INTRODUCTION
This document highlights key findings from the Research and Planning Group for California Community Colleges’ (RP Group) external evaluation of Long Beach City College’s (LBCC) Round 3 Trade Adjustment Assistance Community College and Career Training (TAACCCT) Grant.

WHAT IS TAA 2.0?
The LBCC program, called TAA 2.0 was designed to prepare unemployed and underemployed Long Beach, CA residents for entry into living-wage, career-potential jobs in two of the region’s fastest growing industries: construction and low-emission, heavy duty transportation.

TAA 2.0 offered two training tracks: Construction Pre-Apprenticeship Program (CPAP) and Preventative Maintenance and Alternative Fuels (called Heavy Duty). Both tracks were short-term, delivered not-for-credit, and culminated in certifications meaningful to industry, including unions. The curriculum for both training tracks was industry-driven, and instructors brought a wealth of real-world industry experience to the classroom.

LBCC's training initiative began as TAA 1.0, which focused on career paths in engineering technology from October 2013-December 2015. Planning for TAA 2.0 began in May 2015 when the college assessed its progress and decided that challenges fundamental to the program warranted a substantive reorientation. TAA 2.0 was launched in January 2016 and concluded August 31, 2017.

WHAT WILL I FIND IN THE EVALUATION SNAPSHOTS?
Two Evaluation Snapshots follow. The first Snapshot is an evaluation summary of TAA 2.0’s CPAP track; the second Snapshot is an evaluation summary of TAA 2.0’s Heavy Duty track. Each Snapshot provides high-level findings related to the following evaluation questions:

• How did the TAA 2.0 implementation approach change over time for each of the two training tracks?
• Who enrolled in TAA 2.0, and how satisfied were they with the training received?
• What did unions, employers, and other stakeholders think about TAA 2.0 in terms of how effectively the training tracks responded to industry needs?
• How many participants in the two training tracks completed each program?
• How many completers found training-related jobs, and how long did it take them?
• What did LBCC learn from TAA 2.0 that could inform both future efforts at the college and other community college initiatives designed to help individuals facing barriers to employment embark on meaningful career pathways?

The Evaluation Snapshots also introduce the reader to several TAA 2.0 participants and participating union and employer representatives.

HOW WAS TAA 2.0 EVALUATED?
The RP Group's evaluation included: site visits; focus groups with participants and instructors; a review of TAA 2.0 reports, promotional material, and other documents; one-on-one interviews in person or by telephone with program partners, employers, union leaders, and other stakeholders; participant exit surveys; exit interviews with LBCC’s TAA 2.0 team and partners; and collection and analysis of participant outcome data, including employment status, pre- and post-program wages, and time to employment. Formative and summative results were reviewed and discussed during regular meetings with the TAA 2.0 team.

This evaluation called for a high level of flexibility. The project changed repeatedly, sometimes in response to evaluation recommendations and sometimes because of input provided by participants, unions, and other stakeholders. The TAA 2.0 team was extremely entrepreneurial, continually making improvements and developing relationships with employers and other stakeholders. The lessons they learned and that we learned in the process can help guide community colleges that want to respond to urgent labor market needs with nimble, industry-guided, short-term training programs.

Dr. Darla Cooper, Interim Executive Director, RP Group

In only 18 months, the LBCC team not only met at least 50% of their goals, but also established themselves as the flagship training provider for the Building Trades Council MC3 curriculum establishing robust and long-term union relationships resulting in job placements for underrepresented populations. LBCC also has new curriculum and industry relationships in emerging technology thanks to the TAACCCT work in heavy duty alternative fuels. Our students benefit from relevant curriculum, robust employer relationships, and pipelines to well-paying careers.

Melissa Infusino, Director of Workforce Development, LBCC
EVALUATION SNAPSHOT: CONSTRUCTION PRE-APPRENTICESHIP PROGRAM

Target Population
Unemployed and underemployed individuals from populations that have been historically underrepresented in construction sector union jobs.

Program Components

OUTREACH & INTAKE
- Outreach to community based organizations, churches, veterans groups, elected officials, and other sources of referral
- Orientations
- Applicant interviews

CPAP TRAINING PROGRAM
- Delivery of the building trades’ official 120-hour Multi-Craft Core Curriculum (MC3)
- Occupational Safety & Health Administration (OSHA) 10 Certification
- First Aid & Cardiopulmonary Resuscitation (CPR) Certification
- Physical training for construction (24 hours)

SUPPORT SERVICES
- Funds to assist with transportation costs (bus passes & gas cards), union dues, tools, equipment, clothing, and boots
- Access to Pacific Gateway Workforce Investment Network (PGWIN) resource center, career counseling support, and union application assistance
- Tutoring
- Office hours with instructors
- Life and career counseling, soft skills building and interview readiness workshop provided by TAA 2.0 CPAP team members

JOB PLACEMENT ASSISTANCE
- Job search workshops
- Information about job opportunities
- Career fairs
- Referrals to additional training programs
- Follow-up calls to check on employment status and need for additional support

OUTREACH & INTAKE
- Recruitment and promotional activities delivering a strong message about the need for motivation and persistence among participants
- Social media presence and frequent promotion of events, testimonials, news and photos
- Resume writing (8 hours)
- Industry speakers
- Field trips to construction sites and union apprenticeship training centers

These components were added as the program developed

Participants

GENDER
- Male 93%
- Female 7%

ETHNICITY
- Latino 46%
- African American 31%
- White 12%
- Asian 5%
- Multiethnic 2%
- Other/Unknown 5%

EMPLOYMENT STATUS UPON ENTRY INTO CPAP
- Unemployed 62%
- Part-Time 29%
- Full-Time 9%

PARTICIPANT CASE STUDY 1*
Lydia applied to Local 433’s Ironworking Apprenticeship Program while she was still attending the CPAP, but learned there was a long waiting list. She had her lucky break during a class visit to a construction site where she approached the supervisor and showed such determination and commitment that she was called up shortly afterwards to participate in a special boot-camp for women in the trades. After completing the tough and physically demanding three-week boot-camp, Lydia was in. She reflects, “You have to stay in shape. This is hard physical work.” She adds, “You cannot wait for the next person to do things for you. It takes work to get in [to the union].”

PARTICIPANT CASE STUDY 2*
Rafael, a veteran, had been unemployed for three months when he started the CPAP. After completing the CPAP training and then passing Local 12’s apprenticeship test for surveyors, he now works at least 40 hours a week. “I sometimes have to get up for work at 2 am,” he said. “It is hard, but I love it as soon as I start working.”

* Each case study is based on an interview with a program participant, union representative, or employer and derived from transcripts and notes recorded with the interviewee’s permission. The names of the interviewees have been changed to protect their privacy.
Implementation Analysis

Fidelity of Implementation
The TAA 2.0 team showed a high level of entrepreneurship and flexibility in continuously improving program components in response to input from participants, instructors, partners, and union and employer stakeholders, as well as from the evaluation team. This process included the following changes:

- **Outreach and intake**: Shift from focusing on maximizing enrollment to recruiting candidates who were highly motivated, committed to the trades, physically fit, and willing and able to translate the resources, support, and networking the program provided into an apprenticeship opportunity—even if it takes months to achieve this goal.

- **Training program**: Addition of physical strength training and resume writing as well as expansion of hands-on applications, industry and union site visits, and guest speakers.

- **Support services**: Increased focus on career counseling, soft skills development, and other support aimed at preparing participants to enter the labor market.

- **Job placement assistance**: Recognition that longer-term support was required by many program completers, such as check-ins, training and job referrals, updates on the status of major construction projects, and alerts regarding industry hiring and union testing opportunities. Addition of career fairs offered to connect program completers with local employers. Also help defraying the costs of tools, union fees, and clothing.

Participant Satisfaction (Based on survey responses from 141 or 66% of completers)
Almost all survey respondents (98%) would recommend the CPAP to others. A large majority of responders indicated they were ready to apply the new skills and competencies learned in the program. Participants expressed a very high level of satisfaction with the CPAP instructional team, which included industry and union representatives as well as industry veterans with hands-on knowledge of what is required to succeed in the trades.

Effectiveness of Partnerships
Pacific Gateway Workforce Investment Network (PGWIN) partnered with LBCC to provide critical support in the areas of recruitment, assessment, support services, and especially job preparation and placement. Another partner, Modern Times, organized two successful career fairs.

TAA 2.0 partnered with two community-based organizations (CBO) serving at-risk youth. Some communication challenges emerged between TAA 2.0 and these CBO partners, especially regarding the identification of candidates ready to benefit from the training. Nevertheless, one of the CBO partners reported successful employment outcomes for 27 of 28 clients referred to the CPAP, including two program completers finding apprenticeships and three additional trainees finding training-related work in the construction sector.

Outcomes Analysis

<table>
<thead>
<tr>
<th>Outcomes Analyzed</th>
<th>Target</th>
<th>Outcomes</th>
<th>%Target Achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrolled</td>
<td>424</td>
<td>243</td>
<td>57%</td>
</tr>
<tr>
<td>Completed</td>
<td>383</td>
<td>187</td>
<td>49%</td>
</tr>
<tr>
<td>Earned credentials</td>
<td>298</td>
<td>189</td>
<td>63%</td>
</tr>
<tr>
<td>Employed</td>
<td>288</td>
<td>137</td>
<td>48%</td>
</tr>
<tr>
<td>Employed in apprenticeships</td>
<td></td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>Experienced wage increase</td>
<td></td>
<td>72</td>
<td></td>
</tr>
</tbody>
</table>

* Each case study is based on an interview with a program participant, union representative, or employer and derived from transcripts and notes recorded with the interviewee’s permission. The names of the interviewees have been changed to protect their privacy.
When the evaluation concluded 7/31/2017, CPAP had met about 50% of the proposed outcomes, but this had been achieved in approximately half the time that was originally committed to accomplish these goals. Further, many participants had not had enough time to find jobs so the findings reported here are the preliminary rather than the final outcomes.

**Key Messages from Interviews with Program Completers 1-13 Months After Completion**

- **The CPAP shows you the path to a union job.** The program introduces participants to the opportunity of a union career path; teaches them how to navigate their way to an apprenticeship; and provides access to a network that can help them make the right connections.

- **You have to be patient and committed.** For those who are committed, motivated, and willing to persist in a job search that can require months before it pays off, the reward can be life-changing – union wages, paid training, benefits, and a built-in career ladder.

- **You have to really want it!** For those who are not fully committed to this line of work – including the hard physical demand of construction jobs-- other training programs may be a better choice.

**Lessons Learned**

- **Training alone is not sufficient for success.** Recruitment, assessment of applicants’ “match” with the program, targeted support services, and especially job placement assistance are essential in order to reach and effectively serve the targeted populations. Community colleges need to consider which of these components they are best equipped to deliver, and all partners need to be aware of the real cost of delivering the program.

- **The ability to quickly adjust content is essential** to the effective delivery of pre-apprenticeship programs. Ideally, the scheduling of sessions should be driven by construction cycles.

- **Partnering with unions can be a complex proposition.** Each union has different requirements, schedules, and key players. Building and growing partnerships with unions takes time and dedicated effort.

- **The CPAP could have cultivated additional partnerships with non-union contractors** in the building trades, which may have increased placement of program completers. It is also possible that non-union contractors may have responded with more enthusiasm than their union counterparts to offers of on-the-job-training and other subsidized employment provided as incentives to hire entry-level workers with barriers to employment.

**Conclusion**

While the CPAP was not successful in fully meeting the proposed outcomes goals, the CPAP performed well, continuously improving each program component and developing a network of powerful relationships with community partners, unions, and industry representatives that can be parlayed into additional opportunities for the college and Long Beach job-seekers. Moreover, if the CPAP had launched at the beginning of the grant period, the outcomes goals would likely have been fully achieved, or even exceeded.

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EVALUATION SNAPSHOT: HEAVY DUTY

Target Population
Unemployed and underemployed individuals from populations that have historically been underrepresented in the heavy duty vehicle preventative maintenance and alternative fuels sectors.

Program Components

<table>
<thead>
<tr>
<th>ORIGINAL TRAINING PROGRAM</th>
<th>REVISED TRAINING PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MODULAR TRAINING PROGRAM</strong></td>
<td><strong>SUPPORT SERVICES</strong></td>
</tr>
<tr>
<td>• Three-week, 80-hour program</td>
<td>• Office hours with instructors</td>
</tr>
<tr>
<td></td>
<td>• Life and career counseling from TAA 2.0 Heavy Duty team members</td>
</tr>
<tr>
<td></td>
<td>• Office hours with Modern Times</td>
</tr>
<tr>
<td></td>
<td>• CBO client support services</td>
</tr>
<tr>
<td><strong>GENDER</strong></td>
<td><strong>ETHNICITY</strong></td>
</tr>
<tr>
<td>Male</td>
<td>Latino</td>
</tr>
<tr>
<td>Female</td>
<td>African American</td>
</tr>
<tr>
<td>96%</td>
<td>54%</td>
</tr>
<tr>
<td>4%</td>
<td>21%</td>
</tr>
<tr>
<td>8%</td>
<td>13%</td>
</tr>
<tr>
<td>1%</td>
<td>6%</td>
</tr>
<tr>
<td>These components were created and added as the program developed.</td>
<td></td>
</tr>
</tbody>
</table>

Participants

**Implementation Analysis**

**Fidelity of Implementation**
The TAA 2.0 team showed a high level of entrepreneurship and flexibility in continuously improving program components in response to input from employers, participants, instructors, partners, and the evaluation team. What was conceived as an 80-hour, three-week training program was revised based on stakeholder input to a modular design offering stackable blocks of instruction with a 40-hour core component.

The revised design also added the following components to the training:

- **Support Services**: Addition of life and career counseling provided by instructors, the TAA 2.0 Heavy Duty team, and Modern Times.

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• **Job Placement Assistance**: Recognition that participants needed assistance preparing for interviews and identifying employers. Addition of job counseling services, resume writing, mock interviews and career fairs. Hiring of consultant to track and re-connect with individuals who participated in the original 80-hour Heavy Duty program and in subsequent pilot modules. Inclusion of these participants in invitations to workshops and career fairs.

• **Employer Incentives**: Leveraging of a California program that incentivizes employers to upgrade the skills of incumbent workers and partial reimbursement for on-the-job training of incoming workers.

**Participant Satisfaction (Based on survey responses from 45 or 28% of completers)**

All survey respondents (100%) were “very likely” (92%) or “likely” (8%) to recommend the Heavy Duty program to others. Participants expressed a very high level of satisfaction with the Heavy Duty instructional team and with the emphasis on hands-on learning. Almost all survey respondents wanted to enroll in one or more additional Heavy Duty training modules.

**Effectiveness of Partnerships**

Partner Modern Times played a key role in beginning to build a network with potential employers and other key stakeholders. Modern Times delivered two successful job fairs. However, Modern Times commented that the resume-writing and mock-interview preparation should have been built into the training instead of being voluntary and delivered after the end of a module. Modern Times also noted that many participants would have benefited from soft skills training.

TAA 2.0’s at-risk youth-serving community-based organization (CBO) partners expressed enthusiasm about the opportunity the training program offered for their clients to enter the job market. Some challenges persisted in terms of communication between LBCC and these CBO partners about the motivation and commitment required for successful participation in the modules.

**Outcomes Analysis**

The modular version of the Heavy Duty training track launched only seven months before grant support ended. As such, the participant employment outcomes targeted in the grant proposal were not achieved, and overall it is too early to meaningfully report on employment outcomes achieved by the first cohorts of training participants from the modular training.

**Enrollment and Completion Outcomes**

<table>
<thead>
<tr>
<th></th>
<th>Target</th>
<th>Outcomes</th>
<th>% Target Achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrolled</td>
<td>375</td>
<td>161</td>
<td>43%</td>
</tr>
<tr>
<td>Completed</td>
<td>338</td>
<td>138</td>
<td>41%</td>
</tr>
</tbody>
</table>

Nonetheless, it is noteworthy that despite the short implementation period, Heavy Duty achieved 43% of its enrollment goal and 41% of its completion goal. Furthermore, the rate of enrollment increased over time as awareness of the training opportunity increased among potential participants and employers. Had time not been lost due to a reorientation of the original TAA 1.0 program and the redesign of the program, the Heavy Duty program may well have met the enrollment and completion targets LBCC proposed.

"So many people are retiring or working beyond retirement age. There’ll be lots of opportunities for the right people. You have to be motivated, want to learn, not be afraid to get hands dirty."

*Regional General Manager, Long Beach Recycling Company*

With too little available to assess employment outcomes, the RP Group conducted interviews with employers, asking them about their demand for workers and about the employment prospects of Heavy Duty participants. Their insights and perspectives, also presented in the case study sidebars on

**EMPLOYER CASE STUDY 2**

We sent two people to the Heavy Duty training. We have another ten that I’d like to send to the 10-hour preventative maintenance course. There is a need for job seekers who can work with hydraulics and diagnostic tools – and we need people with welding skills. There is a [career] path there. You start as at $18/hour and then become a mechanic’s helper, earning $23/hour. Then, as the next step you become a mechanic and you are looking at $34/hour. So many people are retiring or working beyond retirement age. There’ll be lots of opportunities for the right people. You have to be motivated, want to learn, not be afraid to get hands dirty.

*Representative from national truck rental company*

**EMPLOYER CASE STUDY 3**

We have more openings than candidates, but there are not enough people with an interest in technical jobs. I went to the TAA 2.0 career fair. It was very organized and I spoke with about half of the people from the program. They seemed very motivated. We have our own training program, but we like to see people coming in with some training in addition to a high school diploma.

*Regional General Manager, Long Beach Recycling Company*

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these pages, included the following observations:

- It is hard to find people who want to work in technical, blue-collar jobs. The Heavy Duty modules provide an excellent introduction to what is required, like getting under a recycling truck that needs maintenance. The LBCC program also highlights the rewards of working in an industry that has career pathways and offers living wage jobs and in many cases health and retirement benefits.
- More than one-third of the heavy duty workforce is about to retire and job opportunities abound, especially for mechanics and welders. Employers interviewed liked the job fairs and the opportunity to meet potential replacement workers.
- Several interviewees have already or are planning to enroll incumbent workers in the Heavy Duty training modules.
- Although many Heavy Duty employers have internal training programs, entry-level job seekers need to have a high school diploma and some technical training. Motivation is key. Several employer interviewees reported that Heavy Duty participants had not responded to calls inviting them to job interviews.
- Heavy Duty offers several pathways for advancement. One takes the following path: technician to senior technician to fleet manager. Entry level is $20/hour. Another path is technician to mechanic’s helper to mechanic. Entry level is $18/hour.

**Lessons Learned**

- **Training alone is not sufficient for success.** On the industry side, employers need to be engaged, a process that requires a continuous investment of personnel time. On the participant side, recruitment strategies must correspond with the target population and communicate both the requirements and opportunities associated with the program. Long-term job placement support is also necessary to prepare entry-level workers for success and connect them with prospective employers.
- **The ability to quickly make adjustments in content and delivery is essential** to respond to (1) new skills and competencies required by the rapidly developing clean energy/alternative fuels sector, and (2) training needs of employers with different manufacturing processes and requirements. As such, this type of training is best delivered not-for-credit, enabling colleges to be more nimble and flexible.
- **While technical training is important to employers, participant motivation and mastery of basic soft skills are equally essential for successful job placement.**
- **Opportunities for peer-learning are created when modules include both incumbent workers and individuals with limited experience.** Initial concern about combining these two groups in one classroom proved unfounded and the recommendation is to build this diversity into the cohort whenever possible. The **local demand for technicians and mechanics will continue to increase as the current workforce retires.** LBCC has the opportunity to respond to this demand by leveraging the Heavy Duty training modules, the excellent instructional team, and the new industry partners.

**Conclusion**

The modularized version of Heavy Duty launched too late for the program to fully realize its potential during the grant period. Delays resulted from the reorientation from TAA 1.0 to TAA 2.0; the change in delivery format from 80 hours of training to modular delivery; the time required by the small TAA 2.0 team to launch and develop the CPAP track; and the initial reliance on one employer partnership that did not materialize as envisioned. However, the Heavy Duty training track’s potential to effectively meet industry needs was underscored when time and other resources were invested in identifying and developing additional employer partners.

To realize the potential of the Heavy Duty program and others like it, LBCC must continue to develop and expand employer partnerships as well as determine how to effectively market training programs to motivated candidates who can benefit from the living wage and career-oriented employment opportunities created by alternative fuels and heavy duty maintenance employers.

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