 / 0 #DIV/0!	**Entered Employment**[1] Exit Cohort: 04/01/2014 - 03/31/2015	* / * #VALUE!
Employment Retention[1] Exit Cohort: 07/01/2014 -	* / * #VALUE!	**Employment Retention**[1] Exit Cohort: 10/01/2013 - 09/30/2014	* / * #VALUE!
Average Earnings[2] Exit Cohort: 07/01/2014 -	* / * #VALUE!	**Average Earnings**[2] Exit Cohort: 10/01/2013 - 09/30/2014	* / * #VALUE!

Grantee: FL
For Report Quarter Ending: 12/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter		Cumulative 4 Quarter Period	
Entered Employment[1] Exit Cohort: 01/01/2015 -	0 / 0 #DIV/0!	**Entered Employment**[1] Exit Cohort: 04/01/2014 - 03/31/2015	0 / 0 #DIV/0!
Employment Retention[1] Exit Cohort: 07/01/2014 -	0 / 0 #DIV/0!	**Employment Retention**[1] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0 #DIV/0!
Average Earnings[2] Exit Cohort: 07/01/2014 -	* / * #VALUE!	**Average Earnings**[2] Exit Cohort: 10/01/2013 - 09/30/2014	* / * #VALUE!

Grantee: IN
For Report Quarter Ending: 12/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 01/01/2015 -	* / *	#VALUE!	**Entered Employment**[1] Exit Cohort: 04/01/2014 - 03/31/2015	14 / 19	73.68%
Employment Retention[1] Exit Cohort: 07/01/2014 -	* / *	#VALUE!	**Employment Retention**[1] Exit Cohort: 10/01/2013 - 09/30/2014	4 / 4	100.00%
Average Earnings[2] Exit Cohort: 07/01/2014 -	34866 / 5	$6,973	**Average Earnings**[2] Exit Cohort: 10/01/2013 - 09/30/2014	63085 / 7	$9,012

Grantee: KS
For Report Quarter Ending: 12/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 01/01/2015 -	15 / 18	83.33%	**Entered Employment**[1] Exit Cohort: 04/01/2014 - 03/31/2015	117 / 162	72.22%
Employment Retention[1] Exit Cohort: 07/01/2014 -	27 / 31	87.10%	**Employment Retention**[1] Exit Cohort: 10/01/2013 - 09/30/2014	68 / 78	87.18%
Average Earnings[2] Exit Cohort: 07/01/2014 -	848012 / 56	$15,143	**Average Earnings**[2] Exit Cohort: 10/01/2013 - 09/30/2014	1982523 / 132	$15,019

Grantee: MD
For Report Quarter Ending: 12/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 01/01/2015 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 04/01/2014 - 03/31/2015	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0	#DIV/0!

Grantee: MI
For Report Quarter Ending: 12/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 01/01/2015 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 04/01/2014 - 03/31/2015	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0	#DIV/0!

Grantee: MO
For Report Quarter Ending: 12/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 01/01/2015 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 04/01/2014 - 03/31/2015	* / *	#VALUE!
Employment Retention[1] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 10/01/2013 - 09/30/2014	* / *	#VALUE!
Average Earnings[2] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 10/01/2013 - 09/30/2014	* / *	#VALUE!

Grantee: NC
For Report Quarter Ending: 12/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 01/01/2015 -	16 / 27	59.26%	**Entered Employment**[1] Exit Cohort: 04/01/2014 - 03/31/2015	53 / 100	53.00%
Employment Retention[1] Exit Cohort: 07/01/2014 -	* / 5	#VALUE!	**Employment Retention**[1] Exit Cohort: 10/01/2013 - 09/30/2014	43 / 47	91.49%
Average Earnings[2] Exit Cohort: 07/01/2014 -	166616 / 13	$12,817	**Average Earnings**[2] Exit Cohort: 10/01/2013 - 09/30/2014	1213120 / 80	$15,164

Grantee: NJ
For Report Quarter Ending: 12/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 01/01/2015 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 04/01/2014 - 03/31/2015	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0	#DIV/0!

Grantee: NY
For Report Quarter Ending: 12/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 01/01/2015 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 04/01/2014 - 03/31/2015	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0	#DIV/0!

Grantee: OH
For Report Quarter Ending: 12/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 01/01/2015 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 04/01/2014 - 03/31/2015	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0	#DIV/0!

Grantee: OK
For Report Quarter Ending: 12/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 01/01/2015 -	9 / 13	69.23%	**Entered Employment**[1] Exit Cohort: 04/01/2014 - 03/31/2015	92 / 101	91.09%
Employment Retention[1] Exit Cohort: 07/01/2014 -	36 / 38	94.74%	**Employment Retention**[1] Exit Cohort: 10/01/2013 - 09/30/2014	95 / 100	95.00%
Average Earnings[2] Exit Cohort: 07/01/2014 -	1452084 / 77	$18,858	**Average Earnings**[2] Exit Cohort: 10/01/2013 - 09/30/2014	4913627 / 254	$19,345

Grantee: SC
For Report Quarter Ending: 12/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 01/01/2015 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 04/01/2014 - 03/31/2015	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0	#DIV/0!

Grantee: TX
For Report Quarter Ending: 12/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 01/01/2015 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 04/01/2014 - 03/31/2015	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0	#DIV/0!

Grantee: VA
For Report Quarter Ending: 12/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 01/01/2015 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 04/01/2014 - 03/31/2015	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0	#DIV/0!

Grantee: WA
For Report Quarter Ending: 12/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 01/01/2015 -	15 / 26	57.69%	**Entered Employment**[1] Exit Cohort: 04/01/2014 - 03/31/2015	79 / 124	63.71%
Employment Retention[1] Exit Cohort: 07/01/2014 -	13 / 14	92.86%	**Employment Retention**[1] Exit Cohort: 10/01/2013 - 09/30/2014	47 / 54	87.04%
Average Earnings[2] Exit Cohort: 07/01/2014 -	746359 / 42	$17,770	**Average Earnings**[2] Exit Cohort: 10/01/2013 - 09/30/2014	2420977 / 138	$17,543

Grantee: WI
For Report Quarter Ending: 12/31/2015

OFFICIAL COMMON PERFORMANCE MEASURE OUTCOMES

Current Quarter			Cumulative 4 Quarter Period		
Entered Employment[1] Exit Cohort: 01/01/2015 -	0 / 0	#DIV/0!	**Entered Employment**[1] Exit Cohort: 04/01/2014 - 03/31/2015	0 / 0	#DIV/0!
Employment Retention[1] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Employment Retention**[1] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0	#DIV/0!
Average Earnings[2] Exit Cohort: 07/01/2014 -	0 / 0	#DIV/0!	**Average Earnings**[2] Exit Cohort: 10/01/2013 - 09/30/2014	0 / 0	#DIV/0!

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