

Third-Party Evaluation of Implementation & Impact of the Southwest Missouri Public Safety and Emergency Medical Initiative TAACCCT Grant

Grant # TC-23754-12-60-A-29


Abstract:

This report provides qualitative and quantitative data related to the extent to which Crowder College implemented TAACCCT grant programs and strategies with fidelity. In addition, the report evaluates participant outcomes and examines differences in outcomes between grant and non-grant participants. By linking two connected evaluation efforts---implementation and outcomes/impact, the College is in a better position to document what was delivered and achieved with grant funds, and evaluate and learn more about the impact of such actions on student outcomes.

This workforce solution was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The solution was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership.



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Preface

Crowder College's TAACCCT grant, Public Safety and Emergency Medical Initiative (commonly and hereafter referred to as the PSP grant), provided the opportunity for the College to increase capacity of public safety programs and to develop and experiment with a number of innovative instructional and student support strategies. Such strategies were designed to improve public safety within the community as well as meet the needs of targeted populations seeking to acquire industry-recognized program awards and credentials and gain employment in criminal justice, fire science, and emergency medical services occupations.

This report provides both implementation and grant performance outcome evaluation, and examines the impact of grant programs and strategies in regard to program completion and employment upon program completion.

Implementation evaluation data related to how the grant met and exceeded the deliverables and performance outcomes outlined in the original statement of work can be found on pages 16-35. At times the PSP grant challenged the College's existing culture and practices, and grant leadership modified programs and strategies along the way. These adaptations due to "lessons-learned" during implementation are outlined on page 33. Grant innovations holding promise for further discussion, review, and possible scaling are presented on page 35. Outcome and impact evaluation data and analysis designed to examine the extent to which the grant positively impacted program completion and employment upon program completion are described on pages 37-43.

Although the PSP grant ends September 30, 2016, the impact of lessons learned is just beginning. In an effort to more fully examine grant innovations and connect lessons learned from its TAACCCT grant to the College's mainstream operation, Crowder College leadership is prepared to incorporate this evaluation and related grant data into its strategic planning process. Thank you for allowing us to be a part of your transformative journey as you continue to work to meet the needs of your community.

Executive Summary

This report presents an evaluation of Crowder College's Public Safety and Emergency Medical Initiative (commonly referred to as PSP) grant as part of the Trade Adjustment Assistance Community College and Career Training (TAACCCT) program administered by the U.S. Department of Labor (DOL). This is the culminating report on grant implementation, performance outcomes, and impact. Evaluation progress reports and the curriculum review reports are attached.

Crowder College used their TAACCCT grant to expand capacity as well as develop and experiment with a number of innovative instructional and student support strategies. Such strategies were designed to improve public safety within the community as well as meet the needs of targeted populations seeking to acquire industry-recognized program awards and credentials and gain employment in criminal justice, fire science, and emergency medical services occupations.

This report provides both implementation and grant performance outcome evaluation, and examines the impact of grant programs and strategies in regard to program completion and employment upon program completion. A multi-dimensional evaluation process was employed to meet Department of Labor evaluation requirements and provide the College with data and analysis related to the following key questions.

- How did Crowder College partner with employers to develop/redesign programs?
- How did Crowder College develop and structure the curriculum?
- Did the PSEMI programs serve the target population?
- Did Crowder College implement programs and strategies in a timely manner?
- How do actual grant outcomes compare to targeted grant outcomes?
- Do students and employers believe the grant had a positive impact on the community?
- What has Crowder College learned during the implementation process?
- What grant programs and strategies appear to hold promise for long-term sustainability and scaling?
- How do grant program completion and employment results compare to similar metrics for non-grant students?

These research questions guided all project data gathering from participant data files to interview protocols and strategy implementation tools. Throughout the grant, Cosgrove & Associates visited the College and the satellite campus where instruction was delivered to interview students, faculty, college staff and administration, and employers. Interview results were cross-referenced with the College's reports to DOL, programmatic documents, implementation tools customized to the work plan from the PSP statement of work, surveys, and student-level data from the College's student information system and supplemental participant data collection tools, to ensure both validity and reliability of results.

The implementation evaluation draws on Weiss'¹ concept of process evaluation and Chen's ² work on theory-driven evaluation to understand what is happening inside the program. By partnering with Crowder College to employ two linked evaluation efforts---implementation and outcomes/impact, the College is in a better position to document what was delivered and achieved with grant funds, and evaluate and learn more about the impact of such actions on student outcomes.

Given the innovative nature of grant programs, the College's existing data systems were not able to fully capture all student data needed to track performance outcomes and impact results. Cosgrove & Associates partnered with the PSP grant team to assist in the development of supplemental data collection tools related to grant intake, outcome tracking, and grant program/strategy implementation. To help ensure data reliability and validity, as well as provide continuous feedback to the College, Cosgrove & Associates partnered with the PSP team on data definitions, data collection, and data integrity and reviewed such information with the College on a term by term basis or when new personnel came onboard.

A quasi-experimental, non-equivalent control group design was employed to examine possible differences in program completion and employment data between grant participants and non-grant students. A retrospective sample of students who started with Crowder College in Fall 2013 was used to build a non-grant control group. The non-grant control group consisted of 1,232 students. Academic and employment outcomes for the non-grant control group were tracked through Fall 2015. Students in the non-grant control group did not participate in grant programs/strategies. This retrospective approach helped avoid "treatment" contamination between the grant and the non-grant groups. However, despite efforts to construct similar student population of first-time to Crowder College students, grant students were more likely to be male and on the average older than students in the non-grant control group sample.

We employed logistic regression to compare dichotomous outcome variables (e.g., program completion, and employment) between students in the non-grant control group and the grant treatment group. Data analysis associated with procedure used of a two-tailed t-test and an alpha-level of .01 to establish statistical significance. By ensuring that students in both the control and treatment cohorts were new to the College, we were able to remove potential bias associated with previous Crowder enrollment. Age, gender, and employment status at initial enrollment were used as control variables and participation in the grant was employed as the treatment variable.

¹ Weiss, C. H., (1998). *Evaluation: Methods for studying programs and policies*. Upper Saddle River, NJ: Prentice Hall.

² Chen, H. (2004). The roots of theory-driven evaluation: Current views and origins. In M. Alkin (Ed.), *Evaluation roots: Tracing theorists' views and influences* (pp. 132-152). Thousand Oaks, CA: Sage Publications.

Although the TPE and the PSP team took great care to ensure the validity and reliability of all data, the following list of possible limitations associated with these data should be considered when interpreting evaluation outcome and impact results.

- ❖ Participant enrollment and tracking to record DOL required metrics and grant performance outcomes challenged the College's existing data collection system/processes. To address such challenges, adaptations to existing information systems were required and secondary data reporting systems were developed. During such processes, student data may have been subjected to clerical/data entry and computing/coding errors.
- ❖ Employment and wage data collected through valid Social Security Number (SSN) matching with state UI employment records often lag behind actual employment and wages by 6-8 months. Although student follow-up surveys, with employment verification were used to supplemental official UI employment and wage data, these data were also at times incomplete.
- ❖ Student and employer satisfaction data collected through follow-up surveys may be subject to "positive-response bias", as students and employers with positive impressions are often more likely to respond to such surveys and/or respondents may not provide honest responses to survey questions.
- ❖ Self-assessments of grant progress, and innovation scaling and sustainability were completed by those working directly with the grant. Given the extensive commitment of such staff to grant success, such respondents may have an inflated view of grant progress, scaling and sustainability.

To help minimize and address possible data limitations, all student input and outcome data, as well as interview, observation, and college self-assessment data were reviewed at the end of each academic term by College staff and TPE to check for accuracy. In addition, Cosgrove & Associates recognized the complex nature of the grant innovations and worked with Crowder College to implement a Developmental Evaluation³ model to support innovation by using data to improve grant performance and decision-making while meeting DOL requirements. To aid the College in the use of evaluation data for continuous improvement, C&A provided a series of three Evaluation Progress Reports (EPR) at the following key grant intervals: July 2013; September 2014; and March 2015.

Due to DOL's expectation to build capacity while implementing the grant requirements, grant leadership had to design the innovation, change college processes and cultures to implement innovations, manage the grant within stated DOL compliance requirements, and achieve and track the results—all within three years. DOL's challenge to build capacity, although laudable, did not always align with DOL's required reporting metrics and therefore may have been an unrealistic expectation for a three-year period.

Data presented in this report point to the success of PSP grant participants and reveal that grant participants completed programs and secured employment at higher rates than students in more traditional, non-grant programs. Although such results are encouraging, it is important for the

³ Patton, M. Q. (2011). *Developmental Evaluation: Applying complexity concepts to enhance innovation and use*. New York, NY: Guilford Press.

College to focus on lessons learned during the grant and build upon the innovations and strategies used to achieve such results. Grant staff, Crowder administrators and employers suggested the following areas hold promise for further scaling and sustainability.

- ❖ Expand and Enhance Strategies Aimed at Employer Engagement in Program Development and Expected Outcomes
- ❖ Develop Meaningful Career Pathways & New Student Orientation Processes
- ❖ Explore the PSP Intrusive Advising Model for Aspects that Could Benefit Segments of the Crowder College Student Body
- ❖ Expand and Create Systematic Processes for Awarding Credit for Prior Learning
- ❖ Continue Experimentation with Alternative Instructional Strategies Not Based upon the Traditional 16-week, Term-based Format.

The following represent key data results related to this evaluation.

- The PSP grant surpassed all targeted performance measures related to enrollment, program completion, and employment of program completers.
- Employer input and engagement were used to redesign three public safety programs: Fire Science, Criminal Justice, and Emergency Medical Services.
- Crowder College designed a new program, Public Safety Management, but has discontinued the program due to low enrollment.
- Employers reported satisfaction with their Crowder College partnerships and suggested that the overall quality of public safety workers in the service area was enhanced.
- Crowder College targeted and provided college access to unemployed and academically low-skilled adults:
 - Average age of participants was 28
 - 99% were either unemployed or under-employed at program start-up
 - 74% were academically low-skilled at program start-up
- The credit hour completed-to-attempted ratio was 83%.
- The program completion rate was 67% with 249 of the participants completing at least one program of study.
- Eighty-eight percent (88%) of program completers were employed upon program completion, with an annual average wage of \$34,950,
- Seventy-five percent (75%) of participants who began as employed received a wage increase after enrolling in their grant program.
- Sixty-seven percent (67%) of program completers who started as unemployed secured employment upon program completion.
- Eighty participants (21%) are continuing their education after enrolling in the grant.
- Grant participants expressed a high degree of satisfaction with program offerings and college support services. In addition, participants reported grant programs/services helped to improve their abilities and self-efficacy with regard to key workplace skills.
- Grant participants were more likely than non-grant students to complete a program award and secure employment upon program completion.
- The College used their TAACCCT grant to experiment with many of the foundational aspects of the Career Pathway approach within the four programs comprising the PSP

grant. It remains to be seen which, if any, of these aspects will transfer to the general college.

- The experimental nature of the PSP grant has laid a solid foundation for further innovation and development associated with the following areas:
 - redesign of programs using career pathways;
 - new student orientation;
 - intrusive instructional support strategies;
 - expansion of Credit for Prior Learning;
 - non term-based, alternative instructional formats;
 - expanded use of employer engagement to support program creation and continuous improvement.
- College leadership is attempting to link PSP experimentation, lessons learned, and evaluation results to its current strategic planning process.

I. Introduction

The Round II Trade Adjustment Act Community College and Career Training (TAACCCT) program was launched in 2012 by the United States Department of Labor (DOL) in partnership with the United States Department of Education (DOE). The Round II Solicitation for Grant Applications (SGA) called for grantees to “increase attainment of degrees, certificates, and other industry-recognized credentials and better prepare the targeted population and other beneficiaries for high-wage, high-skill employment”.

Crowder College and leadership from local public safety agencies saw the TAACCCT program as directly related to the area’s need to rebuild from the May 22, 2011 EF5 tornado which destroyed more than 2,000 businesses and 8,000 homes in Joplin, MO and surrounding counties. Thousands of workers were displaced from their jobs and homes. Employment data and face-to-face discussions with public safety officials revealed the immediate demand for public safety and emergency medical job training.

Crowder College was awarded the SW Missouri Public Safety and Emergency Medical Initiative (PSP) Round II TAACCCT grant to increase capacity of public safety programs and develop programmatic and student support innovations related to individuals seeking employment in the public safety and emergency medical services work sector. The project goal was to bridge the training gaps between existing public safety programs and industry demands and enhance programs with updated competencies related to industry-skill standards and certifications via innovative delivery methods. The PSP grant sought to develop innovations related to the following:

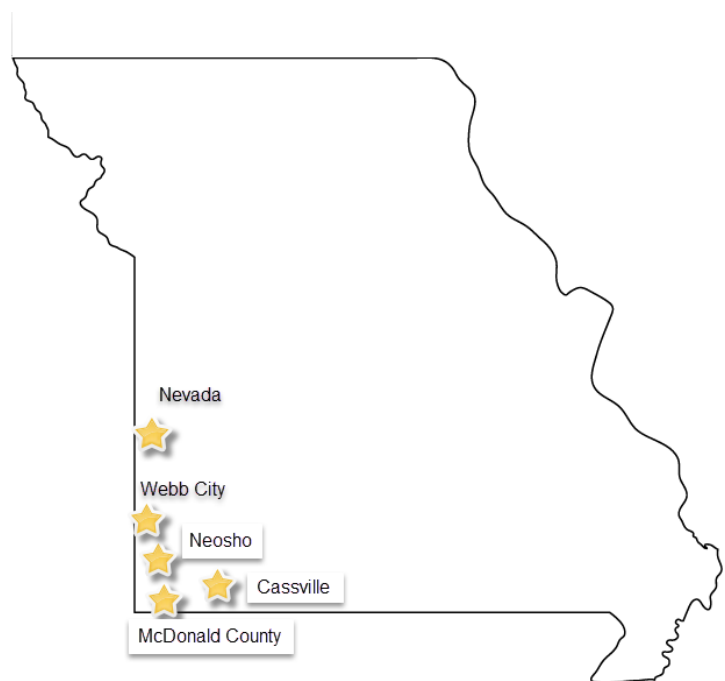
- Priority 1: Expand/Build Programs that Meet Industry Needs & Develop Career Pathways
- Priority 2: Improve Achievement Rates and/or Reduce Time to Completion
- Priority 3: Accelerate Progress for Low-Skilled & Other Workers
- Priority 4: Employ Instructional Strategies Which Make Work a Central Context for Learning
- Priority 5: Employ Strategies to Address the Needs of Working Adults by Accommodating Student Work Schedules

Contextual Factors - Located in the southwestern corner of Missouri, Crowder College has its main location in Neosho, Missouri as well as sites in Cassville, Jane (McDonald County), Nevada and Webb City. The College also offers classes in Carthage, Greenfield, Lamar, Monett and Mt. Vernon. Over the course of the PSP grant, the College’s enrollment varied by less than five percentage points as shown in Table 1. Crowder College housed the PSP grant in the Institutional Advancement-Grants Office which reports directly to the President. (See Appendix I for Organizational Chart). The College used grant funds to hire a grant administrator tasked with engaging community/employer partners; sharing employer curriculum suggestions with appropriate program staff; overseeing recruitment, retention, and employment strategies; and overall grant implementation. Crowder College deployed a team to implement the PSP grant (hereinafter referred to as the PSP team) including Grants Office staff and an administrator, student navigator/advisor, data specialist and faculty members supported by grant funds. The grant was based at the College’s Webb City location.

Table 1: Crowder College Fall Enrollment	
2012	5,590
2013	5,845
2014	5,710
2015	5,580

Crowder College’s nine-county service area is mainly rural with a total population of 328,089 and a population per square mile of 59. Eighty-four percent of the population aged 25 and older have completed a high school degree or higher, but only 15% of residents aged 25 and older have completed a four-year degree or higher. The median household income is approximately \$38,000. Nineteen percent of the population is at or below the poverty level. Fifty-eight percent of the population aged 16 and older are in the labor force. (Source: American Fact Finder, Current Population Estimates, 2015). The city of Joplin (population 50,150) is by far the largest urbanized area in the College’s service area.

Figure 1: Map of Missouri with Crowder College Main (Neosho) and Satellite Campuses



Throughout the course of the grant, the College saw changes in leadership including an interim president, a new president, a new vice-president of academic affairs, a new associate vice-president of career and technical education, a new grants director, as well as at least three different career navigators. Despite this change in leadership and grant personnel, Crowder College was able to maintain a consistent focus on fulfilling the obligations of the grant.

The College hoped the grant could help unemployed workers secure jobs in the public safety

sector; improve the quality of public safety in the area through upskilling of incumbent public safety workers and volunteers; and improve college relationships with employers, workforce, and local four-year institutions partnerships. The TAACCCT grant provided an opportunity to use evidenced-based designs to “experiment” with innovative strategies related to career pathway development including accelerated and non-traditional instructional formats, stackable credentials, technology-enabled learning, employer engagement, and intensive student advising.

As the administering entity for this grant, Crowder College contracted with Cosgrove & Associates (C&A) to conduct a rigorous, third-party evaluation (TPE) of grant implementation, outcomes, and impact. Throughout the grant, C&A partnered with Crowder College to complete a comprehensive, multi-dimensional approach to evaluate both grant implementation and outcomes, and impact.

This report provides qualitative and quantitative data related to the extent to which Crowder College implemented grant programs and strategies with fidelity. In addition, the report evaluates participant outcomes and examines differences in outcomes between grant and non-grant participants.

Method of Analysis - Working together, Crowder College and C&A designed the research questions presented in Figure 2 to meet DOL’s requirements as well as additional questions of interest to the College:

Figure 2: PSP Core Evaluation Questions

How did Crowder College partner with employers to develop/redesign programs?

How did Crowder College develop and structure curriculum?

Did PSP programs serve the target population?

Did Crowder College implement programs and strategies in a timely manner?

Do students and employers believe the grant had a positive impact on the community?

How do actual grant outcomes compare to targeted grant outcomes?

What has Crowder College learned during the implementation process?

What grant programs and strategies appear to hold promise for long-term sustainability and scaling?

How do grant program completion and employment results compare to similar metrics for non-grant students?

These research questions guided all project data gathering from participant data files to interview protocols and strategy implementation tools. C&A visited the College and the satellite campus where instruction was delivered to interview students, faculty, college staff and administration, and employers. Interview results were cross-referenced with the College’s reports to DOL,

programmatic documents, implementation tools customized to the PSP Work Plan, student-level data from the College's student information system, and surveys to ensure both validity and reliability of results. The implementation evaluation draws on Weiss'⁴ concept of process evaluation and Chen's ⁵ work on theory-driven evaluation to understand what is happening inside the program. By partnering with Crowder College to employ two linked evaluation efforts---implementation and outcomes/impact, the College is in a better position to document what was delivered and achieved with grant funds, and evaluate and learn more about the impact of such actions on student outcomes.

⁴ Weiss, C. H., (1998). *Evaluation: Methods for studying programs and policies*. Upper Saddle River, NJ: Prentice Hall.

⁵ Chen, H. (2004). The roots of theory-driven evaluation: Current views and origins. In M. Alkin (Ed.), *Evaluation roots: Tracing theorists' views and influences* (pp. 132-152). Thousand Oaks, CA: Sage Publications.

II. Evaluation Process

At the onset of the grant, Cosgrove & Associates and Crowder College agreed that efforts such as PSP involve complex innovations and often challenge traditional evaluation models. As such, C&A worked with the College to implement a Developmental Evaluation⁶ model to support innovation by using data to improve grant performance and decision-making while meeting DOL requirements. To aid the College in the use of evaluation data for continuous improvement, C&A provided a series of three Evaluation Progress Reports (EPR) at the following key grant intervals: July 2013; September 2014; and March 2015. This set of EPRs can be found in Appendix II.

Data Sources and the Limitations of Data

Cosgrove & Associates employed the following data collection strategies/sources throughout the entire grant period:

- Bi-annual internal stakeholder interaction including: comprehensive site visits, listening sessions, and interviews;
- Annual employer partner communication including: interviews, listening sessions, surveys;
- Interviews, focus groups, and surveys of grant participants;
- Review of DOL Quarterly Narrative Progress Reports;
- Review of DOL Annual Performance Reports;
- Review of Crowder College PSP internal grant reports;
- Review of grant artifacts (e.g., recruitment flyers, pathway maps, curriculum, etc.)
- Unit record tracking of grant participant characteristics and outcomes through Crowder College tracking system including the College Student Information System and supplemental student intake forms;
- Completer employment data (combination of UI employment/wage data and Crowder College completer follow-up tracking); and
- Crowder College annual implementation and progress self-assessment reporting.

Although the TPE and the PSP team took great care to ensure the validity and reliability of all data, including training PSP team members on interpreting and recording data variables and attributes, the following list of possible limitations associated with these data should be considered when interpreting evaluation outcome and impact results.

- Participant enrollment and tracking to record DOL required metrics and grant performance outcomes challenged the College's existing data collection system/processes. To address such challenges, adaptations to existing information systems were required and secondary data reporting systems were developed. During such processes, student data may have been subjected to clerical/data entry and computing/coding errors.

⁶ Patton, M. Q. (2011). *Developmental Evaluation: Applying complexity concepts to enhance innovation and use*. New York, NY: Guilford Press.

- Employment and wage data collected through valid Social Security Number (SSN) matching with state UI employment records often lag behind actual employment and wages by 6-8 months. Although student follow-up surveys, with employment verification were used to supplement official UI employment and wage data, these data were also at times incomplete.
- Student and employer satisfaction data collected through follow-up surveys may be subject to “positive-response bias”, as students and employers with positive impressions are often more likely to respond to such surveys and/or respondents may not provide honest responses to survey questions.
- Self-assessments of grant progress, and innovation scaling and sustainability were completed by those working directly with the grant. Given the extensive commitment of such staff to grant success, such respondents may have an inflated view of grant progress, scaling and sustainability.

To help minimize and address possible data limitations, the TPE and the PSP team employed the following strategies.

- All student input and outcome data were reviewed at the end of each academic term by College staff and TPE to check for accuracy.
- The College secured a single TPE who is knowledgeable about the types of data stored in each of the systems and any data limitations. The TPE and the PSP team partnership helped the process of data integration proceed in a consistent and reliable manner.
- PSP built on expertise from TAACCCT Round 1 and made use of the existing data structures.
- All data sources were examined with the grantee and TPE data analysis/interpretation was shared with the PSP team on annual basis through a series of Evaluation Progress Reports.
- The self-assessment tool used was completed by the PSP team three times throughout the course of the grant. The tool followed the PSP work plan from the statement of work, and with regard to planning, pre-planning and implementation stages was cross-referenced with DOL QNPRs and APRs. With regard to the more complex values of sustaining and scaling, the tool was cross referenced with College leadership. The tool has been used to assess implementation in other TAACCCT grants.
- To ensure the validity and reliability of survey data, survey instruments were developed in concert with the grantee, and checked to ensure consistent results over time. Questionnaire items and results were also compared to results from student and employer interviews.

Quasi-Experimental Design to Evaluate Impact - Cosgrove & Associates employed a Quasi-Experimental Non-Equivalent Control Group⁷ design to evaluate grant outcomes/impact. Cosgrove & Associates partnered with Crowder College to acquire de-identified, unit-record participant and outcome data for all grant participants. This data set was used to develop the Grant Participant Treatment Group. In addition, C&A worked with the College to create a de-

⁷ Stanley, J. & Campbell, D. (1966). *Experimental and Quasi-Experimental Designs for Research*. Chicago, IL. Rand McNally Co.

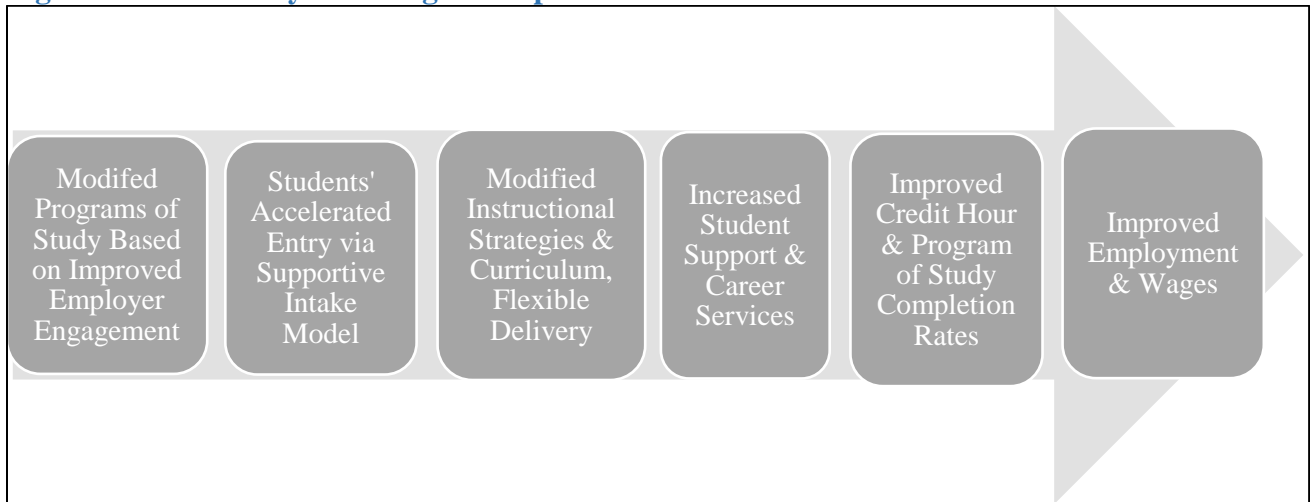
identified unit-record data set for a non-grant control group cohort of students who started with Crowder College in the Fall 2013 term. Students in the non-grant control group did not participate in grant programs/strategies. This retrospective approach helped avoid “treatment” contamination between the grant and the non-grant groups.

Academic and employment outcome data were examined for both groups during a similar time period 2013-2015. Logistic regression was used to compare dichotomous outcome variables (e.g., program completion, and employment) between students in the grant group and the non-grant control group. Please see section I. Results: Additional Program Completion Analysis & Grant Impact Evaluation Data (page 30) for further analysis.

In soliciting grant applications, DOL acknowledged grantees would need to place significant emphasis on institutional capacity building to meet the program goals. DOL encouraged applicants to propose ways to “expand and improve their ability to deliver education and career training programs” urging them to incorporate evidence-based design, stacked and latticed credentials, online and technology-enabled learning, transferability and articulation, and strategic alignment (*U.S. Department of Labor, ETA Solicitation for Grant Applications, Round 2---SGA/DFA PY 11-08*).

The PSP theory of change is depicted below in Figure 3. The College and leadership from local public safety agencies conceived of the grant as a way to improve employment outcomes for participants, increase Crowder College capacity, and enhance community public safety. The college would design curriculum based upon employer needs and deliver it to students in a manner that suited the needs of the adult learner (accelerated, flexible, modified college algebra entry requirements, increased student support at intake, academic support during the program, and career support throughout the program). These changes in program design and delivery were expected to lead to improved student completion and employment.

Figure 3: PSP Theory of Change & Improvement



Due to DOL’s expectation to build capacity while implementing the grant requirements, grant leadership had to design the innovation, change college processes and cultures to implement innovations, manage the grant within stated DOL compliance requirements, and achieve and track the results—all within three years. DOL’s challenge to build capacity, although laudable, did not always align with DOL’s required reporting metrics and therefore may have been an unrealistic expectation for a three-year period. An over-reliance on traditional metrics related to number of participants and program completion rates created situations in which the College pushed hard to enroll participants and award program credentials/certificates. Although this may have resulted in positive grant performance outcomes, it limited the College’s ability and time needed to transfer lessons learned from grant programs to non-grant programs and thus, inadvertently, created an environment in which grant innovations were sometimes isolated from the mainstream organization.

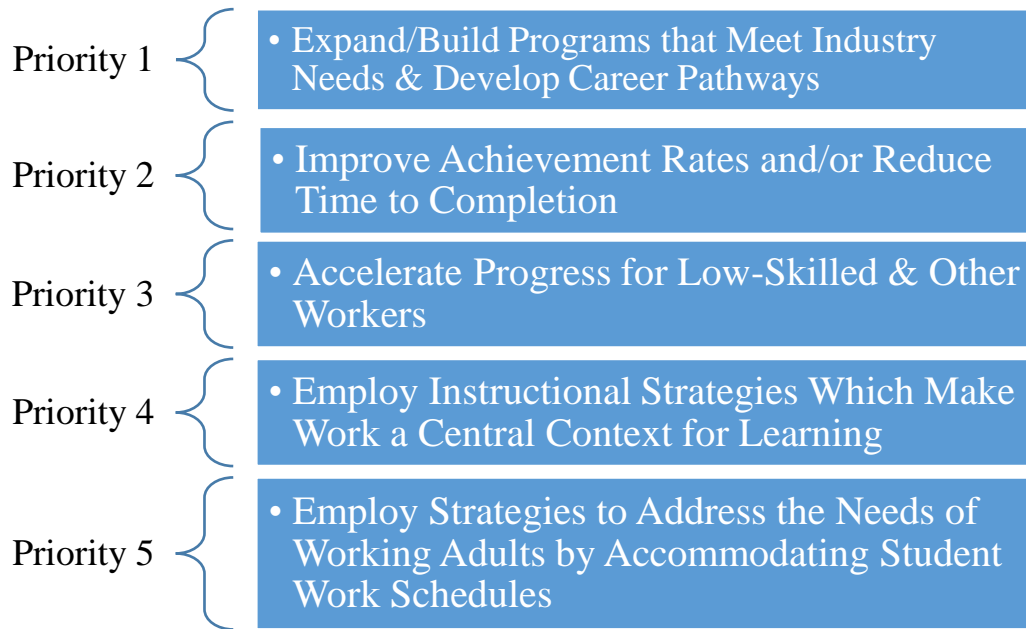
III. Results: Implementation & Grant Outcomes Evaluation

This section of the report examines evaluation data from the perspective of two key questions.

1. Did Crowder College implement the PSP grant in accordance with the designed statement of work?
2. What outcomes were achieved as a result of program and strategy implementation?

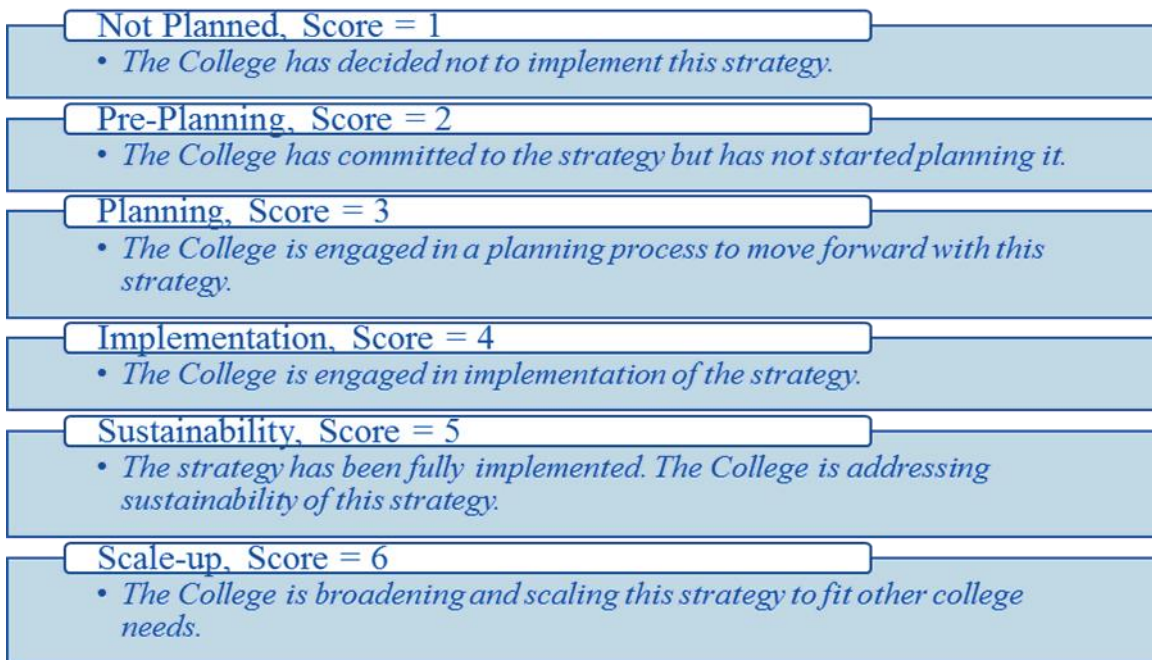
As outlined in the PSP Work Plan, the grant was designed to address the following five priorities:

Figure 4: PSP Priorities



PSP Third Party Evaluators partnered with Crowder College to design and implement a Strategy Implementation Progress Scale (SIPS). Using SIPS, grant staff annually assessed the College’s progress on strategy implementation including sustainability and scaling. Cosgrove & Associates and grant staff reviewed resulting data to identify grant strengths and opportunities for improvement.

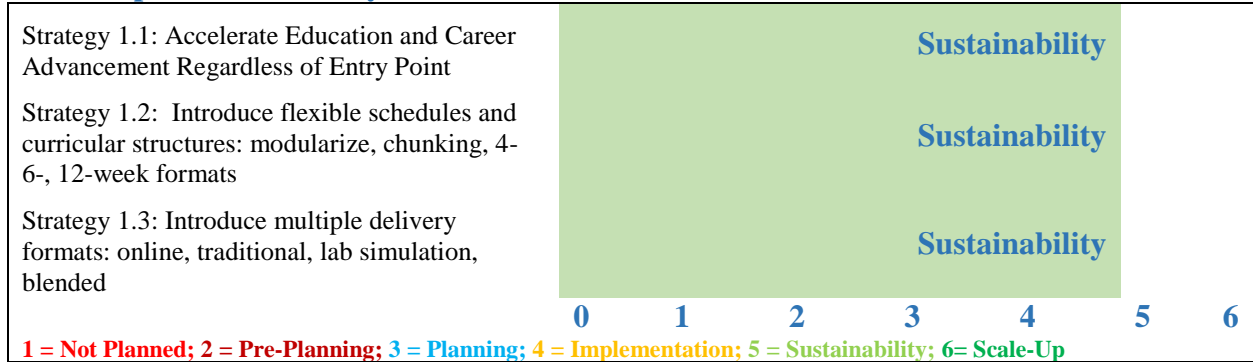
Figure 5: PSP Strategy Implementation Progress Scale (SIPS)



Figures 6-10 present the Strategy Implementation Progress Scale score at the final implementation stage for primary strategies within each priority. The score is based upon analysis and evaluation of the grantee’s self-assessment, review of grant artifacts, and interviews with College leadership.

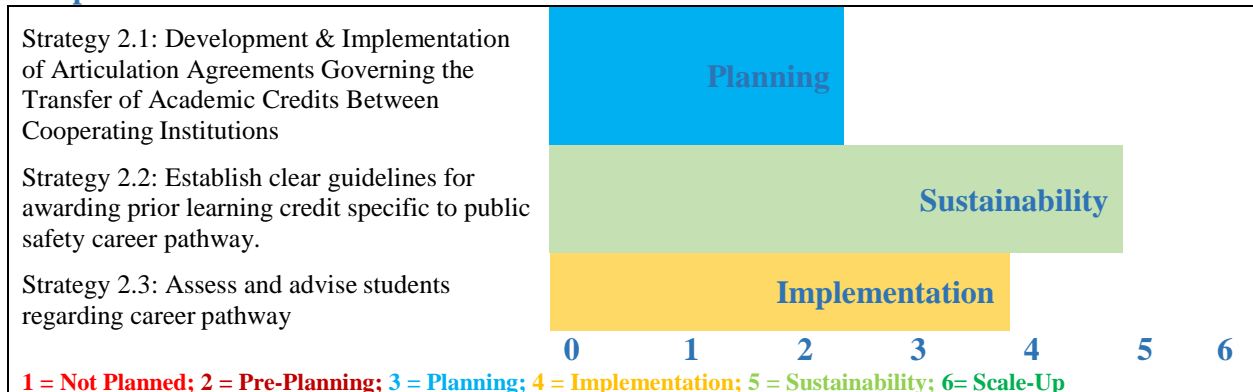
Of the strategies designed to meet the priority *building programs that address industry needs and develop career pathways* (Figure 6), the College anticipates sustaining progress made in accelerating students along their pathways. Programs were accelerated via online/hybrid delivery, condensed and blocked courses, and courses offered at non-traditional times (i.e., weekends and evenings). The College plans to sustain these non-traditional offerings. Moreover, grant staff noted the value of inter-departmental career pathway maps and stated students would benefit from maps showing “the cross-over between programs and degrees. Adding potential salary amounts to our Maps would also be motivational for students to continue their education.” (PSP staff comment, 2016).

Figure 6: SIPS Score for Priority 1: Expand & Build Programs That Meet Industry Needs & Develop Career Pathways



Crowder College employed several strategies to address the priority of improving achievement and reducing time to completion. College grant faculty and staff recognize the benefit of and expect to sustain progress made with the awarding of credit for prior learning. Although faculty and staff also see positive impact from enhanced student advising, in order to sustain enhanced advising the College will need to assign responsibility and budget for this function as the career advisor position was grant funded. Although the College attempted to improve articulation agreements, they were unable to reach agreement with the local four-year institution. See Figure 7 below.

Figure 7: SIPS Score for Priority 2: Improve Achievement Rates and/or Time to Completion



As shown in Figure 8 below, the primary strategies outlined in the grant to accelerate progress for those defined as low skilled revolved around academic and soft-skill assessment and development, and tutoring. Over the course of the grant, faculty and staff learned of the relationship between academic and soft-skill development. A PSP advisor stated “when students are academically low-skilled and in need of remediation, they also typically need assistance with the use of technology and in strengthening their soft skills and professionalism.” (PSP staff comment, 2016). To sustain these strategies, the College may need to seek additional resources.

Figure 8: SIPS score for Priority 3: Accelerate Progress for Low-Skilled & Other Workers

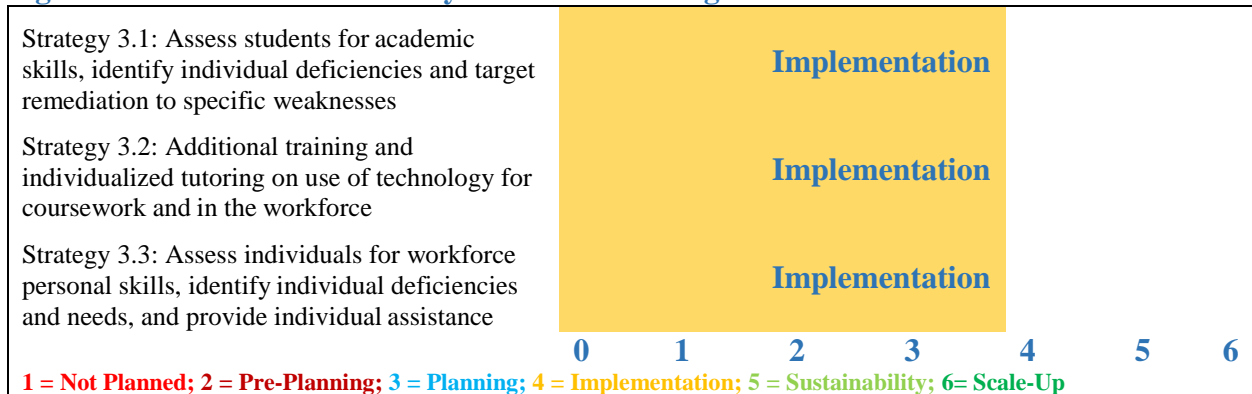
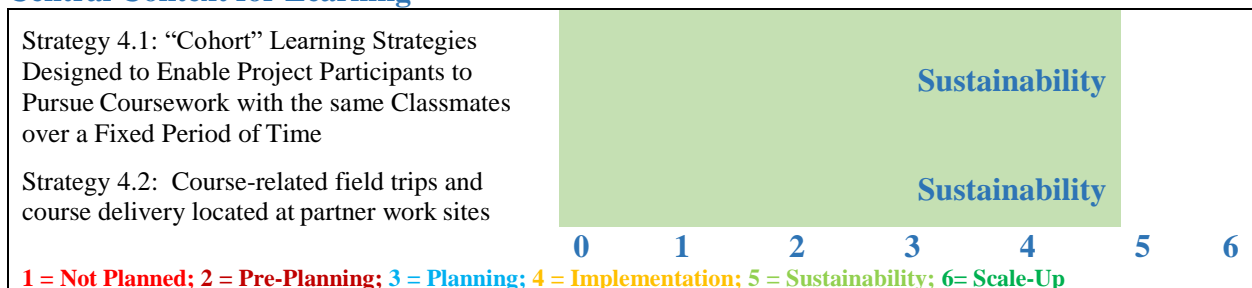


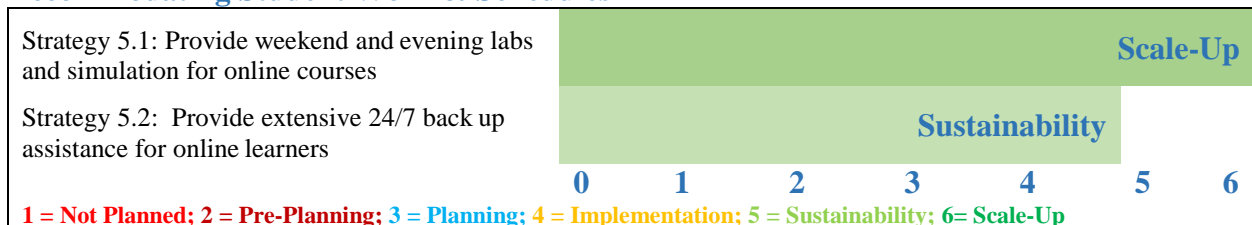
Figure 9 shows the College expects to sustain two strategies related to instructional strategies implemented to address the priority of making work a context for learning. Employers, students, and faculty alike noted the success of employer-based learning including employers providing classroom space, use of equipment, and use of outdoor training sites. The College’s attempts to introduce the cohort style will be sustained in the EMT/Paramedic programs.

Figure 9: SIPS score for Priority 4: Create Instructional Strategies That Make Work a Central Context for Learning



As shown in Figure 10 below and noted above in the discussion of priority one, the College expects to scale the flexible scheduling of courses to other programs as warranted by student demand and instructor availability.

Figure 10: SIPS Score for Priority 5: Strategies to Address the Needs of Working Adults by Accommodating Student Work & Schedules



Figures 6-10 above reveal Crowder College implemented all proposed grant strategies and worked to sustain and/or scale several strategies.

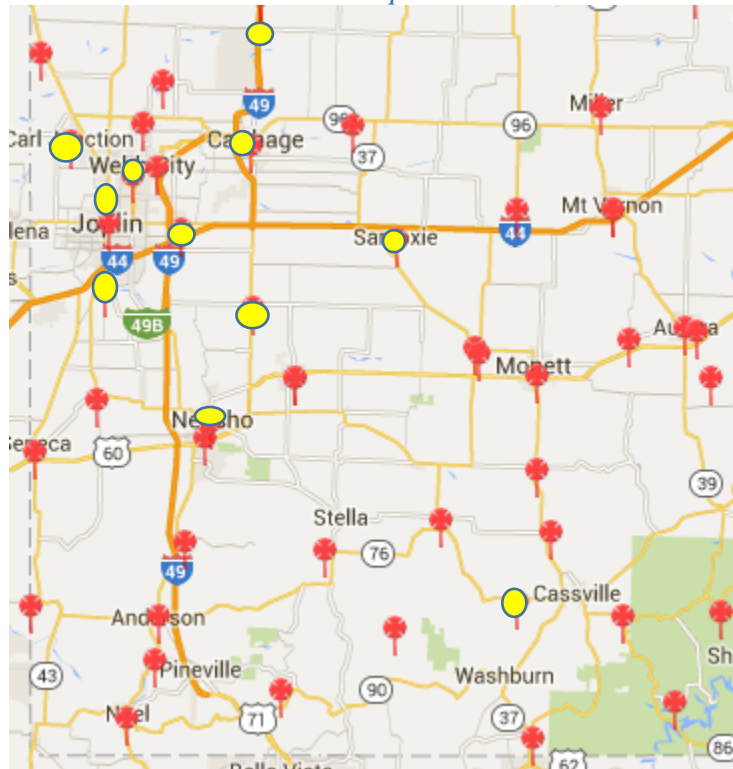
Evaluation Question 1: How did Crowder College partner with employers to develop/redesign programs?

The city of Joplin lies in the northwest corner of the Crowder service area and is the largest community the College serves (2015 US Census population estimate 50,150). Joplin and the adjacent Webb City maintain paid public safety providers. Figure 11 depicts the fire districts within the College's service area with the communities participating in PSP marked in yellow. Many of these fire districts are served by all-volunteer forces or those with a blend of paid firefighters and volunteers (each point on the map indicates the location of such forces). These small fire, sheriff, and emergency medical departments lack the staff or funding to engage in any but required training. The aftermath of the Joplin tornado of May 2011 prompted the genesis of the PSP grant as community leaders and public safety providers recognized the need for better public safety training in the area.

The PSP grant served to bring together fire, police/sheriff, and emergency medical departments to identify training needs; build programs to upskill incumbent employees and volunteers; and train unemployed residents of the area.

Representatives from eleven of the fire and/or police/sheriff districts (denoted with a yellow dot in Figure 11 above) engaged with Crowder College to build or modify public safety programs in the following areas: Fire Science, Criminal Justice, Public Management, and EMT/Paramedic. The PSP team created new -- and reinvigorated existing -- program advisory councils to produce program and career pathway maps to help guide grant participants from initial training to completion of Bachelor's degrees with additional credentials earned along the way. The employer engagement process also served as a catalyst for bringing employers together to discuss common needs and concerns beyond those pertaining to training and workforce development. Historically, the rural nature and geographic dispersion of employers/agencies had led to the isolation of regional partners/agencies. Through the essential conversations that led to the PSP grant, employers/agencies benefitted from meeting as a group. As stated by a local police responder during an employer focus group: "it has been good to meet and know that we all share the same problems." (PSP Employer focus group, 2014). Crowder College's PSP team, Crowder administration, and employers noted the value of this convening and expressed the

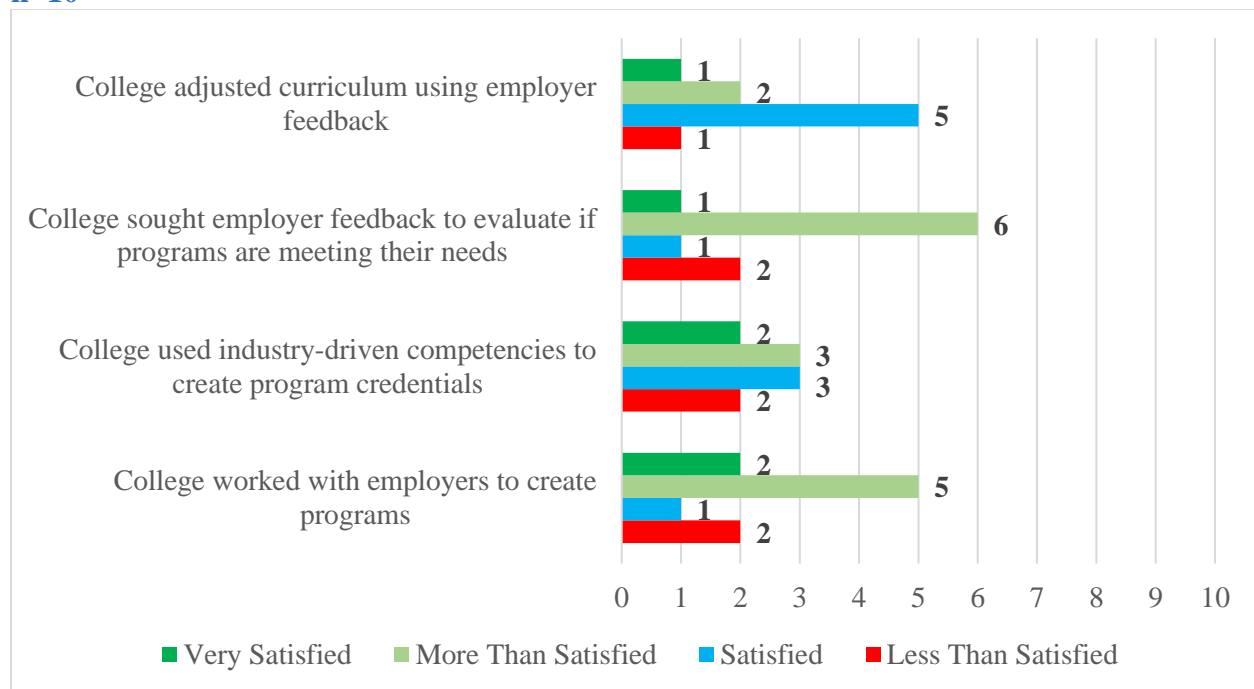
Figure 11: Map of Fire Districts in Crowder College Service Area in Southwestern Missouri- Yellow Dot Indicates Participant in PSP



desire to continue meeting on a regular/systematic basis. In particular, the fire departments expressed the desire to have the College fund a position dedicated to the convening of area departments, identification of training needs, coordination of training provision, and delivery of training.

Throughout the course of the grant, the evaluators met with employers in various ways: individual interviews, focus groups, and listening sessions. As grant implementation ended in the spring of 2016, the evaluators followed up a listening session with a survey of PSP employer partners. Ten respondents to the survey indicate that overall, employers are pleased with the quality of PSP instruction and made special note that Crowder College reached out to employers and the community and “brought the program to the community”. Employers also commented on the appropriate mix of “hands on instruction” and academic skill development. Employers indicated instructors made appropriate use of instructional equipment. In general, employers expressed satisfaction with the degree to which the College asked for their input and used employer feedback to build/modify programs. Figure 12 shows employer satisfaction regarding various aspects of the PSP grant. (PSP Employer survey, 2016).

Figure 12: Employer Satisfaction Related to College & Employer Program Development, n=10

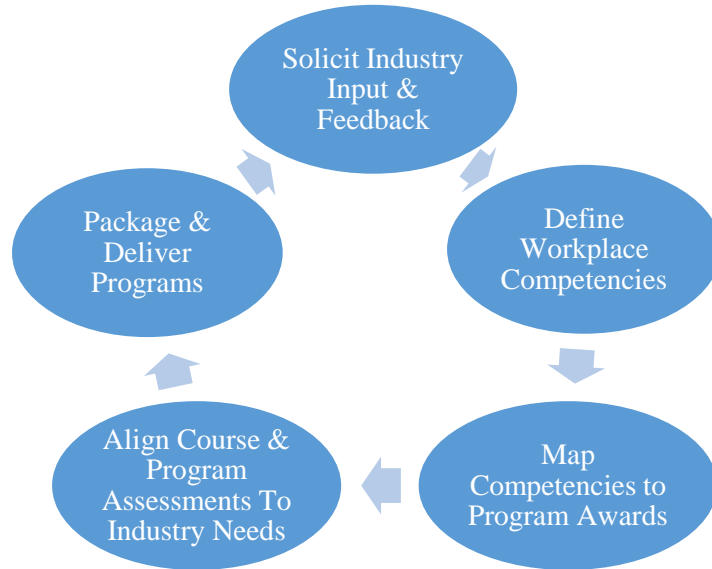


Survey responses could reflect firefighters’ concern that the College may not be able to sustain the Fire Science program or the concern from the smaller departments that the bigger departments had a stronger voice and influence in decision making.

Evaluation Question 2: How did Crowder College develop and structure curriculum?

A cornerstone of the College’s TAACCCT grant is the development of accelerated delivery of industry-developed curriculum. Program staff and faculty adapted the foundation of their curricula to build or design programs and courses around competencies required for success in the public safety industry. Figure 13 provides an overview of the curriculum adaptation and development process.

Figure 13: Program and Curriculum Development and Feedback Process



At the heart of any instructional innovation is the curriculum. To gain a more complete understanding of how the College developed, modified, and adapted grant-program curriculum, Crowder College worked through its Third Party Evaluator to engage a Curriculum Review Coordinator. This coordinator located and coordinated the work of external Subject Matter Experts (SME) who reviewed and assessed program and/or course components according to standard principles of quality technical curricula: Is it clear, logical and progressive? Are the curricula linked to current industry standards and practices? Is it innovative; i.e., does it address the challenges many adult students encounter in attempting to acquire skills and, hence, jobs in an accelerated timeframe?

The SMEs used a standard rubric to assess the programs on the following seven general components. (See Appendix III for PSP Curriculum Review templates, completed rubrics, and final report).

Program or Student Learning Outcomes and Industry Certifications:

Is the program structure logical and effective; do the program outcomes align to industry standards; are they clearly stated, introduced and reinforced effectively; when appropriate and possible, are learning outcomes linked to one or more recognized industry certification; and are successful students able to earn certification/s upon program completion?

Course Objectives:

Are the program or course objectives appropriate, clearly stated and measurable and do they support one or more program or student learning outcome?

Module or Unit Objectives:

Are module or unit objectives linked to course objectives; do they address one or more objectives; are they clearly stated and measurable?

Instructional Materials and Lab Resources:

Are program materials and resources appropriate to teach the course and module objectives; do they meet current industry practices and standards; do they provide options for multiple learning styles and do they demonstrate evidence of an effort to support adult learner success?

Learning Activities:

Do they promote achievement of module/unit objectives; are they presented in a way that students understand their purpose and how the skills and or knowledge points being learned are linked to current industry practices and standards; do they demonstrate evidence of an effort to support adult learner success?

Assessment and Evaluation:

Do they measure the learning objectives and link to industry standards, align with course activities and resources, and provide regular and timely feedback to students?

Innovative and Enhanced Strategies:

Is there evidence of industry input in the program design; are there enhancements in any or all of the curricular components to support adult learners; and is there evidence of improved student success?

A compilation of the results of the four reviews is provided in the Curriculum Review report (See Appendix III). Overall the reviews were positive, with programs receiving a preponderance of “very good” or “good” ratings on the rubric scale. Summary comments related to program structure and instructional materials, equipment, delivery methods and assessment of knowledge and skills are presented below. Grant leadership found this process was instructive for faculty and program leadership and could be transferred to other programs.

Criminal Justice:

Effective program structure provides a clear, logical pathway to completion. Outcomes are aligned for occupational focus, though they could be more clearly stated for one course (CJ 290 – *Police Supervision and Management*). Instructional materials reflect current practices of criminal justice professionals. The use of various activities and assessments supports multiple learning styles. The program uses online, hybrid and traditional classroom learning environments.

Emergency Medical Services:

The program structure is effective and the sequence adequate to understand the path to completion. Prerequisites should be included in the suggested plan of study, as should associated

certifications and licensure (EMT, AHA CPR, etc.) and miscellaneous requirements (immunizations, police background checks, etc.) Outcomes are aligned well with industry standards, in great part due to the role of expert adjuncts and actively engaged Advisory Committee members. Instructional materials support course and learning objectives very well and the resources are aligned with the industry standards as defined by the EMS National Standards and Curriculum. The program exceeds national minimums for evaluation. All of the evaluations tie in well with the course objectives and standards.

Fire Science:

The program structure creates a logical, proven path to completion, with many of the course outcomes aligning fully to the Fire and Emergency Services Higher Education core curriculum. The program design and up-to-date instructional materials and equipment directly support the stated outcomes and objectives and support the current Firefighter I & II/FESHE certification exams. Activities are linked to current State of Missouri standards as defined by the National Fire Protection Association. Further, the materials and resources are constructed and presented in a way that all students should know their purpose and their various roles in the emergency services environment. Diverse student learning styles are addressed through the use of online training modules, classroom lectures and various approaches to assessment of learning. The reviewer suggested the Fire Science program should build toward National Fire Academy's Professional Development FESHE recognition.

Public Management:

As designed, the program provides introductory courses with a heavy emphasis on governmental functions in the public sector. Consider including other career venues, such as non-profit organizations and the private, corporate sector. The basic materials and resources are appropriate to the career area. Activities are multi-faceted, and include participation in classroom discussions and debate and online research. Assessments appear to be limited to written testing. One recommendation is to enrich classroom discussion and students' understanding of this career field with real-world case studies for review and discussion of the who, what, when, where and how of various incidents with either desirable/appropriate or disastrous outcomes. Also, while basic learning opportunities are evident, using more innovative teaching and learning activities can help students make connections to real world situations, problems and solutions.

Evaluation Question 3: Did PSP programs serve the target population?

The final PSP participant enrollment of 373 surpassed the grant target of 180. It should be noted that although enrollment in Fire Science, Criminal Justice, and EMT/Paramedic was strong, enrollment in the Public Safety Management program did not meet original expectations. Participant enrollment by program and profile data are provided in Tables 2 and 3.

Table 2: PSP Participant Enrollment by Program

Program Area	Count	Percentage of Total Enrollment
Criminal Justice	78	21%
Fire Science	147	39%
EMT/Paramedic	145	39%
Public Safety Management	3	1%

Table 3 below profiles PSP participants and shows that 76% were male, 86% were white, 74% were non-college ready, and the average age was 28.

Table 3: PSP Participant Profile

Participant Category	Count	Percentage of Total Enrollment
Female	91	24%
Male	282	76%
White	322	86%
African-American	5	2%
Other Minority	46	12%
Average Age	Average Age = 28	
No Previous College Before Grant Enrollment	103	28%
Non-College Ready in Either English or Mathematics	276	74%
Not Employed at Grant Enrollment	111	30%
Veteran	37	10%
TAA Eligible	0	0%

Employers reported actively encouraging employees to take advantage of the grant programs. Moreover, several employers from the smaller departments indicated that they were pleased that they were able to “skill-up” incumbent workers (and volunteers). Concurrently, these same employers expressed concern as to how they would afford to train employees in the future. In particular, fire department chiefs made several references to the value of PSP training for their volunteer and paid staff while expressing concern for the future of training opportunities post-grant.

Although the PSP program did not enroll any TAA-eligible students (the Crowder College service area has few TAA eligible individuals), the participant profile does indicate that the grant

has served a regional adult population with no previous college and that is academically low-skilled, and/or under- or unemployed.

Evaluation Question 4: Did Crowder College implement programs and strategies in a timely manner?

The College implemented the PSP Fire Science, Criminal Justice, and EMT/Paramedic programs in a timely manner. Crowder struggled with implementation associated with the Public Management program as it did not generate expected enrollment. Crowder examined a variety of reasons for the lack of interest in the Public Management program, including the lack of incumbent worker motivation to acquire the program skills/competencies, the lack of value of a two-year degree in this area, a program structure that is too traditional and not customized to adults working in public agencies. Furthermore, during the period of the grant the two leading proponents of the program retired from their local positions and relocated out of the Crowder College service area. These two key advocates had held high profile positions in the community, were instrumental in the conception and design of the program, and had received national recognition as a result of their work in the aftermath of the Joplin tornado and the loss of their advocacy was a blow to recruitment to the program. Crowder College has moved to de-activate its Public Management program as a result of low enrollment and the departure from the community of program champions.

The PSP grant called for the introduction of flexible/alternative instruction formats, as well as the introduction of online and hybrid course and lab offerings. Although the College has increased flexibility with weekend, evening, and block course offerings, it met internal resistance to moving away from the traditional 16-week schedule. Barriers and resistance appear to be rooted in both existing administrative processes/procedures as well as adherence to traditional instructional formats. PSP scheduling offers lessons to the College in terms of student completion of and satisfaction with PSP programs offered in non-traditional scheduling formats.

The grant successfully implemented online/hybrid offerings. The orientation/student handbook supporting and describing them was well received by students. The College sees potential for sustaining these offerings as well as sustaining and/or scaling the handbook throughout the College.

Although Credit for Prior Learning existed before the grant, the College used the PSP grant to develop a formalized/systematic process to award it, and approximately ten percent of grant participants benefitted. The College is considering this new process as a means to bridge the gap between credit and non-credit continuing education instruction. The College is working to identify or develop additional Credit for Prior Learning opportunities in its non-credit curricula that will enable students to acquire credit and thereby expedite certificate or degree completion.

The grant effectively implemented enhanced student support strategies related to student intake and orientation, career counseling, and academic support. Students enrolled in PSP programs received more personal attention than a typical, new (non-grant) Crowder College student. Advisors, grant staff, and administrators all believe this increased personal attention led to improved student engagement and played a key role in successfully launching a student's educational experience. Student follow-up survey data from program completers revealed that 98% of the respondents reported they received "Quite A Bit" or "Very Much Help" in regard to

acquiring information related to their career interests and with developing a plan to pursue their career interests.

The grant developed a student orientation manual for participants to provide students with a “roadmap” for navigating the College’s internal processes and procedures. The new handbook was well received by students and helped PSP advisors quickly and effectively orient them to their program of study. Grant staff shared this handbook with non-credit/customized training personnel and believes it could easily be adapted for other programs.

Although 74% of PSP students were academically under-prepared for college in either English or mathematics when they enrolled, the lack of preparedness pertained mostly to mathematics, with the majority having math skills below College Algebra. Recognizing that Fire Science, Criminal Justice, and EMT/Paramedic programs may not require College Algebra skills at program entry, the College adjusted its math entry requirement for PSP programs and contextualized instructional content to focus on math skills/competencies related to Fire Science, Criminal Justice, and EMT/Paramedic. The grant provided self-paced learning modules and instructional support for students who required additional assistance to achieve the required math skills.

We observed three aspects of student advising: launching the student into their selected program; program retention and completion; and job placement upon completion. As part of the initial student orientation the grant provided career assessment and advising related to public safety career pathways. Although staff report that students were pleased with this process and benefited from the experience, further data collection is required to document this finding and gauge the extent and value of such engagement. To more fully understand the influence of advising on retention and completion, Crowder may wish to review student advisor documentation of interactions with students for patterns and variation. This is especially important because while the staff believes that this interaction is important, College administration is financially unable to sustain it. The College would benefit by identifying key problem and intervention points for students to design specific, cost-effective retention strategies.

With regard to employment of completers, the College indicated concern related to a possible over-saturated local job market in Fire Science and EMT. Grant staff indicated that completers are unwilling or unable to travel the distance to an area where jobs are available. Although advising staff forewarned students that the local market was saturated, students continued to enroll in those pathways and were unwilling or unable to relocate upon completion. The College may wish to consider developing advising strategies to assist completers in broadening their job search using local LMI data and focusing on transferable skills.

Evaluation Question 5: How do actual grant outcomes compare to targeted grant outcomes?

The PSP grant statement of work outlined specific targets related to participant enrollment, program completion, and employment of program completers. Figures 14-17 reveal that Crowder College significantly surpassed all original targets. In particular, Crowder College achieved doubled targeted enrollment.

Figure 14: Comparison of Grant Targeted Enrollment to Actual Enrollment

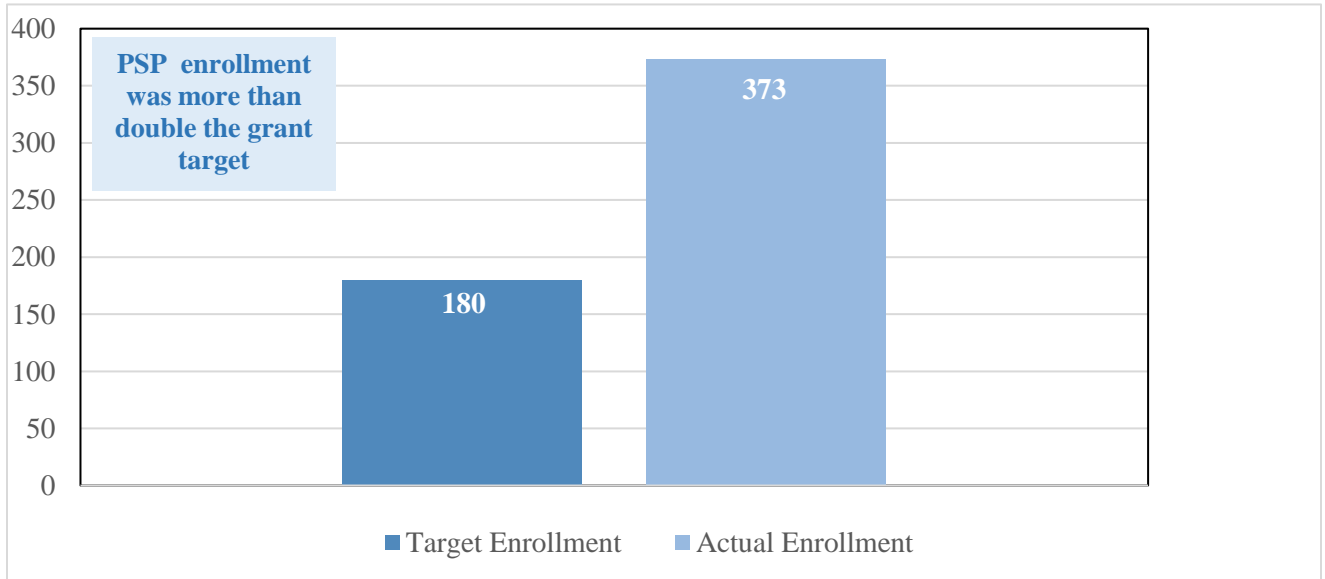


Figure 15: Actual Completion and Employment Rates Compared to Grant Targets

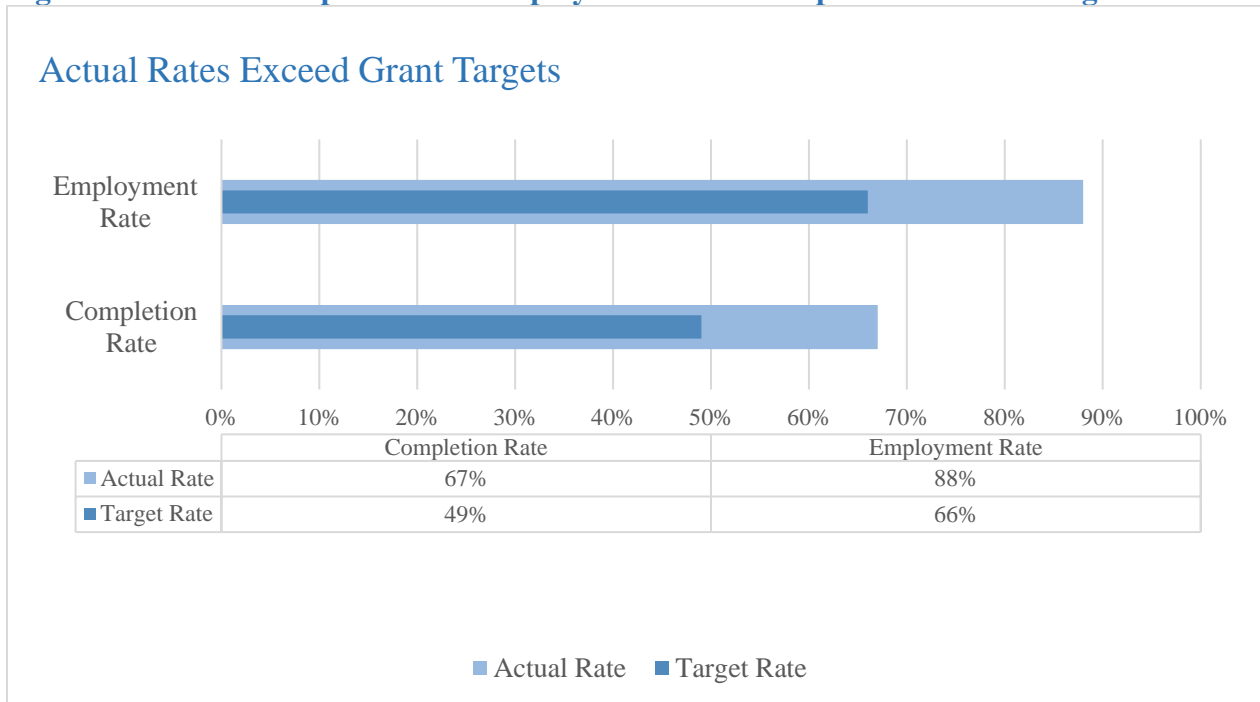
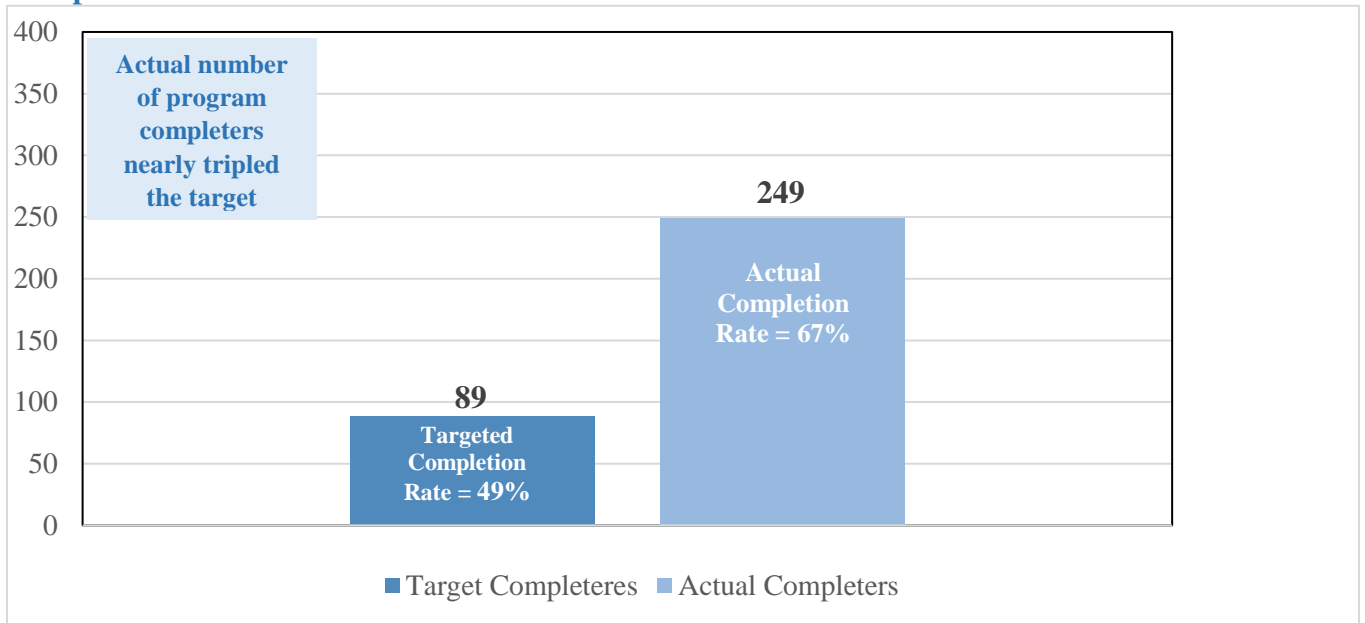


Figure 15 above compares the target and actual completion and employment rates for PSP participants and demonstrates that both completion and employment rates exceeded grant targets.

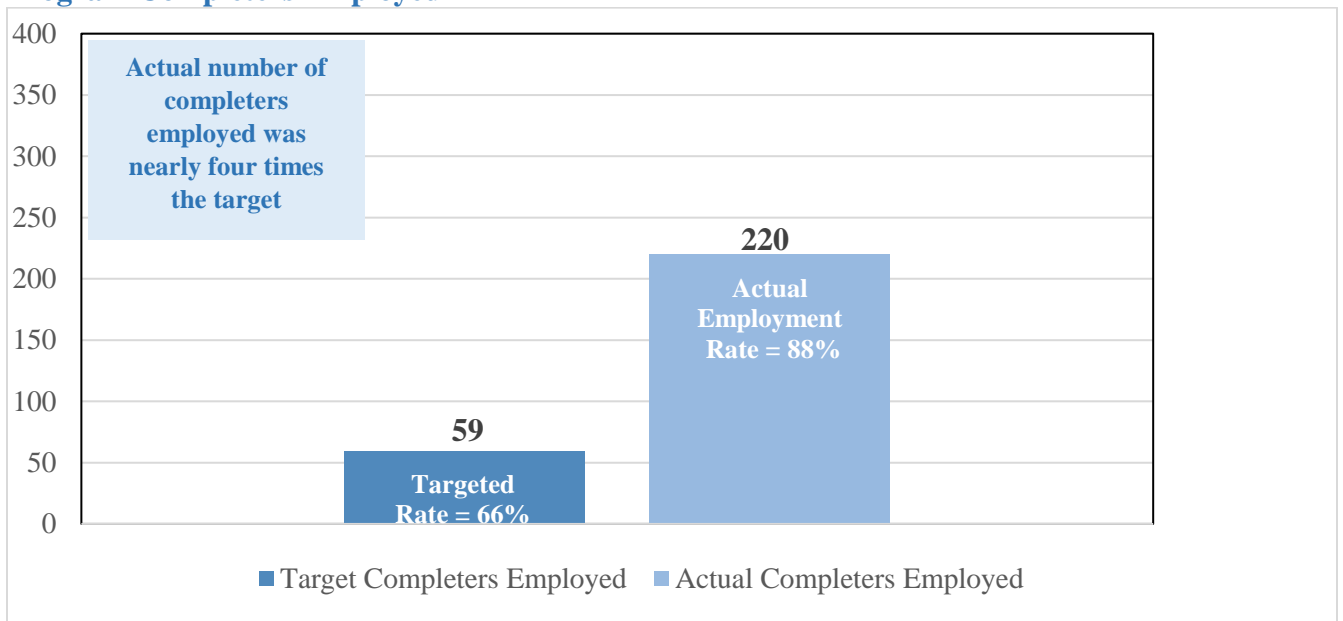
The PSP statement of work committed to 89 program completers for a program completion rate of 49%. The actual number of PSP participants who completed a program of study was 249 or 67% of enrolled participants. The College thus nearly tripled the grant targeted number of completers. (See Figure 16 below).

Figure 16: Comparison of Grant Targeted Program Completers to Actual Program Completers



Regarding the employment of program completers, the PSP statement of work targeted an employment rate of 66% for the completer goal of 89. Of the 249 PSP program completers, 220 were employed resulting in an employment rate of 88% for PSP program completers. (See Figure 17 below).

Figure 17: Comparison of Grant Targeted Program Completers Employed to Actual Program Completers Employed



Additional data points related to designated grant outcomes revealed the following.

- All 373 participants completed credit hours. The total number of credit hours earned by grant participants was 6,298. The final credit hour completed-to-attempted ratio for grant participants was 83%.
- Although not all participants completed a full program of study, all 373 participants did complete an industry recognized, stackable credential.
- Eighty participants (21%) are continuing their education after enrolling in the grant.
- Of the 220 program completers who were employed after program completion, 204 (93%) were employed six months later.
- Of 262 participants who began their PSP program as incumbent workers, 188 (72%) reported an increase in wages after enrolling in or completing their program of study.

Evaluation Question 6: Do students & employers believe the grant had a positive impact on the community?

Employers believe the PSP programs positively impacted not only their departments and agencies, but also the region as a whole. (PSP employer focus group, 2014, 2015, 2016). This positive impact was noted by employers from larger departments, as well as the more rural, smaller departments. Although further examination is required, it appears as though the PSP programs contributed to the overall quality of the public safety workforce and volunteer firefighters in the Crowder region. Employers stated that the grant upskilled the current workforce and improved the talent pipeline. The College may wish to continue to examine long-term results to determine if these investments in social capital have enhanced community development. The College’s employer engagement process demonstrated its role as a community resource and the College would do well to transfer lessons learned to other program areas in regard to gathering employers, obtaining employer input related to training needs, and providing and adapting educational programs to match stated employer needs.

PSP students interviewed expressed satisfaction with the quality of instruction, equipment and overall support they received and noted an appropriate mix of “hands-on, real-life” instruction and academic skill development. It should also be noted that the students seemed especially committed to “giving back to their community”. (PSP student interview, 2015)

In addition to student interviews, we also collected and analyzed student follow-up survey data from the 229 program completers who answered the survey. These data reveal a large percentage of students reported “Quite A Bit” or “Very Much” when asked to indicate how much their PSP program helped them acquire specific skills for each of the following areas:

Table 4: PSP Program Completers Exit Survey Results: Areas Where Completers Reported their Program Helped “Quite A Bit” or “Very Much”

(n=229 or 92% of PSP Completers)

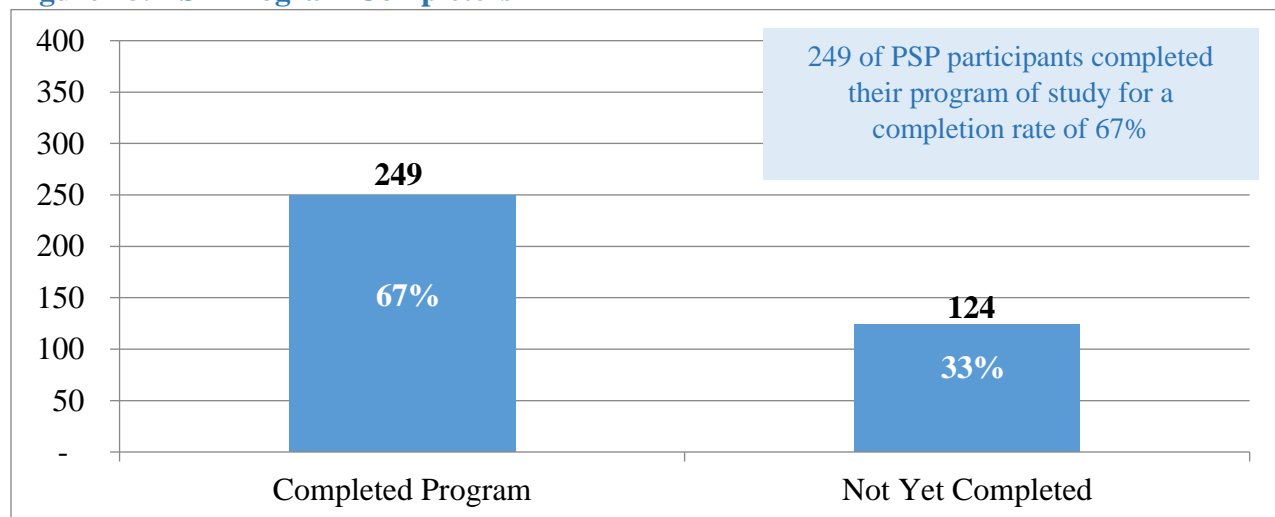
- Acquire Information Related to My Career Interests, 98%
- Develop a Plan to Pursue My Career Interests, 98%
- Think Critically & Analytically, 98%
- Work Effectively with Others, 97%
- Gain Confidence in My Academic Abilities, 94%
- Speak Clearly & Effectively, 92%
- Write Clearly & Effectively, 87%
- Use Computing & Information Technology, 79%
- Obtain a Job Related to My Career Interests, 75%
- Analyze & Solve Math Problems, 68%

When program completers were asked to indicate the degree to which their PSP met their expectations, 46% reported that their program exceeded their expectations, and 38% stated their program greatly exceeded their expectations. While 24% percent of the program completers said

they were somewhat confident that they had received the skills and knowledge required to be successful in their chosen field, 72% reported they were very confident they had done so.

The PSP grant was intended to bridge the training gaps within existing public safety programs and industry demands and train workers for jobs in Law Enforcement, Fire Science, Public Management, and Emergency Medical Services. As shown below in Figure 18, of the 373 PSP participants, 249 (67%) completed their program of study.

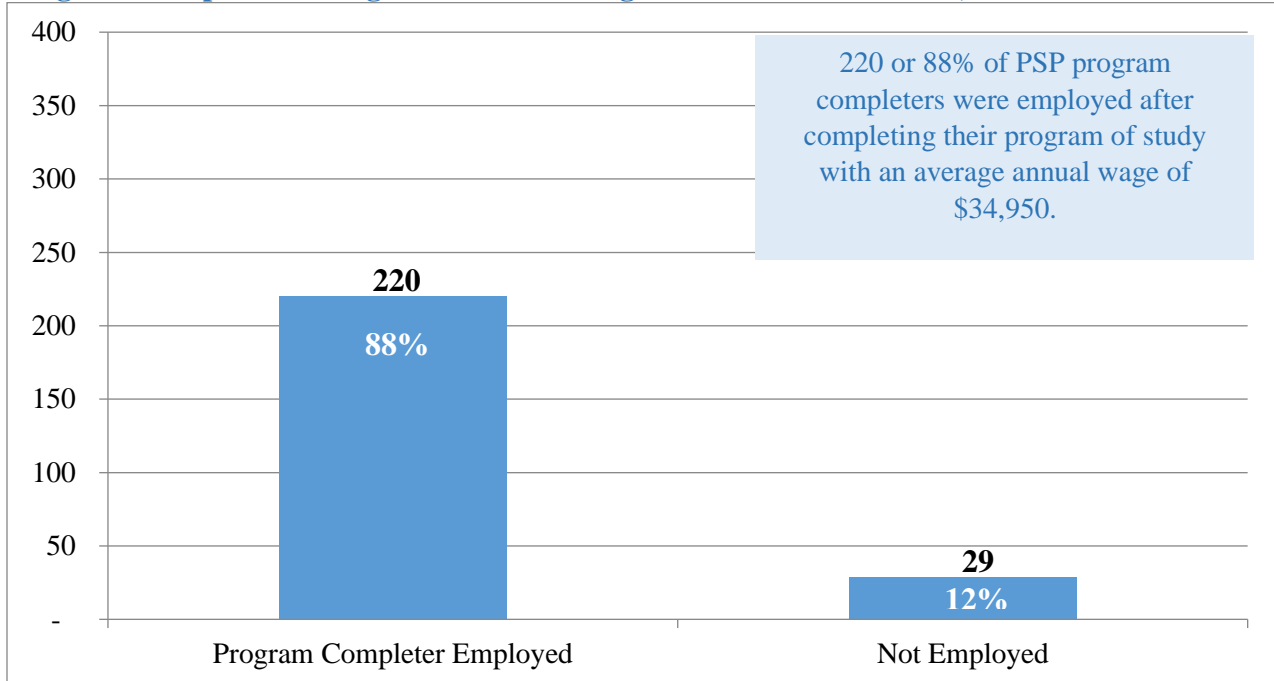
Figure 18: PSP Program Completers



As shown in Figure 19 below, of the 249 program completers, 220 (88%) were employed after program completion. The average annual wage for program completers who were employed after completion was \$34,950. Table 5 below lists the average annual wages for 2015 Total Wages for All Industries, Public and Private in the counties comprising the Crowder College service area.

Table 5: 2015 Total Wages for All Industries, Public and Private Crowder College Service Area	
Source: Missouri Economic Research and Information Center	
https://www.missourieconomy.org/indicators/countywage.stm	
COUNTY	AVERAGE WAGE
Barry	\$35,877
Barton	\$27,697
Cedar	\$25,896
Dade	\$27,997
Jasper	\$38,797
Lawrence	\$33,229
McDonald	\$31,106
Newton	\$33,030
Vernon	\$34,594

Figure 19: Program Completers Employed After Completion: Annual Earnings for Program Completers Using Available UI Wage Data Estimated at \$34,950



Of the 249 program completers, 70 began as non-incumbent workers. Of the 70 program completers who started their program as unemployed, 47 (67%) secured employment after program completion.

Evaluation Question 7: What has Crowder College learned during the implementation process?

Crowder College reached out to its employers and community partners in an effort to develop/redesign industry-based public safety programs. Moreover, the College directed attention to serving specific target populations (adults, low-academic skills, under-employed, and/or unemployed). As the College evaluated its implementation process and began to explore the relationship between implementation and outcomes, the following list of key lessons learned came to the surface.

- Employers were eager and willing to engage with Crowder College to design curriculum and programs related to workforce needs.
- Employers were willing to share space, equipment, and training sites when they knew they would get quality training for their workforce as well as contribute to increasing the talent pipeline.
- Building cohort groups played a critical role in student success.
- Students and employers value Credit for Prior Learning opportunities and it is vital to keep faculty and staff trained on the process.

- Students valued the career pathway approach, and although students rated each aspect of student advising as beneficial, the College could benefit from further investigation to learn for whom intake, academic, and career advising had the greatest impact.
- “Student advising plays a vital role in the success of the student and the program. Having a well-trained, knowledgeable, friendly person in that position is imperative to ensure students receive the information they need.” (PSP grant staff comment, 2016)
- Meaningful new student orientation and increased personal attention during the initial registration process helped students begin their education experience successfully.
- Students were satisfied with program design and instructional content, and they especially valued the inclusion of hands-on learning opportunities. “Being able to train at local fire departments also brought them hands-on training and real-life scenarios.” (PSP grant staff comment, 2015)
- Incorporating simulators and other equipment requires planning, patience, and a systematic review of student performance.
- “Academic assessment when a student is interested in enrolling is a fine line to walk. On one hand, it can help ensure students are in the correct course level to be successful. On the other hand, not allowing students to enroll in their program course because they have to take developmental courses is frustrating and can set their education goal back. Students benefit when staff and faculty are informed on the succession and levels of remediation courses.” (PSP grant staff comment, 2016)
- Adjunct faculty with specific industry experience were valuable assets in curriculum design and instructional processes. Consistent curriculum, educational resources, a process for adjunct faculty to share current workplace experiences, and support in curriculum delivery for adjunct faculty should be reviewed and, when necessary, enhanced in programs where adjunct faculty play a large role. “The PSP grant gave us the opportunity to bring staff/faculty together from multiple programs so they could learn from one another. Continuing to have similar programs meet regularly would be beneficial to Crowder so that programs are not siloed and resources/knowledge may be shared.” (PSP grant staff comment, 2016)
- Self-paced instruction when combined with appropriate instructional support provided a successful alternative to the traditional approach to teaching developmental mathematics.
- Students and employers valued the use of alternative instructional formats. The College learned that while online/hybrid learning is beneficial for many students, it is not the best option for all. Grant faculty and staff recommend that counseling and assessment be provided for students prior to enrollment in online coursework. Students benefit from additional support such as orientation sessions, in-person tutoring, peer group learning sessions, and pre-class training in use of the learning management system and course software. Moreover, faculty need support and professional development as online courses often require the use of vendor-provided software.

- Continuation and scaling of successful grant innovations should not be left to chance. Successful grant innovations should be reviewed and discussed in the College's strategic planning process. An executive-level internal champion(s) with specific responsibility for incorporating innovations into mainstream practices would more fully support successful innovations beyond the life of the grant.
- The tuition waiver was a valuable incentive to enrollment, retention and completion. Without it many of the students would have been unable to enroll or complete their program of study.
- Continuous program improvement demands the right data, strong research capacity, and structured inquiry processes. Accelerated programs required the College to do things differently than in traditional programs. To successfully implement such programs, the grant leadership needed to learn from their own experiences as they implemented program, policy, and procedural changes. Grant leadership and the data team worked collaboratively to ensure that appropriate data/evidence were available to help guide their learning process. Such data and evidence appears to be fertile ground for additional College-wide discussion and review during the strategic planning process.
- Grant leadership also worked closely with their data team to track key DOL performance measures and performance targets. These indicators included, for example, participation, credit accumulation, program completion, and employment follow-up. However, grant leadership recognized that such metrics were not always the most valuable measures to inform program improvement, so they looked to the student information systems, and their own data to more fully understand students' progress.

Evaluation Question 8: What grant programs and strategies appear to hold promise for long-term sustainability and scaling?

The PSP grant afforded the College the opportunity to experiment with and develop new strategies related to employer engagement, program re-design, accelerated and condensed course structures, new student orientation, Credit for Prior Learning, career advising, technology-enabled learning, and instructional support. Based on the student and employer outcomes and Crowder College feedback, the following innovations appear to hold the most promise for sustainability and are worthy of further discussion and examination as part of the College's strategic planning process.

Strategies aimed at employer engagement: The PSP employer engagement process has demonstrated that employers are eager to engage with the College when they believe their input will be used to modify and/or design instructional programs. The College would do well to take steps aimed at transferring what the grant learned about enhanced employer engagement to non-grant programs. The PSP team's investment in employer relationships resulted in improved programs, stronger partnerships, and showed the college how to work with employers to support low-income workers to learn while they earn. By directing specific attention to: how to gather employers; obtain employer input related to training needs; and provide and adapt educational

programs to match stated employer needs, the College would answer the U.S Department of Education’s Call to Transform Adult Learning⁸.

Develop meaningful new student orientation, including the use of career pathway maps for new CTE students: The revised student handbooks for orientation and online learning helped participants navigate internal processes and procedures. In addition, students appreciated the career pathway maps which outlined the relationship between program awards, job attainment and career development. The PSP team suggested the College expand the use of these resources to the general student population and continue orientation efforts related to career pathways for career and technical education program majors. The College could build upon the success of these PSP strategies as it delves into building its own Career Pathway model for these are the building blocks of guided pathways as noted by Bailey, Jaggars and Jenkins⁹.

Explore the PSP Intrusive Advising Model for Aspects that Could Benefit Segments of the Crowder College Student Body. Intrusive advising overcomes the common drawback of student advising which Kolenovic, Linderman, and Karp note as “the student support services in many colleges assumes that students have the knowledge, social skills, and motivation to access such services.”¹⁰ Although the College was certain of the positive results of each aspect of PSP student advising: intake and orientation, career counseling, and academic support, general consensus from the PSP team and executive leadership was that the College lacks the funds to expand this model to the general college population. One resource that recognizes the benefits as well as the financial demands of intrusive advising is the Accelerated Study in Associate Programs (ASAP) model of the City University of New York <http://www1.cuny.edu/sites/asap/wp-content/uploads/sites/8/2015/05/Resource-Guide.pdf>.¹¹ An aspect of this model that could be of particular use to the College is the “Needs Group” which groups students based on need for advising services and provides guidelines for building support groups and levels of contact.

Credit for Prior Learning appears to hold the most promise for sustainability: The College has designed an appropriate plan to sustain the Credit for Prior Learning process (award CPL at the conclusion of non-credit and continuing education courses). However, this approach appears to be contingent on the successful development of non-credit, continuing education courses customized to the needs of incumbent workers. This approach holds promise and is likely to avoid the traditional internal struggles between Credit and Non-Credit operations. Lakin, et al.,

⁸ U.S. Department of Education. Making Skills Everyone’s Business: A Call to Transform Adult Learning in the United States. February 2015. <http://www.ed.gov/edblogs/ovae/2015/02/24/makingskills-everyones-business-report-launch/>

⁹ Bailey, T., Jaggars, S. S., & Jenkins, D. (2015, April). What We Know About Guided Pathways - CCRC. Retrieved July 25, 2016, from <http://ccrc.tc.columbia.edu/media/k2/attachments/What-We-Know-Guided-Pathways.pdf>

¹⁰ Kolenovic, Z., Linderman, D., & Karp, M. M. (2013). *Improving student retention and graduation via comprehensive supports: Two- and three-year outcomes from CUNY’s Accelerated Study in Associate Programs (ASAP)*. *Community College Review*, 41(4), 271-291.

¹¹ City University of New York, Office of Academic Affairs. (2015, March). *Inside Accelerated Study in Associate Programs: A resource guide on program structure, components, and management*. Retrieved from <http://www1.cuny.edu/sites/asap/wp-content/uploads/sites/8/2015/05/Resource-Guide.pdf>

2015, find that a college is more likely to implement successful credit for prior learning when “it views credit for prior learning as integral to an institution’s mission; identifies it in its strategic goals; and supports it through transparent policies and procedures, organizational structures, robust leadership, and continued data analysis on enrollment, persistence, and completion.”¹²

Develop instructional alternatives to the traditional 16-week, semester-based format: The College recognizes that the traditional 16-week semester format may not meet the education and life-style needs of adult populations. The PSP grant allowed Crowder College to experiment with increased weekend offerings and non-term and shorter-term instructional formats. Although such strategies worked for the grant programs and would seem to hold promise for scaling to other CTE programs, the College will need to widen the extent to which non-grant faculty and staff are exposed to, experiment with and are supported in these non-traditional formats.

¹² Lakin, M. B., Nellum, C. J., Seymour, D., & Crandall, J. R. (2015). Credit for Prior Learning Charting Institutional Practice for Sustainability. Retrieved from <https://www.acenet.edu/news-room/Documents/Credit-for-Prior-Learning-Charting-Institutional-Practice-for-Sustainability.pdf>

IV. Results: Additional Program Completion Analysis & Grant Impact Evaluation Data

A. Additional Program Completion Analysis - Table 6 presents program completion data including the number of completers, the completion rate, and the employment rate for program completers by program type and background variables.

Table 6: Number of Program Completers, Program Completion Rate & Completer Employment Rate

Category	Number of Program Completers	POS Completion Rate	Program Completer Employment Rate
Program Type			
Criminal Justice	15	19%	93%
Fire Science	113	77%	88%
Emergency Medical Services	121	83%	88%
Gender			
Female	54	59%	91%
Male	195	69%	88%
Initial Employment Status			
Not Employed	69	62%	68%
Employed	180	69%	97%
Age Group			
Less Than 21	52	64%	94%
21-25	76	74%	86%
26-30	45	65%	93%
31-40	48	62%	85%
Over 40	28	65%	71%
Initial College Readiness			
College Ready All Areas	62	65%	84%
Not College Ready: Math or Eng.	187	68%	90%

Table 6 reveals that PSP participants in Fire Science and Emergency Medical Services (EMS) were more likely to complete their program of study. This difference appears to be primarily related to differences in program structure and final award level. Fire Science and EMS were shorter-term programs with significant emphasis on program acceleration. The Criminal Justice program was designed to support a full two-year AAS program with embedded industry-recognized stackable credentials.

It is noteworthy that the employment rate of program completers across all categories was high and 67% of those who began as unemployed secured employment after completing their program of study.

Participants who began as both unemployed and less than college-ready represent a key underserved population. These participants represent a high risk population for both program completion and employment. The PSP grant appears to have served this at-risk population in a positive manner. Seventy-two participants fell into this category as they began their PSP program. Sixty-two percent (45) of this target group completed their program of study, and of those 45 completers, 71% (32) were employed after program of study completion.

B. Grant Impact Evaluation Analysis –

Evaluation Question 9: How do grant program completion and employment results compare to similar metrics for non-grant students? Up to this point we have presented an in-depth analysis of how Crowder College implemented grant programs and strategies, plus an extensive set of outcomes for PSP participants including the following:

- A participant count of 373, exceeding the original grant target by 193 students.
- The participant profile demonstrates the College served the low-skilled, unemployed/underemployed, adult target population including Veteran participants.
- A program completer count of 249 (67% completion rate), exceeding the original grant completer target by 160.
- An employment rate for completers of 88% with an employment retention rate of more than 90% and a reported average annual earnings of approximately \$34,950. The actual number of program completers employed (220) surpasses the original grant target by 161.

We will now explore the extent to which the PSP grant impacted program completion and employment upon program completion. This impact evaluation is designed to help answer the question: how would program completion and employment outcomes look if students had not enrolled in the grant? To assist in determining the extent to which PSP participants differed in terms of program completion AND employment at program completion from non-grant students, we used a retrospective sample of students who started with Crowder College in Fall 2013 to build a non-grant control group. The non-grant control group consisted of 1,232 students. The average age for students in the control group was 23. Fifty-two percent of the students in the control group were female. We tracked academic and employment outcomes for the control group through Fall 2015.

We employed logistic regression to compare dichotomous outcome variables (e.g., program completion, and employment) between students in the non-grant control group and the grant

treatment group. Data analysis associated with Impact Evaluation used a two-tailed t-test and an alpha-level of .01 to establish statistical significance. By ensuring that students in both the control and treatment cohorts were new to the College, we were able to remove potential bias associated with previous Crowder enrollment.

We first examined differences in outcomes between the two groups by employing cross-tabulation analysis with grant participation as the independent variable and program completion and employment upon program completion as dependent variables. Results associated with this analysis can be found in Tables 7 thru 9.

Table 7: Comparison of Program Completion and Completer Employment Between Grant Treatment Participant Group and Non-Grant Control Group

Category	Number of Program Completers	Program of Study Completion Rate	Program of Study Completer Employment Rate
Grant Treatment Participant Group, n = 272	187	69%	88% of Completers
Non-Grant Control Group, n = 1,232	182	15%	48% of Completers

Data from Table 7 reveal that students in the grant treatment group were both more likely to complete their program of study and be employed following program completion.

Since a key grant strategy involved attempting to move students into their career program/pathway more quickly, we also used cross-tabulation to examine the comparison of program completion and employment between the non-grant control and the grant treatment groups, controlling for whether or not a student began as college-ready in all academic areas. Tables 8 and 9 present this comparison data.

Table 8: Comparison of Program Completion and Completer Employment Between Grant Treatment Participant Group and Non-Grant Control Group for Students Who Began as College Ready in All Academic Areas

Category	Number of Program Completers	Program of Study Completion Rate	Program of Study Completer Employment Rate
Grant Treatment Participant Group, n = 72	46	64%	87% of Completers
Non-Grant Control Group, n = 329	44	13%	54% of Completers

Table 9: Comparison of Program Completion and Completer Employment Between Grant Treatment Participant Group and Non-Grant Control Group for Students Who Began as Less Than College Ready in Either English or Mathematics

Category	Number of Program Completers	Program of Study Completion Rate	Program of Study Completer Employment Rate
Grant Treatment Participant Group, n = 200	138	70%	88% of Completers
Non-Grant Control Group, n = 903	138	15%	46% of Completers

Tables 8 and 9 reveal that the program completion rate and employment rate for program completers in the grant treatment group are greater than comparable rates for students from the non-grant control group, regardless of entering academic skill levels. It is interesting to note that program completion rates for both the grant treatment and the non-grant control groups are higher for students who began as less than college ready in either English or mathematics. It is possible that students who begin as less than college ready received additional instructional and support services during their first term. This result and suggested hypothesis are worthy of further exploration by the College.

To further examine differences in completion and employment between the grant and the non-grant groups we used logistic regression analysis to examine the impact of PSP grant participation on program completion and employment.

PSP Impact: Logistic Regression Model 1: PSP Treatment Grant & Non-Grant Control Group Program Completion

Model 1 examines program completion as the outcome variable and includes the following set of control variables:

- Gender (0 = Male and 1 = Female)
- Age (actual age at program start-up)
- Student employed at program start (0 = Not Employed and 1 = Employed)

The treatment variable in this analysis is PSP Participant or Not (0 = non-grant student and 1 = PSP Participant). The following key results are associated with Regression Model 1.

Table 9: Regression Analysis Results for Variables Predicting Program Completion (n= 1,504)

Total Treatment & Control Group, First Time Enrolled at Crowder College	Model Chi-Square Goodness of Fit Coefficient & Sig. Level	Nagelkerke R-Squared
n = 1,504	307.274, Sig. <.001	0.275

Classification Table

Observed	Predicted		
	Completer Code		Percentage Correct
	No	Yes	
Step 1 Completer Code No	1,050	85	92.5
Yes	182	187	50.7
Overall Percentage			82.2

a. The cut value is .500

Variables in the Equation

	<i>B</i>	S.E.	Wald	df	Sig.	Exp(<i>B</i>)
PSP Participant or Not	2,633	0.206	163.457	1	p<.001	13.92
Gender	-0.27	0.145	0,35	1	.851	0.973
Age	0.001	0.008	0.32	1	.857	1.01
Employed at Program Start	0.186	0.193	0.929	1	.335	1.205
Constant	-1.933	0.279	48.01	1	.000	0.145

As shown in Table 10 above, the model's Goodness of Fit Chi-Square value of 307.274 (sig. <.001) reveals the model performs well as a set of variables and is statistically significant. The Nagelkerke R-Squared value of 0.275 indicates the model explains approximately 28% of the variance in the program completion outcome variable. The Classification Table shows the model correctly classified 82% of the cases. A further review of the results indicates PSP Grant Participants were 13.92 (Exp*B*) times more likely to complete their program of study than non-grant students, while the other variables did not contribute significantly to predicting program completion.

PSP Impact: Logistics Regression Model 2: PSP Grant Treatment Participants and Non-Grant Students Employment upon Program Completion

Certainly program completion is an important outcome, but PSP was also designed to increase the employability of its participants. Model 2 examines Employment upon Program Completion as the outcome variable for both PSP grant participants and non-grant students and included the following set of control variables.

- Gender (0 = Male and 1 = Female)
- Age (actual age at program start-up)
- Student employed at program start (0 = Not Employed and 1 = Employed)

The treatment variable in this analysis is PSP participant or not (0 = non-grant student and 1 = PSP participant). The following key results are associated with Regression Model 2

Table 11: Regression Analysis Results for Variables Predicting Employment upon Program Completion (n=1,504)

Total Treatment & Control Group, Credit Programs Only	Model Chi-Square Goodness of Fit Coefficient & Sig. Level	Nagelkerke R-Squared
n = 1,504	362.035, Sig. <.001	0.360

Classification Table

Observed		Predicted			
		Employed at Program Completion		Percentage Correct	
		No	Yes		
Step 1	Employed at Program Completion	Not Employed	1,144	108	91.4
		Yes, Completed & Employed	88	164	65.1
Overall Percentage					87.0

a. The cut value is .500

Variables in the Equation

	<i>B</i>	S.E.	Wald	df	Sig.	Exp(<i>B</i>)
PSP Participant or Not	2.864	0.220	169.152	1	p<.001	17.532
Gender	-0.201	0.178	1.280	1	.258	0.818
Age	-0.004	0.010	0.180	1	.672	0.996
Employed at Program Start	-0.138	0.209	0.437	1	.509	0.871
Constant	-2.243	0.315	50.818	1	p<.001	0.106

Table 11 above displays the model's Goodness of Fit Chi-Square value of 362.04569 (sig. <.001) reveals the model performs well as a set of variables and was statistically significant. The Nagelkerke R-Squared value of 0.360 indicates the model explains approximately 36% of the variance in the employed upon program completion outcome variables. The Classification Table

shows the model correctly classified 87% of the cases. A further review of the results indicates PSP grant participants were 17.52 (*ExpB*) times more likely to be employed after program completion than non-grant program completers, while the other variables did not contribute significantly to predicting employment upon program completion.

Regression models 1 and 2 suggest participation in the PSP grant had a positive impact on program completion and employment upon program completion. A portion of this impact may be attributed to the accelerated and condensed time period of PSP programs compared to the traditional programs available to the non-grant control students.

V. Conclusion

Crowder College was awarded the PSP Round II TAACCCT grant to develop programmatic and student support innovations for individuals seeking employment in the public safety and emergency medical services work sector. The goal was to bridge the training gaps between existing public safety programs and industry demands and enhance programs with updated competencies related to industry skill standards. We employed a multi-dimensional process to evaluate both grant implementation and grant outcomes.

The results of our evaluation reveal that the College did implement grant programs and strategies in accordance with the specified grant deliverables. Furthermore, the College used the grant as a catalyst to more effectively respond to employers' needs in the public safety and emergency medical services sector. However, it should be noted that due to lack of demand for students with a two-year degree in Public Safety Management, enrollment in the Public Safety Management program was less than anticipated. As a result of this conclusion, the College has discontinued any attempts to offer this program.

As for grant outcomes, it is noteworthy that the grant surpassed all performance targets outlined in the original statement work. The final grant participant total of 373 nearly doubled the original target. Sixty-seven percent (249 students) of the participants completed their grant program of study (surpassing the target rate of 49%). Eighty-eight percent (220 students) of the program completers were employed upon program completion (surpassing the target rate 66%). Although this employment rate includes both incumbent and non-incumbent workers, it is noteworthy that the six-month employment retention rate for these 220 program completers was 93%. In addition, 75% of the program completers who began as employed (188 students) received a wage increase after enrolling in their grant program.

Controlling for incumbent worker status, we found that 70 of the program completers were unemployed when they began their program of study. Of these 70 non-incumbent workers who completed their program of study 67% were employed upon program completion.

Through the use of logistic regression analysis, we compared program completion and employment upon program completion for grant participants and non-grant participants. Results of this analysis revealed that grant participants were statistically more likely to complete their program of study and secure employment upon program completion.

As an active partner in the evaluation process, the College used continuous evaluation analysis and feedback to improve program and support strategies throughout the grant. Data presented in this report point to the success of PSP grant participants and reveals that participants completed programs and secured employment at higher rates than students in more traditional, non-grant programs. Although such results are encouraging, it is important for the College to focus on lessons learned during the grant and build upon the innovations and strategies used to achieve such results. Grant staff, Crowder administrators and employers suggested the following areas hold promise for further scaling and sustainability

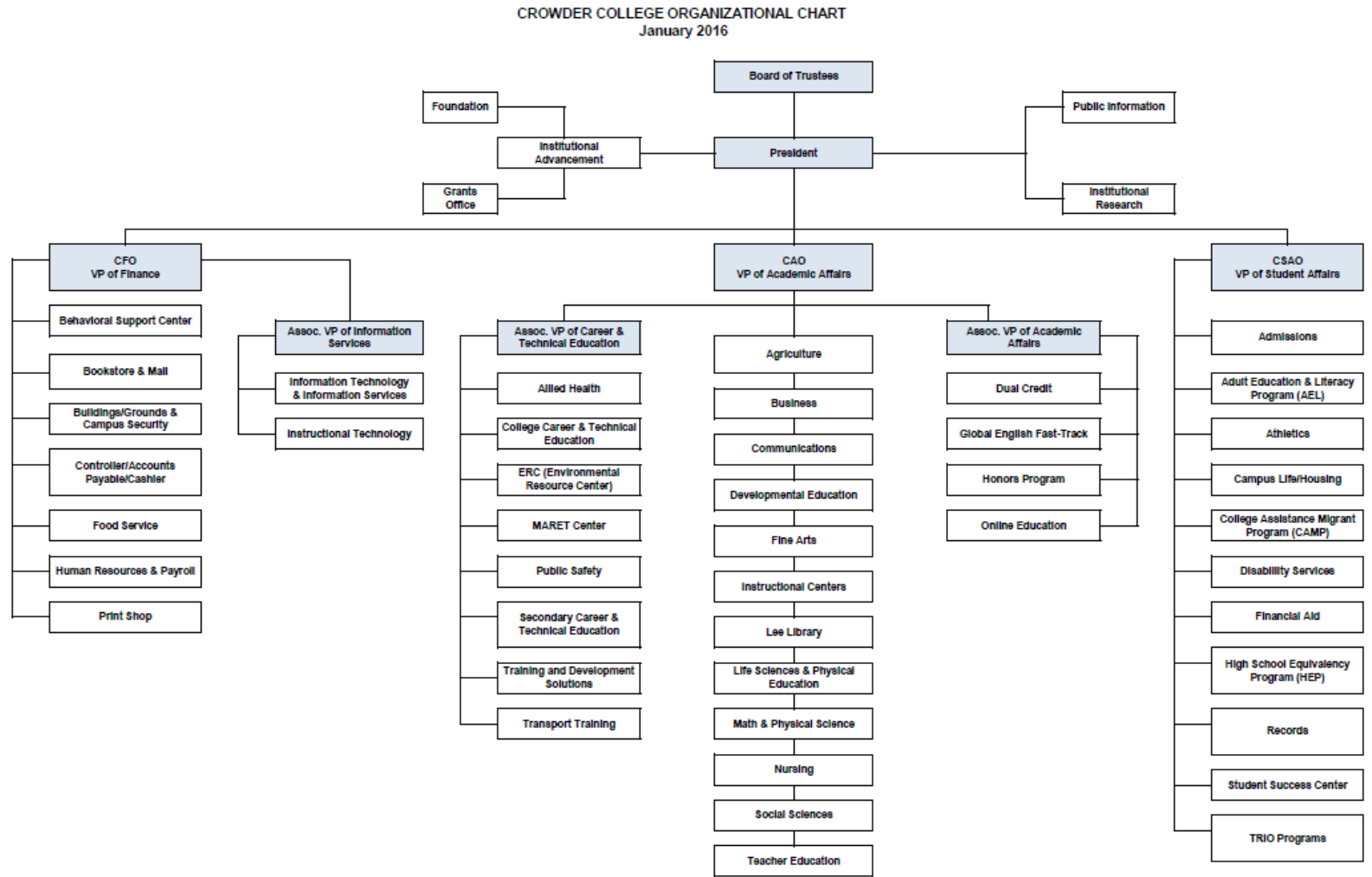
- ❖ Expand and Enhance Strategies Aimed at Employer Engagement in Program Development and Expected Outcomes
- ❖ Develop Meaningful Career Pathways & New Student Orientation Processes
- ❖ Explore the PSP Intrusive Advising Model for Aspects that Could Benefit Segments of the Crowder College Student Body
- ❖ Expand and Create Systematic Processes for Awarding Credit for Prior Learning
- ❖ Continue Experimentation with Alternative Instructional Strategies Not Based upon the Traditional 16-week, Term-based Format.

Administration and the PSP team recognized scaling of such innovations is likely to encounter organizational resistance. Such resistance does not appear to be linked to a specific set of individuals or groups, but instead to be rooted in existing practices/policies, and organizational culture. The College has made a conscious effort to link PSP experimentation, lessons learned, and evaluation results to its current strategic planning process.

As the College seeks to move forward, it may wish to consider the creation of internal Network Improvement Communities (NIC) related to each area. Using principles of *Improvement Science*¹³, a Crowder College NIC would establish a formal process in which faculty, administrators, and community partners work and learn together to effectively scale successful innovations. The College’s organizational culture is one in which faculty and staff tend to learn from each other through face-to-face and small group interactions. Throughout our evaluation, faculty and staff often referred to the “Crowder family” and stressed the importance of including all internal stakeholders in the creation and possible scaling of innovations. Given NIC’s emphasis on face-to-face discussion and small-group learning, the NIC process would seem to be a good fit as the College continues to explore how successful grant innovations could be sustained beyond the life of the grant.

¹³ Bryk, A. S., Gomez, L. M., Grunow, A., & LeMahieu, P. G. (2015). *Learning to improve: How America's schools can get better at getting better*. Cambridge, MA: Harvard Education Press.

Appendix I: Crowder College Organizational Chart



Appendix II: Evaluation Progress Reports

Evaluation Progress Report #1, July 2013

INTRODUCTION

The Crowder College Public Safety Project (PSP) grant calls for programmatic and student support innovations to respond to the training needs of adults seeking employment in the public safety work sector. Such innovations focus on the following five areas:

1. Expand/Build Programs That Meet Industry Needs & Develop Career Pathways.
2. Improve Achievement Rates and/or Reduce Time to Completion.
3. Accelerate Progress for Low-Skilled & Other Workers.
4. Employ Instructional Strategies Which Make Work a Central Context for Learning.
5. Employ Strategies to Address the Needs of Working Adults by Accommodating Student Work Schedules.

To evaluate and support such innovations Cosgrove & Associates (C&A) is partnering with Crowder College to conduct a comprehensive, multi-dimensional approach to examine the following grant phases: process; implementation; progress and performance measures; and use of data continuous improvement. During the initial phases of this evaluation, Cosgrove & Associates worked with Crowder College to examine grant processes and program/strategies implementation. Particular attention was directed to review the extent to which:

- a) employers and community partners helped shape curriculum and program content;
- b) the innovations listed above were incorporated into program structure.

This report summarizes key findings from this initial evaluation phase.

PROCESS EVALUATION

In April 2013, Cosgrove & Associates met with Crowder College faculty and staff to review PSP grant processes and implementation plans. Based upon observations and data collected during this site visit, C&A used a five-point rubric (5= Excellent Progress to 1 = Poor Performance--- See Appendix I) to evaluate the PSP grant in the following domains: Design and Governance (Score = 5); Program Review (Score = 4); Program Staffing (Score = 4); Data Collection (Score = 4); and Local and Regional Collaboration (Score = 5). These scores translate to an overall score of 4.4 out of 5.

The overall organization and program leadership for the PSP grant is strong and team members have clearly defined roles and responsibilities. In addition, individual program leaders are part of a coordinated, team effort and appear to work well together.

Crowder College has initiated efforts to ensure that grant activities and strategies are integrated into its strategic planning and AQIP accreditation processes. The College has started to collect baseline sustainability planning data to help ensure the continuation of successful grant innovations beyond the life of the PSP grant. Furthermore, Crowder College is also exploring how to incorporate PSP strategies into future Title III grant processes.

PSP grant fiscal processes are in place and coordinated with existing Crowder College practices and policies. The College has an established history of excellent grant management and fiscal oversight, including DOL, TAA grant experience.

Crowder College has launched PSP programs in Criminal Justice, Fire Science, and Emergency Medical Service, and is expected to start its Public Service Management program during the 2013-2014 academic year. Program content and structure are based upon industry input and industry partnerships are in place to continually support and improve the PSP programs. Crowder College has clearly established a strong relationship with its local WIB/Career Centers. Furthermore, the College has created an important nexus between the academic and student supports services/strategies within each program.

The College has leveraged Round 1 TAA grant knowledge and resources to facilitate data management including: recording enrollment, progress and completion measures at the participant, unit-record level. Crowder College worked with C&A to ensure that systems to record and document DOL reporting requirements are in place; recording enrollment, progress and completion measures at the participant, unit-record level and to acquire official employment and wage data necessary to appropriately document employment outcomes are now in place.

The College is working closely with C&A to develop internal strategies to continually enhance its capacity to use evaluation and performance data for continuous improvement. As a part of this effort, Crowder College completed the Sustainability Planning Assessment Survey. Results from this survey will serve as baseline measures of organizational culture associated with continuous improvement. Baseline measures suggest that Crowder College is well-positioned in the following areas: internal and external support for the PSP program; current and future funding to support grant innovations; employer engagement; identification of specific measureable goals; and collection and use of data to support continuous improvement. The Sustainability Planning Assessment Survey will be administered at key intervals throughout the grant to continuously monitor support in these areas.

In addition to the DOL grant reporting and evaluation process, Crowder College appears eager to engage with C&A to explore how grant program/strategies may impact individual students' perceived self-worth and confidence. Crowder College is also interested in examining community impact related to improved "public goods" associated with fire, police, EMS and public service management. The College envisions that increased educational opportunities will enhance the overall quality of the public sector workforce and result in positive social and economic impacts. Crowder College plans to partner with C&A to collect data to test this hypothesis.

IMPLEMENTATION EVALUATION

Crowder College has started PSP programs in Criminal Justice, Fire Science and Emergency Medical Service, and plans to begin the Public Safety Management program in Fall, 2013. As of the end of the third quarter (6/30/13) participant enrollment stands at 113. Eighty percent of the participants are male. Forty-four percent are 18-24 years of age, 32% are 25-34, and 44% are 35 or older. Eighty-three percent are attending college for the first time. Thirty-four percent reporting being unemployed at the start of their program, while all participants indicated they were either unemployed or under-employment when they began their PSP program. As of June

30th, 51 participants have achieved at least one stackable credential. Employment follow-up associated these individuals is currently underway and data will be available for the Year 1 DOL Annual Report.

As part of the Implementation Evaluation, Cosgrove & Associates conducted two additional site visits. The first visit was designed to assist Crowder College in reviewing the relationship between grant strategies and programs of study. Such a review is essential to evaluating program outcomes and the extent to which one or more of the strategies impact such outcomes. For each program, Cosgrove & Associates provided Crowder College with a Strategy Implementation Evaluation Tool to aid in this effort. Crowder College faculty and staff are currently in the process of completing this task.

The second visit focused on a series of employer focus groups/interviews. This data collection was designed to address the following questions:

1. Did employers have meaningful input to program design and content?
2. Is Crowder College using industry input to modify programs and instructional content?
3. How have existing (or new) program structures been modified?
4. Does the revised (or new) program structure include stackable credentials?
5. Are credentials stacked at appropriate skill points to benefit industry and workers?
6. Are programs/strategies being launched as designed and in a timely manner?
7. How does Crowder College plan to sustain employer engagement and innovations?
8. How do employers perceive their partnerships with Crowder College; are they satisfied with such partnerships?
9. What is the potential economic impact of PSP?
10. What are employers looking for in new hires?

Cosgrove & Associates met with more than 20 employers and/or community partners from all program areas. Throughout the interviews, employers provided specific comments regarding a variety of topics. In an attempt to organize and clarify such comments, yet remain fair to the interviewee, we have presented such specific comments in bold italics, but avoided stating such comments as direct quotes. Summary results from this data collection are presented below.

- Employer Involvement & Input to Program Design, Curriculum & Content.

Employers reported being actively involved in the development of PSP programs. Several employers reported that they were impressed with Crowder College's willingness to accept suggestions/criticism and quickly make changes. In addition, as evidenced by the following comments, employers have noticed that Crowder College used their input to modify program structure and content. Employers made the following comments during interviews with C&A:

- *We have direct involvement, because we direct the classes taught in the program.*
- *Crowder sends curriculum to us for review and they respect the knowledge base of our department.*
- *Crowder really listened to all of our input, they've done their best.*
- *Crowder follows-up with employers after employer has made suggestion*

- *Crowder is very receptive to whatever issues are brought to their attention.*
- *Crowder is: responsive, has convenient locations, works with small departments, teaches practical skills, and provides training that the customer needs, tailors classes to needs for worker retraining and specialty classes.*
- *We noted a problem, brought it to Crowder's attention and the problem was taken care; this really helped improve the program.*

- Program Implementation and Structure

Employers reported that Criminal Justice, Fire Science and EMT programs have begun in a timely manner. Several employers are waiting for the Public Safety Management program to start and are eager to work with Crowder College to help successfully launch the program in Fall 2013. In addition, employers expressed their support for the use of stackable/latticed credentials. The use of stackable/latticed credentials appears to make it easier for participants to begin college and move through the program in a manner consistent with the economic and life-issue needs of adults. Employers made the following comments during interviews with C&A:

- *The PSP program is a great way for employees to start college and acquire the credentials they need.*
- *PSP allows existing employees to advance within a department; this is especially important for employees who have experience, but lack minimum education requirements for promotion.*
- *The PSP program is a blessing for students; it offers new career opportunities that can be pursued while someone is still working.*
- *The PSP program has had a snow-balling effect for employees. People who did not think they would ever go to college have enrolled in the program, had success and now feel confident they can achieve more.*
- *The PSP program has allowed Crowder to embed its programs in the community and the program structure allows student to acquire credentials along the way, rather than having to complete all the requirements at one time.*
- *We hope that the PSP program will find a way to award credit for life and work experience. This would really help encourage workers to attend college and complete the PSP program.*
- *The PSP program structure is great, but the COMPASS test, especially the math portion keeps people away; no one wants to waste time taking dummy math. Most of the people, who are afraid of the math test, just haven't had math in a long time, but their math skills are fine. But, if they take the COMPASS test and score low they end up in dummy math and they just aren't going to enroll.*

- Plans for Program Sustainability and Employer Satisfaction

Employers reported a high degree of satisfaction with the current partnerships. Such satisfaction will prove valuable as Crowder continues to develop plans for program sustainability beyond the life of the grant. As evidenced by earlier statements, employers recognize and value Crowder's

willingness to ask for input, and use employer input to develop and improve PSP programs. According to numerous employers, Crowder College seems unique in this regard and should continue its positive employer/community outreach efforts. Employers made the following comments during interviews with C&A:

- *I've been a part of other college's advisory committees and I stopped attending because it was a waste of time. That just isn't the case with Crowder College's PSP program; they really listen and use what we have to say.*
 - *When compared to other colleges in the area, Crowder College blows them out of the water. Crowder is responsive, offers great training and is willing to work with us.*
 - *Crowder is part of the community and Crowder Cares.*
 - *PSP program counselors have been very helpful. They recognize the needs of adults and are working to support the students.*
 - *Crowder could be the unifying force for public safety training in the entire area and beyond. This region could not only become self-sufficient in regard to such training, but has the expertise to be a national leader and resource.*
 - *The PSP program is off to a great start. Crowder should keep moving forward and not chicken out.*
 - *Crowder should continue to expand its offerings and locations in the PSP area; bringing the training to community locations is a great idea.*
- Potential Economic Impact and Employer Needs

Employers repeatedly noted potential economic impact associated with the PSP program. It seems clear that they are aware that the PSP program is offering people a unique opportunity and pathway to a college education. In addition, they recognize that such programs will improve the overall quality of the public safety workforce and also likely increase the service provided by such employees. Employers offered the following comments during interviews with C&A:

- *Crowder is progressive and has a vision for how it impacts the community. Crowder's impact is unique because it helps the entire region and reaches people who probably would not attend college if not for Crowder.*
- *Our goal is to have 40-50% of our department attain an Associate Degree. The PSP program offers enhanced value to the community and potential for increased community service and support, which can translate into higher wages.*
- *We need employees who are prepared for promotion; employees with good communications skills; we want people who have critical thinking skills and who recognizes the potential pitfalls of actions taken.*
- *We need people who are critical thinkers, physically fit; and possess common sense, practical experience, character, honor, integrity, and courage.*

ACTION RECOMMENDATIONS

This evaluation report reveals that Crowder College has established a strong foundation for its PSP program. The PSP programs are serving key target populations and employer/community

partnerships are both positive and well-established. To continue to build upon this strong foundation, Crowder College should address the following items.

- Conduct a campus-wide Faculty/Staff PSP training session. The purpose of this session should be to increase program awareness and share successful innovations currently being developed through the PSP program.
- Continue to support participant enrollment and program completion in the PSP Criminal Justice, Fire Science, and EMT programs.
- Examine potential barriers to enrollment and program retention. Crowder College may wish to direct attention to its entry assessment processes. Although entry assessment is necessary to document low-skilled participants, the assessment process should not be a barrier to enrollment. Crowder College may wish to examine the use of ACT WorkKeys as an alternative to its current COMPASS test.
- Implement the Public Safety Management Program in Fall 2013.
- Complete data collection related to completer and NON-returner follow-up. In addition, analyze such data for required reporting and continuous improvement processes.
- Complete the Strategy Implementation Assessment Tool so as to clearly define the relationship between PSP strategies and PSP programs.
- Review current participant data and outcome tracking files to ensure that the correct data are being collected to answer both DOL and Crowder College research questions.
- Continue to support and build upon successful employer/community partnerships.

Appendix I Process and Implementation Assessment Scale

5 EXCELLENT PROGRESS: COLLEGE IS MAKING EXCELLENT PROGRESS AND SUCCESSFUL IMPLEMENTATION HAS ALREADY OCCURRED OR WILL CERTAINLY OCCUR NO LATER THAN FALL 2013.

4 GOOD PROGRESS: COLLEGE IS MAKING SIGNIFICANT PROGRESS AND SUCCESSFUL IMPLEMENTATION IS LIKELY FOR FALL 2013, BUT MORE WORK IS NEEDED TO ENSURE SUCCESSFUL IMPLEMENTATION FOR FALL 2013.

3 MAKING PROGRESS: COLLEGE IS AWARE OF STEPS REQUIRED FOR SUCCESSFUL IMPLEMENTATION, AND HAS TAKEN SOME ACTION, BUT SIGNIFICANT WORK NEEDS TO BE COMPLETED TO ENSURE SUCCESSFUL IMPLEMENTATION FOR FALL 2013.

2 LACKING PROGRESS: COLLEGE IS AWARE OF STEPS REQUIRED FOR SUCCESSFUL IMPLEMENTATION, BUT CURRENTLY ACTION IS LACKING. IMMEDIATE ACTION NEEDS TO BE TAKEN IF SUCCESSFUL IMPLEMENTATION FOR FALL 2013 IS EXPECTED.

1 PERFORMANCE IS POOR: PROGRESS IS COMPLETELY LACKING. COLLEGE MUST TAKE IMMEDIATE ACTION TO INCREASE AWARENESS OF STEPS REQUIRED FOR SUCCESSFUL IMPLEMENTATION.

Appendix II: Evaluation Progress Reports

Evaluation Progress Report #2, August, 2014

EXECUTIVE SUMMARY

The Crowder College Public Safety Project (PSP) grant calls for programmatic and student support innovations to respond to the training needs of adults seeking employment in the public safety work sector. Such innovations focus on the following five areas:

1. Expand/Build Programs That Meet Industry Needs & Develop Career Pathways.
2. Improve Achievement Rates and/or Reduce Time to Completion.
3. Accelerate Progress for Low-Skilled & Other Workers.
4. Employ Instructional Strategies Which Make Work a Central Context for Learning.
5. Employ Strategies to Address the Needs of Working Adults by Accommodating Student Work Schedules.

To evaluate and support program development Cosgrove & Associates is continuing to partner with Crowder College to conduct a comprehensive, multi-dimensional approach to examine the following grant phases: process; implementation; progress and performance measures; and use of data for continuous improvement. During phase 2 of this evaluation, Cosgrove & Associates worked with the College to evaluate grant processes, program/strategy implementation and progress related to key performance measures. Particular attention was directed toward the following key questions.

- Has Crowder College developed PSP programs built upon industry-recognized stackable credentials?

Yes. Crowder College engaged with public safety agencies/employers to create and/or modify program structures including industry-recognized stackable credentials which lead to post-secondary certificates and degrees in key public safety areas. Employer engagement with college faculty and staff is especially strong. Such engagement is especially noteworthy when one considers the variety of agencies/employers with which the College is working..

- Has the College modified instructional formats to strengthen online/hybrid formats and accelerated formats, including contextualization of key skill/competencies?

Crowder College has developed new instructional formats employing online/hybrid instruction. The initial implementation of hybrid format experienced software, technology and connectivity issues. The College has addressed these issues and continues to improve student and faculty orientation materials. Moreover, the College is developing a Technology Handbook for students enrolling in online/hybrid sections. Such changes have been well received from students.

Program curriculum has been accelerated and contextualization of key skills/competencies is taking place. Students and employers are pleased with such modifications and recognize the connections between such changes and students' desires to move more quickly from the classroom to employment.

- Has the College implemented PSP programs of study and support strategies in a timely manner?

As of the end of the 2013-2014 all four PSP programs of study have been implemented. Due to a lack of student demand, the Public Safety Management program enrollment is low and less than anticipated. The College is considering revising adaptations to the Public Safety Management curriculum and merging its key courses as options within the three existing PSP programs (Fire Science, EMS, and Criminal Justice). Crowder College will select the best course of action prior to the start of Year 3. It is worth noting that the College is using student as well as employer input and evaluation feedback to continuously improve its grant program structure.

Instructional and student support strategies have been implemented and have been well received by participants. Strategies related to intrusive advising, increased course/program orientation, and career navigation seem especially promising and are being considered for scaling beyond the grant.

- Is Crowder College using appropriate data collection processes to record participant enrollment and track performance outcomes?

Crowder College is collecting participant and outcome data at the unit-level and sharing such data with the grant leadership and evaluation personnel. Data are collected and shared in a secure data environment. In addition, data sharing agreements and practices exist which allow the evaluation team to track employment and wage data at the unit record level. The PSP team is also using follow-up surveys to secure feedback from both current participants and program completers.

The College has experienced staff turn-over in the data collection/tracking area and is currently working to define Program Completers in a more consistent manner. Grant leadership should continue to develop appropriate staff development tools to ensure appropriate knowledge transfer if additional staff turn-over occurs.

- Are grant participants enrolling in accordance with expected implementation and pathways to performance targets?

Grant leadership monitors participant enrollment on a quarterly basis and has established pathway to performance participant and completers targets. Current PSP enrollment stands at 265 participants and has already surpassed the grant target of 180.

- Are participants completing programs of study in accordance with expected implementation and pathways to performance targets?

Participants are progressing through stackable credentials established within programs of study and completing programs of study in accordance with expected targets. The current number of Program Completers is 156 (surpassing the grant target of 89). The number of Program Completers was recently revised to reflect a more specific (and consistent) definition of Program

Completer. Term to term retention of non-completers remains high (approximately 80%) and is higher than traditional program term to term retention.

- Are program completers securing employment?

The College tracks both the overall employment rate for completers and the non-incumbent worker employment rate for completers. The current employment rate for all program completers (includes under-employed) is 47%. The employment rate for non-incumbent workers is 36%; however, the majority of such completers have had less than two months to secure employment at the time of this report.

- Are colleges developing meaningful partnerships with employers?

Crowder College has used employer engagement to develop and modify curriculum, program structure, and program completer competencies. In addition, the College is continuing to use employer partnerships to monitor program course competencies as well as using employer feedback to modify course and program content. The use of continuous feedback from employers to improve program content and delivery is especially noteworthy. Efforts related to employer engagement have also increased partnerships and cooperation among employers. Crowder College has asked Cosgrove & Associates to examine the extent to which employer-to-employer partnerships/cooperation is leading to increased regional coordination among various public safety agencies.

IMPLEMENTATION & PERFORMANCE MEASURE PROGRESS EVALUATION

Over the past six months, Cosgrove & Associates partnered with Crowder College to conduct site visits with faculty and staff. A five-point rubric (5=Excellent Progress to 1=Poor Performance---See Appendix I) was employed to evaluate the PSP grant in the following domains: Program Implementation (Score =4), Participant Enrollment (Score = 5), Program Completion (Score = 5), Employer Engagement & WIB Engagement (Score = 4), Data Collection, (Score = 4) and Overall Organization Support for Grant Innovations (Score = 4). These scores translated to an overall Implementation Score of 4.33. It is worth noting that the implementation and performance scores remained at high levels during Year 2. Although scores may vary from year to year, depending on issues and challenges, it is important to recognize that scores in the 4 to 5 range indicate excellent performance. Best Practices and Areas of Concern identified during the site visits are presented in Appendices II and III.

The College has implemented the PSP Criminal Justice, Fire Science, and EMS programs and is currently considering adaptations to the Public Safety Management program (merging selected Public Safety Management courses (not implemented as of 6/30/2014) into the three existing programs). Programs are based upon employer input and strong employer partnerships are in place.

As of the end of Quarter 3, Year 2, participant enrollment stands at 265. Seven-three percent of the participants are male. Eighty-eight percent are white and 12% are minority. Twenty-six percent were unemployed upon program enrollment, while an additional 73% reported being under-employed at program start-up. Thirty-two percent are attending college for the first time,

and 48% are less than college-ready in at least one academic area (math, reading, or English). Eleven percent are Veterans. The average age is 29 and 35% are over the age of 30. Currently, there are no TAA-eligible students enrolled in any program.

Current progress measures for participants are positive, with the credit hour completion to credit hour attempted ratio in excess of 80%. Of the 265 unique participants, 156 have completed a program of study. Forty-seven percent of the program completers are employed at program completion. It should be noted that this percentage includes both incumbent and non-incumbent workers. The current employment rate for program completers who were NOT employed when they started the program is 36%. Although this rate appears low, one must consider that a significant number of program completers recently completed their program (June 2014) and the current employment follow-up data are as of July 31. Thus, many of the completers have not had ample time to secure employment.

To further support program and strategy implementation, Cosgrove & Associates met with the PSP team to review the College's compliance with their stated workplan. Data were collected through college self-reports, direct observation, campus interviews, and quarterly reports. This data triangulation process helps the College link specific strategies to programs and monitor strategy implementation on a continuous basis.

Crowder College continues to provide significant intrusive support services related to retention, tutoring, academic and personal counseling and career pathway development. Student and faculty feedback are being used to adapt such services to better meet student needs. Staff have reported that such support has been more productive than originally anticipated. Crowder College is using lessons learned from their TAA Round One grant, MoHealthWINs, to support and further develop such services for PSP participants. The College is examining the extent to which changes in advising and student support could be initiated across the campus.

Although entry assessment testing reveals that nearly half of the participants demonstrate less than college-level scores in either mathematics, English or reading, the College's traditional developmental coursework does not meet the academic and career needs of PSP students. The PSP grant is allowing the College to experiment with alternative instructional strategies designed to accelerate academic progress, while at the same time address required career competencies. Early evaluation findings reveal that the alternative instructional strategies hold promise, as the Credit Hour Earned to Credit Hour Enrolled Ratio for the less than college-ready participants is 81%. This rate compares favorably to the same ratio for the college-ready participants (83%).

ACTION RECOMMENDATIONS

This evaluation report reveals that the Crowder College PSP grant has made significant progress in Year 2. Program enrollment is strong and although no TAA-eligible students are enrolled, the grant is serving key target populations. To continue to build upon its strong foundation, the College should address the following items.

- The College should continue to conduct and expand campus-wide Faculty/Staff PSP Grant training sessions designed to increase program awareness and share successful innovations associated with employer engagement, credit for prior learning, competency-based

instructional formats, intrusive student support services, and modified developmental education formats.

- Given the lack of student enrollment in the Public Safety Management program, the College should finalize plans to offer program courses to students in a manner that achieves necessary enrollment while adhering to employer input on key course competencies.
- Finalize strategy implementation across all programs.
- Examine potential barriers to enrollment and program retention.
- Build upon successful innovations associated with modified developmental education and examine scaling opportunities beyond grant programs.
- Examine current organizational practices/processes which curtail grant innovations. Specific attention should be directed to helping colleges adapt/modify traditional term-based models to accept and accommodate off-schedule, non-term based instructional formats.
- Continue to align grant participant and outcome data collection with standard college data collection efforts and student information systems. Appropriate staff development should be provided to grant research/reporting staff to ensure that all data are being recorded and reported in a manner that is consistent with the PSP statement of work and DOL definitions.
- Initiate the PSP Curriculum Review process and engage both grant and non-grant faculty and staff in this process. Specific attention should be directed to fully engage campus academic leadership and full-time faculty in the curriculum review process.
- Expand college/employer engagement to increase employer hiring of PSP program completers.
- Review information collected through the Spring 2014 site visits, work plan reviews and the Quarterly Reporting process so as to clearly define the relationship between grant strategies and grant programs.

Appendix I: Implementation Assessment Scale

5	EXCELLENT PROGRESS: COLLEGE IS MAKING EXCELLENT PROGRESS AND FULL IMPLEMENTATION HAS OCCURRED. COLLEGE PROCESSES SUPPORT GRANT PROGRAMS & INNOVATIONS AND SCALING OF SUCCESSFUL INNOVATIONS IS TAKING PLACE OR BEING PLANNED.
4	GOOD PROGRESS: COLLEGE IS MAKING SIGNIFICANT PROGRESS AND SUCCESSFUL IMPLEMENTATION HAS OCCURRED OR IS SCHEDULED FOR FALL 2014.
3	MAKING PROGRESS: COLLEGE IS MAKING PROGRESS, BUT FULL IMPLEMENTATION HAS NOT YET OCCURRED. COLLEGE IS AWARE OF STEPS REQUIRED FOR SUCCESSFUL IMPLEMENTATION AND IS SCHEDULED FOR FALL 2014, BUT MORE WORK IS NEEDED TO MEET THE FALL 2014 IMPLEMENTATION DEADLINE.
2	LACKING PROGRESS: COLLEGE IS AWARE OF STEPS REQUIRED FOR SUCCESSFUL IMPLEMENTATION, BUT CURRENTLY ACTION IS LACKING. IMMEDIATE ACTION NEEDS TO BE TAKEN TO MORE FULLY SUPPORT GRANT PROGRAMS AND STRATEGIES.
1	PERFORMANCE IS POOR: PROGRESS IS COMPLETELY LACKING. COLLEGE MUST TAKE IMMEDIATE ACTION TO INCREASE AWARENESS OF STEPS REQUIRED TO IMPLEMENT AND SUPPORT GRANT PROGRAMS AND STRATEGIES.

Appendix II: Evaluation Progress Reports

Evaluation Progress Report #3, March 2015

Cosgrove & Associates Evaluation Progress Report #3: Crowder College PSP Year-Three Implementation Site Visit, March 2015.

On March 9-10 2015, Cosgrove & Associates (C&A) conducted a year-three implementation site visit to examine the Public Safety Project (PSP) grant implementation status. Prior to this site visit, C&A reviewed Crowder College's Quarterly Narrative Progress Reports as submitted to DOL as well as conducting regular analysis of participant level data. In February, 2015, the PSP team completed the PSP Grant Implementation Progress Tool. Through this tool, C&A collected current data associated with activities, progress, and concerns related to each PSP Priorities and Strategies. During the site visit C&A interviewed the PSP team, Employer Partners, Crowder College Academic Administration, and PSP students to further explore the extent to which the College has successfully implemented grant strategies. During our visit we focused on the following key questions.

1. How has Crowder partnered with employers to develop/redesign programs?
2. How do program participants compare with other students and potential employees?
3. Did Crowder implement programs and strategies in a timely manner?
4. What is the impact of the project on the community?
5. What has Crowder learned during the implementation process?
6. What grant programs and strategies appear to hold promise for sustainability?
7. What are opportunities for improvement?

This Memorandum presents a summary of our document review and site visit.

1. How has Crowder partnered with employers to develop/redesign programs?

Using extensive employer engagement, Crowder College built/modified public safety programs in the following areas: Fire Science, Criminal Justice, EMT/Paramedic, and Public Safety Management. As part of the employer engagement process, PSP programs have benefited from the use of industry leaders as adjunct faculty.

The PSP team continues to engage employers in curriculum review through the PSP Program Advisory Councils. The PSP team worked with advisory councils to produce program and career pathway maps to share with grant participants. In addition, the employer engagement process has served as a catalyst for bringing employers together to discuss common needs and concerns. Prior to the PSP grant, employers/agencies rarely met as a group. The PSP team, Crowder Administration, and employers noted the value of this convening and expressed the desire to continue meeting on a regular/systematic basis.

Employers are pleased with the quality of PSP instruction and made special note that Crowder College reached out to employers and the community and "brought the program to the community". Employers also commented the appropriate mix of "hands on instruction" and

academic skill development. Employers indicated that instructors are making appropriate use of instructional equipment and noted they were especially satisfied with new equipment and see the value that equipment will have to their departments and the community for years to come. In general, employers expressed satisfaction with the degree to which the College asked for their input and used employer feedback to build/modify programs.

Although the Fire Science program contains fewer instructional hours than required by the State accrediting body, employers and Crowder staff believe the program does provide the necessary instructional content. That being said, one employer from the fire science group expressed disappointment with the pass rates for state certification exams. We suggest that Crowder collect information on certification pass rates to determine if there is a connection between their condensed program and pass rates. In addition, Crowder should explore if certain categories of students have lower pass rates

2. How do program participants compare with other students and potential employees?

As of the Spring 2015 term, PSP participant enrollment stands at 371 and has surpassed the grant target of 180. It should be noted that although enrollment in Fire Science, Criminal Justice, and EMT/Paramedic is strong, enrollment in the Public Safety Management program has not met original expectations. Seventy-six percent of grant participants are male and 86% are white. The average age for participants is 28 and 32% had no previous college education. Sixty-one percent had some college education, but no formal degree. Nine percent of participants are veterans and 55% percent were under-prepared for college-level work in at least one academic area (English or Mathematics). Twenty-six percent of participants were not employed when they started their PSP program and 72% percent reported being Under-Employed when they first enrolled in the PSP program.

Employers reported current employees who enrolled in a PSP program matched the overall PSP enrollment profile. Employers also reported actively encouraging employees to take advantage of the PSP program, its quality instruction and its free tuition. Moreover, several employers from the smaller departments indicated that they were pleased that they were able to up-skill incumbent workers (and volunteers). Concurrently, these same employers expressed concern as to how they would afford to train employees in the future. Fire department chiefs made several references to the value of PSP training for their volunteer staff. As a result of this conversation, Crowder agreed to document the volunteer status of participants for further analysis.

Although the PSP program did not enroll any TAA-eligible students (the Crowder service area has few TAA eligible individuals), the participant profile does indicate that the grant has served the population associated with no previous college, academically low-skilled, and under or unemployed adults in the region.

3. Did Crowder implement programs and strategies in a timely manner?

The College implemented the PSP Fire Science, Criminal Justice and EMT/Paramedic programs in a timely manner. Crowder has struggled with program implementation associated with the Public Management program. The Public Management program has not generated the expected

enrollment. Although employers have supported the development of the program, their employees have been slow to enroll. Crowder is continuing to examine a variety of reasons for the lack of interest in the Public Management program. Possible explanations include a lack of incumbent worker motivation to acquire the program skills/competencies, the lack of currency/value of a two-year degree in this area, and a program structure that is too traditional and not customized to adults working in public agencies. The College has determined the courses developed are worth sustaining and the best way to do so is to place them under the transfer/Social Sciences umbrella.

The PSP grant calls for the introduction of flexible/alternative instruction formats, as well as the introduction of online and hybrid course and lab offerings. Although the College has increased weekend and evening offerings, it has met internal resistance to moving away from the traditional 16-week course offerings. The PSP team noted that they have experienced resistance to change from the College. Although specific instances and/or barriers were not mentioned, resistance appears to be rooted in both existing administrative processes/procedures, as well as adherence to traditional instructional formats. In an effort to more fully serve the needs of employers and the demand for flexible instructional formats, the College should work to examine specific institutional barriers and develop appropriate processes aimed at such barriers.

The PSP grant has successfully implemented online/hybrid offerings. The orientation/student handbook associated with online/hybrid offerings has been well received by students and the College sees potential for the handbook to be sustained and/or scaled throughout the College.

The PSP grant has developed a systematic process for awarding Credit for Prior Learning. Approximately ten percent of PSP participants have been awarded Credit for Prior Learning. The College is considering this process as a means to bridge the gap between credit and non-credit, continuing education instruction. Employers have indicated the need for short-term, customized continuing education instruction designed for incumbent workers. The College is working to develop such offerings and plans to initiate such coursework through its non-credit instructional processes and then allow students to acquire "COLLEGE CREDIT" through the Credit for Prior Learning process.

The grant has successfully implemented additional student support strategies related to student orientation, career counseling, and academic support. Students who enroll in the PSP program receive significantly more personal attention than a typical, new Crowder College student (non-participant). Advisors, PSP staff, and College administrators all believe this increased personal attention increases student engagement and plays a key role in successfully launching a student's educational experience.

In addition, the grant developed a new student orientation handbook designed to provide students with a "roadmap" for navigating the College's internal processes and procedures. The new handbook has been well received by students and has helped PSP advisors quickly and effectively orient students to their program of study. The College hopes to make this new handbook available to all incoming Crowder students.

Although 55% of PSP students enrolled as academically under-prepared for college, the majority of this need related to math skills below College Algebra skills. Recognizing that Fire Science, Criminal Justice and EMT/Paramedic programs may not require College Algebra skills at program entry, the College adjusted its math entry requirement for the PSP programs and modified instructional content to focus on math skills/competencies related to Fire Science, Criminal Justice and EMT/Paramedic. The grant provides self-paced learning modules and instructional support for students who require additional assistance to achieve the required math skills. Students wishing to complete the full AA or AAS program may still need to complete College Algebra, but lack of College Algebra skills is no longer a barrier to program entry.

We observed three aspects of student advising: launching the student into their program; program retention and completion; and job placement upon completion. As part of the initial student orientation the PSP grant provides career assessment and advising related to public safety career pathways. Although staff report that students are pleased with this process and benefit from the experience, further data collection is required to document this finding and gauge the extent of such engagement.

In order to understand the impact of advising on retention and completion, Crowder should review student advisor documentation of interactions with students. This is especially important since the staff believes that this interaction is important but college administration is financially unable to sustain the practice. The College would benefit by identifying key problem and intervention points among students, and use such information to design specific retention strategies.

With regard to employment of completers, a major concern is the over-saturated job market in Fire Science and EMT. Crowder reported that completers are unwilling or unable to travel the distance to an area where jobs are available. Crowder should develop advising strategies to assist completers in broadening their job search beyond a specific public safety position when the completer is unwilling or unable to travel or relocate.

The small sample of Paramedic students interviewed indicated the most important reasons for selecting Crowder College for their education were: tuition waivers, accelerated time to completion, and Crowder's reputation for pass rates on the national and state certification tests. This group indicated that they were unaware of the availability of student advisors to assist them. Furthermore, the students could not imagine what the advisors could do for them. After having completed 75% of the program, the students rated the following as the most important factors in retention: tuition waivers, instructors, equipment, and classmates.

Although the College PSP team and administration are convinced of the effectiveness of personal attention provided by grant staff, Crowder administration indicates that the College does not have the resources to continue providing such personalized attention. As such, Crowder would be well served by investigating which touch points are the most beneficial to students and then examine their current registration and advising model to see if those beneficial activities could be addressed within the current model.

4. What is the impact of the project on the community?

Employers believe the PSP program has positively impacted not only their departments/agencies, but also the region as a whole. This positive impact was noted by employers from larger departments, as well as the more rural, smaller departments. Although further examination is required, it appears as though the PSP program has contributed to the overall quality of the public safety workforce and volunteer firefighters in the Crowder region. The PSP employer engagement process has demonstrated Crowder College's role as a community resource. The College would do well to take steps aimed at maintaining its leadership role as a convener of public safety agencies in the region.

EMT/Paramedic program students interviewed during this visit expressed a high degree of satisfaction with the quality of instruction, equipment and overall support they have received through the PSP program. It should be noted that the students seemed especially committed to "giving back to their community". This finding further supports the conclusion that the PSP program is expanding the quality of public safety service within the region.

Student feedback collected during the EMT/Paramedic interviews matched student follow-up survey responses. As of the Spring 2015 term, 137 students have completed follow-up surveys. When asked to indicate the degree to which they are confident that the PSP Program provided them with the skills and knowledge required to be successful in their chosen field, 95% of students responded with either Somewhat Confident or Very Confident.

As with employers, the students are pleased with the appropriate mix of "hands-on, real-life" instruction and the development of their academic skills. Again, student survey results confirmed this result. Follow-up survey response data revealed that when students were asked to indicate how much their PSP program helped them acquire specific academic skills, a large percentage reported "Quite A Bit" or "Very Much" for each of the following areas:

- Speak Clearly & Effectively, 93%
- Think Critically & Analytically, 98%
- Write Clearly & Effectively, 88%
- Analyze & Solve Math Problems, 73%
- Use Computing & Information Technology, 83%
- Work Effectively with Others, 98%
- Gain Confidence in My Academic Abilities, 94%

The students are pleased with the quality of equipment and noted that the equipment they are using is the same equipment they will be exposed to during their national testing process, as well as in the field.

Although the two-semester Paramedic program is demanding the students noted they prefer completing the program in two semesters, rather than the traditional three-semester format. Finally, the students reported a high degree of satisfaction with the tuition-waiver. The majority of students reported that if not for the tuition-waiver they would not have been able to enroll in the program.

As of March 2015, the PSP grant has more than 200 Program Completers, surpassing the grant target of 89 completers. As noted above, employers are pleased with the both the quality of instruction and the overall employment preparation of completers and students report a high degree of satisfaction with the faculty, course offerings, and believe they will be well prepared for their chosen field.

Both Crowder College and C&A continue to collect employment and wage data associated with Program Completers. Current data reveal that 142 of the 200 Program Completers (71%) are employed as of March 1, 2015. This data includes all Program Completers and any type of employment (full or part time, public safety-related or not).

Further employment analysis reveals that 51 of the Program Completers were NOT Employed when they started their PSP program of study. Of those 51 NON-Incumbent workers, 30 (59%) are employed as of March 1, 2015. The PSP team expressed concerns associated with the number of NON-Incumbent program completers who secure employment. The PSP grant target called for a 66% employment rate upon program completion.

The PSP team suggested that although the grant is likely to produce more NON-Incumbent program completers who secure employment than the target number of 59, the targeted employment rate of 66% may be difficult to achieve due to “market saturation” in some areas, especially Fire Science and EMT completers. In addition, the PSP team noted that a number of Fire Science program completers are not seeking employment, but enrolled in the program to increase their skills as volunteer firefighters. Given the number of volunteer fire departments in the region and the number of firefighters trained with the PSP grant, C&A plans to work with the College to identify those participants associated with a volunteer department for additional follow-up analysis.

5. What has Crowder learned during the implementation process?

Crowder College should be commended for reaching out to its employers and community partners in an effort to develop/redesign industry-based public safety programs. In addition, the College has directed attention to serving specific target populations (adults, low-academic skills, under-employed, and/or unemployed). As the PSP evaluation process moves from Implementation Evaluation to Outcome/Impact Evaluation, the following list of key lessons learned have come to the surface:

- Employers are eager and willing to engage with Crowder College to design curriculum and programs related to workforce needs.
- Students and employers value Credit for Prior Learning opportunities.
- Meaningful new student orientation and increased personal attention during the initial registration process play important roles in helping students successfully begin their education experience.
- Adjunct faculty with specific industry experience are valuable assets in curriculum design and instructional processes.

- Self-paced instruction when combined with appropriate instructional support may provide an alternative to the traditional approach to teaching developmental mathematics.
- Continuation and scaling of successful grant innovations should not be left to chance. An internal champion(s) with specific responsibility for incorporating innovations into mainstream practices is needed to more fully support successful innovations beyond the life of the grant.
- The tuition waiver was a valuable incentive to enrollment, retention and completion. Without the waiver it is unlikely that many of the students would have been able to enroll.

6. What grant programs and strategies appear to hold promise for sustainability?

The PSP grant afforded the College the opportunity to experiment with and develop new strategies related to employer engagement, program re-design, accelerated and condensed course structures, new student orientation, Credit for Prior Learning, career advising, and instructional support.

Based on the student and community outcomes observed to-date, grant strategies aimed at employer engagement, new student orientation, and Credit for Prior Learning appear to hold the most promise for sustainability. The PSP employer engagement process has demonstrated Crowder College's role as a community resource. The College would do well to take steps aimed at maintaining its leadership role or securing another entity to serve as a convener of public safety agencies in the region.

The student handbooks for orientation and online learning have helped participants navigate internal processes and procedures. The PSP team suggests that the College expand the use of these handbooks to the general student population. Since the cost of this is not tied to an FTE staff person, this is an excellent example of sustaining a good practice without adding staff.

The College has designed an appropriate plan to sustain the Credit for Prior Learning process (award CPL at the conclusion of non-credit and continuing education courses), but this approach appears contingent on the successful development of non-credit, continuing education courses customized to the needs of incumbent workers. This approach holds promise and is likely to avoid the traditional internal struggles between Credit and Non-Credit operation.

7. What are opportunities for improvement?

The PSP team, Crowder Administration, and Employers all expressed concern/questions related to what happens to the future of PSP program innovations once the grant ends. Employers are cautiously optimistic that the College will continue to actively engage with them through the Program Advisory Councils, but noted that colleges have started employer engagement efforts in the past, but then walked away from the process.

College administration and the PSP team expressed concern that the College seems to lack an internal "champion" to push for the continuation of several successful grant strategies: Fire

Science Program, Online Orientation, accelerated programs, launching students into programs, and pathway advising.

The PSP grant calls for the introduction of flexible/alternative instruction formats, as well as the introduction of online and hybrid course and lab offerings. Although the College has increased weekend and evening offerings, it has met internal resistance to moving away from the traditional 16-week course offerings. Specific instances and/or barriers were not mentioned, but the resistance appears to be rooted in both existing administrative processes/procedures, as well as adherence to traditional instructional formats. In an effort to more fully serve the needs of employers and the demand for flexible instructional formats, the College should work to examine specific institutional barriers and develop appropriate processes aimed at such barriers.

Although Crowder administration agreed with the PSP team that the student advising model and personal attention of the grant was a factor in the retention and completion rates for participants, they stated that Crowder lacks the financial resources to sustain or scale the model.

Appendix III: PSP Curriculum Review Report

Public Safety Project Curriculum Review - Overview Report

To meet compliance requirements established by the U.S. Department of Labor for recipients of TAACCCT grant funding, Cosgrove & Associates conducted a curriculum review of four **Public Safety Project** programs developed or enhanced with grant funds by Crowder College. The review process was introduced in March 2015 and completed in September 2015. This report provides **(1)** an overview of that process, **(2)** a summary of the parameters of the technical program reviews and general subject-matter expert findings in three key areas; and **(3)** a listing of the four technical programs with selected programmatic highlights, innovations and/or challenges.

1. Curriculum Review Process

Process Introduction and Orientation. The curriculum review process for Crowder College's Public Safety programs mirrored that established for review programs developed or enhanced through Missouri Round 1 and Round 2 grants, MoHealthWINS and MoManufacturingWINS, respectively. The process and documents used in these reviews were discussed with Crowder College personnel and it was agreed both met the necessary review criteria. The list of required documents and the rubric used to review the programs are attached. (See Exhibits 1 and 2.)

Subject Matter Experts. Four subject matter experts (SMEs) conducted curriculum review of the four project programs. They were identified by the Curriculum Review Coordinator based on their expertise in one of the four program areas. They were then approved by the College, which contracted directly with them for review services. All have significant instructional and professional experience in the occupational field of the programs they reviewed.

The Review Coordinator oriented the SMEs to the project through individual phone and e-mail conversations. The project goals and intent of the review process were discussed. They studied the list of required documentation and related templates that would be used by the College to document its programs and the rubric they would use to evaluate them. The SMEs were encouraged to contact college personnel directly if they had questions about the programs they were assigned to review. They were asked to not approach the review as a "grading" of a program, but instead as a look at its structure and curricular components, how both address the needs of adult learners, and as an opportunity, when appropriate, to suggest ways how the programs could be strengthened.

Timeline. The deadline for submission of review documents was May 15, 2015. The SMEs were instructed their review rubrics should be submitted by July 30.

2. Summary of Subject Matter Expert Findings

The SMEs assigned to review technical programs were asked to assess program or course components according to standard principles of quality technical curricula: Is it clear, logical and progressive? Is the curriculum linked to current industry standards and practices? Is it innovative; i.e., does it address the challenges many adult students encounter in attempting to acquire skills and, hence, jobs in an accelerated timeframe?

The SME rubric sought to assess the programs on seven general components:

Program or Student Learning Outcomes and Industry Certifications: Is the program structure logical and effective; do the program outcomes align to industry standards; are they clearly stated, introduced and reinforced effectively; and, when appropriate and possible, are learning outcomes linked to one or more recognized industry certification and are successful students able to earn certification/s upon program completion or are they prepared to do so following any requisite work experience?

Course Objectives: Are the program or course objectives appropriate, clearly stated and measurable and do they support one or more program or student learning outcome?

Module or Unit Objectives: Are module or unit objectives linked to course objectives; do they address one or more objective; are they clearly stated and measurable?

Instructional Materials and Lab Resources: Are program materials and resources appropriate to teach the course and module objectives; do they meet current industry practices and standards; do they provide options for multiple learning styles and do they demonstrate evidence of an effort to support adult learner success?

Learning Activities: Do they promote achievement of module/unit objectives; are they presented in a way that students understand their purpose and how the skills and or knowledge points being learned are linked to current industry practices and standards; do they demonstrate evidence of an effort to support adult learner success?

Assessment and Evaluation: Do they measure the learning objectives and link to industry standards, align with course activities and resources, and provide regular and timely feedback to students?

Innovative and Enhanced Strategies: Is there evidence of industry input in the program design; are there enhancements in any or all of the curricular components to support adult learners; and is there evidence of improved student success?

A compilation of the results of the four reviews is provided in **Attachment A**. Overall the reviews were very positive, with programs receiving a preponderance of “very good” or “good” ratings on the rubric scale. The College did an excellent job preparing its documentation.

Several common themes emerged in SME comments about **program structure**, key goals being that program outcomes and course objectives align to industry standards and that prospective and current students be able to review these outcomes and objectives along with course descriptions and understand the skills and knowledge they would gain. Examples of reviewer comments follow.

- **Criminal Justice:** Effective program structure provides a clear, logical pathway to completion. Outcomes are aligned for occupational focus, though they could be more clearly stated for one course (CJ 290 – *Police Supervision and Management*).

- **Emergency Medical Services:** The program structure is effective and the sequence adequate to understand the path to completion. Prerequisites should be included in the suggested plan of study, as should associated certifications and licensure (EMT, AHA CPR, etc.) and miscellaneous requirements (immunizations, police background checks, etc.) Outcomes are aligned well with industry standards, in great part due to role of expert adjuncts and actively engaged Advisory Committee members,
- **Fire Science:** The program structure creates a logical, proven path to completion, with many of the course outcomes aligning fully to the Fire and Emergency Services Higher Education core curriculum.
- **Public Management:** As designed, the program provides introductory courses with a heavy emphasis on governmental functions in the public sector. Consider including other career venues, such as non-profit organizations and the private, corporate sector.

The SMEs also looked at **instructional materials and equipment, delivery methods and assessment of knowledge and skills.**

- **Criminal Justice:** Instructional materials reflect current practices of criminal justice professionals. The use of various activities and assessments supports multiple learning styles. The program uses online, hybrid and traditional classroom learning environments.
- **Emergency Medical Services:** Instructional materials support course and learning objectives very well and the resources are aligned with the industry standards as defined by the EMS National Standards and Curriculum. The program exceeds national minimums for evaluation. All of the evaluations tie in well with the course objectives and standards. If there are resources for challenged students, these should be mentioned. Also, greater clarity is needed on how students progress through the online program.
- **Fire Science:** The program design and up-to-date instructional materials and equipment directly support the stated outcomes and objectives and support the current Firefighter I & II/FESHE certification exams. Activities are linked to current State of Missouri standards as defined by the National Fire Protection Association. Further, the materials and resources are constructed and presented in a way that all students should know their purpose and their various roles in the emergency services environment. Diverse student learning styles are addressed through the use of online training modules, classroom lectures and various approaches to assessment of learning.
- **Public Management:** The basic materials and resources are appropriate to the career area. Activities are multi-faceted, and include participation in classroom discussions and debate and online research. Assessments appear to be limited to written testing. One recommendation is to enrich classroom discussion and students' understanding of this career field with real-world case studies for review and discussion of the who, what, when, where and how of various incidents with either desirable/appropriate or disastrous outcomes. Also, while basic learning opportunities are evident, using more innovative teaching and learning activities can help students make connections to real world situations, problems and solutions.

The reviewers affirmed the College’s statements of **programmatic innovation or enhancement**. In order to better orient the SMEs to the programs and to give them essential context to assess program curriculum, Crowder College was asked to submit a one- to two-page Introductory Overview with information on how the program was developed or enhanced and how it evolved over the course of the grant; what challenges the College encountered in this work; and the status of the program and what the plans were for it going forward. It was also asked to submit a Statement of Programmatic Innovation and/or Enhancement to provide, from its perspective, how the program met the key grant goals. While the former was prepared for each of the four Public Safety programs, a single document (**Attachment 2**) captures how the collective programs met the grant’s goals.

The following chart summarizes program-specific highlights, innovations and, when shared, challenges encountered in launching and/or enhancing program components.

Public Safety Program	Program Detail/Highlights/Innovation/Challenges
Criminal Justice	<p>Revised program</p> <p>Credit</p> <p>Highlights/Innovation: To open articulation opportunities, changed name from “Law Enforcement” to “Criminal Justice”. Program courses are offered in traditional, online and blended formats. Revised and enhanced curriculum through use of reconstituted, robust Advisory Board, many members of which strengthened the program further serving as adjunct instructors. Developed curriculum for new 911 Virtual Dispatch Simulator.</p> <p>Challenges: Figuring out how to award credit for prior learning for completion of academy and other Peace Officer Standards and Training (POST) course hours when that training is fractured into short-term segments and does not align well with program courses. Negotiating relationships with baccalaureate institutions who share interest in strong interface with government and civic agencies and organizations.</p>

<p style="text-align: center;">Emergency Medical Services</p>	<p>Revised program</p> <p>Credit</p> <p>Highlights/Innovation: Added hybrid format for some courses to its traditional classroom/skills labs structure, with book portion taught online and subsequent 14-week clinical block. Modified summer program schedule to accelerate completion and introduced cohort structure in its Paramedic program. Introduced Fisdap scheduling program that enables students to identify and select clinical assignments that meet their personal life/work schedules. Revised and enhanced curriculum through use of reconstituted, robust Advisory Board. Recruited board members from an expanded geographic area and many board members have strengthened the program further by serving as adjunct instructors. Introduced hybrid programming for international students, now drawing students from around the world.</p>
<p style="text-align: center;">Fire Science</p>	<p>Revised program</p> <p>Credit</p> <p>Highlights/Innovations: College’s existing Transfer Credit Matrix for this program was quick win for state’s new Credit for Prior Learning initiative. The Credit Matrix model outlines what state certifications or National Fire Academy courses are accepted for credit. Credit for firefighting training is awarded for completion of 40+ hour training courses and written certification exam through the Missouri Department of Public Safety. Revised and enhanced curriculum through use of reconstituted, robust Advisory Board. Recruited board members from an expanded geographic area and many board members have strengthened the program further by serving as adjunct instructors. Expanding articulation options to include Pittsburg State University.</p>
<p style="text-align: center;">Public Management</p>	<p>New program</p> <p>Credit</p> <p>Highlights/Innovations: Program courses provide a good foundation for students completing Criminal Justice, EMS, Fire Science or other non-Public Safety degrees or certificates to pursue baccalaureate degrees in Public Administration, Political Science or Business Administration, including those interested in non-profit work. Revised and enhanced curriculum through use of reconstituted, robust Advisory Board. Recruited board members from an expanded geographic area and many board members have strengthened the program further by serving as adjunct instructors.</p> <p>Challenges: Finding a baccalaureate institution with which to articulate has been difficult because closest historic and geographic partners do not have Public Administration or Public Management programs at the baccalaureate level.</p>

Appendix III: PSP Curriculum Review Report

EXHIBIT 1 Public Safety Project Curriculum Review Documentation

Please prepare the following documents for the Subject Matter Expert review of each of your Public Safety programs:

1. **Key personnel information contact sheet:**

Grant Lead and Program Coordinator/s names, email addresses, work phone numbers.

2. **Introductory overview of program:**

To provide your SME with a preliminary orientation to your program, this one- or two-page overview should *briefly* describe:

- the program (CIP code, credit/non-credit, number of credits or contact hours, certificate or degree, occupational family, industry certifications, delivery method/s),
- how its development and/or enhancement evolved,
- any challenges encountered in developing or launching it (change of focus resulting from post-award industry partner discussions, recruitment issues, changes in regional job market demand, difficulty finding qualified instructors, etc.),
- information on current status of and plans for the program;
- any other pertinent information that would help orient the SME to your program prior to document review.

3. **Curriculum Map**

For multi-course programs, provide a crosswalk between program or student learning outcomes and courses indicating where outcomes are introduced, reinforced and mastered. For single-course programs, provide a crosswalk between course objectives and units. *See different templates and examples for a multi-course program and a single-course program.*

4. **Program Career Ladder or Stackable Credential Information**

Descriptive or graphic depiction of how students in your program can move up a career ladder through the acquisition of skills and certifications. *See MCC Manufacturing Careers and Career Map examples.*

5. **Syllabus**

A syllabus (for each course in the program) that includes course objectives, prerequisites, course length (# of days or weeks) and delivery method/s.

6. **Instructional Materials**

List of all textbooks, manuals, websites, ancillary materials and major laboratory tools and equipment. *See template and example.*

7. **Overview Table of Objectives, Modules, Learning Activities, Assessments**

Complete a table for *each course developed or enhanced with grant funds*, capturing in sufficient detail sample learning activities and assessments that best showcase your curriculum. *See template and example.*

8. **Statement of Programmatic Innovation and/or Enhancement**

Provide a one- or two-page document describing specific examples of how the program incorporates one or more of the Public Safety Project key strategies: **(a)** Expand/Build Programs that Meet Industry Needs & Develop Career Pathways; **(b)** Improve Achievement Rates and/or Reduce Time to Completion; **(c)** Accelerate Progress for Low-Skilled & Other Workers; **(d)** Employ Instructional Strategies Which Make Work a Central Context for Learning; **(e)** Employ Strategies to Address the Needs of Working Adults by Accommodating Student Work Schedules. This document should include programmatic data or faculty observations how the infused innovations or enhancements impact student learning and success.

Appendix III: PSP Curriculum Review Report, Exhibit 2

Public Safety Project Curriculum Review Rubric, Spring/Summer 2015

Program Reviewed:

College:

Reviewed by:

Date:

Review scale definitions:

Exceptional: Review component is a “best practice” and represents a model for replication.

Very good: Review component is complete and effective.

Good: Review component is adequate but presents opportunities for improvement.

Ineffective: Review component is weak and in need of significant improvement.

No or Insufficient Evidence: Review component was not covered or information provided in the documents was insufficient for assessment.

Curriculum Map, Career Ladder/Stackable Credential Documentation, Syllabi	Excellent	Very Good	Good	Ineffective	No/Insufficient Evidence
1. Program CIP code/s appropriate to program title and outcomes.					
2. Effective program structure (prerequisites, course sequence, stackable credential-structure provide a clear, logical path to completion).					
3. Outcomes aligned to occupational focus (industry skills and standards) and prepare students for appropriate industry certification/s.					
4. Outcomes are clearly stated.					
5. Outcomes are introduced and reinforced effectively.					
6. Course objectives are clearly stated and measurable.					
7. In multi-course programs, course objectives support one or more program or student learning outcome. In single-course programs, modules support one or more course objective.					
<p>Comments or recommendations specific to each section rated:</p> <p>1.</p> <p>2.</p> <p>3.</p> <p>4.</p> <p>5.</p> <p>6.</p> <p>7.</p> <p>General comments or recommendations:</p>					

Instructional Materials and Lab Resources	Excellent	Very Good	Good	Ineffective	No/ Insufficient Evidence
1. Support stated course or unit learning objectives.					
2. Meet/reflect current industry practices and standards.					
3. Provide options for multiple learning styles.					
4. Instructional materials are cited properly.					
5. There is evidence of materials and resources that support online or technology-enabled learning.					
Comments or recommendations specific to each section rated:					
1.					
2.					
3.					
4.					
5.					
General comments or recommendations:					
Overview Table: Objectives, Modules/Units, Learning Activities and Assessments	Excellent	Very Good	Good	Ineffective	No/ Insufficient Evidence
1. Modules/units are linked to course objectives.					
2. Learning activities promote achievement of stated module/unit objectives.					
3. Learning activities provide opportunities for interaction and active learning.					
4. Learning activities provide options for multiple learning styles.					
5. Learning activities are linked to current industry practices, standards and certifications.					
6. Learning activities demonstrate evidence of innovation or enhancements to support adult learner success.					
7. Materials/resources (to include equipment, tools and software) are used in a way that students understand their purpose and use in industry settings.					
8. Assessments measure stated learning objectives and link to industry standards.					
9. Assessments align with course activities and instructional materials and resources.					

10. Assessments are sequenced throughout the instructional period to enable students to build on feedback.					
11. Assessments are varied and appropriate to content.					
12. Assessments provide opportunities for students to measure their own learning progress.					
Comments or recommendations specific to each section rated:					
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.					
General comments or recommendations:					
Innovative or Enhanced Strategies	Excellent	Very Good	Good	Ineffective	No/ Insufficient Evidence
1. Evidence of industry input/standards in program design and curricular components.					
2. Evidence of program enhancements to support the adult learner.					
3. <i>If program has run long enough</i> , is there evidence that program design and curricular components and enhancements are resulting in good or improving completion rates?					
Comments or recommendations specific to each section rated:					
1. 2. 3.					
General comments or recommendations					

Appendix III: PSP Curriculum Review Report

Statement of Programmatic Innovation and/or Enhancement



<p>PRIORITY 1: Accelerate Education and Career Advancements Regardless of Entry Point</p>	<p>An advisory council was established as soon as notification of grant award was received. The PSP Coordinator worked through the first year of the grant to add representatives from municipalities, fire departments, police departments and ambulance services throughout Jasper County (our main target area) as well as Newton and McDonald Counties. Our members have been excellent resources for procuring program equipment, providing instructors for PSP courses, promoting our programs to their departments and in their communities, and providing advice on updating program curriculum. During the first year of the grant, our Advisory Council met on a monthly basis while programs were still being implemented. Currently, we are trying to meet every other month. Sub-committees for individual programs have also been formed and have met to discuss program specific topics on an as needed basis. Our robust Advisory Council has allowed the PSP participants to have excellent employer engagement. As mentioned above, several of the Advisory Council members have served as instructors in our programs, which has created an unprecedented opportunity for participants to know about job openings while training in the field, in some cases leading to instant employment once they complete their training.</p> <p>In addition, programs of study were completed for each PSP program along with program/career pathway maps with entry/exit points. This information is shared not only with participants but with our Advisory Council.</p>
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<p>PRIORITY 2: Articulation Agreements Governing the Transfer of Academic Credits between Partner Institutions and Guide to PLAs</p>	<p>Crowder has met with Missouri Southern State University (MSSU), Missouri State University (MSU), and Pittsburg State University (PSU) to discuss articulation agreements for our PSP programs. Crowder has revamped our Criminal Justice program (changing name from Law Enforcement to Criminal Justice, updated curriculum, etc.) to better tie into the program at MSSU. Crowder currently has articulation agreements in place with MSSU, MSU and PSU for general education programs.</p> <p>MSU has eagerly expressed a willingness to work with Crowder to articulate our Criminal Justice programs and we have also talked about a partnership between our Public Management degree and their City Planning program. Finding a direct partnership with our Public Management program and a 4-year program has been difficult. MSU, MSSU and PSU do not offer a bachelor's degree in Public Management/Administration. MSU currently offers a minor as part of their Political Science program and then has a Master's program in Public Administration. In light of these difficulties, we have transitioned the Public Management degree under the umbrella of Social Science Department at Crowder. We expect this to increase the program's visibility and demand for these classes.</p> <p>We are also currently looking into a relationship with PSU for Fire Science. PSU is possibly looking into developing a 4-year Fire Science-related degree and has expressed interest in working with Crowder as a partner.</p> <p>In addition to the three universities mentioned above, Crowder currently has formal articulation agreements in place with the following institutions of higher education:</p> <table data-bbox="344 1003 1369 1176"> <tr> <td>University of Missouri</td> <td>Missouri University of Science & Technology</td> </tr> <tr> <td>University of Arkansas</td> <td>Baker University</td> </tr> <tr> <td>Central Methodist University</td> <td>American Public University</td> </tr> <tr> <td>The University of Phoenix</td> <td>Stephens College</td> </tr> <tr> <td>Western Governors University</td> <td>Northwest Missouri State</td> </tr> </table>	University of Missouri	Missouri University of Science & Technology	University of Arkansas	Baker University	Central Methodist University	American Public University	The University of Phoenix	Stephens College	Western Governors University	Northwest Missouri State
University of Missouri	Missouri University of Science & Technology										
University of Arkansas	Baker University										
Central Methodist University	American Public University										
The University of Phoenix	Stephens College										
Western Governors University	Northwest Missouri State										

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"> PRIORITY 3 Instructional Strategies that Make Work a Central Context for Learning </p>	<p>PSP courses are offered in both online and traditional classroom settings, with most courses being offered in the evening, making it more convenient for participants who work during the day. Our Fire Fighter I&II and EMT courses are a combination of traditional classroom lectures and practical skills labs. Our online/hybrid EMT course meet one time per week with the rest of the coursework delivered online. Our Crime Scene Processing course utilizes a blended format – the 8-week course meets on Friday/Saturday, with classroom lectures on Fridays and Saturdays set aside for labs.</p> <p>When a student is academically low-skilled and in need of remediation, they also typically need assistance with the use of technology and in strengthening their soft skills and professionalism. We make an initial assessment in all three areas when a student first meets with the PSP Admissions Counselor to apply for our program and enroll in PSP courses and then work to further assess needs during the semester and throughout the student's involvement with our program.</p> <p>When students come in to enroll, the PSP Admissions Counselor discusses courses that are being offered under the grant and explains the available delivery options. For classes with lab/practical skills components (Fire Fighter I&II, EMT, etc.), we advise the students what to expect (ex: Saturday labs and skills evaluations for FF I&II). Typically, multiple delivery options are not offered during the same semester for the same course (except for the EMT course), but we have been piloting alternating some of our courses between the traditional classroom and online from semester to semester.</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"> PRIORITY 4: Cohort Learning Strategies Designed to Enable Project Participants to Pursue Coursework with the Same Classmates over a Fixed Period of Time </p>	<p>We considered offering sections of general education courses for students wanting to complete degrees in Fire Science and/or Criminal Justice. However, we have found that each participant has unique needs, various levels of college readiness, and different educational goals. Additionally, some of our students only need take one or two courses (Fire Fighter I & II and/or EMT) to prepare them to enter the workforce in the Fire or EMS career fields. These factors have made it difficult to form cohorts within PSP programs.</p> <p>A cohort of students did begin the Paramedic program in the fall 2013 semester with 23 students, this group finished in May 2014 with 16 completers. A second cohort began in the fall of 2014 with 15 students and will end in May 2015 with 14 completers.</p>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"> PRIORITY 5: Strategies to Address the Needs of Working Adults by Accommodating Student Work Schedules </p>	<p>PSP course schedules, with delivery format, days, times and location, are finalized and published at least two weeks prior to enrollment for the following semester. All PSP courses, with the exception of the Paramedic program, are held online or during twilight/evening sessions. Individual course syllabi and schedules are uploaded on to Blackboard by the week before classes begin. Our Fire Fighter I & II course utilizes multiple Saturdays for practical skills training in addition to the regular class meetings two nights per week. Students in this course are informed of the extra Saturday class dates at enrollment and a tentative Saturday schedule is included in the course syllabi. For our online/hybrid EMT course, students meet each Wednesday evening to review material and train on practical skills.</p> <p>An excellent example of how the EMT/Paramedic programs accommodate working adults is how they schedule the required clinicals. Clinicals are scheduled using a scheduling program called Fisdap. At the beginning of each semester, all the clinical sites are input with days and hours of availability. When it is time for students to start clinicals, each student is given a Fisdap access code. The student goes in and creates an account. Once they have created their account, they are then able to go in and choose what days and times they want to do clinicals based on availability of the sites. It is first come, first serve, so if the site is not available, it may be taken by someone already. For EMT, they only have to go to ER and EMS. We have 6 hospitals for ER, all with day shifts, at least one has night shifts. We also have at least 10 EMS services to use. For paramedic, we utilize at least 7 hospitals. Medics have to go to ER, ICU, Pediatrics, PICC, Telemetry, OB, OR, Cath Lab, and Respiratory Therapy. Again, we have day and night shifts available. For EMS, they utilize the same services as the EMT's. On any given day, we have at least 30 sites available with some places having more than one slot per site. The working adult has lots of choices and can pick up shifts around their work schedule.</p>
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This workforce solution was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The solution we necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, continued availability, or ownership.



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Appendix III: PSP Curriculum Review Report Subject Matter Expert Programmatic Reviews

Fire Science	Exceptional 4	Very Good 3	Good 2	Ineffective 1	No/insufficient Evidence 0	Rusty Sullivan, Reviewer
Curriculum Map, Career Ladder/Stackable Credential Documentation, Syllabi						Comments or recommendations specific to each section rated:
Program CIP code/s appropriate to program title and outcomes.			1			The CIP code (43.0203) is accurate and appropriate to programs title and outcomes.
Effective program structure (prerequisites, course sequence, stackable credential-structure provide a clear, logical path to completion).		2				The program structure is effective and creates a logical, proven and developed path to completion.
Outcomes aligned to occupational focus (industry skills and standards) and prepare students for appropriate industry certification/s.			3			The outcomes are aligned with current State of Missouri standards as defined by the National Fire Protection Association. Program outcomes for FSCI 108 Fire protection Systems and FSCI 102 Building Construction also meet the Fire and Emergency Services Higher Education core curriculum requirement/standard for professional development. Program outcomes for FSCI 205 Tactics and Strategies, FSCI 109 Legal Aspects of Emergency Services, FSCI 107 Fire Service Hydraulics, FSCI 103 Fire Investigation (1), also meet the Fire and Emergency Services Higher Education Non-core curriculum standard for professional development. Program could benefit further by adding more FESHE Core curriculum.
Outcomes are clearly stated.		4				The program outcomes are clearly and concisely stated.
Outcomes are introduced and reinforced effectively.		5				The outcomes are very effectively introduced and reinforced according to NFPA and FESHE standards through lectures, Online training, pre and post module assessments and the various certification exams.
Course objectives are clearly stated and measurable.		6				The course objectives are clearly and concisely stated in adherence to NFPA standards.
In multi-course programs, course objectives support one or more program or student learning outcome. In single-course programs, modules support one or more course objective.		7				Both the NFPA firefighter I & II and FESHE courses support the programs course objectives and its clearly stated outcomes.
General comments or recommendations:	Both the NFPA Firefighter I & II (training) and FESHE (education) courses support each other in National Fire Academy's Fire Service Professional Development initiative. Suggestion for the future: The Fire Science program coordinator should build toward National Fire Academy's Professional Development FESHE recognition.					

Fire Science		Exceptional 4	Very Good 3	Good 2	Ineffective 1	No/Insufficient Evidence 0	Rusty Sullivan, Reviewer
Instructional Materials and Lab Resources							Comments or recommendations specific to each section rated:
Support stated course or unit learning objectives.		1					The learning design directly supports the stated outcomes and objectives, and support the Current Firefighter I & II/FESHE certification exams.
Meet/reflect current industry practices and standards.	2						The materials and resources reflect current Firefighter I & II/FESHE standards and practices as defined by the NFPA and National Fire Academy's Professional Development initiatives.
Provide options for multiple learning styles.		3					Through its use of online training modules, classroom lectures, PDF's and assessments the programs Materials do support multiple learning styles.
Instructional materials are cited properly		4					The materials provide are licensed, certified, approved, and are cited properly.
There is evidence of materials and resources that support on-line or technology-enabled learning.	5						By using current computers, software and internet access along with online learning modules and PDF files The program strongly supports both online and technology based learning.
General comments or recommendations:	The program uses up-to-date firefighting equipment and strategies, making for a safe and effective training environment.						
Overview Table: Objectives, Modules/Units, Learning Activities and Assessments							Comments or recommendations specific to each section rated:
Modules/units are linked to course objectives.		1					Modules are well organized and linked directly and linked directly to the course objectives.
Learning activities promote achievement of stated module/unit objectives.		2					The activities reinforce the practical applications of the objectives and promote achievement with pre and post module assessments.
Learning activities provide opportunities for interaction and active learning.		3					The classes and modules provide excellent opportunities for active learning. This coupled with direct interaction with the teacher provides great learning opportunities.
Learning activities provide options for multiple learning styles.		4					The use of online modules coupled reading, classroom discussion and teacher interaction provides options for multiple learning styles.

Fire Science	Exceptional 4	Very Good 3	Good 2	Ineffective 1	No/Insufficient Evidence 0	Rusty Sullivan, Reviewer
Learning activities are linked to current industry practices, standards and certifications.		5				The activities are linked with current State of Missouri standards as defined by the National Fire Protection Association. Program activities for FSCI 108 Fire protection Systems and FSCI 102 Building Construction also linked to the Fire and Emergency Services Higher Education core curriculum requirement/standard for professional development. Program activities for FSCI 205 Tactics and Strategies, FSCI 109 Legal Aspects of Emergency Services, FSCI 107 Fire Service Hydraulics, FSCI 103 Fire Investigation (1), are also linked to the Fire and Emergency Services Higher Education Non-core curriculum standard for professional development.
Learning activities demonstrate evidence of innovation or enhancements to support adult learner success.		6				The Firefighter I & II and FESHE modules provide students with a working knowledge of firefighting and fire service leadership even if they have had no prior experience in emergency services.
Materials/resources (to include equipment, tools and software) are used in a way that students understand their purpose and use in industry settings.		7				The materials and resources are constructed and used in a way that all students should know their purpose as well as those of the various roles in the emergency services environment.
Assessments measure stated learning objectives and link to industry standards.		8				The assessments and modules are directly linked to NFPA standards as defined by the National Fire Academy's FESHE National Professional Development.
Assessments align with course activities and instructional materials and resources.		9				Assessments are done before and after each online module and clearly assess the student's knowledge and retention.
Assessments are sequenced throughout the instructional period to enable students to build on feedback.		10				The online modules with assessments provide instant feedback with constant feedback by the instructor.
Assessments are varied and appropriate to content.		11				The content of the assessments are appropriate to skill levels and subject matter of each chapter.
Assessments provide opportunities for students to measure their own learning progress.		12				The pre and post module assessments provide an excellent opportunity to gauge student development and prepare for the final certification test.
General comments or recommendations:	All activities and assessments are appropriate and in compliance with national firefighting standards.					

Fire Science	Exceptional 4	Very Good 3	Good 2	Ineffective 1	No/Insufficient Evidence 0	Rusty Sullivan, Reviewer
Innovative or Enhanced Strategies						Comments or recommendations specific to each section rated:
Evidence of industry input/standards in program design and curricular components.		1				The NFPA and FESHE programs, along with input and advice from the Joplin Missouri fire and police chiefs provide an advanced learning opportunity to students which reflects current emergency services standards. It's a well-designed program with a proven track record and a nationally recognized certification.
Evidence of program enhancements to support the adult learner.		2				The use of online training provides dedicated students with 24/7 access and gives them the opportunity to learn at their own pace. Reinforced by required classroom attendance it enhances the learner's ability to study and research on their own and validate their development.
If program has run long enough, is there evidence that program design and curricular components and enhancements are resulting in good or improving completion rates?		3				Evidence of the programs history was not present, however it can be safely stated based on national data that this program will be successful. With the shift from traditional to non-traditional students; colleges have had to develop more accommodating educational opportunities. This program has taken into account the various student learning styles and availabilities to develop a comprehensive and safe experience for all.
General comments or recommendations:	Crowder College's Fire Science program is effective, safe, and meets the NFPA/Missouri Division of Fire Safety's certification standards for Firefighter I & II, Fire Officer I and Fire Service Instructor I testing. The program also meets several of the FESHE core curriculum requirements for recognition and numerous non-core alternatives. The Fire Science Program should strive for the National Fire Academy's National Professional Development FESHE recognition when appropriate.					

Public Management	Exceptional 4	Very Good 3	Good 2	Ineffective 1	No/Insufficient Evidence 0	Dorinda Masters, Reviewer
Curriculum Map, Career Ladder/Stackable Credential Documentation, Syllabi						Comments or recommendations specific to each section rated:
Program CIP code/s appropriate to program title and outcomes.			1			CIP Code indicated was selected as the one most closely related to the program in the Division.
Effective program structure (prerequisites, course sequence, stackable credential-structure provide a clear, logical path to completion).			2			The degree program as designed provides introductory courses with a heavy emphasis on governmental units and functions in the public sector. Since the program overview (intent) includes career preparation in a variety of venues, including non-profit, it may be useful to potential students to have more exposure (and examples) of challenges, opportunities, differences and similarities in various work settings.
Outcomes aligned to occupational focus (industry skills and standards) and prepare students for appropriate industry certification/s.			3			Outcomes stated and aligned should provide a good foundation in preparation for work in the public sector.
Outcomes are clearly stated.		4				Outcomes are clear and to the point.
Outcomes are introduced and reinforced effectively.		5				Outcomes are stated well and connect with objectives for the two courses.
Course objectives are clearly stated and measurable.		6				Course objectives are stated well and are measureable through testing indicated.
In multi-course programs, course objectives support one or more program or student learning outcome. In single-course programs, modules support one or more course objective.		7				The two courses designed specifically for this program provide a natural progression from 101 to 201. Basic objectives in each course provide opportunities for expansion of information from 101 to 201 and for connections to be made when students go into BMGT 285. They should also provide a framework for students who will advance into the bachelor program.
General comments or recommendations:	With a program that includes a range of career possibilities beyond the public sector, it is recommended that the non-profit sector and the private (corporate) sector may have important information, ideas and resources to share. Representation from these sectors on the advisory committee can bring additional adjuncts with different perspectives and job opportunities for students.					
Instructional Materials and Lab Resources						Comments or recommendations specific to each section rated:
Support stated course or unit learning objectives.			1			Materials indicated provide basic textbooks, an internet site and identify basic tools and equipment needed by students.
Meet/reflect current industry practices and standards.			2			Basic materials and resources are appropriate to public management.

Public Management	Exceptional 4	Very Good 3	Good 2	Ineffective 1	No/Insufficient Evidence 0	Dorinda Masters, Reviewer
Provide options for multiple learning styles.			3			There are activities and assessments that include student participation in class: discussion, debate and on line research. Assessment is completed through written testing. While this provides opportunities for students who are able to communicate verbally and in writing, other methods may be required for students with limitations or disabilities. I understand this may be arranged through the college disabilities system.
Instructional materials are cited properly						Materials are cited appropriately.
There is evidence of materials and resources that support on-line or technology-enabled learning.		4				While there is evidence of materials and resources provided, there are many opportunities to add on line links for research and support materials that can be useful to students in finding and studying examples of work beyond state and federal government.
General comments or recommendations:			5			In an introductory course it is often useful to bring specific case studies to the students for analysis and for discussion. For example, using very different real world examples can help students consider who, what, when, where, how, etc., as it relates to incidents -- often resulting in disastrous outcomes. Real world examples can help students relate to what happens around them (and around the world) and can demonstrate how their specific jobs may be central to response(s) and actions (and implications resulting from lack of appropriate responses).
Overview Table: Objectives, Modules/Units, Learning Activities and Assessments						Comments or recommendations specific to each section rated:
Modules/units are linked to course objectives.		1				There is a natural link from modules and units to the related course objectives.
Learning activities promote achievement of stated module/unit objectives.			2			Basic learning activities are stated and appropriate. Additional ones can provide more applied learning.
Learning activities provide opportunities for interaction and active learning.			3			While appropriate, additional in class case study analysis, topic mapping, small group activities and study, in class topic presentations and others can be effective methods to include for enhanced student learning.
Learning activities provide options for multiple learning styles.			4			Basic learning activities are reasonable. Additional activities can expand student learning for those with different learning styles.

Public Management	Exceptional 4	Very Good 3	Good 2	Ineffective 1	No/Insufficient Evidence 0	Dorinda Masters, Reviewer
Learning activities are linked to current industry practices, standards and certifications.			5			Learning activities are basic and reasonable. Greater learning can occur for some students when activities are included that bring actual practice situations to the forefront.
Learning activities demonstrate evidence of innovation or enhancements to support adult learner success.			6			Basic learning opportunities are evident...using more innovative teaching and learning activities can help students make connections to real world situations, problems and solutions.
Materials/resources (to include equipment, tools and software) are used in a way that students understand their purpose and use in industry settings.			7			The use of the internet, software and other basic tools is important. Introducing additional resources and tools can be effective in helping students understand their use in actual practice in the work setting.
Assessments measure stated learning objectives and link to industry standards.			8			Written testing is indicated along with observation during discussions and debates. Are other assessments completed using discussions and debates?
Assessments align with course activities and instructional materials and resources.			9			Written testing is a standard in many introductory courses. It appears that the tests in the two courses will be designed on the textbook content and perhaps other materials provided in class through lectures.
Assessments are sequenced throughout the instructional period to enable students to build on feedback.			10			It appears that testing will take place as various course objectives and learning activities take place throughout the course.
Assessments are varied and appropriate to content.			11			Testing is listed as modules/units are presented.
Assessments provide opportunities for students to measure their own learning progress.			12			Students receiving results of tests are able to track their progress throughout the term to compare their progress and determine where they stand on earning a grade.
General comments or recommendations:	Students should have opportunities for hands on practice in class analyzing and finding solutions to problems and situations that occur in public management settings. This program can also provide positive benefits to students through field observations and service learning in related settings.					

Public Management	Exceptional 4	Very Good 3	Good 2	Ineffective 1	No/Insufficient Evidence 0	Dorinda Masters, Reviewer
Innovative or Enhanced Strategies	Comments or recommendations specific to each section rated:					
Evidence of industry input/standards in program design and curricular components.			1			While there is great representation from the public sector (fire, police, ambulance, etc.) on the advisory committee, there is no evidence of inclusion of the non-profit or private sector. Because there is an indication that these sectors are included in the program, it is important to capture the expertise and advice of people in totally different career settings.
Evidence of program enhancements to support the adult learner.		2				Adult learners are a major focus of this program as indicated in the Overview and in other documents.
If program has run long enough, is there evidence that program design and curricular components and enhancements are resulting in good or improving completion rates?					3 NA	This is a new program and I do not have this information.
General comments or recommendations:	As stated previously, it is advisable to add two or three people from other sectors to the advisory committee to provide balance and depth of perspective to a wider range of career paths. It has been my experience that the non-profit world is very interested in students who are prepared in public management/administration.					

Criminal Justice	Exceptional 4	Very Good 3	Good 2	Ineffective 1	No/Insufficient Evidence 0	William Tucker, Reviewer
Curriculum Map, Career Ladder/Stackable Credential Documentation, Syllabi						Comments or recommendations specific to each section rated:
Program CIP code/s appropriate to program title and outcomes.			1			The CIP code 43.0103, Criminal Justice/Law Enforcement Administration, title and description suggest the student will be prepared to apply theories and practices of organization management and criminal justice to the administration of public law enforcement agencies and operations. However, only one course outcomes, CJ: 290 – Police Supervision and Management, appear to address administration of public law enforcement agencies and operations. Of the limited Classification of Instructional Program codes, consideration should be given to using CIP 43.0104 rather than 43.0103.
Effective program structure (prerequisites, course sequence, stackable credential-structure provide a clear, logical path to completion).		2				Effective program structure provides a clear logical path to completion. However, from the documents I received, there does not appear to be a stackable credential structure, which is not unusual for this program.
Outcomes aligned to occupational focus (industry skills and standards) and prepare students for appropriate industry certification/s.		3				Outcomes are aligned for occupational focus. Two of the courses are highly recommended for the Police Academy at MSSU. It should be noted there is no national accreditation for criminal justice programs.
Outcomes are clearly stated.		4				Outcomes are clearly stated. See General comments or recommendations below.
Outcomes are introduced and reinforced effectively.		5				Outcomes are introduced to the students. General comments or recommendations below.
Course objectives are clearly stated and measurable.		6				Course objectives are clearly stated and measurable. General comments or recommendations below.
In multi-course programs, course objectives support one or more program or student learning outcome. In single-course programs, modules support one or more course objective.		7				The different courses' objectives and learning outcomes support each other in the pathway.
General comments or recommendations:						CJ 290, Police Supervision and Management syllabus should be improved with more clear statements of outcomes and student assessments. Noticeably missing are the instructor's expectations from the student, the instructor's contact information and grading scale. Because I received only two pages of CJ 290 syllabus, it's possible I did not receive the entire syllabus.

Criminal Justice	Exceptional 4	Very Good 3	Good 2	Ineffective 1	No/Insufficient Evidence 0	William Tucker, Reviewer
Instructional Materials and Lab Resources						Comments or recommendations specific to each section rated:
Support stated course or unit learning objectives.			1			With the exception of CJ 290, Police Supervision and Management, the instructional materials clearly support the stated course objectives.
Meet/reflect current industry practices and standards.		2				Instructional materials reflect current practices of criminal justice professionals and some instructors report having current or recent experience in the subject matter.
Provide options for multiple learning styles.			3			Through practice quizzes, research papers, lectures and interactive discussion boards, the program support multiple learning styles. However, it appears the student does not have an option to choose a learning style of choice.
Instructional materials are cited properly		4				Instructional materials are cited properly and with specificity.
There is evidence of materials and resources that support on-line or technology-enabled learning.		5				The program uses both on-line, hybrid and traditional classroom learning environments.
General comments or recommendations:	The instructional materials used in these courses are provided by pertinent textbook book publishers known to make relevant study resources available to students. As stated in the previous section, CJ 290 needs improvement.					
Overview Table: Objectives, Modules/Units, Learning Activities and Assessments						Comments or recommendations specific to each section rated:
Modules/units are linked to course objectives.		1				Weekly schedules of learning activity are linked to course objectives.
Learning activities promote achievement of stated module/unit objectives.		2				Weekly schedules of learning activity promote achievement of stated module/unit objectives.
Learning activities provide opportunities for interaction and active learning.		3				Online courses provide opportunities for interaction and active learning via the required use of Blackboard's discussion boards. Hands-on lab exercises also provide opportunities for active learning.
Learning activities provide options for multiple learning styles.		4				Use of lab exercises, online discussion boards, teacher interaction and individual reading assignments provide options for multiple learning styles.
Learning activities are linked to current industry practices, standards and certifications.		5				CJ 102, CJ 190 and CJ 200 hands-on lab exercises and practical demonstrations are linked to current industry practices and standards.

Criminal Justice	Exceptional 4	Very Good 3	Good 2	Ineffective 1	No/Insufficient Evidence 0	William Tucker, Reviewer
Learning activities demonstrate evidence of innovation or enhancements to support adult learner success.		6				The structure of reading assignments and duration of quizzes and tests availability support adult learning success for those who have job and family responsibilities.
Materials/resources (to include equipment, tools and software) are used in a way that students understand their purpose and use in industry settings.		7				CI 102 hands-on materials and resources are used in a way to make students understand their purpose and use.
Assessments measure stated learning objectives and link to industry standards.		8				Assessments measure stated learning objectives as covered in the relevant chapter or unit of learning.
Assessments align with course activities and instructional materials and resources.		9				Weekly chapter assessments clearly align with course activities and instructional materials and resources.
Assessments are sequenced throughout the instructional period to enable students to build on feedback.		10				The results of quizzes and exams given at the end of each chapter or unit of learning enable students to build on feedback.
Assessments are varied and appropriate to content.		11				Weekly assessments covering different chapter are varied and appropriate to content.
Assessments provide opportunities for students to measure their own learning progress.		12				Weekly assessments clearly provide opportunities for students to measure their own learning progress.
General comments or recommendations:						
Innovative or Enhanced Strategies					Comments or recommendations specific to each section rated:	
Evidence of industry input/standards in program design and curricular components.		1				The course offerings and sequencing are designed to be consistent with criminal justice programs across the country.
Evidence of program enhancements to support the adult learner.		2				Using online and hybrid instructional delivery formats allows adult learners to access course materials 24 hours, seven days a week using various data access and communications technologies.
If program has run long enough, is there evidence that program design and curricular components and enhancements are resulting in good or improving completion rates?					NA	Unable to assess with information provided.
General comments or recommendations:						

Emergency Medical Technician/Paramedic	Exceptional 4	Very Good 3	Good 2	Ineffective 1	No/Insufficient Evidence 0	Earl Neal, Reviewer
Curriculum Map, Career Ladder/Stackable Credential Documentation, Syllabi						Comments or recommendations specific to each section rated:
Program CIP code/s appropriate to program title and outcomes.		1				The CIP is appropriate to the program and outcome.
Effective program structure (prerequisites, course sequence, stackable credential-structure provide a clear, logical path to completion).			2			The program structure is effective; the sequence is adequate to understand the path to completion. Prerequisites could be included in the suggested plan of study (EMT Licensure, AHA CPR, etc.) Also are immunizations, police background checks and TB required?
Outcomes aligned to occupational focus (industry skills and standards) and prepare students for appropriate industry certification/s.	3					Outcomes are aligned well with industry standards. Expert adjuncts and Advisory Committee members are used effectively to obtain these outcomes.
Outcomes are clearly stated.	4					Outcomes are clearly stated and understandable.
Outcomes are introduced and reinforced effectively.	5					Outcomes are introduced and reintroduced very effectively.
Course objectives are clearly stated and measurable.			6			Course objectives are clearly stated and measurable according to the National Standards and Curriculum.
In multi-course programs, course objectives support one or more program or student learning outcome. In single-course programs, modules support one or more course objective.			7			The EMT, Paramedic and online courses meet the course objectives.
General comments or recommendations:	The EMT and Paramedic programs are well thought out and structured very well. Need to mention all prerequisites required in the courses.					
Instructional Materials and Lab Resources						Comments or recommendations specific to each section rated:
Support stated course or unit learning objectives.	1					The material and labs support course and learning objectives well.
Meet/reflect current industry practices and standards.	2					The material and lab resources are aligned with the industry standards as defined by the National Curriculum and National Standards.
Provide options for multiple learning styles.		3				Multiple learning styles are met with learning materials and labs. Could mention resources for challenged students.
Instructional materials are cited properly	4					All instructional materials are listed and cited properly.
There is evidence of materials and resources that support on-line or technology-enabled learning.					5	Kind of vague on how the program works and how the students progress through the online program.

Emergency Medical Technician/Paramedic	Exceptional 4	Very Good 3	Good 2	Ineffective 1	No/Insufficient Evidence 0	Earl Neal, Reviewer
General comments or recommendations:						
Overview Table: Objectives, Modules/Units, Learning Activities and Assessments					Comments or recommendations specific to each section rated:	
Modules/units are linked to course objectives.	1					The modules are linked to objectives, activities and assessments very well. The table used outlines the correlation and expectations.
Learning activities promote achievement of stated module/unit objectives.	2					The use of quizzes, homework, competency assessments and unit exams demonstrates the students' success of all learning objectives.
Learning activities provide opportunities for interaction and active learning.		3				Learning activities provide an excellent opportunity for the students to learn from adjunct instructors, field and clinical preceptors and the course instructor.
Learning activities provide options for multiple learning styles.	4					The online course allows the students to come in for all lab and clinical opportunities to give the student the personal interaction with instructors and preceptors.
Learning activities are linked to current industry practices, standards and certifications.	5					Learning activities are linked to current industry practices and/or tested by the use of NREMT testing in both practical and written forms. These standards are set by the industry experts in the field.
Learning activities demonstrate evidence of innovation or enhancements to support adult learner success.		6				The program gives the student the basics needed to get an EMT license and prepare him/her for the paramedic program. The Paramedic programs provide all of the advance knowlede which is accomplished very well through the learning activities.
Materials/resources (to include equipment, tools and software) are used in a way that students understand their purpose and use in industry settings.	7					The materials and tools are well thought out and meet and/or exceed the state and national standards. The students have a great opportunity to obtain proficiency on all the skills needed to enter the EMS field.
Assessments measure stated learning objectives and link to industry standards.		8				The assessments are directly linked to the objectives and standards outlined in the national curriculum and NREMT.
Assessments align with course activities and instructional materials and resources.		9				There are quizzes and unit exams after each class sessions as well as competency evaluations after each pertinent section.

Emergency Medical Technician/Paramedic	Exceptional 4	Very Good 3	Good 2	Ineffective 1	No/Insufficient Evidence 0	Earl Neal, Reviewer
Assessments are sequenced throughout the instructional period to enable students to build on feedback.	10					Assessments are done after each section utilizing written testing and practical testing and all evaluations are reviewed upon completion giving adequate feedback to students.
Assessments are varied and appropriate to content.			11			The content of the assessments aer built around each chapter objectives as well as the skill level of the student.
Assessments provide opportunities for students to measure their own learning progress.		12				Assessments receive immediate feedback from instructors; student recieve written scores and reasoning for each answer.
General comments or recommendations:						
Innovative or Enhanced Strategies	Comments or recommendations specific to each section rated:					
Evidence of industry input/standards in program design and curricular components.		1				An advisory council was setup immediately consisting of various disciplines throughout the industry. The council worked to setup standards, curriculum, and program design. The council also along with medical direction reviewed all pertinent documents and data associated with the program.
Evidence of program enhancements to support the adult learner.		2				All demographics for the program were developed and assessed for the adult learner including variable schedules and some online portions.
If program has run long enough, is there evidence that program design and curricular components and enhancements are resulting in good or improving completion rates?					NA	There was insufficient data to determine adequate length of the program to support improvement.
General comments or recommendations:	The program has taken adequate steps to ensure that it is conducive t the adult learner. Also, the program has done a good job in establishing cohort learning strategies to get good participation. Overall the program review documents are very well written, concise and suggest it is a successful program that promises great student outcomes.					

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