



TAACCCT Goals, Design, and Evaluation

The Trade Adjustment Assistance Community College and Career Training Grant Program Brief 1

Kelly S. Mikelson, Lauren Eyster, Christin Durham, and Elissa Cohen

February 2017

The Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant program is a \$2 billion federal workforce investment aimed at helping community colleges across the nation increase their capacity to provide education and training programs for in-demand jobs. The US Department of Labor (DOL) administers the seven-year grant program in partnership with the US Department of Education.¹

This brief highlights the goals of the TAACCCT grant program and provides an overview of evaluation activities for the four rounds of TAACCCT grants. Using information from grantee documents, third-party evaluation plans, and the solicitations for grant applications (SGAs) from all four rounds of grants, this brief describes grant requirements, proposed evaluation designs, and TAACCCT grant funding for evaluations.² The brief concludes with a preview of the national evaluation of the TAACCCT grant program.

BOX 1

National Evaluation of the TAACCCT Grant Program

This brief is the first of four briefs from the national evaluation of the TAACCCT grants produced by the Urban Institute under contract to the US Department of Labor (DOL). The national evaluation³ will document and assess the implementation and outcomes of the TAACCCT grants and synthesize the evidence from the third-party evaluations of the grants. This brief focuses on TAACCCT grant goals, the grants' design, and evaluation activities. Three other briefs focus on grantee characteristics; grant approaches, industries, and partnerships; and early results from the grants. The views expressed are those of the authors and should not be attributed to DOL, nor does mention of trade names, commercial products, or organizations imply endorsement of same by the US Government.

Overview of the TAACCCT Grant Program

Businesses seek to recruit, hire, and retain skilled workers for high-wage, high-skill occupations in an increasingly competitive global economy. Community colleges, public institutions of higher education primarily offering programs of two years or less, play a major role in developing a skilled workforce. Developing demand-driven education and training programs that meet the needs of employers, however, can be challenging because of resource and institutional constraints.

Congress authorized the TAACCCT grant program as part of the American Recovery and Reinvestment Act of 2009 to increase the capacity of community colleges to meet local and regional labor demand for a skilled workforce. The Health Care and Education Reconciliation Act, signed in March 2010, provided the TAACCCT program with nearly \$2 billion in funding over fiscal years 2011–14, or approximately \$500 million annually over four rounds of grants. DOL, which administers the grants, funded a total of 256 three- to four-year grants to institutions of higher education offering programs that can be completed in two years or less. Figure 1 provides a diagram of the periods of performance and annual reporting years (fiscal years) for the four rounds of TAACCCT grants. DOL encouraged a variety of activities (box 2).

FIGURE 1

Periods of Performance by Round of TAACCCT Grant, All Rounds

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Round 1	October 2011–September 2015						
Round 2		October 2012–September 2016					
Round 3			October 2013–September 2017				
Round 4				October 2014–September 2018			

Source: Authors' adaptation of DOL Employment and Training Administration documentation.

Notes: DOL allowed Round 1 grants to be extended up to four years. The original period of performance was three years. Grantees have an additional three months after the grant period ends to complete reporting requirements.

BOX 2

Types of Allowable TAACCCT-Funded Activities

Unlike many DOL grant programs, the TAACCCT grant program does not pay for the cost of training but rather funds the development of infrastructure. Community colleges were encouraged to build institutional capacity in several ways, including

1. hiring or training additional instructors or staff (the grants included the costs of salaries and benefits),
2. developing facilities and infrastructure (specifically, renovating educational spaces and purchasing equipment that supports or improves Programs of Study),
3. developing curricula for upload to a repository of free open educational resources (www.SkillsCommons.org),
4. conducting needs assessments of students,
5. providing student supports and services (e.g., financial, academic, or personal),
6. emphasizing transferability and articulation (for credit and credentials), and
7. using TAACCCT funding to leverage additional resources.

Source: TAACCCT solicitation for grant applications, Rounds 1–4. <https://www.doleta.gov/taaccct/applicantinfo.cfm>.

What Are the TAACCCT Grant Program’s Goals?

Funding eligible institutions⁴ in all 50 states, the District of Columbia, and Puerto Rico, the TAACCCT grant program aims to prepare program participants for employment in high-wage, high-skill occupations in demand by local employers. The program funds both individual institutions and multicollge consortia that may benefit workers eligible for Trade Adjustment Assistance (TAA)⁵ and other adults across a state, region, industry sector, or cluster of related industries.

The overarching goals of the TAACCCT program are to

1. better prepare TAA-eligible workers and other adults for high-wage, high-skill employment or reemployment in growth industry sectors by increasing their attainment of degrees, certificates, diplomas, and other industry-recognized credentials that match the skills needed by employers;
2. introduce or replicate innovative and effective methods for designing and delivering instruction that addresses specific industry needs and leads to improved learning, completion, and other outcomes for TAA-eligible workers and other adults; and
3. demonstrate improved employment outcomes for TAACCCT participants.

To ensure that TAACCCT grantees accomplish these goals, the SGAs⁶ describe the key areas of focus for TAACCCT projects (table 1). Although the areas changed somewhat over the course of the

four rounds, all four SGAs emphasize the importance of (1) developing career pathways or stacked and latticed credentials (box 3), (2) strengthening online and technology-enabled learning, and (3) using evidence-based design.

TABLE 1

Voluntary Areas of Focus and Mandatory Core Elements for TAACCCT Projects in All Rounds

	Voluntary areas of focus	Mandatory core elements			
	Round 1	Round 2	Round 3	Round 4	
Accelerate progress for low-skilled and other workers	X				
Improve retention and achievement rates to reduce time to completion ^a	X				
Develop career pathways or stacked and latticed credentials	X	X	X	X	
Strengthen advanced online and technology-enabled learning	X	X	X	X	
Use evidence-based design	X	X	X	X	
Align strategically with the workforce system and other stakeholders		X	X	X	
Develop transferability and articulation of credit		X	X	X	
Align with previously funded TAACCCT projects		X	X	X	
Engage employers	X	X	X	X	
Develop or scale sector strategies				X	

Source: Urban Institute TAACCCT grantee database.

Note: TAACCCT = Trade Adjustment Assistance Community College and Career Training.

^a Improving retention and achievement rates to reduce time to completion was explicitly included as a voluntary area of focus or a mandatory core element in Rounds 2–4. However, improving retention and achievement rates are described in the overall vision and elsewhere in the solicitations for grant applications for Rounds 2–4.

BOX 3

Career Pathways and Stacked and Latticed Credentials

The term “credential” refers to educational certificates, degrees, registered apprenticeship certificates, occupational licenses, and other industry-recognized certifications. Stacked or latticed credentials are a sequence of credentials that can be accrued, building an individual’s skills to help them along a career pathway or up a career ladder. A career pathway or ladder is a sequence of education and training coursework that prepares individuals for different and potentially higher-paying positions within the same occupation or industry.

In the health care field for example, although specific requirements vary by state, a certified nursing assistant license precedes a licensed practical nurse license. Licensed practical nurses may then pursue additional education and training to obtain a registered nursing degree.

Source: Jane Oates, “Increasing Credential, Degree, and Certificate Attainment by Participants of the Public Workforce System,” Employment and Training Administration, US Department of Labor, December 15, 2010, <https://wdr.doleta.gov/directives/attach/TEGL15-10acc.pdf>.

All four rounds emphasize an evidence-based design (i.e., using existing evidence to design the project) in different ways. In Round 1, DOL encouraged projects to develop innovative strategies or replicate existing approaches that research has shown to have strong⁷ or moderate⁸ evidence of positive impacts on education or employment outcomes. Round 1 emphasizes the tiered-evidence approach (strong, moderate, or preliminary) and offers several voluntary areas for projects to focus on (table 1). Beginning in Round 2, DOL required grantees to focus on mandatory core elements. These grantees had to base their designs on a level of evidence appropriate for the project proposed. Those seeking to replicate existing strategies were instructed to cite strong or moderate evidence from existing research; projects with new designs were asked to cite preliminary research findings.

DOL also required the Rounds 2–4 grants to include a third-party evaluation that assessed the implementation and outcomes of the grant-funded activities. Third-party evaluations generate evidence of the impacts and an understanding of the grant activities implemented, in turn supporting program improvement during the grant implementation, informing future federal workforce investments and policy, and informing community college leaders and other workforce stakeholders on the approaches that may work for their colleges and the workforce system. Table A.1 provides a full list of grant features across each of the four rounds, highlighting the key requirements and components of the grant program.

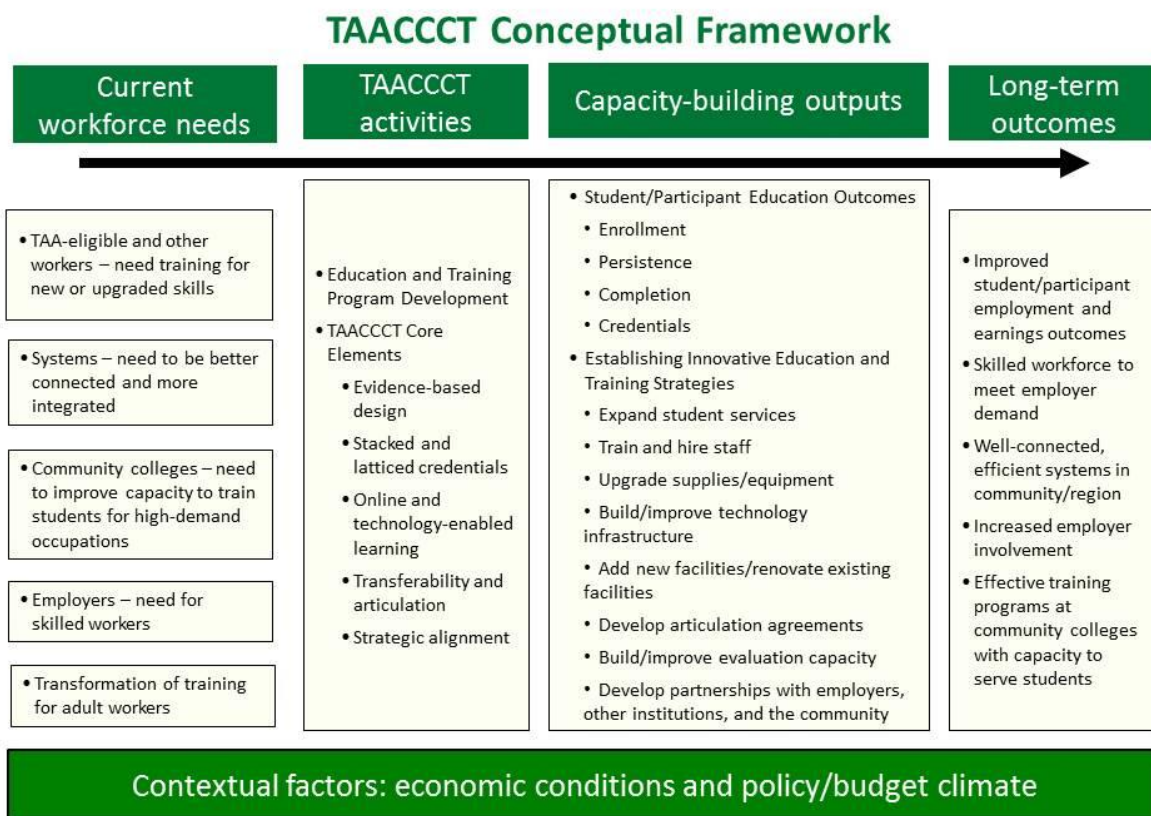
To better conceptualize how the TAACCCT grants work and their intended outcomes, the TAACCCT conceptual framework (figure 2) depicts the program visually. With current economic conditions and policy and budget climates as context, the model describes current workforce needs that TAACCCT activities address.

TAACCCT grantees are funded to improve their capacity to educate and train students for high-demand occupations, and that may require increased coordination with key stakeholders in the local and regional workforce system. The TAACCCT areas of focus and core elements (table 1) represent innovative education and training activities that are designed to improve student education and training outcomes. TAACCCT project strategies are also designed to build capacity and improve short-term student outcomes, such as enrollment, persistence, completion, and credentialing.

The expected long-term outcomes of TAACCCT activities include improved student employment, retention, and earnings, as well as transformation of workforce development systems within communities and throughout regions. Evidence-based design and alignment with previously funded TAACCCT programs are expected to produce effective training programs with increased employer engagement to ensure that students are graduating with skills that meet employer demands.

FIGURE 2

TAACCCT Conceptual Framework



Source: The Urban Institute and its partners developed the conceptual framework as a part of the TAACCCT national evaluation.

What Key Factors Have Shaped the TAACCCT Grants over the Four Rounds?

The TAACCCT program evolved over several rounds of grants (with grants first being awarded in 2011 and the last awards in 2014) to have an increasing emphasis on evidence-based design and rigorous evaluations and to build upon previously funded TAACCCT strategies shown to be effective. Several grant design factors and requirements changed over the four rounds, including expanding the reach of TAACCCT funding, strategic alignment as a core element of the grant design, the changing structure of the grant, and the sustainability of the TAACCCT-funded activities. Table A.1 provides a visual depiction of how the requirements and components of the grants changed.

Expanding the Reach of TAACCCT Grants

Public, proprietary, and other nonprofit institutions of higher education⁹ offering programs that can be completed in two years or less were eligible to apply for TAACCCT funding. Such institutions of higher education include two-year and four-year colleges and universities, which include historically black colleges and universities, tribally controlled colleges and universities, Hispanic-serving institutions, and Asian American and Native American Pacific Islander-serving institutions.

DOL sought to extend the reach of the TAACCCT grants in two ways. First, it allowed groups of eligible institutions to submit a proposal as a single institution or as the lead institution on behalf of a consortium of two or more individually eligible institutions. DOL encouraged applicants to form consortia to develop programs that serve individuals across a region, state, industry sector, or cluster of related industries, and to leverage their collective experience to expand and improve education and career training programs.¹⁰

Second, although DOL did not fund the continuation of existing TAACCCT projects in subsequent rounds, it did allow grantees and other eligible applicants to propose projects that expanded or enhanced previously funded TAACCCT projects. Enhancements could include redesigning an in-person, classroom-based program to use online or hybrid instructional delivery;¹¹ adding stackable education or training credentials to an existing program; or developing an accelerated format for a program.

Strategic Alignment as a Core Element

DOL increasingly emphasized the importance of strategic alignment among workforce stakeholders and partners, particularly in Rounds 2–4. In Round 1, DOL did not use the term “strategic alignment” but did require grantees to involve employers and consult with the public workforce system. In particular, grantees were required to actively engage at least one employer to assist in defining grant project strategy and goals, identify needed skills and competencies, provide education and training resources (e.g., equipment, instructors, and internships), and hire program graduates where appropriate. Grantees had to consult with entities in the public workforce system, such as Local Workforce Investment Boards, American Job Centers, or state agencies that administer the TAA for Workers program, to refer potential participants or to help connect workers with employers.

Round 2 grantees also had to include outreach and coordination with previous TAACCCT grantees to expand strategic alignment efforts. To do so, DOL asked grantees to reduce duplication, share information, coordinate efforts, and expand the geographical reach of their programs. Applicants had to describe their plans to identify and incorporate projects and tools developed by philanthropic and nonprofit organizations that can positively affect their proposed programs. Grantees were required to involve at least one employer for each targeted industry in the program that would actively engage in identifying the necessary skills and competencies for the program, and to assist with curriculum development and program design. Employers were asked to participate in one or more of the following ways: helping define the program strategies and goals, providing resources to support education and/or

training (such as equipment, instructors, funding, internships, or other work-based learning activities), and committing to hire qualified program participants.

In Round 3, DOL emphasized the importance of strategic alignment by requiring grantees to include four key categories of stakeholders:

- **Governors.** Grantees were asked to align their programmatic goals and strategies with their Governor's Office of Economic Development and their integrated state workforce plan (as laid out by the Workforce Investment Act of 1998).
- **Employers and industry.** Grantees carved out specific roles for employers and had to provide evidence of their commitment and engagement. In addition to the employer engagement requirements in Round 2, the Round 3 SGA asked grantees to specify roles for employers and industry organizations, such as (1) identifying necessary skills and competencies, assisting with curriculum development and program design; (2) developing pathways for individuals that involve both education or training curriculum and work-based experience; (3) developing and aligning stackable credentials with career ladders within firms and industries; (4) developing or scaling successful sector-focused strategies; and (5) providing apprenticeships, internships, on-the-job training, or other work-based training opportunities.
- **The public workforce system.** Grantees were required to collaborate with the public workforce system in developing and delivering programs.
- **Philanthropic organizations, business-related and other nonprofit organizations, community-based organizations, and labor organizations, especially those engaged in sector strategies.** Examples of collaboration included incorporating tools developed by these organizations, connecting program participants to work-based training opportunities, assisting with placement opportunities, and providing supportive services where appropriate.

In Round 4, DOL continued to increase the emphasis on strategic alignment by elevating sector strategies (box 4) to a required core element. In addition, applicants were required to partner with at least one local workforce development board or American Job Center to develop and implement the project, along with the state agency that administers the TAA for workers program. Applicants received points for funding one workforce development board or an American Job Center to provide services or activities tailored to the TAACCCT project that are not already funded by other grants.

BOX 4

Sector Strategies and Employer Engagement

The Round 4 SGA asked applicants to focus their programs on one or more industry sectors. Sector-based workforce development programs are a partnership between workforce organizations and specific industries—such as health care, advanced manufacturing, transportation, or financial services—or clusters of occupations. The SGA also asked applicants to involve at least two employers and a regional industry representative for each targeted sector. Employers and regional industry representatives are to be actively engaged in designing and implementing the grantee’s sector strategy in five ways: (1) serving on the program’s leadership team; (2) helping implement program strategies and goals; (3) identifying and mapping the necessary skills and competencies for the program; (4) assisting with curriculum development and designing the program; and (5) where appropriate, assisting with the design of an assessment or credential that will address industry skill needs.

Source: TAACCCT solicitation for grant applications, Round 4. <https://www.doleta.gov/taaccct/applicantinfo.cfm>.

Changing Grant Features

Grant features such as period of performance and funding availability changed over the course of the four rounds of funding. In Round 1, grants were limited to a 36-month period of performance (which was later extended to 48 months for most grantees at no cost). In Rounds 2–4, grantees were given up to 48 months, with the final 6 months to be used for gathering data for reporting outcomes and completing the requirements for third-party evaluations.

Legislation required that TAACCCT funding be awarded in every state. Accordingly, in all rounds, DOL awarded at least 0.5 percent of the total available funds to institutions in each of the 50 states, the District of Columbia, and Puerto Rico. Grant amounts varied across the four rounds because of the availability of funds and policy changes:

- Round 1 grants ranged from \$2.5 million to \$5 million for single institutions and from \$2.43 million to \$24.65 million for consortium applicants.
- Round 2 grants ranged from \$2.20 million to \$3.36 million for single institutions and from \$2.5 million to \$15 million for consortium applicants.
- Round 3 grants ranged from \$2.23 million to \$2.75 million for single institutions and from \$2.5 million to \$25 million for consortium applicants.
- Round 4 grants ranged from \$2.32 million to \$3.25 million for single institutions and from \$6.44 million to \$20 million for consortium applicants.

In Round 1, DOL allowed grantees to exceed award amount ceilings to replicate strategies that research had shown to be effective or to propose scalable online and technology-enabled courses and learning projects that would reach many diverse students over a large geographic area. Rounds 2 and 3 did not permit exceptions to set funding ceilings. Round 4 allowed funding ceiling increases for projects

that enhanced system changes through proposals to (1) advance state career pathway systems, (2) improve statewide data collection, or (3) create nationally recognized competencies and credentials.

Sustainability of Grant-Funded Efforts

DOL emphasized the importance of sustainability in all rounds of funding, but how grantees were asked to consider sustainability evolved. DOL encouraged Round 1 grantees to plan for sustainability by securing future funding from nonfederal sources or, given limited availability of funding, to continue low-cost strategies or encourage other institutions to adopt strategies proven successful. The Round 2 SGA asked grantees to focus on project strategies with lasting impact while describing how successfully funded programs would be incorporated into the long-term curriculum offerings of the college. Round 2 grantees had to sustain their partnerships with employers. Round 3 and 4 grantees had to describe how data would be used to determine which strategies and activities were effective and explain how these strategies would be integrated into future activities and programs without grant funding.

How Are TAACCCT Grantees Planning to Evaluate Their Projects?

DOL required grantees in Rounds 2–4 to conduct rigorous third-party evaluations. Some Round 1 grantees also included independent evaluations, but they were not required to do so. This section describes the grant requirements for the third-party evaluations and provides an overview of the evaluation methods, quantitative and qualitative data sources, and treatment and comparison group characteristics¹² grantees submitted as part of their evaluation plans.

Third-Party Evaluation Requirements

Although evidence-based design is a common focus of TAACCCT projects in all rounds, Rounds 2–4 also emphasized developing new evidence through rigorous evaluation. In the Round 1 SGA, DOL acknowledged that there is little research on successful strategies that are similar to TAACCCT in community colleges, but asked that grantees develop and implement strategies using any existing evidence and programs that could be evaluated. The SGA provided an evidence-based conceptual framework that encouraged applicants to design strategies using research studies that supported the effectiveness of the proposed program. That framework ranked evidence in three tiers: strong, moderate, and preliminary. DOL required grantees to report on comparison program students in addition to participant program students in their annual reporting. In addition, DOL requested that each proposed project activity include ongoing evaluation to ensure continuous improvement and data-driven decision making. However, grantees did not have to use a third-party independent evaluator.

Beginning in Round 2, DOL required grantees to develop strategies with existing evidence of success and to use grant funds to implement a third-party evaluation of their grant projects, thereby producing new evidence of a program's efficacy. DOL was committed to funding applications that used

data and evidence to (1) design strategies that are likely to produce significant positive change in learning and employment outcomes, (2) continuously evaluate the effectiveness of strategies to improve programming, and (3) identify and integrate promising and proven strategies into education and training programs. Applicants submitted a short evaluation plan and budget for an independent evaluation of their TAACCCT program interventions. Evaluation designs had to include a program implementation analysis and a participant outcomes or impacts analysis. Applicants were encouraged to use the most rigorous evaluation design feasible to estimate the TAACCCT activities' impacts, using either a random-assignment experimental design or a comparison cohort quasi-experimental design.

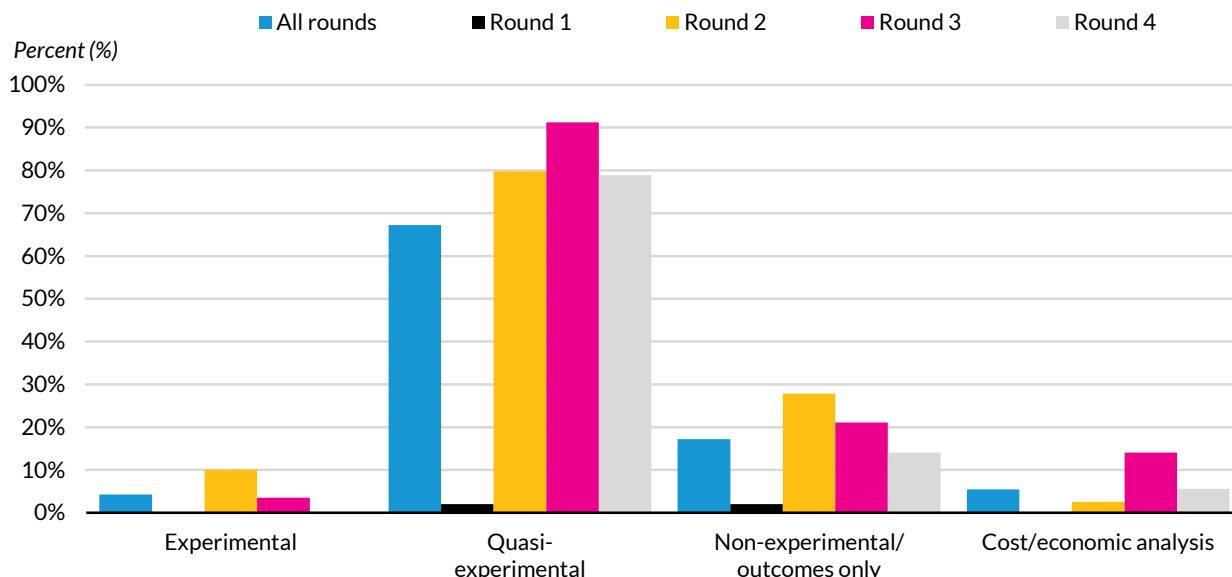
In addition, DOL required that grantees participate in national evaluation activities designed to synthesize evaluation findings across all TAACCCT grants and assess the program's implementation. The national evaluation will provide the workforce development field with crosscutting evidence and lessons on building workforce education and training capacity in community colleges, and it is discussed later in this brief.

Planned Methods for Third-Party Evaluations

A key component of the third-party evaluations is using rigorous methods to determine the outcomes and impacts of TAACCCT activities.¹³ Figure 3 provides an overview of the methods used to measure the outcomes or impact of the grant activities across all rounds. Most often these concern participant outcomes, but they could also include an economic or cost analysis of the grant activities to participants, the college or colleges, or taxpayers. Over two-thirds of the third-party evaluations (the largest proportion) are using quasi-experimental methods. If performed well, such methods can state that the difference between TAACCCT participants' education and employment outcomes and those of a similar group of individuals who did not participate in TAACCCT is attributable to the TAACCCT activities themselves, ruling out other explanations for the difference (i.e., such methods can estimate the marginal impact of the grant activities). About 17 percent of grantees and their third-party evaluators plan to conduct pre-post or outcomes-only studies (i.e., noncausal) of participant outcomes. Few evaluations across the rounds included experimental designs or economic or cost analyses. As shown in table A.2, grantees and third-party evaluators became more specific in the quasi-experimental methods used to estimate participant impacts, with approximately 70 percent in Rounds 3 and 4 specifying propensity score matching as the method they will use to draw comparison groups that can be used to estimate causal impacts.¹⁴

FIGURE 3

Grant Evaluations Using Various Methods to Measure Outcomes and Impacts, Rounds 1–4



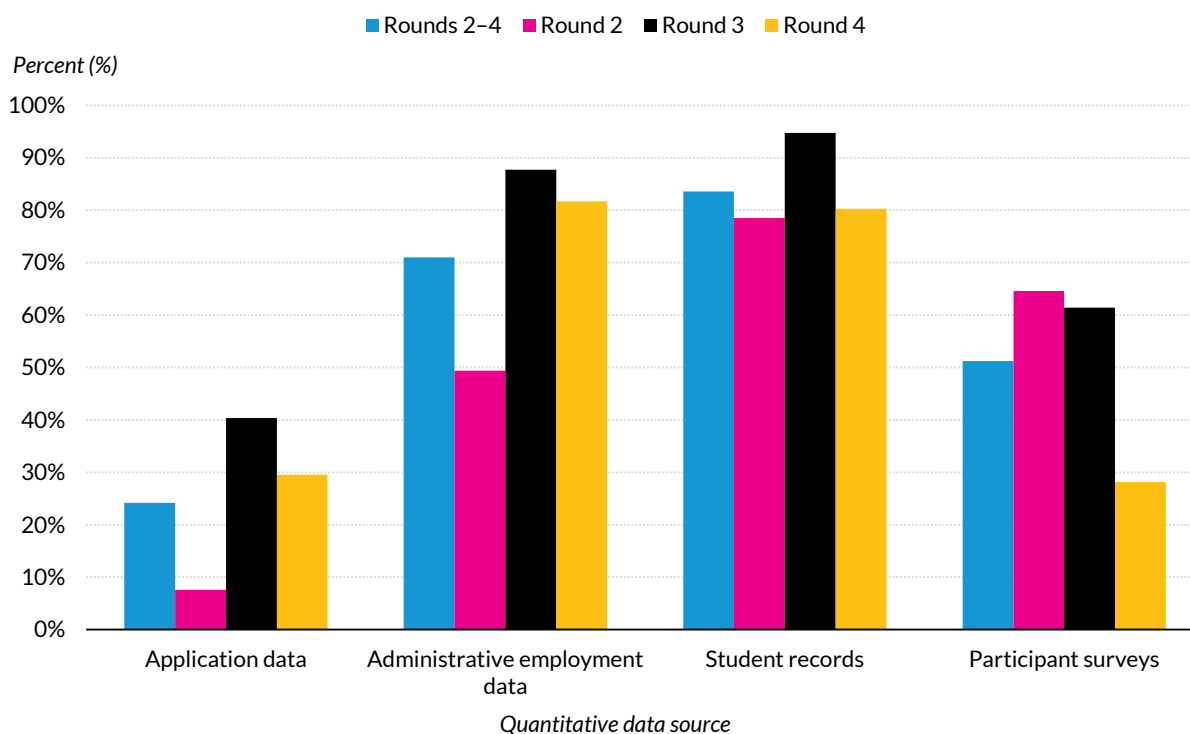
Source: Urban Institute TAACCCT grantee database.

Notes: In Round 1, an evaluation plan was not required, and 48 of the 49 grantees did not submit an evaluation plan. Round 2 grantees were required to submit 10-page summary evaluation plans, and their planned evaluation methods were culled from those summaries. Round 2 awarded a total of 79 grantees, and 10 sites did not report on any outcomes. In Rounds 3 and 4, grantees were required to select an independent third party to conduct a rigorous evaluation of their project and to submit a detailed evaluation plan. In Round 3, all 57 grantees submitted a detailed evaluation plan. In Round 4, 11 grantees had not submitted an approved detailed evaluation plan at the time this brief was published. The experimental category consists of evaluation plans with a full experimental design or regression discontinuity. The quasi-experimental category includes evaluation plans with designs using propensity score matching. The nonexperimental design category is composed of evaluation plans using outcomes or correlational and pre- and postanalysis.

Grantees and their third-party evaluators are using various sources of both qualitative and quantitative data to conduct their planned evaluations (figure 4). Round 2 grantees report that the majority of the 79 evaluations will include access to student records (62) and participant surveys (51); approximately half of evaluations will have access to administrative employment data (39) (table A.3). Of the 57 Round 3 grantees, 54 plan to make student records available to their third-party evaluators. Likewise, 50 Round 3 grantees plan to make administrative employment data available, and 35 plan to have participant surveys. Only 23 grantees, however, plan to make application data available for the third-party evaluator’s analyses. Over 80 percent of Round 4 grantees report that evaluators will have access to administrative employment data (58) and student records (57), though the number of planned participant surveys declines from approximately 66 percent of grantees in Rounds 2 and 3 to 28 percent (20 of 71). The accuracy of information in Rounds 3 and 4 is likely higher because the database uses information from detailed evaluation plans developed using the expertise of third-party evaluators; only shorter summary evaluation plans submitted by grantees at the time of application were available for Round 2 grants.

FIGURE 4

Grant Evaluations Using Various Quantitative Data Sources, Rounds 2–4



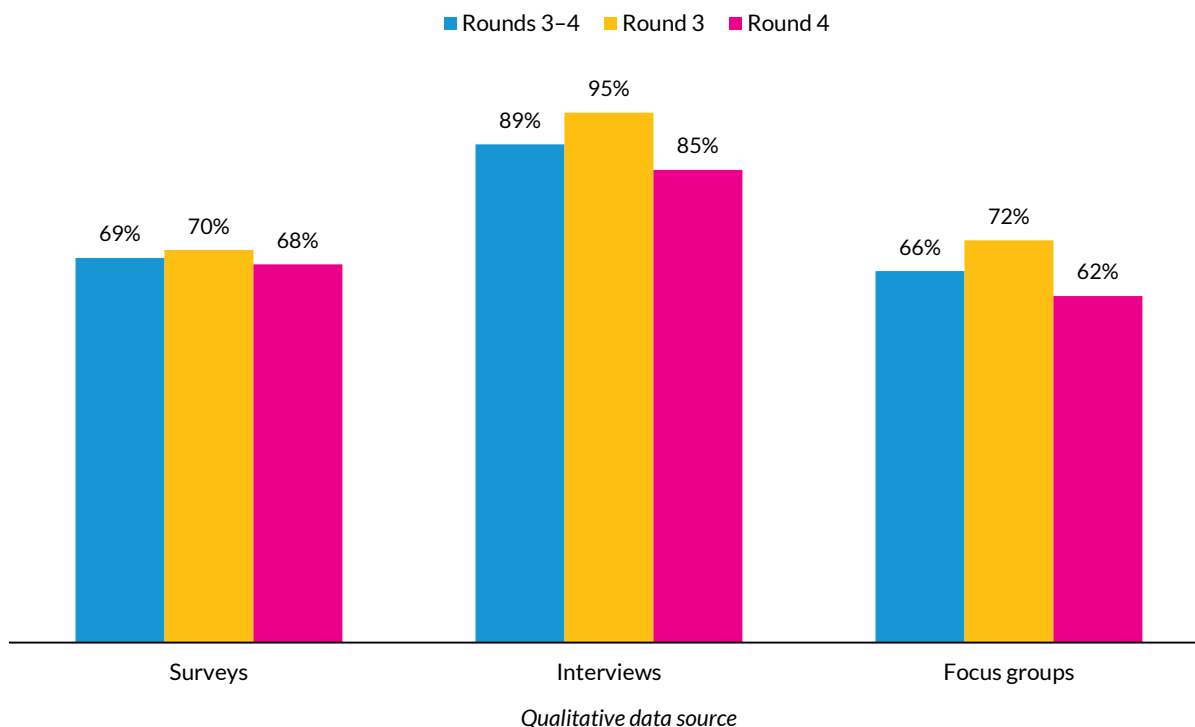
Source: Urban Institute TAACCCT grantee database.

Note: In Rounds 2 and 4, some grantees did not report their quantitative data sources. For exact counts of unreported data by round, see table A.2. Four Round 4 grantees had not submitted an approved detailed evaluation plan at the time this paper was published.

Grantees plan to use three sources of qualitative data for their evaluations: focus groups with participants; surveys with participants and employers; and interviews with faculty, leadership, and other staff, partners, and employers (table A.4). A majority of the 57 Round 3 grantees report they plan to administer surveys (40) and conduct focus groups (41), and almost all (54) plan to conduct interviews (figure 5). In Round 4, the majority of grantees also report that they plan to administer surveys (48) and conduct focus groups (44), and 85 percent report that they plan to conduct interviews (60). All Round 4 grantees that had submitted a detailed evaluation plan at the time this brief was published said they plan to conduct interviews.

FIGURE 5

Grant Evaluations Using Various Qualitative Data Collection Methods, Rounds 3–4



Source: Urban Institute TAACCCT grantee database.

Note: This information is not available for Rounds 1 and 2. Four Round 4 grantees had not submitted an approved detailed evaluation plan at the time this brief was written.

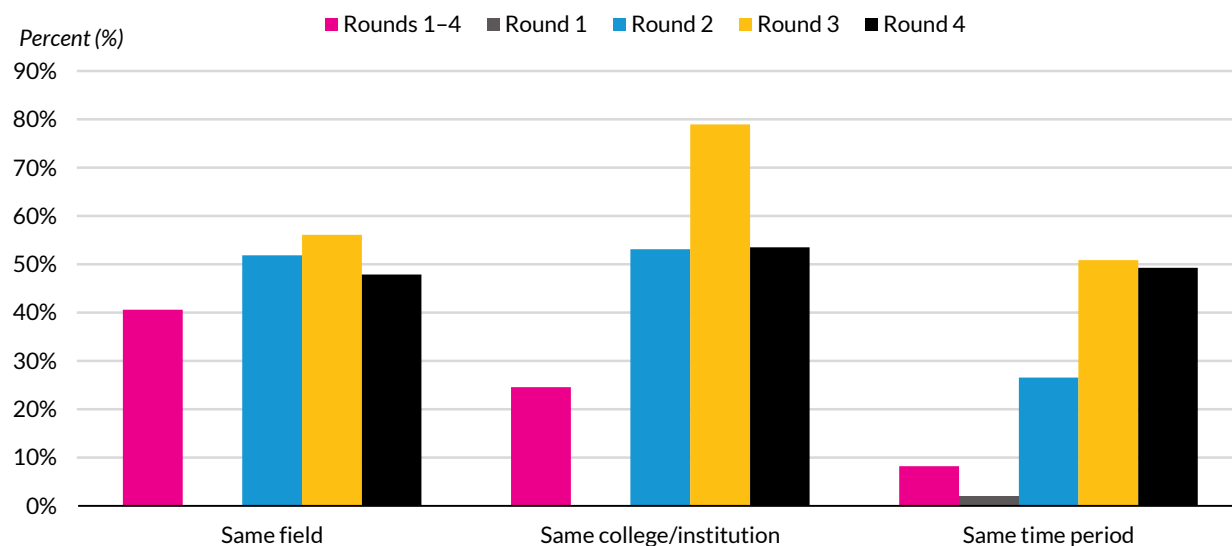
Grantees specified the average size of their treatment and comparison groups¹⁵ for the planned evaluations (table A.5). In Round 3, 57 grantees planned to have an average of 932 treatment group members and 1,825 comparison group members. These figures were lower in Round 2, though the information may be less reliable because Round 2 grantees were not required to submit detailed evaluation plans. In Round 4, although the maximum reported treatment and control group sizes increased from Round 3, the average size of the treatment group was very similar, and the average comparison group size was 2,053.

Grantees also had to specify sources for comparison groups as part of their evaluation plans (figure 6). Over half of grantees in Rounds 2 and 3 reported that the comparison group for their planned evaluation would be drawn from the same field (41 and 32, respectively) or the same college or institution (42 and 45, respectively; table A.6). Twenty-one of 79 Round 2 grantees and 29 of 57 Round 3 grantees reported that they would draw their planned comparison group during the same period they drew the treatment group. Similar proportions of Round 4 grantees reported that evaluators planned to draw comparison groups from the same field (34), the same college or institution (38), or the same time period (35) as treatment groups, and 11 grantees had not submitted an approved detailed evaluation plan when this brief was published. Although each of these factors controls for threats to the internal

and external validity of the evaluations, it is unknown how much grantees' planned evaluation strategies align with the actual evaluation as it will be conducted.

FIGURE 6

Grant Evaluations Using Various Sources of Comparison Groups, Rounds 1–4



Source: Urban Institute TAACCCT grantee database.

Note: Four Round 4 grantees had not submitted an approved detailed evaluation plan at the time this brief was written, and their information is not included here.

Funding for evaluations changed little over the course of Rounds 2–4. On average, about 6 to 7 percent of a grantee’s total funding is spent on evaluation activities each round (table A.7). The average evaluation budget increased slightly from \$415,731 in Round 2 to \$571,922 in Round 3, but it then decreased in Round 4 to \$397,413. This reflects the Round 3 increase in maximum grant award to about \$25 million versus \$15 million in Rounds 2 and 4.

What Can We Learn from the TAACCCT Grants?

The national evaluation of the TAACCCT grant program began in October 2012 after DOL awarded the Round 2 grants. The Urban Institute, Abt Associates, and their partners are conducting the evaluation using a mix of qualitative and quantitative methods to understand and assess the program to inform future federal workforce investments and policy. Figure 2 presented the conceptual framework for the evaluation. The evaluation seeks to answer the following research questions:

- What service delivery or system reform innovations led to improved employment outcomes and increased skills for participants? Under what conditions can these innovations be most effectively replicated?

- What are the types of emerging ideas for service delivery change or system reform that seem the most promising for further research? Under what conditions are these ideas most effective?
- What was learned about directions for future research on the country's public workforce system and workforce development in general?

The research team is using four study components to document and assess the implementation and outcomes of the grants:

- An evaluability assessment of the grantees to determine opportunities for measuring training impacts and to make recommendations for more rigorous evaluation designs for the national evaluation, third-party evaluations, and future grant initiatives.
- An implementation analysis of the service delivery approaches developed and the systems changed through the grants.
- An outcomes study of selected Round 4 grantees using survey data and administrative records to better understand the characteristics of TAACCCT participants, their service receipt, and their outcomes related to education and employment, as well as to promote the rigor of grantee third-party evaluations.
- A synthesis of third-party evaluation findings to draw a national picture of the TAACCCT grant approaches and evidence of the outcomes and impacts of the grants.

Data sources for these evaluation components include individual-level and aggregate student data, grantee documents (including quarterly and annual reporting), site visits, college surveys, and third-party evaluation reports. The evaluation team is also reviewing and synthesizing the final evaluation reports produced by the third-party evaluators and submitted by grantees to DOL. These reports provide information about the implementation of the grants, the outcomes observed, and the impacts of the TAACCCT interventions on the participants' education and employment.

The findings and analyses from the national evaluation of the TAACCCT grant program will contribute to and build upon a growing body of research on community college approaches to program capacity building. The findings will provide information about the strategic alignment of systems such as employers and industry, the public workforce system, and educational institutions and other organizations, and they will provide information about the transferability and articulation of credentials that allow students to achieve higher education and training levels in their careers.

Appendix A. Additional Tables

TABLE A.1

Comparison of TAACCCT Grant Requirements and Features by Round

	Round 1	Round 2	Round 3	Round 4
Number of grants	49	79	57	71
Period of performance	October 2011–September 2014 (originally 36 months; extended by 6 months for 12 grants and by 12 months for 37 grants)	October 2012–September 2016 (final 6 months of grant period used for reporting and evaluation activities only)	October 2013–September 2017 (final 6 months of grant period used for reporting and evaluation activities only)	October 2014–September 2018 (final 6 months of grant period used for reporting and evaluation activities only)
Total funding	\$500 million	\$500 million	\$4.75 million	\$3.25 million
Maximum funding: single institution	\$5 million	\$3.36 million	\$2.75 million	\$2.5 million
Maximum funding: consortium	\$24.65 million	\$15 million	\$25 million	3 to 10 members: \$10 million 11 or more members: \$20 million
Exceptions to funding cap	Yes, if the grant project would replicate evidenced-based strategies or implement online or technology-enabled learning	No	No	Yes, for projects focused on regional or statewide capacity building activities, including career pathway systems, statewide data integration, or nationally recognized competencies and credentials
Third-party evaluation	Not required, but evaluation of grant projects was encouraged	Required; grantees had to submit short evaluation design plan with application	Required; grantees had to submit short evaluation plan with application and detailed evaluation plan at a later date; plans were subject to DOL approval	Required; grantees had to submit short evaluation plan with application and detailed evaluation plan at a later date; plans were subject to DOL approval

TABLE A.1

Comparison of TAACCCT Grant Requirements and Features by Round (continued)

	Round 1	Round 2	Round 3	Round 4
Major strategy focus	Online learning	Online learning	Employer-sponsored, work-based training, systems change	Sector-based systems change in regional and statewide economies
Additional areas of focus, core elements, and priorities	<p><u>Evidence-based design</u>: use moderate or preliminary evidence to develop program designs and strategies</p> <p><u>Accelerated progress for low-skilled and other workers</u>: redesigned developmental education; contextualized learning; augmented student services; enhanced relationships with community based organizations to provide support services</p> <p><u>Programs that meet industry needs, including career pathways</u>: earn and learn education models; on-the-job training; clinical or cooperative education; paid internships; registered apprenticeships; partnerships with employers; entrepreneurship training, including mentoring and peer-to-peer training</p>	<p><u>Evidence-based design</u>: use existing or preliminary data to develop new strategies or use strong or moderate evidence to support replication of existing evidence-based strategies</p> <p><u>Stacked and latticed credentials</u>: interoperable programs; course clusters for credentials; stackable certifications, certificates, and diplomas; competency-based assessments; entrepreneurship outcomes-based approaches</p> <p><u>Transferability and articulation of credit</u>: increased cooperation among institutions on postsecondary career and technical education, preapprenticeship, and apprenticeship programs; credit transferability and articulation</p>	<p><u>Evidence-based design</u>: use existing or preliminary data to develop new strategies or use strong or moderate evidence to support replication of existing evidence-based strategies</p> <p><u>Stacked and latticed credentials</u>: course clusters for credentials; stackable certifications, certificates, and diplomas; competency-based assessments; certificates designed in collaboration with industry associations or employers; latticed, side-by-side credentialing; prior learning credits; simulations</p> <p><u>Transferability and articulation of credit</u>: increased cooperation among institutions within a state or across state lines on postsecondary career technical education, preapprenticeship and apprenticeship programs; credit transferability and articulation; bridge programs from noncredit to credit-bearing courses</p>	<p><u>Evidence-based design</u>: use existing or preliminary data to develop new strategies or use strong or moderate evidence to support replication of existing evidence-based strategies</p> <p><u>Stacked and latticed credentials</u>: course clusters for credentials; stackable certifications, certificates, and diplomas; competency-based assessments; certificates designed in collaboration with industry associations or employers; latticed, side-by-side credentialing; prior learning credits; simulations</p> <p><u>Career pathways</u>: sequenced coursework or training credentials that aligns with industry-recognized skills and credentials; accelerated remediation; student support services and career guidance; prior learning assessments; modularized curricula; stacked and latticed credentials; online and technology-based learning; competency-based education; credit transferability and articulation</p>

TABLE A.1

Comparison of TAACCCT Grant Requirements and Features by Round (continued)

Round 1	Round 2	Round 3	Round 4
<p><u>Strengthened online and technology-enabled learning</u>: fully accessible online courses; technology-enabled learning courses; interactive simulations; personalized instruction; elements of game design; asynchronous and real-time collaboration; competency-based assessments; feedback mechanisms</p>	<p><u>Advanced online and technology-enabled learning</u>: online and hybrid learning strategies; access for underserved areas; scalability; hands-on learning; accelerated learning strategies; interactive simulations; personalized and virtual instruction; game design; asynchronous and real-time collaboration</p>	<p><u>Advanced online and technology-enabled learning</u>: online and hybrid learning strategies; rolling and open enrollment processes; modularized content delivery; simulated assessments and training; accelerated course delivery strategies; interactive simulations; personalized and virtual instruction; game design; digital tutors; asynchronous and real-time collaboration; large-scale systemic educational mining and learning analytics; personal tutor educational software; next generation assessments; capstone projects</p>	<p><u>Advanced online and technology-enabled learning</u>: online and hybrid learning strategies; rolling and open enrollment processes; modularized content delivery; simulated assessments and training; accelerated course delivery strategies; interactive simulations; personalized and virtual instruction; game design; digital tutors; asynchronous and real-time collaboration; feedback technologies; predictive analytics; feedback loops; visualization; A/B testing approaches; next generation assessments</p>
<p><u>Improved retention and achievement rates and reduced time to completion</u>: self-paced learning; block scheduling; modular curricula; articulation processes or agreements for matriculation to four-year institutions; learning communities; restructured course scheduling</p>	<p><u>Strategic alignment</u>: programs aligned with at least one employer for each targeted industry, the public workforce system, and educational institutions and other organizations</p>	<p><u>Strategic alignment</u>: programs aligned with governors' economic development and integrated state workforce plans (as described in the Workforce Investment Act of 1998 and the Wagner-Peyser Act as amended in 1998), at least one employer per industry targeted per site location, public workforce systems, and at least one of philanthropic organizations, business-related and other nonprofit organizations, community-based organizations, or labor organizations</p>	<p><u>Strategic alignment</u>: programs aligned with governors' economic development and integrated state workforce plans (as described in the Workforce Investment Act of 1998 and the Wagner-Peyser Act as amended in 1998), public workforce systems, and at least one of philanthropic organizations, business-related and other nonprofit organizations, community-based organizations, or labor organizations</p>

TABLE A.1

Comparison of TAACCCT Grant Requirements and Features by Round (continued)

	Round 1	Round 2	Round 3	Round 4
			<p><u>Alignment with previously-funded TAACCCT projects:</u> research TAACCCT Round 1 and/or Round 2 grants to decrease duplication and promote coordination; collaboration with state higher education associations or governing boards</p> <p><u>Sector strategies:</u> use real-time labor market information and engage employer and industry partners</p>	<p><u>Alignment with previously-funded TAACCCT projects:</u> research and coordinate with previous TAACCCT grantees in Rounds 1–3 targeting same occupations or industries; incorporate existing open educational resources; collaboration with state higher education associations or governing boards</p> <p><u>Sector strategies and employer engagement:</u> use traditional and real-time labor market information to improve education; partner with at least two employers and one regional industry representative per industry targeted; registered apprenticeship sponsorships; cognitive task analysis</p>
Outreach	Required to perform outreach to, and gather information on, all communities to be served by the project	Required to perform outreach to, and gather information on, at least one community to be served by the project	Required to reach out to Round 1 grantees to coordinate efforts and expand program reach, and perform outreach to philanthropic and nonprofit organizations to incorporate previously developed projects and tools	Required to perform outreach to, and gather information on, all communities to be served by the project; leverage existing support services in the area; and seek out and collaborate with other regional initiatives

TABLE A.1

Comparison of TAACCCT Grant Requirements and Features by Round (continued)

	Round 1	Round 2	Round 3	Round 4
Required partnerships	At least one employer and a public workforce system	At least one employer for each targeted industry and a public workforce system	A governor; at least one employer for each targeted industry; a public workforce system; and a philanthropic organization, business-related and other nonprofit organization, community-based organization, or labor organization	A governor; at least one employer for each targeted industry; regional or national industry representatives; a public workforce system; and a philanthropic organization, business-related and other nonprofit organization, community-based organization, or labor organization
Prior learning assessment	Encouraged as part of improved retention and completion rates, but not required	Required as part of stacked and latticed credentialing	Required as part of stacked and latticed credentialing	Required as part of career pathways
Sustainability	Use program data to determine successful strategies and activities; plan for securing nonfederal funding or funding commitments; or develop low-cost integration strategies into general operations during grant period	Use program data to determine effective strategies and activities; explain how to integrate effective practices into curriculum offerings; plan for securing nonfederal funding or funding commitments; maintain and sustain employer partnerships	Use program data to determine effective strategies and activities; explain how to integrate effective practices into curriculum offerings; maintain and sustain employer partnerships	Use program data to develop a strategy for institutionalization of activities

Notes: DOL = US Department of Labor; TAACCCT = Trade Adjustment Assistance Community College Career Training.

TABLE A.2

Third-Party Evaluations Using Quantitative (Outcome/Impact) Evaluation Methods, by Round

	All rounds		Round 1		Round 2		Round 3		Round 4	
	N	%	N	%	N	%	N	%	N	%
Experimental design	6	2	0	0	6	8	0	0	0	0
Regression discontinuity	5	2	1	2	2	3	2	4	0	0
Propensity score matching	107	42	1	2	17	22	40	70	49	69
Other quasi-experimental methods	65	25	0	0	46	58	12	21	7	10
Pre-post analysis	28	11	0	0	17	22	7	12	4	6
Outcome/correlational	16	6	0	0	5	6	5	9	6	8
Cost/economic analysis	14	5	0	0	2	3	8	14	4	6
Number of grantees	256		49		79		57		71	

Source: Urban Institute TAACCCT grantee database.

Notes: In Round 1, an evaluation plan was not required, and 48 grantees did not submit an evaluation plan. Round 2 grantees were required to submit 10-page summary evaluation plans, and their planned evaluation methods were culled from those summaries. In round 2, 10 sites did not report on any outcomes. In Rounds 3 and 4, grantees were required to select an independent third-party to conduct a rigorous evaluation of their program and to submit a detailed evaluation plan, and their planned evaluation methods were culled from those plans. In Round 3, all grantees submitted an evaluation plan. In Round 4, 11 grantees had not submitted an approved detailed evaluation plan at the time this brief was published, and their information is not included here.

TABLE A.3

Third-Party Evaluations Using Various Quantitative Data Sources, Rounds 2–4

	Rounds 2–4			Round 2			Round 3			Round 4		
	N	%	Not reported	N	%	Not reported	N	%	Not reported	N	%	Not reported
Application data	50	24	40	6	8	24	23	40	0	21	30	16
Administrative employment data	147	71	28	39	49	16	50	88	0	58	82	12
Student records	173	84	31	62	78	17	54	95	0	57	80	14
Participant surveys to obtain outcomes	106	51	35	51	65	17	35	61	0	20	28	18
Number of grantees	207			79			57			71		

Source: Urban Institute TAACCCT grantee database.

Note: Four Round 4 grantees had not submitted an approved detailed evaluation plan at the time this brief was written, and their information is not included here.

TABLE A.4

Third-Party Evaluations Using Various Types of Qualitative Data, Rounds 3 and 4

	Round 3		Round 4	
	N	%	N	%
Survey for the implementation study	40	70	48	68
Interviews	54	95	60	85
Focus groups	41	72	44	62
Number of grantees	57		71	

Source: Urban Institute TAACCCT grantee database.

Note: This information is not available for Rounds 1 and 2. Eleven Round 4 grantees had not submitted an approved detailed evaluation plan at the time this brief was written, and their information is not included here.

TABLE A.5

Treatment and Comparison Group Sizes for Third-Party Evaluations, Rounds 2–4

	Round 2				Round 3				Round 4			
	N	Mean	Min	Max	N	Mean	Min	Max	N	Mean	Min	Max
Treatment group size	38	646	20	3,195	44	932	50	9,068	49	931	46	13,913
Comparison group size	10	718	20	3,685	25	1,825	50	11,427	38	2,053	46	24,000
Number of grantees	79				57				71			

Source: The Urban Institute TAACCCT grantee database.

Note: Max = maximum; min = minimum. In Round 1, an evaluation plan was not required, and 48 did not submit an evaluation plan. Four Round 4 grantees had not submitted an approved detailed evaluation plan at the time this brief was published, and their information is not included here.

TABLE A.6

Number and Percentage of Grantees Reporting Comparison Group Characteristics for Third-Party Evaluations, Rounds 1–4

	Round 1		Round 2		Round 3		Round 4	
	N	%	N	%	N	%	N	%
Comparison group within								
Same field	0	0	41	52	32	56	34	48
Same college/institution	0	0	42	53	45	79%	38	54
Same time period	1	2	21	27	29	51	35	49
Number of grantees	49		79		57		71	

Source: Urban Institute TAACCCT grantee database.

Note: Four Round 4 grantees had not submitted an approved detailed evaluation plan at the time this brief was published, and their information is not included here.

TABLE A.7

Third-Party Evaluation Allocated Costs and Costs as a Percentage of Overall Grant Funding, Rounds 2–4

	Round 2		Round 3		Round 4	
	Cost	Percentage of budget	Cost	Percentage of budget	Cost	Percentage of budget
Mean	\$415,731	6.4	\$571,922	6.8	\$397,413	6.6
Min	\$10,000	0.4	\$22,500	0.8	\$29,000	1.2
Max	\$1,500,000	11.6	\$2,499,864	23.7	\$1,500,000	13.0
Number of grantees	79		57		71	

Source: Urban Institute TAACCCT grantee database.

Note: Min = minimum; max = maximum. Four Round 4 grantees had not submitted an approved detailed evaluation plan at the time this brief was published, but all Round 4 grantees had submitted evaluation budgets in their original applications and are reflected in the Round 4 calculations.

Notes

1. The seven years are federal fiscal years, from October 1, 2011 through September 30, 2018.
2. The Urban Institute created a database that contains key information from grantee documents including applications, agreements, modifications, and third-party evaluation plans for all four rounds of grants. It also includes data from the US Department of Education's Integrated Postsecondary Education Data System on institutional characteristics. The Division of Strategic Investments team from DOL's Employment and Training Administration provided the documents to Urban to build and populate the database. The information in the database captures grantees' plans for their TAACCCT activities and does not represent what they actually did. The implementation study conducted by the Urban Institute research team and its partners will document and assess the implementation of the TAACCCT grants.
3. A coordinated group of nationally recognized research organizations are conducting the national TAACCCT evaluation, a seven-year effort to capture the lessons and build the evidence across all four rounds of TAACCCT grants. The Urban Institute is leading the national evaluation of Rounds 1–3 TAACCCT grants, and Abt Associates is leading the national evaluation for the Round 4 grants. They currently partner on all rounds with Capital Research Corporation, George Washington University, and NORC at the University of Chicago. Additionally, Urban Institute collaborates with Jobs for the Future on Rounds 1–3.
4. Eligible institutions are institutions of higher education as defined in Section 102 of the Higher Education Act of 1965 (20 USC 1002) that offer programs that can be completed in two years or less. Institutions of higher education include public, proprietary, or other nonprofit educational institutions.
5. To be eligible for TAA reemployment services, the Office of Trade Adjustment Assistance must certify that a group of workers has been adversely affected by foreign trade. A worker that meets the group eligibility criteria may apply for TAA services and benefits through their local American Job Center.
6. DOL announced the SGAs in spring of fiscal year (FY) 2011 (Round 1), FY 2012 (Round 2), FY 2013 (Round 3), and FY 2014 (Round 4). For more information, see "Applicant Information," Trade Adjustment Assistance Community College and Career Training Grant Program, last updated December 11, 2015, <https://www.doleta.gov/taaccct/applicantinfo.cfm>.
7. According to the SGAs, strong evidence is defined as: (1) more than one well-designed and well-implemented experimental study or well-designed and well-implemented quasi-experimental study; or (2) one large, well-designed and well-implemented randomized controlled, multisite trial.
8. According to the SGAs, moderate evidence is defined as: (1) at least one well-designed and well-implemented experimental or quasi-experimental study, with small sample sizes or other conditions of implementation or

analysis that limit generalizability; or (2) at least one well-designed and well-implemented experimental or quasi-experimental study that does not demonstrate equivalence between the intervention and comparison groups at program entry but that has no other major flaws related to internal validity; or (3) correlational research with strong statistical controls for selection bias and for discerning the influence of internal factors.

9. Institutions of higher education are defined in Section 102 of the Higher Education Act of 1965 (20 USC 1002).
10. Because funded eligible institutions may have limited organizational capacity to lead more than one TAACCCT project, single institutions or lead institutions in consortium applications that received funding in Rounds 1 or 2 were not eligible to apply for funding in the subsequent round as single or lead institution grantees. DOL did allow previously funded institutions to apply as member institutions in a consortium in the subsequent round. Round 1 grantees were, however, eligible to apply as a single institution or as a lead or member institution in a consortium application for Rounds 3 or 4, and Round 2 grantees were eligible to apply as a single institution or as a lead or member institution in a consortium application for Round 4.
11. Hybrid instructional delivery refers to a combination of online and classroom delivery.
12. Many evaluators planned to use comparison groups that were enrolled in similar programs at the same time as the treatment groups or prior to TAACCCT implementation, but many evaluators were still exploring these options when they developed their plan for DOL.
13. DOL's Clearinghouse for Labor Evaluation and Research provides guidance on evaluation methods and their relative rigor for estimating impacts and describing the outcomes and implementation of employment and training programs. More information can be found under the Reference Documents tab at "About CLEAR," US Department of Labor, accessed December 7, 2016, <http://clear.dol.gov/about>.
14. Propensity score matching is a statistical technique where the treatment group is compared with a group of individuals that come from a pool of similar individuals (e.g., other adults seeking training to advance skills and careers) not receiving the treatment, or the comparison group, by estimating the probability of enrolling in treatment activities. Generally, a logistic regression model with a set of covariates that is likely to be associated with enrollment is used to estimate a probability "score." The differences between each matched treatment and comparison group members' outcomes are aggregated to estimate the impact.
15. The treatment group includes the TAACCCT participants. The comparison group is comprised of individuals with many demographic variables similar to the treatment group that is exposed to all of the conditions of the study except the TAACCCT program.

About the Authors



Kelly S. Mikelson is a senior research associate in the Income and Benefits Policy Center. With over 15 years of experience conducting quantitative and qualitative research, her work focuses on evaluating workforce development and postsecondary education programs. Her research has included studies of innovative community college programs as well as income support, welfare reform, and social service programs and policies.



Lauren Eyster is a senior research associate in the Income and Benefits Policy Center, where her research focuses on innovative workforce development programs and how to best evaluate and learn from them. Most recently, Eyster has examined industry-focused job training and career pathway initiatives implemented through the workforce investment system and at community colleges. She studies how these programs can best provide education and training to different groups such as laid-off workers, youths, low-income individuals, and older workers. She also researches how

systems and various stakeholders can collaborate to help these individuals find and retain jobs.



Christin Durham is a research associate in the Income and Benefits Policy Center at the Urban Institute, where she conducts research and evaluation for projects related to workforce development and poverty. She is the project manager for the national evaluation of the TAACCCT grant program. Durham has conducted qualitative and quantitative research on various transfer programs, including child care subsidies, housing subsidies, Supplemental Security Income, Temporary Assistance for Needy Families, the Supplemental Nutrition Assistance Program, and the Senior Community Service Employment Program. She also works with a cross-center team providing ongoing guidance and technical assistance for Cities of Learning.



Elissa Cohen is a research associate in the Income and Benefits Policy Center, where her primary research focuses on Temporary Assistance for Needy Families and on workforce development program evaluations. She manages the TAACCCT database. She also works on the Welfare Rules Database project and the Temporary Assistance for Needy Families module of the Assistant Secretary for Planning and Evaluation's Transfer Income Model.

Acknowledgments

This brief was prepared for the US Department of Labor (DOL), Chief Evaluation Office by the Urban Institute, under contract numbers DOLU129633972 and DOLU139634689.

The views expressed are those of the authors and should not be attributed to DOL, nor does mention of trade names, commercial products, or organizations imply endorsement of same by the US Government. The views expressed by the authors should not be attributed to the Urban Institute, its trustees, or its funders. Funders do not determine research findings or the insights and recommendations of Urban experts. Further information on the Urban Institute’s funding principles is available at www.urban.org/support.

The authors are grateful to several people who helped make this series of briefs as informative and useful as possible. First, our project officer Janet Javar from the Chief Evaluation Office has offered important guidance and ideas to ensure the briefs reach the many audiences interested in the TAACCCT grant program. The Division of Strategic Investments team within DOL’s Employment and Training Administration has provided background information and many grant documents that helped ensure that our presentation of the TAACCCT grant program was as complete and accurate as possible. We thank all members of this team, but especially Cheryl Martin, Kristen Milstead, and Evan Burke, with whom we worked most closely. Finally, we thank the Urban Institute staff who helped us catalog, clean, and analyze the huge amount of grant information provided by DOL that is the basis of these briefs.



2100 M Street NW
Washington, DC 20037
www.urban.org

ABOUT THE URBAN INSTITUTE

The nonprofit Urban Institute is dedicated to elevating the debate on social and economic policy. For nearly five decades, Urban scholars have conducted research and offered evidence-based solutions that improve lives and strengthen communities across a rapidly urbanizing world. Their objective research helps expand opportunities for all, reduce hardship among the most vulnerable, and strengthen the effectiveness of the public sector.

Copyright © January 2017. Urban Institute. Permission is granted for reproduction of this file, with attribution to the Urban Institute.