



Expanding Opportunities & Reducing Barriers to Work: California Final Report

Evaluation of Pilot Projects to Promote Work and Increase State Accountability in the Supplemental Nutrition Assistance Program



(Evaluation of USDA, Supplemental Nutrition Assistance Program (SNAP) Employment and Training Pilots)

May 2022

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Contract Number: AG-3198-B-15-0002

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Suggested citation

James Mabli, Gretchen Rowe, Julie Hartnack, Alicia Kone, Karin Ellis, Kelley Monzella, Leah Shiferaw, Leah Jennings, Peter Schochet, Milena Raketic, and Dallas Dotter. (2022). Expanding Opportunities & Reducing Barriers to Work: California Final Report. Prepared by Mathematica, Contract No. AG 3198-B-15-0002. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support.

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Acknowledgements

This report was prepared for the U.S. Department of Agriculture, Food and Nutrition Service (FNS) by Mathematica and MDRC. It would not have been possible without the contributions of many individuals and organizations whose guidance, information, and efforts were critical to the Evaluation of SNAP E&T pilots and the successful completion of this report. We are especially grateful to the individuals who participated in the SNAP E&T pilots, particularly those individuals who completed surveys and participated in focus groups. We also want to give special thanks to the staff members of the State agencies who implemented the SNAP E&T pilots as well as the partners and service providers. Staff from these organizations worked with us to implement the evaluation, provided important information and data, and participated in interviews. We also acknowledge contributions from staff at Insight Policy Research, who played a role in the implementation site visits and led the collection of SNAP administrative data; and Decision Information Resources, who assisted in data collection for the 12-month survey of individuals enrolled in the pilots.

We also are extremely appreciative of the staff at FNS Office of Policy Support (OPS) and FNS Office of Employment and Training (OET) for providing ongoing guidance and feedback on evaluation plans and for reviewing this report. In particular we thank the evaluation's FNS project officer, Anita Singh, as well as her predecessors in this role, Wesley Dean and Danielle Deemer. For this particular evaluation site, we are indebted to Rachel Gragg, the OET liaison for Fresno County.

The many individuals who contributed to the evaluation and this report are shown below, under their respective organizations in alphabetical order.

U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support (OPS) and FNS Office of Employment and Training (OET)

Michael Burke (OPS)	Leigh Gantner (OET)	Loretta Robertson (OET)
Wesley Dean (fmr. OPS)	Rachel Gragg (OET)	Anita Singh (OPS)
Danielle Deemer (fmr. OPS)	Moira Johnston (OET)	Kaila Wilson (fmr. OET)
Marcie Foster (OET)	Kathryn Law (OPS)	Jackie Windfeldt (fmr. OET)

California Department of Social Services (CA DSS), Fresno County Department of Social Services (Fresno County DSS), Reading and Beyond (RAB), and Fresno Economic Development Corporation (EDC)

Alexis Fernandez (CA DSS)	Andrea Reyes (EDC)	Luis Santana (RAB)
Laura Moreno (Fresno County DSS)		

Members of the Technical Working Group

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Amy Ellen Duke-Benfield (National Skills Coalition)		

Mathematica

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Effie Metropoulos

Kelley Monzella
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Allison Pinckney
Milena Raketic
Linda Rosenberg
Gretchen Rowe
Betsy Santos
Peter Schochet
Leah Shiferaw
Dan Thal
Andy Weiss
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MDRC

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Gloriela Iguina-Colón

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Cynthia Miller
Frieda Molina
David Navarro
Keith Olejniczak
Nikki Ortolani
Liza Paudel
Alexandra Pennington

Natasha Piatnitskaia
Stephanie Rubino
Kelsey Schaberg
Susan Scrivener
Makenzi Sumners
Kemar Taylor
Betsy Tessler
Donna Wharton-Fields

We also want to acknowledge the report reviewers and editors at Mathematica and additional reviewers at MDRC, the staff at the Mathematica's Survey Operations Center, the entire research team's efforts in conducting field research and analyzing the qualitative data as well as the efforts to collect, process, and analyze the quantitative data, and the hard work and additional support from research assistants and administrative assistants.

Glossary

ABAWD	Able-bodied adult without dependents. 18- to 49-year-old adult who is not disabled and does not have dependents
Apricot	Financial system
CA DSS	California Department of Social Services
CalWin	Online system to support eligibility and benefits determination in California
CARES Act	Coronavirus Aid, Relief, and Economic Security Act. An economic stimulus bill signed into law on March 27, 2020 that implemented a variety of programs to address issues related to the onset of the COVID-19 pandemic
CBA	California Bridge Academy. The SNAP Employment and Training pilot implemented in California
CFN	Career and family navigator
Control group	A group of individuals enrolled in a SNAP Employment and Training (E&T) pilot that was eligible for services available through existing SNAP E&T programs if such programs were available to the control group in the pilot location
EDC	Fresno County Economic Development Corporation
EPIS	Random assignment system used during enrollment
ES	Existing services. One of two control groups
Food security	Having access at all times to enough food for an active, healthy life. Individuals who experienced food access limitations due to lack of money or other resources are said to be food insecure
Fresno County DSS	The Fresno County Department of Social Services
GED	General Education Development. A group of subject tests which, when passed, certify that the test taker has high school-level academic skills
HMO	Health maintenance organization
ICP	Individual client (and family) plan
ITT	Intention-to-treat analysis. An analytical method where individuals are evaluated based on their initial random assignment group regardless of whether they received the treatment
LWIA	Local workforce investment area. A group of one or more counties that provide workforce development services
MIS	Management information system
NS	No services. One of two control groups
PPO	Preferred provider organization

RAB	Reading and Beyond
Random assignment	An experimental technique for assigning individuals enrolled in a SNAP Employment and Training pilot into research groups (a treatment or control group)
Research group	A group of individuals enrolled in a SNAP Employment and Training pilot that was either eligible for enhanced services (a treatment group) or eligible for services available through existing SNAP E&T programs where available (a control group)
SNAP	Supplemental Nutrition Assistance Program. A Federal nutrition assistance program
SNAP E&T	A program that assists SNAP participants in obtaining employment by providing services, such as job search assistance, job skills training, education, work experience, or workfare, and supports, such as assistance with transportation and child care costs
SSI	Supplemental Security Income. A Federal income supplement program
TANF	Temporary Assistance for Needy Families. A Federal grant program designed to help needy families achieve self-sufficiency
TRAX	Service receipt database
Treatment group	A group of individuals enrolled in a SNAP Employment and Training pilot that was eligible for the enhanced set of services developed under the pilot
UI	Unemployment insurance. A Federal program to provide unemployment benefits to eligible workers
USDA	U.S. Department of Agriculture
Very low food security	A severe form of food insecurity characterized by disrupted eating patterns and reduced food intake
WIA	Workforce Investment Act Gold Standard Evaluation. The most recent national study of the Adult and Dislocated Worker program services conducted in 2012
WIC	Supplemental Nutrition Program for Women, Infants, and Children. A Federal assistance program that provides food, health care referrals, and nutrition education to low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children
WIOA	Workforce Innovation and Opportunity Act
Work registrant	SNAP participant who has not met any Federal exemptions from SNAP work requirements and is therefore required to register for work

Overview

This report presents findings from the evaluation of a SNAP Employment and Training (SNAP E&T) pilot—California Bridge Academy (CBA)—that was implemented in California from January 2016 to December 2018. This was one of 10 pilots Congress authorized and funded under the Agricultural Act of 2014 that offered enhanced SNAP E&T services to assist SNAP participants in obtaining employment. The Fresno County Department of Social Services (Fresno DSS) enrolled 3,930 individuals in the pilot, randomly assigning them into one of three groups: the CBA group who received enhanced SNAP E&T services (46 percent of individuals who enrolled), a No Services (NS) control group who received no SNAP E&T services (38 percent of individuals who enrolled), and an Existing Services (ES) control group who received existing SNAP E&T services (16 percent of individuals who enrolled). All groups could also receive employment and training services available in the community. Fresno DSS targeted work registrants in Fresno County, and CBA services were voluntary. A single provider offered career-oriented services, including 18 months of case management, general education development (GED) preparation classes, in-house training and referrals to occupational skills training opportunities in the community, support services, and subsidized employment opportunities. CBA also offered financial incentives for improving skills while employed and for remaining in services.

CBA expanded on the existing SNAP E&T program that serviced a small number of SNAP participants in Fresno County, adding subsidized employment, in-house GED preparation classes, and more robust support services. Fresno DSS met their recruiting targets and many CBA group members engaged in services, but fewer individuals participated in GED preparation classes and subsidized employment than Fresno DSS and the provider anticipated. Despite the program's challenges with participation in activities, CBA group members were more likely than both ES and NS control group members to start an activity, complete an activity, and receive a support service. Differences in service receipt and participation in activities were much larger for the CBA group relative to NS control group than the ES control group. CBA group members also were more likely than those in the NS control group to receive case management. The CBA group's increased engagement led to an increase in earnings in Years 2 and 3 after random assignment relative to the NS control group, but there was no effect relative to the ES control group. CBA generally did not affect rates of SNAP participation, but CBA did increase the percentage of individuals who were employed, relative to the NS control group, in each year after random assignment. Although the CBA group earned significantly more than the NS control group, the overall cost of implementing the pilot outweighed its benefits compared to both the NS and ES control groups.

Overall, we find that CBA services relative to those received by the ES control group generally produced small differences in earnings and employment that were not significant, while CBA services relative to those received by the NS control group increased earnings based on survey data and produced a similar pattern of findings based on the UI data, despite the latter difference being smaller in magnitude and not statistically significant. These findings should not be surprising, given the services offered to each group. CBA primarily offered three enhancements over the existing SNAP E&T program: financial incentives, in-house GED preparation (instead of or in addition to referrals to other providers), and the opportunity to participate in subsidized employment. However, because of the slow implementation of the subsidized employment activity and few individuals receiving incentives or completing GED preparation classes, the services that the CBA and ES control groups received were relatively identical. So, we would not expect to see many impacts between these two groups due to the lack of contrast in the services they received. However, the model did prove to be successful when compared to individuals who were not offered any existing SNAP E&T services (NS control group).

Executive summary

The Supplemental Nutrition Assistance Program (SNAP) is the primary source of nutrition assistance for many individuals and families with low incomes. SNAP provides monthly benefits to help participants obtain adequate access to food; for some program participants, it also provides work supports through SNAP Employment and Training (E&T) programs to help them become economically self-sufficient. Although States are required to administer a SNAP E&T program, they have flexibility in determining and designing its services and activities. States typically offer SNAP participants some case management and support services, and a range of activities, that includes job search assistance or training, occupational skills training, and basic education.

Because SNAP E&T programs are varied and are administered at the State or local level, information about the most effective approaches for helping SNAP participants gain skills and find work is limited. For this reason, as part of the Agricultural Act of 2014, Congress authorized and funded the SNAP E&T pilots to test innovative strategies for connecting SNAP participants with jobs that would increase their incomes and reduce their need for public assistance. In 2015, the U.S. Department of Agriculture's Food and Nutrition Service awarded grants to 10 States—California, Delaware, Georgia, Illinois, Kansas, Kentucky, Mississippi, Vermont, Virginia, and Washington—which represented diverse service areas and populations. The pilots varied in whether they operated statewide or only in selected areas, and whether they focused on urban communities, rural communities, or both. The majority of individuals the pilots targeted were unemployed or underemployed and faced significant barriers to employment, such as being homeless, having a criminal history, or having a substance use disorder. Pilots generally expanded the types and amounts of services provided through States' existing SNAP E&T programs. Services typically included (1) a comprehensive skills or clinical assessment to determine an individual's work readiness, skills, and barriers to employment; (2) case management services that developed and supported a detailed individualized work and barrier-reduction plan; and (3) support services,¹ such as transportation assistance, child care, housing assistance, and training or work supplies that helped reduce barriers to both engagement in the pilot and employment. The pilots also offered a range of employment and training-related activities, such as independent job search, job readiness training, job search assistance, basic education, occupational skills training, and work-based learning opportunities (such as subsidized employment, work experience, internships, and work study). Each pilot enrolled 3,000 to 7,000 individuals, for a total of 44,359 individuals across the 10 pilots.

Services are resources provided or administered to individuals, such as assessments, case management, and support services.

Activities are employment or training-related events in which individuals participate, such as job search assistance training, basic education, occupational skills training, or work-based learning.

The authorizing legislation also required a rigorous, longitudinal evaluation of the pilots to assess whether the innovative strategies they used were successful in connecting SNAP participants with jobs that increased their incomes and reduced their need for public assistance benefits. This report summarizes

¹ Referred to as participant reimbursements in the SNAP E&T program; however, for this report, we describe the package of services as support services.

evaluation findings for one State—California.² It provides a detailed description of the pilot’s design and implementation and, using data for up to three years following random assignment, examines the services individuals received and assesses the effectiveness of those services in improving individuals’ outcomes. The report also includes findings from the cost-benefit analysis, which itemizes specific monetary costs and benefits of pilot services, and assesses whether the benefits of the services and activities offered through the pilot were large enough to offset their costs.

California pilot background

In January 2016, the Fresno County Department of Social Services, which administers SNAP, began enrollment in its pilot, the California Bridge Academy (CBA), in Fresno County.³ From January 2016 to June 2017, Fresno Department of Social Services enrolled 3,930 SNAP participants in the pilot, targeting work registrants.⁴

CBA services were voluntary. Services were provided through Reading and Beyond (RAB) and Fresno County Economic Development Corporation (EDC). CBA offered career-oriented services that included 18 months of case management, education, occupational skills training, support services, subsidized employment opportunities, and job retention services. CBA also offered financial incentives for completing education and training and for remaining in services.

Evaluation overview

The evaluation included the following four components:

1. An *implementation analysis* that documented the context and operations of each pilot
2. A *participation analysis* that examined the characteristics, participation levels, and service paths of individuals in the pilots
3. An *impact analysis* that identified what works, and for whom, by examining impacts on employment and earnings; public assistance receipt; and other outcomes, such as food security, health, well-being, and housing
4. A *cost-benefit analysis* that estimated the return on each dollar invested in the pilots

The evaluation used an experimental research design in which individuals eligible for SNAP E&T who were enrolled in the pilot were randomly assigned into the CBA group or one of two control groups. Individuals assigned to the CBA group were eligible for the enhanced set of services developed under the pilot. Existing Services (ES) control group members were eligible for services available through the

² Similar reports for each pilot and a summary report are available at www.fns.usda.gov/research-and-analysis.

³ The California Department of Social Services provides general oversight for SNAP; however, SNAP is administered by counties in California.

⁴ Work registrants are SNAP participants who have not met any Federal exemptions from SNAP work requirements and are therefore required to register for work. Federal exemptions apply to individuals who are younger than 16 or older than 59; physically or mentally unfit for employment; subject to and complying with work requirements for another program; a caretaker of a dependent child younger than 6 or an incapacitated individual; participating in a drug or alcohol treatment and rehabilitation program; employed at least 30 hours a week; or enrolled at least half time in a recognized school or training program.

existing SNAP E&T program in the county. No Services (NS) control group members did not receive any SNAP E&T services. Individuals in both the CBA and control groups continued to be eligible for any other employment and training services available in their communities. Through random assignment, the three groups were, on average, similar across a range of characteristics at the time they enrolled in the pilot. They differed only in the services they subsequently were eligible to receive. This research design allows us to confidently attribute differences in outcomes between the groups to the CBA services rather than other potential causes.

For the evaluation, we collected and analyzed several types of data including the following:

- **Implementation data** from interviews with CBA staff and CBA group members to understand the planning and implementation of the pilot and provide context for other analyses
- **Administrative service use data** to describe participation in services and activities
- **Unemployment insurance (UI) wage records** to measure employment and earnings
- **SNAP administrative data** to measure participation in SNAP, Temporary Assistance for Needy Families (TANF), and Medicaid, and the amount of SNAP and TANF benefits
- **12- and 36-month follow-up survey data** to provide additional information about individuals' service receipt, employment, and earnings, as well as food security, health, well-being, and housing status
- **Cost data** from grantees and providers and time-use data to estimate the cost of services and net costs and benefits to individuals, the government, and society

CBA overview

CA Department of Social Services, Fresno Department of Social Services, and RAB based CBA on the existing SNAP E&T program that served a small number of SNAP participants in Fresno County. CBA expanded these services across the county and added work-based learning, GED preparation classes, and more robust support services. CBA also provided financial incentives for completing education and training and for remaining in services. Fresno Department of Social Services and RAB staff developed the pilot because they hoped to demonstrate the effectiveness of the model and to expand services to more individuals and to fill gaps in the current model. Fresno County Department of Social Services contracted with RAB to provide all of the core CBA services and with EDC to provide assistance with subsidized employment.

Individuals assigned to the CBA group met with a staff person referred to as a career and family navigator to complete an intake assessment and begin to develop their individual client (and family) plan. After completing the assessment and plan, the career

California Bridge Academy (CBA) group is the treatment group, which was offered 18 months of intensive case management, GED preparation classes, referrals to occupational skills training or postsecondary education, subsidized employment, job search assistance, support services, and financial incentives for upgrading skills and remaining in services.

Existing SNAP E&T services is the ES control group, which was offered 18 months of case management, assistance connecting individuals to education and training, job search assistance, and wrap around services for members of the individual's family.

No Services is the NS control group, which did not receive SNAP E&T services.

and family navigator determined what supports, referrals, or activities to offer. Individuals were required to complete job readiness workshops and could then be referred to education (including in-house GED preparation classes), occupational skills training, or subsidized employment opportunities. RAB also offered case management and support services over an 18-month period, meaning unless an individual chose to leave, he or she would receive services for 18 months and then would exit CBA.

Services and activities offered to CBA group members included:

Job readiness workshops. Individuals were required to participate in four weekly job readiness workshops before receiving other activities. These workshops were facilitated by RAB staff and included resume preparation assistance, job readiness assistance, interview practice, and job search assistance.

GED preparation classes. RAB offered in-house GED preparation tutoring to CBA group members who needed to complete their GED test. This tutoring allowed individuals to complete their GED preparation without the additional burden of finding and enrolling in an outside program, then finding transportation there. Individuals in the CBA group could work with outside providers if they preferred a more traditional classroom experience, or they could take advantage of both options if they chose.

Subsidized employment. CBA group members could participate in subsidized employment for up to nine months. The goal of subsidized employment was to provide subsidized jobs to individuals who had little or no work experience. RAB contracted with EDC to recruit employers; maintain the Ready-to-Hire database, which was used for posting subsidized jobs; and handle employer agreements and subsidy payments. The career and family navigators referred individuals to the RAB employer liaisons who worked with individuals on interview skills and job searches using the Ready-to-Hire database. The employer liaisons conducted mock interviews with individuals to prepare them for job interviews and to build confidence.

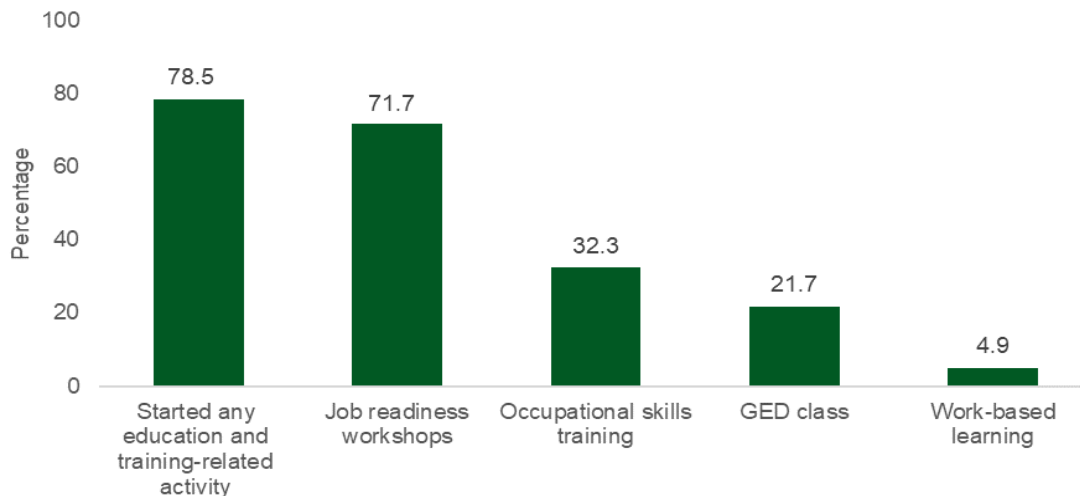
Case management and support services. During the 18-month service period, career and family navigators worked closely with the individuals to help them meet their goals. Career and family navigators generally met with CBA group members weekly but were required to meet at least once a month. Career and family navigators provided individuals with support services needed to reduce barriers, including expenses for transportation, work clothing and uniforms, prescription glasses, and other tools or necessary equipment for training or employment.

Incentives. Individuals in the CBA group were offered two types of differential financial incentives, each with its own intention. The first incentive was provided to individuals who obtained a new full-time job after enrolling in the pilot and engaged in an occupational skills training program (while employed) to advance job-related skills and increase opportunities for promotion or advancement. The second was available to individuals who obtained a new full-time job but continued to participate in CBA services after employment was secured. Individuals could obtain both types of incentives if they met the criteria. During random assignment, those assigned to the CBA group also were assigned to one of two groups that received differential incentives: one group received higher incentives (up to \$480 for each type of incentive) and the other group received lower incentives (up to \$240 for each type of incentive). The incentives accrued in an account maintained by RAB. Individuals could see funds deposited during the 18-month service period but did not receive the lump sum payment until they completed CBA services at the end of the period. Because career and family navigators could not distribute incentive payments at the final case management meeting with the individual, RAB was not able to mail payments to those from whom it did not have contact information. As a result, many CBA group members did not receive their banked incentives.

Participation in CBA services and activities

Most (94 percent) of the individuals randomly assigned to the CBA group engaged in some type of service, meaning they started an assessment or individual client (and family) plan, or started an employment or training-related activity offered by CBA. About 80 percent of CBA group members ultimately started an employment or training-related activity such as job readiness workshops, occupational skills training, GED preparation classes, and work-based learning after they completed intake and assessments (Exhibit ES.1). Among individuals who started an activity, completion rates were highest for job readiness workshops (77 percent), work-based learning (70 percent), and occupational skills training (69 percent) and lowest for GED classes (15 percent). Many of the individuals who completed an occupational skills training program received a certification or credential (9 percent of all CBA group members).

Exhibit ES.1. Almost 80 percent of CBA group members started an employment or training-related activity, with most starting job readiness workshops



Source: SNAP employment and training evaluation administrative service use data.

Note: Estimates are based on data from 1,797 CBA group members.

Almost all CBA group members had at least one contact with a career and family navigator (97 percent), with an average of 44 contacts per person, and 45 percent received a support service. Many received training and work items such as books, fees, uniforms, books, and clothing (43 percent), while 23 percent received transportation assistance. On average, CBA group members who received support services received \$614 in total support service payments. CBA group members were offered two types of differential financial incentives: service retention incentives and education and training incentives. About 15 percent of individuals earned a retention incentive, while only 3 percent earned an incentive for upgrading their skills while employed.

Individuals spent an average of 15 months in CBA. Almost three-quarters of individuals exited CBA within their second year (73 percent), with most exiting in the seventh quarter after random assignment (around the intended 18-month program length). Almost half of individuals (46 percent) exited after completing services. Thirty-eight percent chose to exit before completing services, or were terminated for cause or became ineligible to continue (11 and 5 percent, respectively).

Differences in service receipt for the CBA and control groups

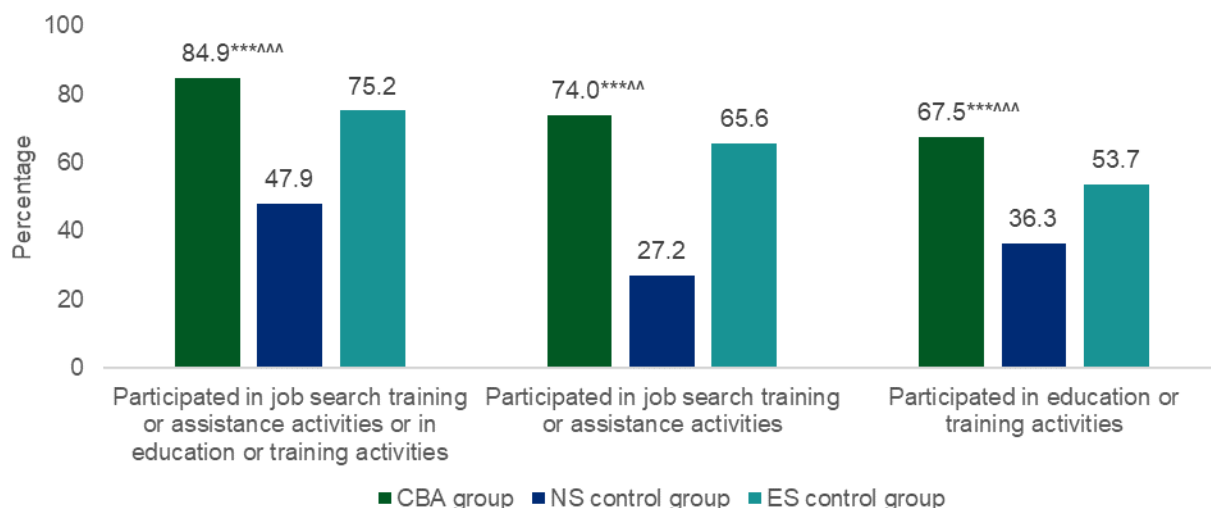
Whether CBA impacted individuals' employment, earnings, and receipt of public assistance depends, in part, on whether there were differences between the CBA and control groups in their receipt of services and their participation in and completion of activities. To provide context for the impacts of CBA, we examined differences in service receipt between the three research groups.⁵ Data were collected in the 12- and 36-month follow-up surveys and capture all types of services and activities, regardless of whether they were provided through CBA, through existing SNAP E&T, or were generally available in the community through programs such as Work Innovation and Opportunity Act or through community colleges, nonprofits, or other organizations.

During the three years following random assignment, the CBA group was more likely than both of the control groups to participate in job search training activities and in education and training activities, with larger differences between the CBA group and the NS control group than between the CBA and ES control groups. Eighty-five percent of the CBA group participated in a job search training or assistance activity or education or training activity compared to 48 percent of the NS control group and 75 percent of the ES control group (Exhibit ES.2). Rates of participation in job search training or assistance activities for the CBA group were 47 percentage points higher relative to the NS control group and 9 percentage points higher relative to the ES control group. CBA group members were also more likely to participate in education or training activities than NS control group members (31 percentage point difference) and ES control group members (14 percentage point difference).

CBA group members were more likely than NS control group members to complete an activity, though there were fewer differences in activity completion between CBA group members and ES control group members. Overall, CBA group members were 23 percentage points more likely than NS control group members and 7 percentage points more likely than ES control group members to complete any type of education or training activity. The CBA group was more likely than the NS control group to receive an occupational certificate or license (9 percentage point difference).

⁵ In this analysis, “service receipt” includes both services (assessments, case management, and support services) and employment and training-related activities.

Exhibit ES.2. Over a three-year period, the CBA group participated in activities offered by CBA, existing SNAP E&T, or the community at higher rates than the control group



Source: SNAP employment and training evaluation 12- and 36-month surveys, weighted data.

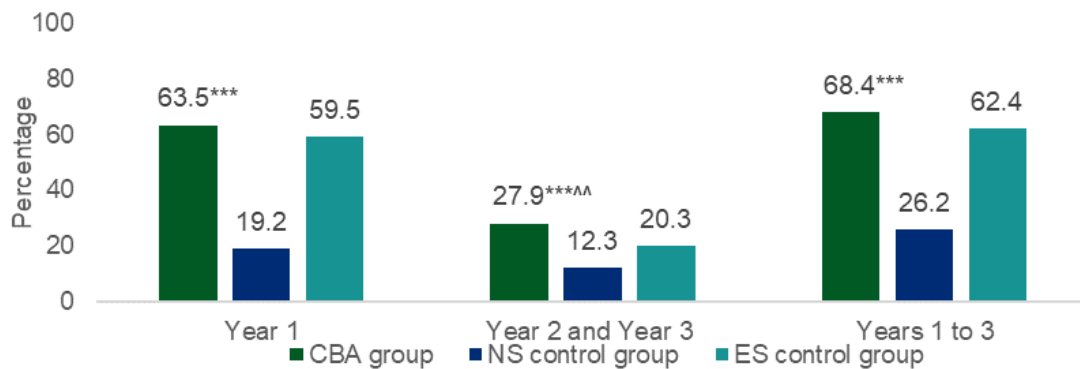
Notes: Estimates cover the 36 months following random assignment. Estimates are based on data from 689 CBA group members, 552 NS control group members, and 247 ES control group members.

^{***/**/*} Difference between the CBA group and NS control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

^{^^/^/^/} Difference between the CBA group and ES control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

The CBA group also was more likely than the NS control group to receive case management (68 versus 26 percent—a 42 percentage point difference), but there was no statistically significant difference between the CBA and ES control groups (Exhibit ES.3). On average, CBA group members had 8 additional contacts with an employment professional or case manager relative to NS control group members (10 versus 2 contacts), and about 4 additional contacts relative to ES control group members (10 versus 6 contacts).

Exhibit ES.3. CBA group members were more likely than NS control group members to receive case management



Source: SNAP employment and training evaluation 12- and 36-month surveys, weighted data.

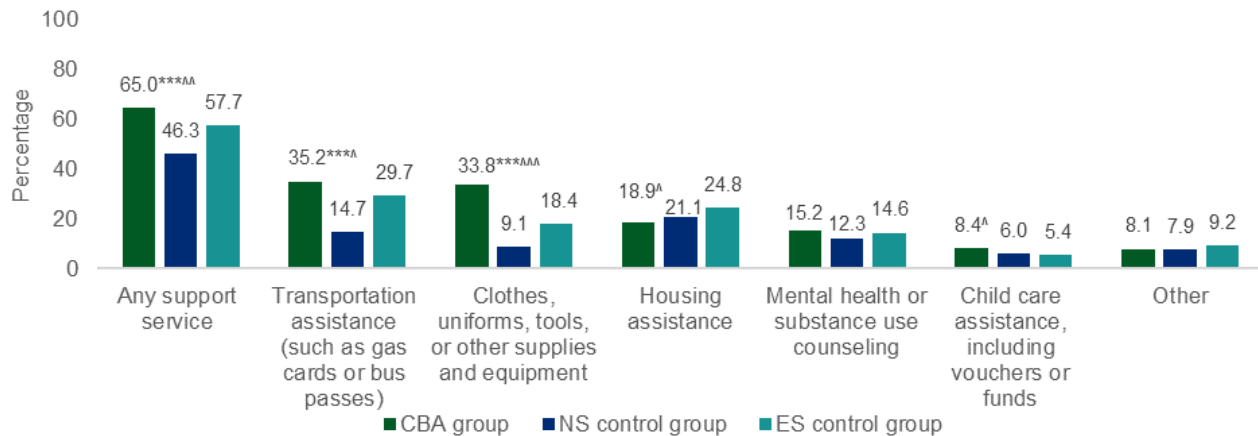
Notes: Estimates cover the 36 months following random assignment. Estimates are based on data from 689 CBA group members, 552 NS control group members, and 247 ES control group members. The 12-month survey requested information about receipt of case management services between the date of random assignment and the date of the 12-month interview. The 36-month survey requested information about receipt of case management services between the dates of the 12- and 36-month interviews. As a result, it is not possible to estimate receipt of assistance separately in Years 2 and 3.

***/**/* Difference between the CBA group and NS control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

^^/^/^ Difference between the CBA group and ES control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

CBA group members also were more likely than members of both control groups to receive support services (19 percentage point difference relative to NS control group members and 7 percentage point difference relative to ES control group members; Exhibit ES.4). The largest difference between the CBA group and both control groups was observed for clothes, uniforms, tools, or other supplies and equipment (34 percent for the CBA group versus 9 percent for the NS control group and 18 percent for the ES control group).

Exhibit ES.4. CBA group members were more likely than control group members to receive support services



Source: SNAP employment and training evaluation 12- and 36-month surveys, weighted data.

Notes: Estimates cover the 36 months following random assignment. Estimates are based on data from 689 CBA group members, 552 NS control group members, and 247 ES control group members.

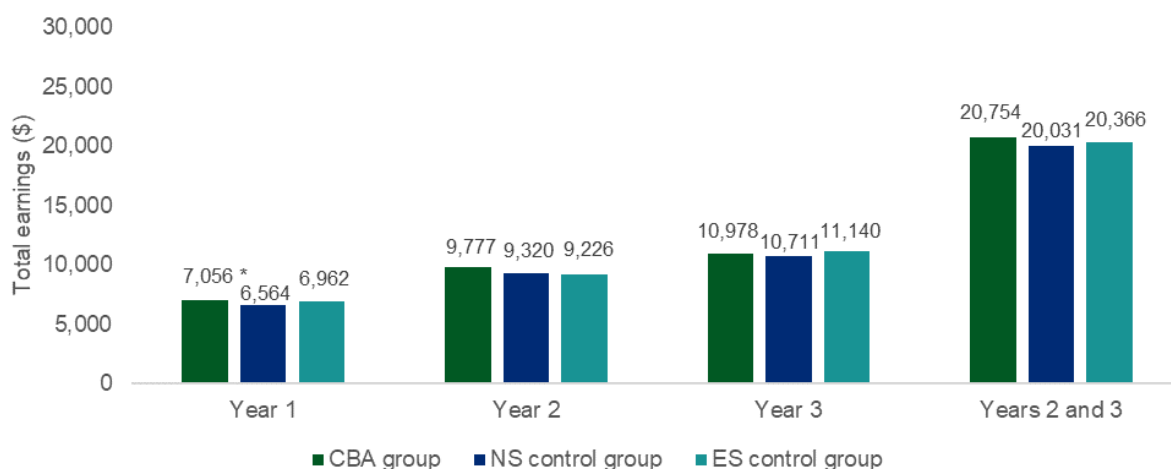
***/**/* Difference between the CBA group and NS control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

^^^/^/^ Difference between the CBA group and ES control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

Impacts of CBA on employment and SNAP participation outcomes

We estimated the impacts of CBA on individual outcomes over the three years following random assignment. Before analyzing the data, we selected two primary outcomes: earnings and SNAP participation. Analyses of earnings and employed were based on both UI and survey data due to differences in data coverage or quality, or in the analysis samples and time periods covered in the data. Instead of focusing on outcomes in Year 3, we focused on those over a two-year period consisting of Years 2 and 3 after random assignment. This approach balanced potential concerns about how the COVID-19 pandemic may have affected outcomes in Year 3 with measuring impacts on outcomes after individuals had sufficient time to participate in CBA activities in Year 1. The estimated impacts on other outcomes are considered exploratory and are used to support findings for the earnings and SNAP participation outcomes by examining whether they had similar impacts.

Earnings. CBA led to an increase in earnings in Years 2 and 3 combined after random assignment based on survey data, but not UI data. Based on UI data, CBA group members earned \$724 more than NS control group members and \$388 more than ES control group members over Years 2 and 3, but these differences were not statistically significant (Exhibit ES.5). Based on survey data, CBA group members had higher earnings than NS control group members in Years 2 and 3 combined (a \$3,938 difference; Exhibit ES.6). CBA group members earned \$1,666 more than ES control group members over the two-year period, but this difference was not statistically significant. CBA group members earned more than NS control group members in each year after random assignment based on survey data. Based on each data source, all three research groups experienced increases in average earnings over time.

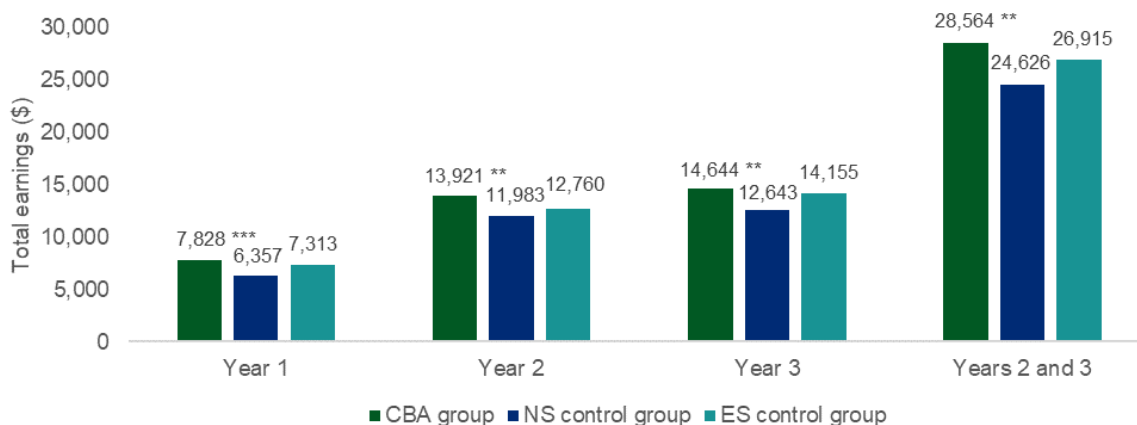
Exhibit ES.5. CBA did not affect earnings (UI data)

Source: SNAP employment and training evaluation UI wage records, weighted data.

Note: Estimates are based on data from 1,797 CBA group members, 1,465 NS control group members, and 633 ES control group members.

***/**/* Difference between the CBA group and NS control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

^^^/^^/^ Difference between the CBA group and ES control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

Exhibit ES.6. CBA increased earnings relative to the NS control group (survey data)

Source: SNAP employment and training evaluation 12- and 36-month surveys, weighted data.

Note: Estimates are based on data from 689 CBA group members, 552 NS control group members, and 247 ES control group members.

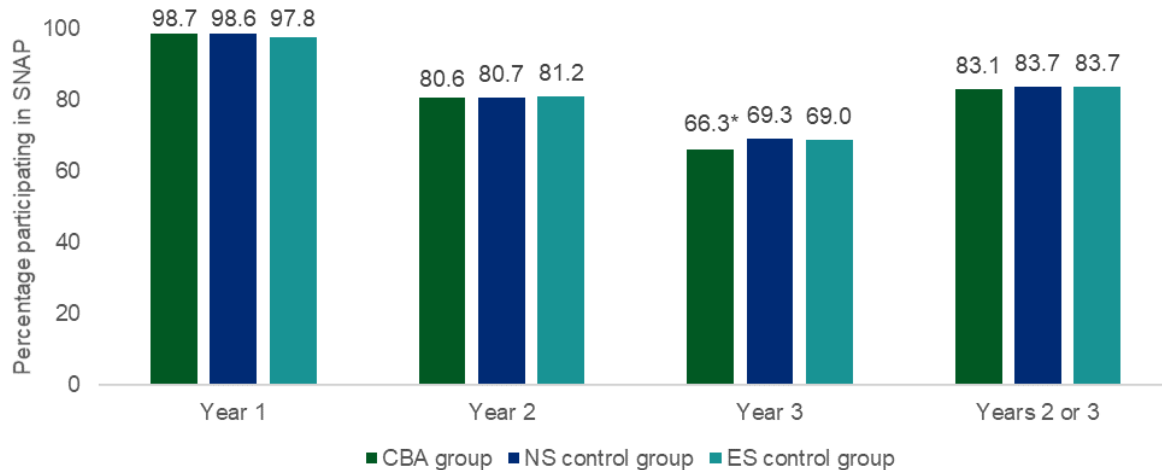
***/**/* Difference between the CBA group and NS control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

^^^/^^/^ Difference between the CBA group and ES control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

SNAP participation. CBA did not lead to a statistically significant change in the likelihood of participating in SNAP in the two-year period (Years 2 and 3) after random assignment. About 83 percent of CBA group members and 84 percent each of NS control group members and ES control group

members participated in SNAP during this period (Exhibit ES.7). The lack of impacts of CBA on SNAP participation reflects similar decreases each year in the rate of SNAP participation for the CBA and control groups. For example, SNAP participation rates decreased from about 99 percent for the CBA and NS control groups and 98 for the ES control group in Year 1 to 66 percent of the CBA group and 69 percent of each control group in Year 3.

Exhibit ES.7. SNAP participation rates based on SNAP administrative data were similar for the CBA group and the NS and ES control groups in each year



Source: SNAP employment and training evaluation SNAP administrative data, weighted data.

Note: Estimates are based on data from 1,797 CBA group members, 1,465 NS control group members, and 633 ES control group members.

***/**/* Difference between the CBA group and NS control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

^^/^/^ Difference between the CBA group and ES control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

Employment, hours worked, and other job characteristics. CBA led to an increase in employment relative to the NS control group in the two-year period (Years 2 and 3) based on survey data (79 versus 72 percent). The largest impact was in Year 1 (10 percentage points), but there were also impacts relative to the NS control group in Years 2 and 3 (7 percentage points in each year). These findings were not corroborated by the UI data, and there were no impacts of CBA on employment relative to the ES control group.

Employment rates provide information about the percentage of individuals employed during a given time period but do not describe the extent or duration of employment. To assess these employment characteristics, we examined the average amount of time individuals were employed each year. Findings were generally similar to those for rates of employment:

- Based on the UI data, there were no statistically significant differences in the number of quarters CBA group members were employed relative to the NS control group or ES control group.
- Based on the survey data, the CBA group was employed 2 more months, on average, than the NS control group; there was no statistically significant difference relative to the ES control group.
- Relative to the NS control group, CBA increased the number of hours worked per week (19 versus 17 hours), but there was no statistically significant difference compared with the ES control group.

Among individuals who were employed at the time of the 36-month survey, CBA group members and control group members held jobs with generally similar characteristics, with several exceptions. CBA group members were less likely to be regular status employees (72 percent of the CBA group and 82 and 86 percent of the NS and ES control groups, respectively) and were more likely to be self-employed or independent contractors (13 percent versus 7 and 8 percent of NS and ES control group members, respectively).

SNAP benefits and exit. There were no impacts of CBA on the average SNAP benefits received, both in absolute terms and as a percentage of the maximum benefit amount. The average SNAP benefit amount in Years 2 and 3 for the CBA group was \$73 and \$93 less than for NS and ES control groups, respectively, but the differences were not statistically significant.

CBA group members had similar likelihoods of exiting SNAP across the three years relative to control group members—74 percent of CBA group members, 72 and 73 percent each of NS and ES control group members, respectively, exited SNAP at some point during the three years after random assignment.

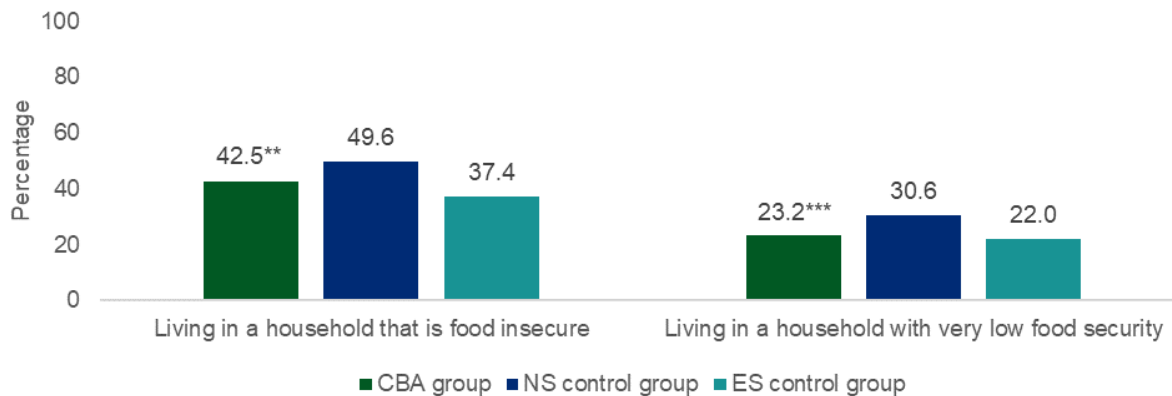
Individuals who exited SNAP included those who left and did not re-enter SNAP in the three-year period, as well as those who left and re-entered before the end of the period. Thus, even though 26 percent of the CBA group participated in SNAP for the full three years, SNAP participation at the end of this period was 54 percent, reflecting that individuals left and re-entered SNAP during the three-year period. These patterns of exiting and re-entering SNAP resulted in both research groups having a similar number of SNAP spells. About 61 percent of the CBA group had a single SNAP spell (meaning they either remained on SNAP for the full three-year period or exited and did not re-enter), 28 percent had two spells, and 11 percent had three or more spells. For the NS control group, these percentages were 60, 27, and 13 percent, and for the ES control group they were 59, 31, and 10 percent, respectively.

Impacts of CBA on other outcomes

CBA led to lower rates of food insecurity than the NS control group; there were no impacts relative to the ES control group. About 43 percent of CBA group members were food insecure compared to 50 percent of NS control group members and 37 percent of ES control group members (Exhibit ES.8). CBA group members also experienced lower rates of very low food security (a severe form of food insecurity) relative to NS control group members (23 versus 31 percent).

There generally were few statistically significant differences between the CBA and control groups for other outcome measures related to health, well-being, and housing status:

- CBA group members were less likely than ES control group members to screen positively for depression (19 versus 26 percent); there was no significant difference relative to NS control group members (21 percent).
- Both research groups had similar levels of health and self-esteem and self-efficacy scores.
- The majority of each research group owned or rented a home or apartment (62 versus 59 and 51 percent of NS and ES control group members, respectively). Although CBA group members and NS control group members were similarly likely to be homeless (4 percent each), CBA group members were more likely than ES control group members to be homeless (3 percentage point difference).

Exhibit ES.8. CBA decreased food insecurity relative to the NS control group

Source: SNAP employment and training evaluation 36-month survey, weighted data.

Note: Estimates are based on data from 689 CBA group members, 552 NS control group members, and 247 ES control group members.

***/**/* Difference between the CBA group and NS control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

^^^/^^/^ Difference between the CBA group and ES control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

CBA costs relative to benefits

CBA costs. An analysis of pilot costs revealed the following findings:

- Fresno County and its partners and providers reported spending \$9,194,027 from April 2015 to December 2018 on the planning and implementation of CBA (\$197,736 during the planning period, \$1,784,252 for recruitment, and \$7,212,038 for CBA services and activities).
- The Food and Nutrition Service grant funded 79 percent of these costs; partners and providers leveraged other funding sources for the remaining 21 percent.
- Administration costs accounted for 51 percent of total costs, including time for staff meetings, supervision, and other activities (\$4,638,020). Direct services accounted for 28 percent of total costs (\$2,574,018), with case management and work-based learning being the largest share of those costs.

Costs relative to benefits. In the cost-benefit analysis, we measured the difference in the average costs of all services received by CBA, NS control, and ES control group members—that is, the differential costs of CBA services—and compared the differential costs of CBA to the value of benefits received by CBA group members. As in the analysis of services received, we considered costs associated with all services and activities, including those delivered by CBA as well as community programs and organizations. This approach reflects the fact that impacts of CBA on individuals' outcomes, such as earnings, were influenced by *all* services individuals received during the 36-month follow-up period, not just those received through CBA.

Based on data from the survey:

- The estimated total costs of all CBA group services were \$8,621,607, including costs for both direct services and ongoing administration. This estimate is about 20 percent higher than the costs of CBA

services alone (\$7,212,038), which indicates that some CBA group members received services from community programs and organizations while they were enrolled in CBA.

- The services received by the control group measure what services would have been available to the CBA group members if CBA were not in place. The estimated costs of all control group services received by the NS group members were \$2,021,686, and by the ES group members were \$1,981,125, including costs for direct services and ongoing administration.
- On average, the total costs of all direct services and activities received by CBA group members was \$6,320 per individual, on average. The total costs of all services NS and ES control group members received through existing SNAP E&T and the community were \$1,380 and \$3,129, respectively, on average.

Estimates of the benefits received by CBA group members reflect earnings and fringe benefits they accrued during the 36-month follow-up period. These data were obtained from the two sources of data used in the impact analysis: (1) UI wage records and (2) 36-month survey data. For the cost-benefit analysis, we used a framework to comprehensively list CBA group benefits and costs relative to the control groups from multiple perspectives, including those of (1) individuals enrolled in CBA, (2) government and taxpayers, and (3) society as a whole—the sum of the other two perspectives. For each perspective, we estimated the net benefit (the difference between total benefits and total costs). A positive net benefit means the benefits outweighed the costs, whereas a negative net benefit means the costs outweighed the benefits. The net benefits of all services CBA group members received were positive for CBA group members but negative for government and taxpayers and for society during the 36-month follow-up period compared to both control groups, based on UI data; net benefits were positive for society compared to the ES control group based on survey data. Compared with the NS control group, the net benefit to society was negative by \$3,499 per CBA group member according to UI wage records and positive by \$991 per CBA group member according to 36-month survey data. Compared with the ES control group, the net benefit to society was negative by \$2,547 per CBA group member according to UI wage records and by \$681 per CBA group member according to 36-month survey data. These findings were robust to changes in assumptions about benefits and costs from all perspectives, such as the values of fringe benefits, taxes, and present values.

Main conclusions and discussion

The goal of the 10 SNAP E&T pilots was to test innovative strategies for increasing SNAP participants' employment and earnings and reducing their need for public assistance benefits. Through its comprehensive data collection and rigorous experimental design, this evaluation assessed whether CBA—the innovative SNAP E&T program California designed and implemented targeting SNAP work registrants—was effective in achieving these goals.

CA Department of Social Services, Fresno County Department of Social Services, and RAB based CBA on the existing SNAP E&T program that served a small number of SNAP participants in Fresno County. CBA expanded these services across the County and added work-based learning, GED preparation classes, and more robust support services. CBA also provided financial incentives for completing education and training and for remaining in services. Fresno County Department of Social Services met their recruiting targets and many CBA group members engaged in services, but fewer individuals participated in GED preparation classes and subsidized employment than Fresno County Department of Social Services and RAB anticipated. Due to a range of implementation issues and the process for placing individuals with employers, few CBA group members started a subsidized employment placement.

Despite the program's challenges with participation in activities, CBA group members were more likely than both NS and ES control group members to start an activity, complete an activity, and receive support services. Differences in service receipt and participation in activities were much larger for the CBA group relative to NS control group than the ES control group. CBA group members also were more likely than those in the NS control group to receive case management. The CBA group's increased engagement led to an increase in earnings over time relative to the NS control group, but there was no effect relative to the ES control group. Although CBA group members earned significantly more than NS control group members, the overall cost of implementing the pilot outweighed its benefits compared to both the NS and ES control groups according to UI wage records. Based on survey data, the benefits of CBA services outweighed their costs to society when compared to the ES group, but not the NS group.

CBA impacts in context of employment and training literature. The study findings are consistent with the previous literature that has often found small labor market effects of employment and training programs for low-income populations offering similar services as CBA. The literature suggests that programs serving low-income populations can typically engage individuals and increase their receipt of services relative to those received by the study control groups in their local areas. The differences for service receipt can be large, especially for receipt of occupational skills training and subsidized employment, translating into positive effects on the percentages of individuals who participate in training activities and the attainment of associated certificates and credentials. However, few of the studies have found that the programs lead to long-term increases in earnings or independence from public assistance (at least over the time period covered by many studies, which is typically less than four years).

There are notable exceptions supporting that the types of activities and services (such as subsidized employment and case management) offered by CBA are effective in improving labor market outcomes. As a result, it is important to understand how take-up and completion of CBA activities and receipt of services, as well as challenges experienced in implementation may have contributed to the evaluation findings.

Discussion of CBA impacts. Together the services received by the ES and NS control groups are representative of the service environment in Fresno County. The existing SNAP E&T program (offered to the ES group) was robust but typically available to only two to three hundred people each year and historically served individuals with children. Thus, most work registrants and relatively few ABAWDs received services through the existing SNAP E&T program in the county. The NS control group, therefore, is more representative of what was available to most SNAP participants in the county. The results from both comparisons are important for understanding how well the CBA services worked for the potential SNAP E&T population as a whole. The impacts of CBA compared to the ES control group describe how effective the enhancements to the existing program were, while comparisons to the NS control group describe how effective the CBA services were relative to the receipt of no services or just those widely available within the community.

Overall, we find that CBA services relative to those received by the ES control group generally produced small differences in earnings and employment that were not significant, while CBA services relative to those received by the NS control group increased earnings based on survey data and produced a similar pattern of findings based on the UI data, despite the latter difference being smaller in magnitude and not statistically significant. These findings should not be surprising, given the services offered to each group. CBA primarily offered three enhancements over the existing SNAP E&T program: financial incentives, in-house GED preparation (instead of or in addition to referrals to other providers), and the opportunity to participate in subsidized employment. However, because of the slow implementation of the subsidized

employment activity and few individuals receiving incentives or completing GED preparation classes, the services that the CBA and ES control groups received were relatively identical. So, we would not expect to see many impacts between these two groups due to the lack of contrast in the services they received. Despite CBA not fully offering all of the planned services as widely as they anticipated, the model did prove to be successful when compared to individuals who were not offered any services.

CBA relative to the ES control group. In addition to the similarity in the services offered to the CBA and ES control groups, the lack of an impact may reflect the small differences in rates of participation and completion of employment or training-related activities between the CBA and ES control groups. There was less than a 10 percentage point difference in the rate of participation in activities, so CBA only improved the take-up of services by a small amount. Also, the increase in completion rates for an activity was only 7 percentage points. The impacts on outcomes such as earnings could have been diluted by those who did not participate in or complete activities. To assess this possibility, we compared impacts for individuals who did and did not start an employment or training-related activity and those CBA group members who completed activities and those who did not. This exploratory analysis showed that there were impacts on earnings and employment for individuals who completed an education or training activity, but no impact for those who completed a job search or job search assistance activity or those who started but did not complete an activity. These findings suggest that the completion of CBA education or training activities may have played a role in connecting some individuals to meaningful employment.

CBA relative to the NS control group. CBA increased earnings relative to the NS control group based on survey data. This is a notable accomplishment given the prevalence and extent of barriers CBA group members faced—only 23 percent were employed at the time of random assignment, and 25 percent did not have a high school diploma. However, these findings are not entirely surprising given the control group was not offered any services through SNAP and had to seek them out in the community on their own. This resulted in increases in the percentage of CBA group members who participated in and completed employment or training-related activities relative to the NS control group. CBA nearly doubled the percentage of individuals who participated in these activities compared to NS control group members. CBA group participated in activities for more than twice as many months as the NS control group did and nearly twice as many hours per week. This also led to considerably higher completion rates; CBA more than doubled the rate of completion of activities relative to the NS control group. CBA also nearly doubled the rate of receipt of occupational certificates or licenses. The CBA group also continued to have higher participation and completion rates through Year 3, suggesting that participation in CBA activities may have supported continued participation in existing SNAP E&T or community-offered activities even after the end of the service period.

CBA also led to higher rates of receipt of case management and support services, which could have helped individual reduce their barriers and move into employment. CBA almost tripled the rate of receipt of case management relative to the NS control group, and increased the rate of receipt of support services, though not by as much. Higher rates of case management and support services also may have allowed individuals to overcome barriers associated not only with starting employment or training-related activities, but also sustaining participation over time and ultimately completing those activities. This additional time in activities and potential skill or certification obtainment, could have led to higher paying jobs than those in the NS group.

Although CBA led to increased earnings relative to the NS control group, this did not result in reduced participation in SNAP. It is possible that the increase in earnings partly reduced SNAP benefit amounts as a percentage of the maximum benefit (the difference between research groups in benefits as a percentage

of the maximum benefit was negative in most quarters and became statistically significant in Quarters 10 and 11 after random assignment), but the increase in earnings was not large enough to make individuals ineligible to receive SNAP. It is also possible that the increase in earnings did reduce the likelihood of participating in SNAP, but this reduction was offset by some CBA group members being more likely to continue to participate in SNAP because they valued the CBA-provided activities. Some individuals may have also continued to participate in SNAP because the CBA-provided services addressing barriers to employment would be discontinued if they did not.

There was a positive impact on earnings for the CBA group relative to the NS control group, but the net benefit of CBA relative to both control groups was negative. This primarily reflects the differential costs of CBA group services, which were not offset by the benefits accrued through earnings and fringe benefits during the 36-month follow-up period. When interpreting these findings, it is important to consider that CBA services were new and experimental. Even though we excluded the costs of planning and recruitment in considering the cost differential between CBA and control group services, the costs of CBA group services were likely higher for the three years of the pilot than they would have been if administered over a longer period of time. In addition, it is possible that some individuals realized benefits which do not appear in the cost-benefit analysis results – for example, increases in earnings that individuals earned after the observation period of 36-months, or unmeasured benefits such as changes in food security, health, or well-being.

Although the findings relative to the two control groups were mixed, SNAP E&T program administrators can learn from the implementation of the CBA model, particularly related to developing a subsidized employment component. As State administrators may be considering offering subsidized employment in their SNAP E&T programs, insights from CBA can be helpful. CBA staff suggested that subsidized employment may provide the most opportunities for individuals in labor markets where entry-level jobs were scarce or there was a specific industry need for positions that required short-term skills training. Fresno County's top industries predominantly included low-wage, entry-level positions (health care, retail, agriculture, manufacturing), and many individuals were not interested in this work or there was little growth potential. Some employers who participated in subsidized employment as part of CBA reported that their need for entry-level candidates was so great that the subsidies did not incentivize them to hire CBA group members. They were more interested in hiring candidates who had soft skills (for example, who were reliable and came to work on time) and could handle the working conditions, such as graveyard shifts, lifting requirements, and part-time or seasonal employment. Employer liaisons also reported that it was difficult to find appropriate jobs for CBA individuals who had some skills and were looking for mid-level positions; building up a reserve of these kind of positions would be an important consideration, as not all SNAP participants are low-skilled. CBA staff learned that it took time and staff commitment to identify how to market the subsidy to employers, monitor the industry-specific needs of the business community, and conduct and compile interest inventories from individuals to match the right candidate to the right subsidized employment position.

I. Introduction

The Supplemental Nutrition Assistance Program (SNAP) is the primary source of nutrition assistance for many individuals and families with low incomes. SNAP provides monthly benefits to help participants obtain adequate access to food; for some program participants, it provides work supports through SNAP Employment and Training (E&T) programs to help them become economically self-sufficient. Although States are required to administer a SNAP E&T program, they have flexibility in designing and determining its services and activities. States typically offer participants assessments and support services, and a range of activities, including job search assistance or training, occupational skills training, and basic education.

Despite the importance of SNAP E&T programs, information about the most effective approaches that help SNAP participants gain skills and find work is limited. For this reason, as part of the Agricultural Act of 2014, Congress authorized and funded SNAP E&T pilots to test innovative strategies for connecting SNAP participants with jobs that would increase their incomes and reduce their need for public assistance benefits. In 2015, the U.S. Department of Agriculture’s Food and Nutrition Service (FNS) awarded grants to 10 States—California, Delaware, Georgia, Illinois, Kansas, Kentucky, Mississippi, Vermont, Virginia, and Washington.⁶ This legislation also funded a rigorous, longitudinal evaluation of these pilots.

The pilots varied in their target populations, geographic reach, and the number of individuals enrolled. The majority of individuals the pilots targeted were unemployed or underemployed and faced significant barriers to employment, such as being homeless or having a criminal history or substance use disorder. Some pilots operated statewide, whereas others operated in select areas of the State, such as counties, community college districts, or local workforce investment areas. Most pilots offered services in both rural and urban areas, but a few focused only on rural or urban communities. Each pilot enrolled 3,000 to 7,000 individuals, for a total of 44,359 individuals across the 10 pilots.

The SNAP E&T pilots generally expanded the types and amounts of services provided through States’ existing SNAP E&T programs. Services typically included (1) a comprehensive skills or clinical assessment to determine an individual’s work readiness, skills, and barriers to employment; (2) case management services that developed and supported a detailed individualized work and barrier-reduction plan; and (3) support services,⁷ such as transportation assistance, housing assistance, and training or work supplies (for example, uniforms, books, clothes, or tools) that helped reduce barriers to both engagement in the pilot and employment. The pilots also offered a range of employment and training-related activities, such as independent job search, job readiness training, job search assistance, basic education, occupational skills

Services are resources provided or administered to individuals, such as assessments, case management, and support services.

Activities are employment or training-related events in which individuals participate, such as job search assistance training, basic education, occupational skills training, or work-based learning.

⁶ SNAP in California is administered by the counties. The FNS grant was awarded to the State SNAP agency and the State oversaw the pilot, but only Fresno County conducted and primarily administered it. We refer to the Fresno pilot as “California.”

⁷ Referred to as participant reimbursements in the SNAP E&T program; however, for this report, we describe the package of services as support services.

training, and work-based learning opportunities (such as subsidized employment, work experience, internships, and work study).

The activities the pilots offered generally were more expansive than those offered under existing SNAP E&T programs, which in most States tended to focus on less intensive independent job search and job search assistance. Moreover, while the pilots were operating, existing SNAP E&T programs could not fund some of the activities and services the pilots provided, such as subsidized employment,⁸ substance use disorder counseling, and mental health counseling. Appendix A provides a summary of each pilot's characteristics, including the target population, pilot location, and pilot start and end dates, and Appendix B provides more detail about the SNAP E&T program and work requirement policies.

This report summarizes evaluation findings for one State—California.⁹ It provides a detailed description of the pilot's design and implementation, the services individuals received, and the effectiveness of those services in improving individuals' outcomes. The report also includes findings from the cost-benefit analysis, which itemizes specific monetary costs and benefits of pilot services, and assesses whether the benefits of the services and activities offered through the pilot were large enough to justify their costs.

A. Overview of California's pilot

California began enrollment in its pilot, the California Bridge Academy (CBA), in Fresno County on January 21, 2016. CBA operated in nine sites within the county—six urban and three rural (Exhibit I.1). In the year before California began CBA enrollment, the average unemployment rate in Fresno County was 10.2 percent (Bureau of Labor Statistics 2019).

Exhibit I.1. CBA locations



California Department of Social Services (CA DSS) provides general oversight for SNAP; however, SNAP is administered by counties in California. Fresno County Department of Social Services (Fresno DSS) administers the SNAP E&T program in Fresno County. The program is voluntary and serves a small number of individuals each year. Fresno DSS contracted with Reading and Beyond (RAB) to provide existing SNAP E&T services which provided 18 months of case management, assistance connecting individuals to education and training, job search assistance, and wrap around services to help all family members with their needs.

CA DSS, Fresno DSS, and RAB developed a pilot based on the existing SNAP E&T program but added more robust services and supports. The voluntary pilot targeted work registrants,¹⁰ including families with children, unemployed or

⁸ The Agriculture Improvement Act of 2018 (P.L. 115-334) made subsidized employment an allowable SNAP E&T component; the final rule published in January 2021 (FNS 2021) permitted States to begin offering it as an E&T component in March 2021.

⁹ Similar reports for each pilot and a summary report are available at www.fns.usda.gov/research-and-analysis.

¹⁰ Work registrants are SNAP participants who have not met any Federal exemptions from SNAP work requirements and are therefore required to register for work. Federal exemptions apply to individuals who are younger than 16 or older than 59; physically or mentally unfit for employment; subject to and complying with work requirements for another program; a caretaker of a dependent child younger than 6 or an incapacitated individual; participating in a *(continued)*

underemployed individuals, high school dropouts, individuals with a criminal history, disadvantaged individuals, or those with limited work experience (Exhibit I.2). CA DSS oversaw the pilot, but Fresno DSS administered it and contracted with RAB and Fresno County Economic Development Corporation (EDC) to offer career-oriented services that included 18 months of case management, general education development (GED) preparation classes, in-house training and referrals to occupational skills training opportunities in the community, support services, subsidized employment opportunities, and retention services. CBA also offered financial incentives for improving skills while employed and for remaining in services.

Exhibit I.2. Pilot characteristics

Characteristics	
Pilot operation period	January 2016 to December 2018
Location	Nine sites in Fresno County, California
Grantee agency	California Department of Social Services (CA DSS)
Key partners	Fresno County Department of Social Services (Fresno DSS)
Key providers	Reading and Beyond (RAB) Fresno County Economic Development Corporation (EDC)
Target population	Work registrants: families with children, unemployed/underemployed, high school dropouts, individuals with a criminal history, disadvantaged individuals, and those with limited work experience.
Number enrolled	3,930
Program type	Voluntary
Existing SNAP E&T program	RAB offered 18 months of case management, assistance connecting individuals to education and training, job search assistance, and wrap around services for members of the individual's family.
Key CBA services	18 months of intensive case management GED preparation classes Referrals to occupational skills training or postsecondary education Subsidized employment Job search assistance Support services Financial incentives for upgrading skill and remaining in services

From January 2016 to June 2017, California enrolled 3,930 individuals in the pilot. Individuals enrolled were randomly assigned into one of three research groups: a treatment group (referred to as the CBA group) who received enhanced SNAP E&T services (46 percent of individuals who enrolled), a No Services (NS) control group who received no SNAP E&T services (38 percent of individuals who

drug or alcohol treatment and rehabilitation program; employed at least 30 hours a week; or enrolled at least half time in a recognized school or training program.

enrolled), and an Existing Services (ES) control group who received existing SNAP E&T services (16 percent of individuals who enrolled). CA DSS continued providing services until December 2018.

B. Evaluation of SNAP E&T pilots

The evaluation included the following four components:

1. An **implementation analysis** that documented the context and operations of each pilot
2. A **participation analysis** that examined the characteristics, participation levels, and service paths of individuals in the pilots
3. An **impact analysis** that identified what works, and for whom, by examining impacts on employment and earnings; public assistance receipt; and other outcomes, such as food security, health, well-being, and housing
4. A **cost-benefit analysis** that estimated the return on each dollar invested in the pilots

The evaluation of each pilot used an experimental research design in which individuals eligible for SNAP E&T who were enrolled in the pilot were randomly assigned into treatment and control groups that were offered differing arrays of services. Random assignment ensures that any differences in outcomes between the two groups are a result of the enhanced services and not driven by the differences in the characteristics of the individuals who did and did not receive those services. Treatment group members were eligible for the enhanced set of services developed under the pilot, and control group members were eligible for services available through existing SNAP E&T programs in the State (unlike other pilots, California had an additional control group that did not receive SNAP E&T services); the treatment and control groups continued to be eligible for any other services available in their communities. Through random assignment, the treatment and control groups within a pilot were, on average, similar across a range of characteristics at the time they enrolled. They differed only in the services they subsequently were eligible to receive.

FNS published an evaluation report that presented interim findings in California for each component of the evaluation (Mabli et al. 2021). The implementation and cost analyses described the planning and early implementation periods of the pilots, and the findings in the participation and impact analyses focused on the 12-month period following random assignment for those enrolled through 2017. We reported these findings for the 3,930 individuals who enrolled in the pilot.

The interim report described several notable findings:

- **Implementation.** California successfully developed most services, created partnerships, enrolled individuals within a year of receiving the grant, and implemented the pilot model mostly as intended. However, staff initially had difficulty identifying and recruiting individuals for the pilot, which slowed enrollment and affected staff morale. Staff dissatisfaction, in part, led to a high staff turnover rate, which took time away from the management of the pilot.
- **Participation.** Almost all individuals in the CBA group met with a career navigator, started an assessment, or received a support service. More than three-quarters of the CBA group ultimately started an employment or training-related activity. However, few individuals received a credential, certification, or degree in the first 12 month after random assignment. Just over a quarter of CBA group members exited the pilot within their first year.

- **Impact.** Although the CBA group was more likely than the NS and ES control groups to start and complete job search training activities and education and occupational skills training activities, CBA led to an increase in employment and earnings relative to the NS control group based on survey data, and not UI data. CBA did not lead to an increase in employment and earnings relative to the ES control group, and did not lead to changes in likelihood of participating in SNAP within the first year relative to either control group.

This final evaluation report builds on the interim report to provide more conclusive evidence about the effectiveness of the pilot's services. The full effects of the enhanced services may not have materialized during the short-term, 12-month follow-up period examined in the interim report, especially for some individuals still receiving services at the 12-month point. Therefore, this report focuses on individuals' outcomes over a period of up to 36 months after random assignment, allowing an assessment of relatively longer-term impacts including, for some individuals, those measured after CA DSS stopped providing services in December 2018.

Finally, the implementation and cost analyses in the interim report described the planning and early implementation periods of the pilots but did not cover the full period during which the State offered services and incurred costs. This report expands the implementation analysis to include the full period during which the pilot was implemented and discusses the potential for its sustainability and replicability. It also builds on the interim cost analysis to determine the net benefit (relative to costs) of providing CBA services.

C. Organization of this report

The remainder of this report is organized as follows:

- Chapter II presents the data and methodology used to conduct the analyses in the evaluation.
- Chapter III describes how enrollment changed over time and the characteristics of the individuals who enrolled.
- Chapter IV describes the pilot's planning and implementation, the ways in which its implementation differed from the original design, challenges experienced, and responses to these challenges. It also describes the sustainability and replicability of CBA.
- Chapter V presents findings from the participation analysis, which describe the services that individuals in the CBA group received.
- Chapter VI describes differences in the services received by the CBA group and the control group.
- Chapter VII presents findings from the impact analysis, which describes the impact of CBA on employment, earnings, benefit receipt, and other outcomes.
- Chapter VIII describes the costs of services the CBA group received and compares the costs and benefits of those services.
- Chapter IX offers conclusions.
- Appendix A describes the primary characteristics of the 10 pilots; Appendix B provides an overview of the SNAP E&T program; and Appendices C to H present detailed findings from the analyses described in Chapters V through VIII, as well as additional subgroup analyses.

II. Data and methodology

This chapter describes the sources of the data we collected for the evaluation and how we used them in the analyses. We discuss how we obtained the data and the types of information each source contained. We also explain which individuals we included in each analysis and the methods we used to address the evaluation's research objectives. A technical supplement in a separate volume describes the data and methodology in detail (Dotter et al. 2022).¹¹

A. Data sources

We collected data to support the evaluation from a variety of sources:

1. **Baseline registration form.** After obtaining study consent, pilot intake staff collected baseline information about individuals in the pilot, including their demographic characteristics, employment histories, and receipt of public assistance. We collected baseline data for all CBA and control group members.
2. **Implementation data.** We collected most of the implementation data during three rounds of site visits to the State, during which we collected information about implementation, challenges, and lessons learned during different periods of pilot operation:
 - Round 1 (July 2016): The planning and early implementation periods
 - Round 2 (June 2017): The first full year of pilot operations
 - Round 3 (September 2018): The last year of pilot operations, as well as planning for the end of the pilot and sustainability of its services

We also collected information during technical assistance and monitoring site visits and telephone calls throughout the planning and service delivery periods.

The site visits included in-person and telephone interviews with staff from CA DSS, Fresno DSS, RAB, and the Fresno County EDC leadership and service provider staff ; structured observations of service provider operations; in-depth interviews with four CBA group members; four focus groups that included either CBA group members who were engaged in services or those who never engaged or stopped engaging before completing services; and targeted discussions with five employers that provided subsidized work experience to CBA group members.

3. **Administrative service use data.** RAB collected and shared administrative data that documented the types of training, education, and services they provided to CBA group members and, where applicable, control group members. The administrative data analyzed for this report included information on service receipt from the date of random assignment for each individual through either the last known date of service or the end of CBA's service period (December 2018).
4. **Unemployment insurance wage records.** We obtained data on employment status and earnings from State unemployment insurance (UI) wage records. We obtained data for each individual in the pilot who had earnings for 8 quarters (two years) before the date of random assignment, at least 12 quarters

¹¹ The supplement provides additional information about the analysis approach, including details on the study design, analytic weights, approach to addressing missing data, and the impact estimation approach.

after random assignment for individuals randomly assigned through June 2017. The data contained earnings amounts for each quarter, which we also used to construct indicators of quarterly employment status.

5. **SNAP administrative data.** Fresno DSS provided SNAP administrative caseload data. We used these data to construct measures of receipt of public assistance (receipt of SNAP and Temporary Assistance for Needy Families [TANF]), SNAP and TANF benefit amounts, and income. We also used these data to characterize individuals' recent history of SNAP participation. DSS provided monthly data for all individuals in the pilot from one year before random assignment through July 2020.
6. **12- and 36-month follow-up surveys.** The 12- and 36-month follow-up surveys were important sources of service receipt and outcomes data examined in this report. We conducted telephone surveys about 12 months after random assignment with individuals enrolled in the pilot through the end of the enrollment period (June 2017) (2,245 CBA and control group members). We also conducted telephone surveys about 36 months after random assignment among individuals who responded to the 12-month survey (1,485 CBA and control group members). The 12-month survey asked for information about individuals' service receipt, employment, and earnings in the 12 months after random assignment. The 36-month survey asked for similar information for the period between the 12- and 36-month surveys. These surveys also provided data for measures of household food security status, health, well-being, and housing status around the time of the interview. The survey data complemented the UI wage records and provided more detail on individuals' employment and earnings, including the number of jobs they held over time; the job start and end dates (if applicable); and characteristics of the jobs, such as hours worked per week, weekly earnings, job type, fringe benefits, and occupation.
7. **Cost data.** To estimate CBA costs, we collected data from cost workbooks completed by CA DSS and partners and providers through the end of the CBA service period. The workbooks were the basis for calculating total costs and describing the categories of costs for the CBA group, including those for staff, direct services, supplies and equipment, and overhead and operations. In addition, to estimate the total cost of each type of service, we administered a time-use survey to collect data on the percentage of time direct service providers spent on each type of service for CBA group members. As described in the technical supplement, we used data from other sources to estimate the costs of control group services and the dollar values of benefits included in the cost-benefit analysis.

B. Analysis approach

The findings presented in this report are based on a comprehensive set of analyses.

1. Implementation analysis

The implementation analysis summarized and synthesized the data collected through the site visits and during technical assistance and monitoring. The analysis focused mainly on the data collected from formal interviews, but we incorporated the information from technical assistance and monitoring into findings when appropriate. Information from the focus groups and case studies is included to provide context; however, it is important to note that we collected these data from small numbers of CBA individuals and employers, and their experiences and opinions are not necessarily representative of the entire CBA group or all employers.

We organized the data by topic, interviewee, and pilot office to facilitate analysis by type of respondent (for example, Fresno DSS or provider) and pilot location within the State. We developed tables and synthesized information across respondents to describe the flow of services and how they changed over time, the challenges staff faced, and lessons learned.

2. Participation analysis

The participation analysis used administrative service use data recorded by service providers to summarize engagement and participation in services and activities following random assignment for CBA group members (control group members were not included in this analysis). The data measured individuals' receipt of services and participation in activities during the entire service period in which individuals could have been engaged in services (January 2016 through December 2018).

We created timelines for each CBA group member to describe when they started to receive services and, for those who completed services, end dates. These timelines allowed us to estimate the order in which individuals typically proceeded through activities and the length of time they spent on each one and in CBA overall.

3. Analysis of differences in service use between CBA and control groups

This analysis statistically compared receipt of services among CBA and control group members over the 36 months following random assignment. Comparing the differences between CBA and control groups in service use provided context for understanding the impacts on employment, earnings, and receipt of public assistance.

The analysis was based primarily on 12- and 36-month survey data, which were available for both CBA and control group members randomly assigned through June 2017.¹² The 12-month survey data provided information on service receipt and participation in activities from the date of random assignment through approximately 12 months later, whereas the 36-month survey provided similar information from the date of the 12-month interview until about 36 months after random assignment. We combined these 12- and 36-month survey data to form a single longitudinal data file that describes, for each member of the CBA and control groups, the employment-related services and education and training activities in which they participated during the 36-month period following random assignment, including type and duration.¹³ The survey data captured any type of service received, regardless of whether it was provided through CBA, existing SNAP E&T, or providers in the community, such as Workforce Innovation and Opportunity Act (WIOA) programs, community colleges, nonprofits, or other organizations.

¹² The analysis also used administrative data analyzed in the participation analysis when information on the use of specific services was available for both CBA and control group members; we present some statistics in Appendix E.

¹³ The activities measured in the survey included (1) job search assistance or job search training and (2) education and occupational skills training. Job search assistance or job search training activities included those that helped individuals with resume writing, interviewing, and networking. Education and occupational skills training activities included education in the form of adult basic education or General Education Development (GED) courses, English as a second language (ESL) classes, or college courses; occupational skills training programs that prepared individuals for specific occupations; general job skills training programs that helped individuals learn widely applicable job skills and readied them for work; and work-based learning activities, such as paid or unpaid internships and apprenticeships.

We compared regression-adjusted averages of measures of service receipt for the CBA and control groups. To improve the precision of the estimates, the regressions controlled for the characteristics of individuals as measured at the time of random assignment, including demographic characteristics (such as age, educational attainment, and number of children in the household) and economic characteristics (such as employment status and earnings). We weighted the observations to ensure that the differences were representative of all individuals enrolled in the pilot. We constructed the weights to reflect the random assignment process, survey design, and survey nonresponse, and used t-tests to determine whether service receipt differences between the CBA and control groups were statistically significant.

4. Analysis of impacts on employment and well-being outcomes

To estimate how CBA affected individuals' outcomes, we compared the average outcomes of the CBA and control groups over the 36 months following random assignment. Because CBA and control group members' baseline characteristics on average were the same at the time of random assignment (see Chapter III and Appendix C), differences in their outcomes after random assignment can be attributed to differences in the services offered to individuals in each group.

We used three data sources to measure outcomes: (1) UI wage records, (2) SNAP administrative data, and (3) 12- and 36-month follow-up survey data. The outcomes examined included employment status, earnings, and job characteristics, such as hours worked and occupation. We measured employment and earnings by quarter and year, using the start and end dates of jobs reported in the surveys. Household food security status was measured over the 30 days before each survey period, whereas health, well-being, and housing status were generally measured at the time of each survey interview. We estimated impacts for most outcomes for individuals randomly assigned through June 2017.

We analyzed outcomes related to earnings and employment using both UI wage records and survey data. Findings for these parallel analyses may differ because of differences in data coverage or quality, or in the analysis samples and time periods covered in the follow-up data. For example, UI wage records are not subject to the recall error that presents a potential problem in surveys. However, UI wage records do not cover all types of jobs, exclude jobs in certain industries, do not contain information on job characteristics, and are subject to other reporting errors.¹⁴ The omissions are nontrivial, and workers in sectors with no or partial coverage in UI wage records comprise about 10 percent of U.S. employment (Hotz and Scholz 2002; Kornfeld and Bloom 1999). Additionally, UI wage records do not cover workers who are casually employed, such as day laborers or part-time helpers, and exclude most cash-only work and work that is part of the “gig economy” (Abraham et al. 2018; Katz and Krueger 2016, 2019). Survey data also have limitations. In addition to the potential for recall error, these data were not available for everyone enrolled in the pilot because some individuals did not respond to the survey. Also, the characteristics and experiences of individuals who responded to the survey may have differed from those who did not respond.¹⁵

¹⁴ In particular, UI wage records do not cover self-employed workers, railroad employees, workers in service for relatives, most agricultural labor, some domestic service workers, and part-time employees of nonprofit organizations (U.S. Department of Labor 2014).

¹⁵ An analysis of the differences in individual characteristics of survey responders and nonresponders, and the differences between research groups, is in the technical supplement.

The time periods for which data are available were the same for the UI and survey data. Analyzed survey and UI data include individuals who were randomly assigned from January 2016 through June 2017. We note that even though there are differences between the data sources, each should provide unbiased estimates of the impacts of CBA on the outcomes they measure, because the research groups were balanced along individual characteristics at the time of random assignment.

With an experimental design, unbiased impact estimates are attainable from the differences between average outcomes of the CBA and control groups. We estimated impacts on outcomes by comparing regression-adjusted averages for each research group to improve the precision of estimates and adjust for small baseline differences between groups that may have arisen by chance or because of survey nonresponse or missing administrative records data. Regressions controlled for individuals' characteristics as measured at the time of random assignment.¹⁶ We used t-tests to determine whether there were significant differences between the CBA and control groups that were unlikely to have occurred purely by chance.¹⁷

We calculated average outcomes for research groups by applying weights to each observation to help ensure that estimated differences between the CBA and control groups were representative of all individuals enrolled in the pilot in the State. We constructed these weights to reflect the random assignment process and, for analyses based on the survey data, adjust for survey nonresponse bias based on observable characteristics recorded prior to random assignment.

We estimated the impact of CBA on many outcomes and across several subgroups, performing statistical tests for each. However, the likelihood that some estimates are found statistically significant simply by chance increases with the number of estimates tested, potentially leading to the false discovery of impacts not really caused by CBA. To help guard against this problem, known as multiple comparisons bias, we selected two primary (confirmatory) outcomes before analyzing the data: (1) earnings (based on both the UI wage records and survey data) and (2) SNAP participation in the two-year period (Years 2 and 3) after random assignment. We defined the primary outcomes over this period of available data because many CBA group members were expected to be engaged in education and training in the first year, which could have reduced their opportunity for employment during that time. Although it is typical to examine longer-term effects of employment and training programs on outcomes by using a time period farthest from when individuals participated in activities, we did not consider Year 3 outcomes among our primary outcomes due to concerns about the adverse effects of COVID-19 on individuals' outcomes in that year. (For about 23 percent of individuals who were randomly assigned, the COVID-19 pandemic took place during their third year after random assignment [with the start of the pandemic defined by the nationwide enactment

¹⁶ The full set of characteristics and additional information on their selection can be found in the technical supplement.

¹⁷ Analyses in this report tested for statistical significance at the 0.01, 0.05, and 0.10 levels. We used the 0.10 level because the evaluation was assessing the effectiveness of new interventions for which there was no previous evidence of effectiveness for SNAP participants. A more stringent statistical significance threshold often is used when evaluating ongoing programs for which there is an established literature on program effects based on prior studies. Using a more stringent statistical significance threshold in the current evaluation would have reduced statistical power and limited our ability to identify and highlight promising sets of services offered through the pilots. By using a 0.10 statistical significance level, the evaluation aimed to build knowledge in the field of workforce development for SNAP participants on which future SNAP E&T evaluations can expand, and eventually apply more stringent tests of effectiveness once programs and service models have been established for a longer period of time.

of the CARES Act on March 27, 2020].) Although CBA's effect on employment was important to assess in the evaluation, we excluded employment from the set of primary outcomes due to our focus on the two-year period (Years 2 and 3); the rate of employment is a more suitable outcome when measuring impacts over a narrower period of time such as a month or quarter. For example, employment was included as a primary outcome for the interim evaluation of this study, which focused on the fourth quarter from random assignment only. In the final evaluation, we used the estimated impacts on employment and other outcomes, as well as for subgroups, to support findings for the primary outcomes by examining whether they fit within a pattern of similar impacts. We view these analyses as exploratory, providing policy-relevant but less rigorous evidence about the effects of CBA. This information could be valuable for continuous program improvement and identifying potential hypotheses for more rigorous examination in the future.

5. Cost analysis

The cost-benefit analysis compares the benefits individuals enrolled in CBA received in dollar terms through changes in earnings and public assistance with the costs of the services provided during the CBA service period. The analysis estimates the extent to which the benefits exceeded the costs of providing services to the CBA group compared with the benefits and costs of providing services to the control groups. In this section, we present the methods used for the cost-benefit analysis.

Description of costs. For the cost-benefit analysis, we estimated three groups of costs: (1) the costs of CBA; (2) the costs of all services provided to CBA group members through CBA and the community; and (3) the costs of all services provided to members of the control groups through the community and through SNAP E&T for the ES control group. For each group of costs, we estimated the total costs, costs by service type (such as case management or education), and costs per individual. The difference between the costs of all services CBA and control group members received is the basis for the cost-benefit analysis.

Costs of CBA. The costs of the CBA included those for planning, recruiting, and delivering services. We based the estimates of CBA costs on cost data provided by CA DSS and partners and providers with direct subcontracts through the FNS grant. These data were reported through standardized cost workbooks submitted for the planning period and on a quarterly schedule during service delivery. CA DSS, Fresno County, and RAB each submitted workbooks with their own cost information. They submitted workbooks for the planning period (July 2015–January 2016) and for 12 quarterly service delivery periods (January 2016–December 2018) through the end of services and closeout activities, which occurred in March 2019.

- **Total costs.** The workbooks captured data on a set of four core cost categories, or cost ingredients, including staff, direct services, supplies and equipment, and overhead and operating costs. These costs included those paid for with FNS grant funds and those paid for with funds leveraged from other sources. We used the cost ingredients to build an estimate of the total costs of CBA by summing them across the four cost categories.¹⁸
- **Costs by service type.** In addition to the cost workbooks, a web survey collected data on the percentage of time provider staff spent on key services for CBA group members—for example,

¹⁸ The ingredient, or build-up, methodology used for the cost data collection and analysis has been used in similar evaluations of public workforce programs and is detailed in Levin, Henry M., and Patrick J. McEwan. *Cost-Effectiveness Analysis: Methods and Applications*. Thousand Oaks, CA: SAGE Publications, 2001.

management, assessments, and job readiness or life skills workshops (such as a job club or job readiness training). We allocated the costs of (1) staff, (2) supplies and equipment, and (3) overhead and operating costs to direct service costs using the percentage of time staff reported spending on these key direct services.

- **Costs per individual.** To estimate the costs of serving the average individual and the range of costs for serving all CBA group members through CBA, we used individual-level data on participation in services to attribute a cost to each service in which the individual engaged. We used administrative service use data collected by CA DSS and partners and providers on participation in CBA services only. We used data on the unit (or per-service) cost of CBA services to estimate the total cost of services for each individual in the administrative service use data. We then estimated the mean cost of services for an individual.

Costs of all services received by CBA group members. In addition to estimating the costs of CBA, we estimated the cost of all services that CBA group members received from the CBA and the community. We used the costs of all services in the cost-benefit analysis because the benefits CBA group members could have accrued through changes in employment and earnings were a product of all services in which they participated during the follow-up period, not just the CBA services.

- **Total costs, costs by service type, and costs per individual.** We estimated the costs of all services CBA group members received per individual using the same method we used to estimate the per individual costs of CBA. We used individual-level data on participation in services to attribute a unit cost to each service in which each individual engaged and estimated the mean and range of costs per individual. We summed the individual-level estimates to get an estimated total cost of all services CBA group members received.

We used the unit costs of CBA services and individual-level participation data from the 12- and 36-month follow-up surveys to estimate the costs of all services CBA group members received. We chose to use the survey data to estimate the cost differentials between the CBA and control groups because, unlike the administrative service use data, the survey data were collected for both the CBA and control groups. In addition, these data reflect all services both groups received, thus maximizing the comparability of the two sets of service costs.

Costs of all services received by control group members. Most grantees were unable to report detailed information on costs for the services received by control group members. As a result, we estimated the costs of all services control group members received using recently published data on the costs of similar services offered through the WIOA Adult and Dislocated Worker programs. Services for the control group were generally similar to or a subset of WIOA services, including case management, assessments, job clubs, job readiness training, independent job search (called resource room visits), education, occupational skills training, work-based learning, and support services. For case management and all employment and training-related activities, we used cost data from the WIA (Workforce Investment Act) Gold Standard Evaluation, which were collected using the same methodology as this evaluation and the same workbook and cost ingredients (staff, direct service, supply and equipment, and overhead and operating costs).¹⁹ For cost estimates of support services, we used 2018 FNS-583 form data on reported

¹⁹ The WIA Gold Standard Evaluation is the most recent national study of the Adult and Dislocated Worker program services, conducted in 2012 and with findings published in 2016. WIA was reauthorized in 2014 under the WIOA. (continued)

costs of support services in existing SNAP E&T programs. We adjusted the cost estimates to 2016 dollars to facilitate a direct comparison with CBA group cost workbook estimates, which we also adjusted to 2016 dollars.

- **Total costs, costs by service type, and costs per individual.** We used the same method to estimate the costs of all control group services that we used to estimate the costs of all CBA group services. We attributed the WIOA unit cost of each service to individual-level data on participation in the services control group members reported receiving through the community in the 12- and 36-month follow-up survey data. We estimated the mean and range of costs per individual and summed the individual-level estimates overall and by service type to estimate the costs of all services control group members received.

Approach to cost-benefit analysis. The cost-benefit analysis used a framework to present a comprehensive listing of CBA group benefits and costs, relative to the two control groups, from three perspectives: (1) individuals enrolled in CBA, (2) government and taxpayers, and (3) society as a whole, which represents the sum of the other two perspectives. The framework is similar to an accounting ledger, listing benefits and costs as dollar values that could be positive from one perspective or negative (a cost) from another. All costs and benefits are expressed as the difference between the CBA group and each control group, and reflect all services those individuals received during the 36-month follow-up period.

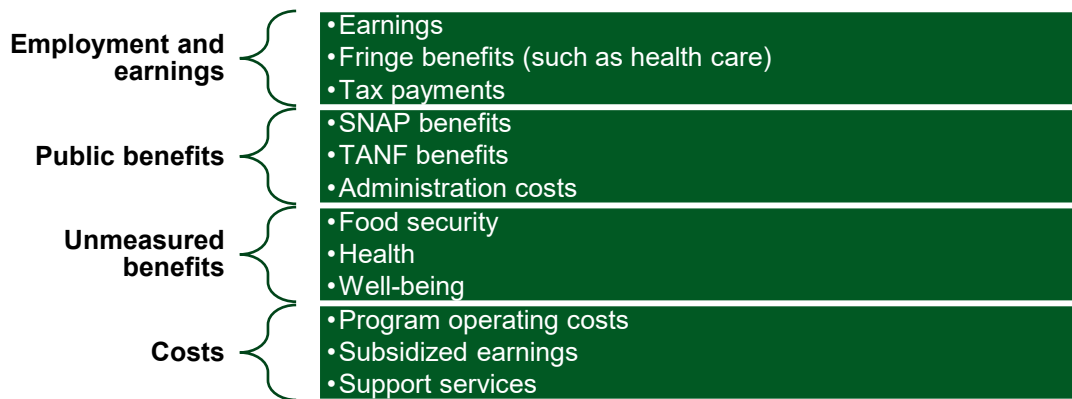
Measures of costs and benefits. Given FNS' and Congress's goals for the SNAP E&T pilots, the primary benefits of interest were (1) increased earnings (through increased employment), which reflect individuals' increased productivity from participating in services; and (2) reduced need for public assistance benefits, such as SNAP or TANF (Exhibit II.1). Additional benefits to government and taxpayers, as well as society, include taxes that individuals pay as part of their post-service employment and reductions in public assistance benefits. The primary costs of interest include costs for operating program services and providing subsidized earnings and support services to individuals while they are engaged in services. While operating costs and resources provided to individuals are a cost to government and taxpayers, the latter are a benefit to individuals.

Although we can attribute a dollar value to benefits such as earnings, fringe benefits like health care, or SNAP benefits, there are other benefits and costs associated with changes in employment and earnings that are more difficult to value. Changes in the rates of food insecurity and well-being (such as improved housing or health status or lower rates of depression) are important outcomes that could be associated with a change in employment and earnings. It is challenging to quantify the dollar value of these benefits reliably—for example, it is difficult to attribute a dollar value to a one-point change on the depression or food security scales used to assess the presence and extent of these issues. Outcomes such as a change in depression or food security might have more value than can be represented by a change in earnings or expenditures, given the relationship of those outcomes to overall and long-term health and well-being. In addition, there are other potential costs to individuals related to employment, such as changes in child care or transportation needs. We did not make assumptions about the values of these benefits or costs because they could influence estimates with a high degree of uncertainty. However, it is important to

Although WIOA made important changes to the workforce system, it did not significantly change the basic set of services offered, nor who was eligible to receive them. We refer to the WIA Gold Standard Evaluation as WIA because that was the name of the authorization at the time the data were collected.

recognize the potential value of these costs and benefits to individuals, government and taxpayers, and society.

Exhibit II.1. Measures of costs and benefits



Costs and benefits by perspective. The findings of the cost-benefit analysis depend on the perspective from which the costs and benefits are considered. For example, an increase in tax payments because of an increase in employment and earnings is a cost to individuals but a benefit to government and taxpayers. We considered variation in the costs and benefits by perspective:



Individuals enrolled in the CBA group could have realized benefits from increased post-program earnings and incurred costs from decreased benefit receipt. Individuals did not incur costs for services but benefitted from receiving subsidized wages and support services while receiving services.



Government and taxpayers (meaning everyone other than individuals) paid costs to fund the services and could have realized benefits from increased taxes from individuals and decreased benefit receipt and program administration costs.



Society as a whole experienced the overall effect of the costs and benefits to individuals and government and taxpayers. Costs or benefits to society were the sum of the costs and benefits to individuals and government and taxpayers. For example, if taxes were a cost to individuals and a benefit to government and taxpayers, there would be a net neutral (zero) benefit to society.

Summary measures. To estimate the net benefit, we took the difference between total benefits and costs for each perspective. A negative net benefit is a net cost from that perspective. We also estimated the return to society on each dollar invested by estimating the ratio of benefits to costs. A benefit-cost ratio greater than 1 suggests that overall benefits of all CBA group services exceeded their costs. A benefit-cost ratio less than 1 suggests that the benefits of all CBA group services, relative to the services CBA group members would have received otherwise, did not outweigh their costs within the 36-month follow-up period. In other words, the costs exceeded the benefits realized.

Accounting for benefits accruing later than costs. The costs of services were incurred during the time when individuals were enrolled in services, but the benefits of those services likely did not accrue fully until a later date. We adjusted the costs and benefits in two ways to make their dollar values comparable during the baseline year of 2016, when CBA started incurring service costs and individuals started accruing benefits.

- **Price deflator.** To account for inflation, we used the implicit gross national product price deflator from the Bureau of Economic Analysis to convert costs and benefits occurring in later years into constant 2016 dollars.
- **Discount rate:** A dollar in the baseline year was worth more than a dollar in later years because it could have been invested and earned interest. To account for this effect, we used a discount rate to convert all costs and benefits incurred in later years into constant 2016 dollars based on the 30-year Treasury bond rate on January 1, 2016 (approximately when CBA started), which was 2.98 percent.

Sensitivity analyses. Like most cost-benefit analyses, our estimates required many assumptions. We examined the sensitivity of our findings to changes in these assumptions to assess whether our results were robust to these changes. We assessed whether our results differed for each of the following changes:

- **Alternative discount rates.** We used an alternative Treasury bond rate to assess the sensitivity of estimates to different rates of return through the discount rate. We tested the sensitivity of our findings to using alternative discount rates of 2 percent and 4 percent.
- **Alternative fringe benefit rates.** We used an alternative fringe benefit rate to assess the sensitivity of estimates to the assumption that the average fringe benefits were worth 20.9 percent of earnings (according to the Department of Labor’s National Compensation Survey). We tested the sensitivity of our findings to using fringe rates that were decreased and increased by 5 percent of earnings.
- **Alternative tax rates.** We used a single marginal tax rate based on the mean earnings impact and characteristics of individuals in CBA at enrollment. Because individuals’ effective tax rates could vary based on their earnings and other deductions, we tested the sensitivity of our findings to using tax rates that were decreased and increased by 5 percent.
- **Alternative assumption that subsidized earnings are not included in UI wage record estimates of earnings.** We assumed that subsidized earnings provided to individuals engaged in work-based learning activities were reported to State UI agencies and were included in UI wage record estimates of earnings. It is possible that not all providers reported subsidized earnings to State UI agencies. We tested the sensitivity of our findings to the alternative assumption that subsidized earnings were *not* included in UI wage record estimates of earnings, but instead were a direct transfer benefitting individuals. We assumed subsidized earnings were included in 36-month survey estimates of self-reported earnings.
- **Alternative assumption that treatment group members only received services through CBA.** The main analysis assumes that CBA group members received additional services outside of CBA through existing SNAP E&T and the community during the pilot period. We use data from the 12- and 36-month follow-up surveys to estimate service receipt for CBA group members and assume any difference in estimate costs of CBA and all services CBA group members received based on the survey is attributed to services received outside of CBA. Survey data are self-reported and could over or underestimate the services that CBA group members received. This sensitivity analysis uses the alternative assumption that CBA group members only received services through CBA and estimate the net benefits using these alternate estimates of costs.

6. Subgroup analyses

For many of these analyses, we examined subgroups that may have been affected differently by the services offered to the CBA group.

Subgroups defined by baseline characteristics. We analyzed a subset of service use and impacts among groups of individuals defined by their status at the time of enrollment, such as the presence of children in the household, work experience, income, age, and presence of severe barriers to employment. For all subgroup analyses, we conducted F-tests to assess research group differences in service receipt or impacts across subgroups. These findings are included in the appendices.

Subgroups defined by the timing of pilot enrollment. We analyzed a subset of service use and impacts by enrollment time period. We divided individuals into two groups based on when they were enrolled in the pilot—those enrolled before versus after the midway point of the pilot’s full enrollment period (January 2016 to September 2016 versus October 2016 to June 2017). We meant the mid-enrollment distinction to capture differences between earlier and later cohorts, independent of how specific pilot operations changed over time. There could have been changes both within and outside of the pilot that contributed to differences in outcomes before and after the mid-enrollment point, including shifts in local labor market demand, changes in implementation policies or practices, or characteristics of individuals. We used t-tests to determine whether the magnitude of differences between CBA and control groups varied across enrollment periods.

Subgroups defined by whether individuals started or completed activities. The main findings presented in this report do not differentiate between individuals enrolled in the pilot who participated in activities and those who did not. These estimates provide information about impacts that can be expected for all SNAP participants who were offered the CBA activities. However, because some individuals did not engage in CBA or start an activity, these estimates mask how well individuals who did participate in such activities may have fared. For this reason, we conducted additional analyses to examine impacts among SNAP participants who did engage in the pilot and participate in activities.

We grouped activities into (1) job search or job search training activities (consisting mostly of independent job search) and (2) education or training activities (consisting of occupational skills training, basic education [GED class and the National Career Readiness Certificate], and work-based learning). We estimated differences in service receipt between CBA and control groups, as well as impacts on outcomes among individuals who started a pilot activity compared with those who did not, and among those who completed a job search or job search training or education or training activity compared to those who started but did not complete an activity.

To conduct this non-experimental analysis, we used a rich set of baseline data collected from all individuals enrolled in the pilot to estimate CBA group members’ propensity for starting an activity using regression-based predictive models. These models were then used to predict control group members’ propensities to start an activity had they been in the CBA group. The resulting propensity scores were then used to define subgroups of individuals in each research group based on the percentages of the CBA group that started an activity. We repeated this process for CBA group members who did not start an activity, completed an employment or training activity, completed a job search or job search training activity, or started but did not complete an activity.²⁰

²⁰ Additional information regarding these procedures can be found in the technical supplement which accompanies the report.

C. Study limitations

This evaluation of the SNAP E&T pilots used an experimental design, rigorous analysis methods, and a multifaceted longitudinal data set to assess whether the pilots were effective in connecting SNAP participants with jobs that increased their incomes and reduced their need for public assistance benefits. Because individuals were randomly assigned to CBA and control groups, we can confidently attribute differences in outcomes between the groups to CBA services rather than differences in the characteristics of the two groups when they enrolled in the pilot, such as differences in education, work readiness, or barriers to employment.

Nonetheless, the evaluation has several methodological limitations:

- 1. Survey nonresponse may have led to potential bias in estimates of service receipt and outcomes.** Data collected from the 12- and 36-month follow-up surveys played an important role in understanding differences between the CBA and control groups in receipt of services available through SNAP E&T and in the community, as well as estimating impacts on employment, earnings, and food security and well-being outcomes. With the exception of employment and earnings data in the UI wage records, much of this information is not available through other data sources. Even when it is available, there are fundamental differences between UI and survey data in the types of jobs covered and the information available to assess job quality. However, because we collected survey data from individuals 12 and 36 months after random assignment, we were unable to locate a nontrivial percentage of individuals enrolled in the pilot via telephone or residential address; thus, they could not participate in the survey. (The response rates of the 12- and 36-month surveys were 72 and 67 percent, respectively.) As a result, characteristics of individuals who responded and did not respond to the survey could have differed between CBA and control groups. If true, this situation would bias the estimates of pilot impacts. To address this possibility, we performed a comprehensive nonresponse bias analysis, using information collected before random assignment, and constructed and applied survey weights based on these analyses to ensure that findings were representative of all individuals who enrolled in the pilot.
- 2. Having incomplete control group data in the cost-benefit analysis led to the use of estimated costs of control group services.** The cost-benefit analysis compares the costs of CBA group services with their counterfactual—those services individuals would have received in the absence of the CBA group services. Most grantees were unable to report detailed information on costs for the services received by control group members, so we estimated those costs using the unit costs of services that were similar to those the control group received, using data from a recently published evaluation of the WIOA Adult and Dislocated Worker program. As a result, the difference in the costs of services represented in the cost-benefit analysis could be over- or underestimated.
- 3. The assessment of CBA’s effectiveness on individuals who participated in activities was not based on an experimental research design.** The subgroup analysis examining differences in pilot impacts among individuals who did and did not start or complete an activity was important for assessing pilot effectiveness among individuals who engaged in the pilot. However, an important limitation of this analysis is that it was not based on an experimental design. The experimental design in the main analysis randomly assigned individuals who enrolled in the pilot to the CBA group or one of two control groups. Individuals in the CBA group chose whether to start an activity and/or complete one based on factors we could not necessarily observe. Thus, because individuals were not randomly assigned to start or complete activities, there is a risk that the factors predisposing individuals to greater participation in activities may have influenced their likelihood of gaining

employment or earning higher wages, independent of their starting or completing an activity. To account for this potential bias, we used a rich set of baseline data available for all individuals enrolled in the pilot to generate weights that balanced the characteristics of CBA group members who started or completed an activity and control group members who would have had a high propensity to start or complete one had they been in the CBA group, thereby reducing the risk of selection bias.

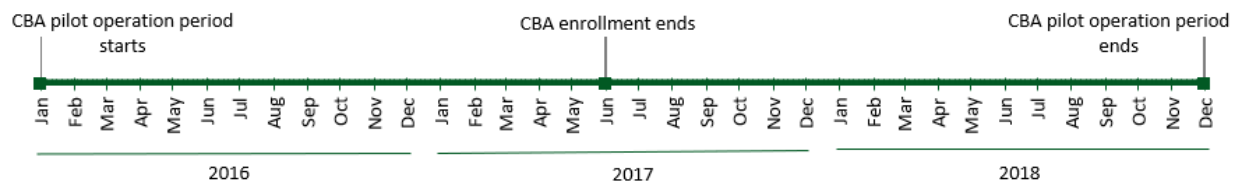
III. CBA enrollment and characteristics

This chapter describes patterns of enrollment in the pilot and the local economic context in which the pilot operated. It also describes the characteristics of enrolled individuals at the time of random assignment and compares the characteristics of those who enrolled in the pilot earlier to the characteristics of those who enrolled later.

A. Patterns of enrollment

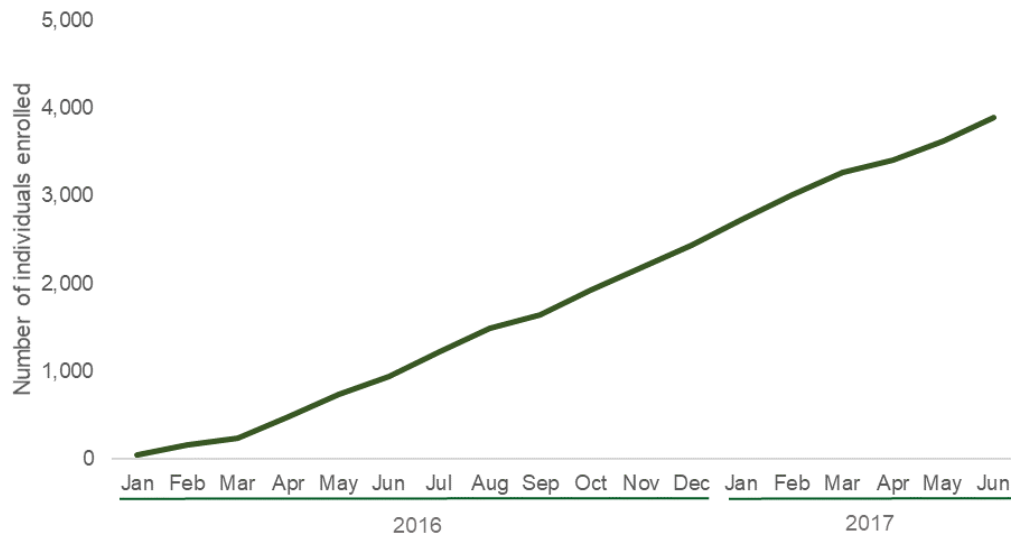
From January 2016 to June 2017, California enrolled 3,930 individuals in the pilot (Exhibit III.1). SNAP participants who enrolled in the pilot were randomly assigned to one of three research groups: the CBA group, a No Services (NS) control group, and an existing services (ES) control group. The number of individuals enrolled increased steadily over time, averaging about 203 individuals per month in 2016, and 244 individuals per month in 2017 (Exhibit III.2).

Exhibit III.1. Overview of pilot enrollment



Source: SNAP employment and training evaluation enrollment data (January 2016 to December 2018).

Exhibit III.2. Cumulative number of individuals enrolled in each month of the enrollment period



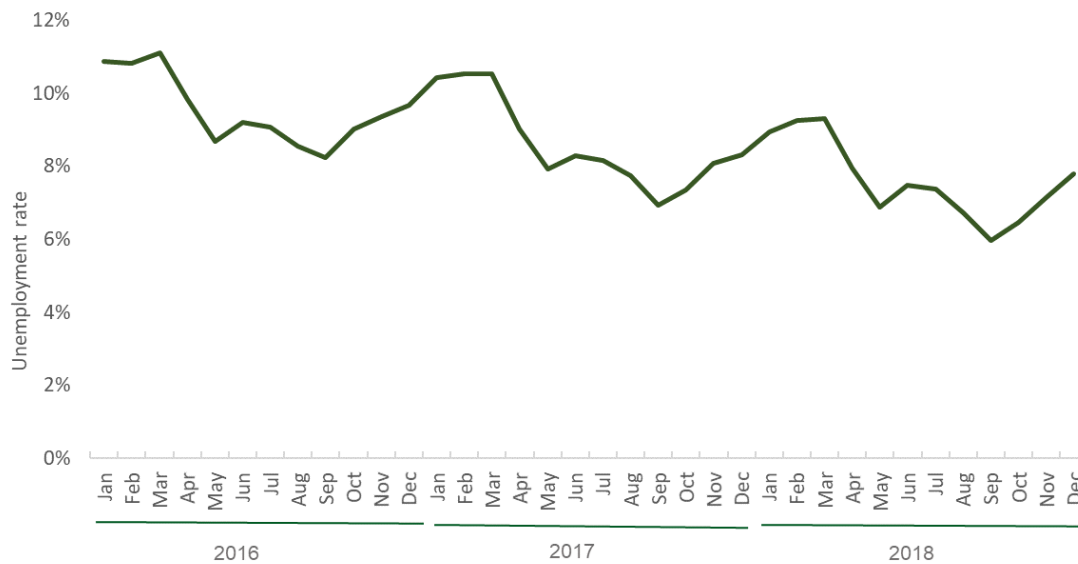
Source: SNAP employment and training evaluation enrollment data (January 2016 to June 2017).

Note: All values are numbers of individuals enrolled per month and include both CBA and control group members. Individuals enrolled in the pilot include all CBA and control group members who completed baseline enrollment registration and did not subsequently revoke their consent to participate in the evaluation of the pilot (3,895 out of the 3,930 enrolled individuals).

B. Local economic context in the CBA pilot area over time

Fresno county, in which CBA operated, experienced consistently high unemployment rates throughout the pilot operation period, with average monthly unemployment fluctuating between 6.0 and 11.1 percent (Exhibit III.3). For the first 14 months of pilot operation (between January 2016 and March 2017), the average monthly unemployment rate fluctuated between 8.2 and 11.1 percent. From April 2017 until the pilot stopped offering services in December 2018, unemployment was between 6.0 and 9.0 percent.

Exhibit III.3. Local unemployment rate in the CBA pilot area for each month of pilot operation



Source: Bureau of Labor Statistics Local Area Unemployment Statistics (January 2016 to December 2018).

Note: All values are average monthly unemployment rates in Fresno county.

Common occupations among the general population in the regions of the pilot remained fairly consistent from 2016 through 2019 (Bureau of Labor Statistics 2020). The most common occupations throughout this period were office and administrative support such as office clerks, customer service representatives, administrative assistants, and accounting and auditing clerks; sales and related occupations such as cashiers and retail salespersons; food preparation and serving related occupations such as fast food and counter workers, waiters and waitresses, and restaurant cooks; educational instruction and library occupations such as teaching assistants, elementary or secondary school teachers, and substitute teachers. Farming, fishing, and forestry occupations such as farmworkers and laborers for crops, nurseries, and greenhouses were among the top five common occupations in 2016 but not 2019, while transportation and material moving occupations such as freight, stock, and material movers, stockers, and tractor-trailer truck drivers were among the top five most common occupations in 2019 but not 2016 (Exhibit III.4).

Among the general population, median hourly wages for these occupations in 2016 ranged from \$10.30 (farming, fishing, and forestry occupations) to \$16.18 (office and administrative support), but were significantly higher for education, training, and library occupations (\$26.11) which typically require credentials and licenses. Wages generally grew by \$1.28 to \$1.84 per hour from 2016 to 2019, with education, training, and library occupation workers experiencing a decrease of \$2.01 over this period.

Exhibit III.4. Common occupations and median wages in Fresno over time

Wage (hourly in dollars)	2016	2019
Office and Administrative Support Occupations	16.18	18.02
Sales and Related Occupations	12.00	13.99
Food Preparation and Serving Related Occupations	11.06	12.34
Farming, Fishing, and Forestry Occupations	10.30	-
Transportation and Material Moving Occupations	-	14.70
Education, Training, and Library Occupations	26.11	24.10

Source: Bureau of Labor Statistics

Note: Data in this table represent the five most common jobs per one thousand individuals in Fresno County in 2016 and 2019.

C. Characteristics of enrolled individuals

The baseline registration form captured demographic, residential, and economic characteristics at the time of random assignment for individuals who enrolled in the pilot. Exhibit III.3 and Appendix Table C.1 show the key characteristics of individuals who enrolled from January 2016 to June 2017. The majority of these enrollees were Hispanic (61 percent) and female (60 percent). The average age was 35, with 67 percent between 25 and 49 years old, and 20 percent between 18 and 24 years old. Almost one-quarter did not have a high school diploma or equivalent education.

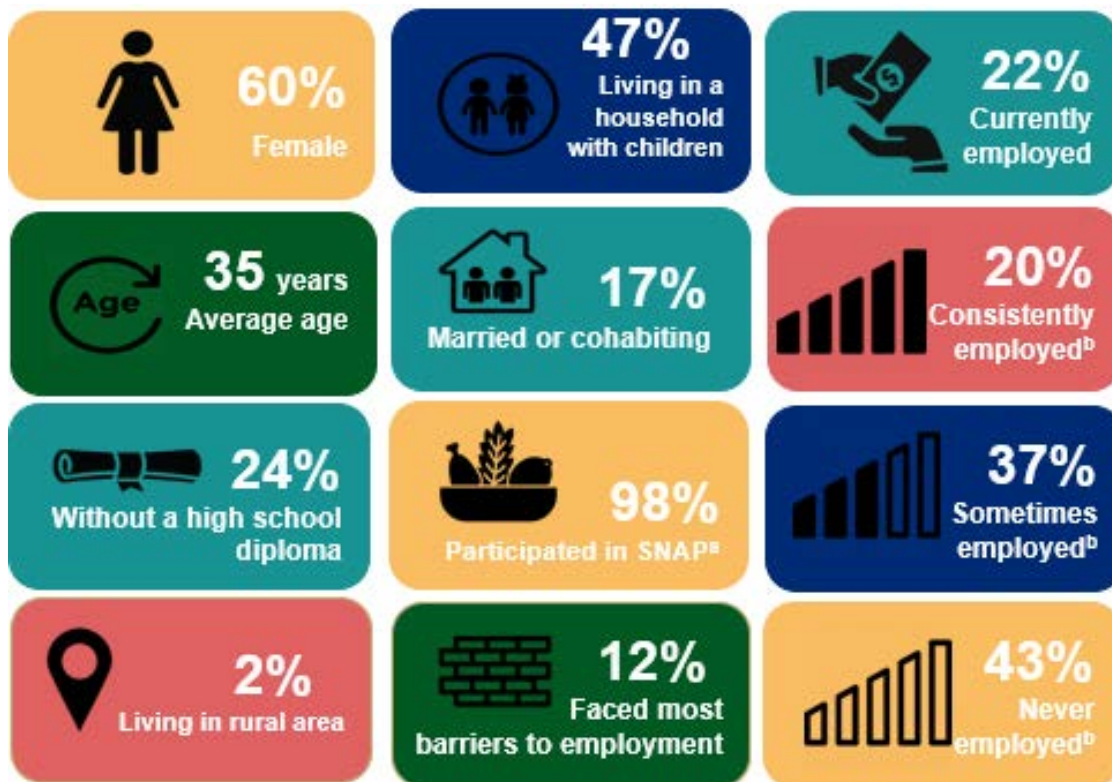
Few individuals (2 percent) lived in a rural area,²¹ while the vast majority (93 percent) lived in a metropolitan area. Seventeen percent of individuals were married or cohabiting, and almost half lived in households with children.

The majority of individuals had been employed at some point in the past (93 percent), but only 22 percent were employed at the time of random assignment (Exhibit III.5). About 20 percent were employed consistently in the two years preceding random assignment, meaning they were employed for at least seven out of the preceding eight quarters, whereas 43 percent either were not employed or were employed for only one of the preceding eight quarters.

We also assessed individuals' barriers to employment based on whether they completed high school and if they were employed in the 12 months before random assignment. Although 88 percent faced the fewest or moderate numbers of barriers, 12 percent faced the most barriers, defined as not being employed in the past 12 months and not completing high school or the equivalent.

Most individuals (98 percent) had participated in SNAP in the year before enrolling in the pilot. About 21 percent participated for one to six months of the year, and over three-quarters (77 percent) participated for more than six months.

²¹ Urbanicity is measured using the Economic Research Service's 2010 Rural-Urban Commuting Area (RUCA) codes. Metropolitan areas are urbanized areas of 50,000 people or more or areas in which most or many commuters in the area commuted to an urbanized area. Rural areas are defined as small urban clusters of 2,500 to 9,999 people or areas in which most commuters in the area commuted to a small urban cluster. This definition includes areas outside of urbanized areas and urban clusters.

Exhibit III.5. Baseline characteristics of individuals enrolled in the pilot

Source: SNAP employment and training evaluation baseline information registration form (January 2016 to June 2017 data).

Note: All values are percentages unless otherwise noted. Individuals enrolled in the pilot through June 2017 include all CBA and control group members who completed baseline enrollment registration and did not subsequently revoke their consent to participate in the evaluation of the pilot (3,895 out of the 3,930 enrolled individuals).

^a Participated in SNAP reflects any SNAP participation in the year before random assignment based on SNAP administrative records. All individuals who enrolled into the pilot were required to be on SNAP at the time of random assignment.

^b Employment experience is defined using UI wage record data for the two years before random assignment. "Consistently employed" includes individuals who were employed for at least 7 out of 8 quarters preceding random assignment. "Sometimes employed" includes individuals who were employed for 2 to 6 quarters preceding random assignment. "Never employed" includes individuals who were employed for at most 1 quarter preceding random assignment.

D. Characteristics of individuals who enrolled earlier versus later

Some analyses in this report examine differences in service receipt and impacts between individuals who were enrolled earlier versus later in the enrollment period. Below we summarize differences in baseline characteristics of CBA group members in these two groups of individuals.

Later enrollees in the CBA group were less likely than earlier enrollees to be female (57 versus 62 percent) or Black (12 versus 15 percent), to have a post-secondary degree (9 versus 13 percent), to have been consistently employed in at least 7 out of 8 quarters before random assignment (18 versus 22 percent), to live in a household with children (44 versus 50 percent), or to be married or cohabiting (16 versus 20 percent; Appendix Table C.3). Later enrollees were more likely than earlier enrollees to speak

English as a primary language (93 versus 90 percent) and to not have a high school diploma or equivalent. Later and earlier enrollees in the CBA group had similar rates of SNAP participation in the year before random assignment (97 versus 96 percent), but later enrollees were more likely to be ABAWDs (43 versus 38 percent).

IV. Implementation analysis

In this chapter, we describe the planning and implementation of CBA based on qualitative analysis of the data collected through interviews, focus groups, and case studies with individuals in CBA. Data presented in this chapter were collected during the planning, implementation, operational, and close-out periods, March 2015 through September 2018 (Exhibit IV.1 provides a pilot timeline).

Exhibit IV.1. Pilot timeline

Pilot activity	Date
Grant awarded	March 2015
Enrollment began	January 2016
Enrollment ended	June 2017
Services ended	December 2018

In the following sections, we provide information about the pilot background and describe the planning and early implementation process. We then detail services and operations, including the recruitment and enrollment processes; control group services and pathways; and CBA group services and pathways, management and collaborations, service receipt patterns, barriers among CBA group members, staffing, and performance reporting. We also discuss the sustainability and replicability of CBA services after the pilots ended, and summarize the key findings discussed in this chapter. Unless otherwise noted, each section describes the policies implemented, not what was planned.

A. Pilot background

Fresno DSS operated a small SNAP E&T program for several years before the pilot began. Fresno DSS contracted with RAB, a local nonprofit, to provide job training and wraparound services to reduce barriers to employment for about 200 individuals and families per year. It offered the services at three locations across the county. RAB felt the program was effective in helping families move to employment, but it was unable to scale it up across the county because it could not find the needed funds to expand. The RAB board originally approached Fresno DSS about its interest in submitting an application to conduct a pilot. RAB hoped to demonstrate the effectiveness of the CBA model so it could expand the program to other counties in California. It also hoped to experiment with the effectiveness of the enhanced services.

For the existing SNAP E&T program, RAB offered a tiered approach to self-reliance, assisting job-seeking adults as they transitioned from obtaining a job to obtaining a better job to developing a career. A central component of the model was 18 months of case management services. Individuals received an in-depth assessment; then, with their case manager, they developed a detailed plan that included both short- and long-term goals and a plan for how to meet them. Additional services included job search assistance, connection with education and training, and help for families based on their specific needs. Once an individual gained employment, the case management focused on job retention. Under the pilot, RAB continued to offer the existing SNAP E&T program services to ES control group members, while the CBA group received these services plus additional enhanced services. The enhanced services encompassed subsidized employment, in-house General Education Development (GED) preparation classes, and financial incentives for upgrading skills and program retention.

RAB expanded CBA and existing SNAP E&T services to nine locations around the county, comprising six urban and three rural sites. Fresno DSS and RAB selected the sites based on the SNAP caseload size

and potential number of recipients. The existing SNAP E&T program services were designed to serve individuals who had children, as RAB served both individuals eligible for SNAP E&T and their children. RAB expanded the target population for CBA to include any work registrant who volunteered because RAB and Fresno DSS wanted to serve the broadest population possible, including able-bodied adults without dependents (ABAWD).

B. Pilot planning and implementation

CA DSS, Fresno DSS, and RAB were all actively involved in pilot planning. Fresno DSS and RAB viewed the pilot as an opportunity to expand employment and training services and capacity. Each organization was responsible for specific administrative tasks during the planning period but worked together to develop the pilot. CA DSS primarily led pilot contractual, budgetary, and reporting tasks. Fresno DSS led service contract development, trained county eligibility staff on updated intake procedures for identifying work registrants, and oversaw the CBA provider. Neither CA nor Fresno DSS added new staff for the pilot; they used existing staff instead, although CA DSS contracted with a State employment and training expert to help with project management. Fresno DSS and RAB worked together to develop the service model; RAB developed the in-house GED preparation classes; Fresno DSS and RAB worked together to develop the new incentives; and RAB primarily worked with EDC—a nonprofit organization that facilitates site selection for new businesses in Fresno and helps retain and expand businesses already located in the area—to develop the subsidized employment program. RAB located office space for the six new locations in the county and hired 37 new staff to fill case manager and clerical positions in each site, as well as staff for the in-house GED preparation classes and job coaches for the subsidized employment activity in CBA. RAB also contracted directly with EDC beginning in October 2016 to manage employer recruitment and payment for the subsidized employment activity, and support the Ready-to-Hire database that connected employers with CBA group members seeking subsidized employment opportunities.

Fresno DSS and RAB staff primarily conducted the initial pilot planning. The RAB model for case management and service delivery was already in place; however, CBA broadened RAB's target population to include ABAWDs instead of just families with young children. This change was challenging for the case managers, who were called career and family navigators (CFNs) because the model drew from best case management practices for motivating individuals based on a two-generational model. RAB had to change its approaches to motivate individuals without children, especially in how they talked about goal setting with those individuals participating in CBA.

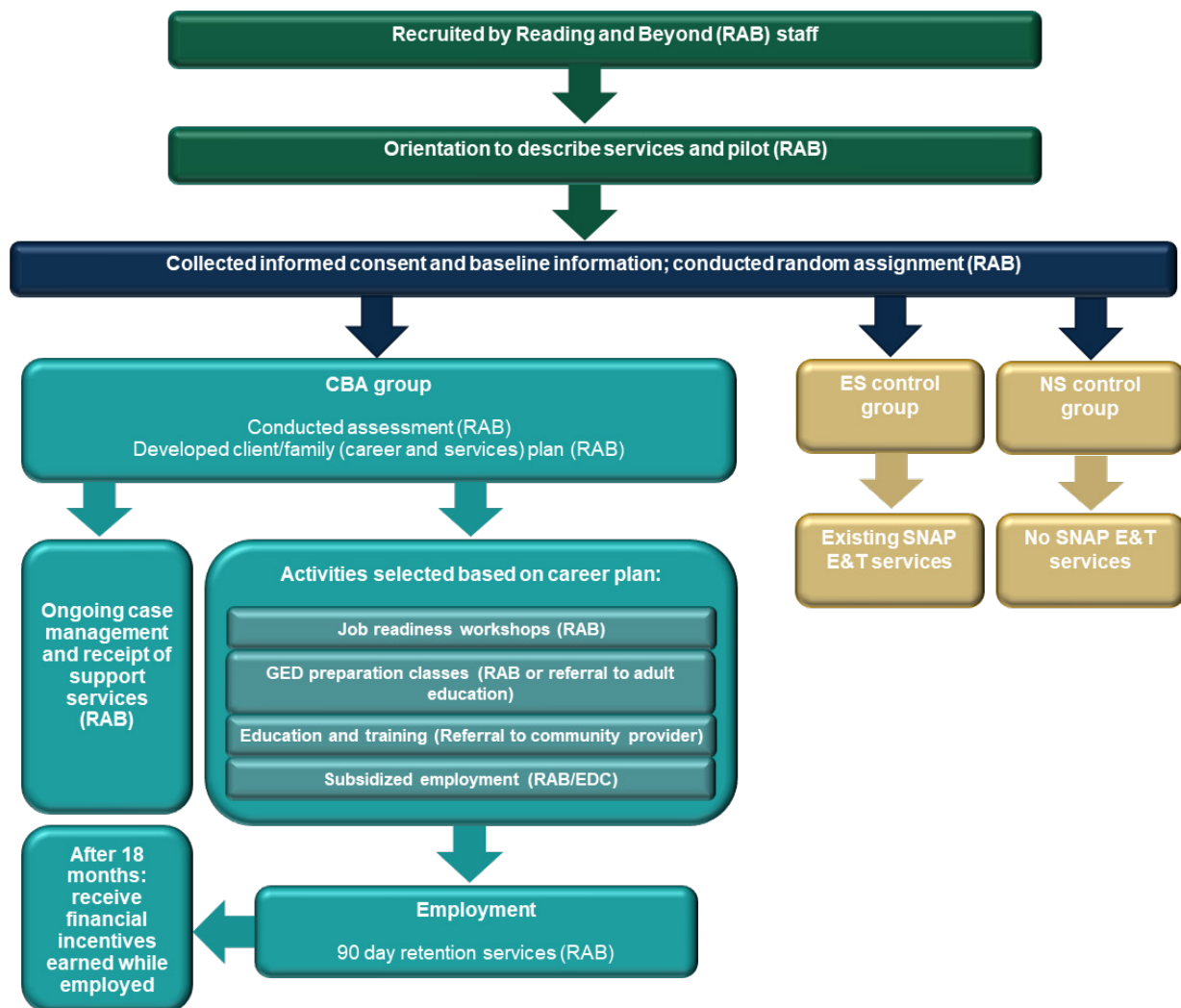
The other focus of planning was on expanding services to six new communities in the county, developing in-house GED preparation classes, and creating incentives. Planning for the subsidized employment activity did not start in earnest until after RAB began enrollment on January 21, 2016. California initially experienced challenges in meeting its enrollment targets, which are discussed in the next section. Implementing the subsidized employment activity was delayed because of contract negotiations between RAB and EDC, which managed the connection with employers. These negotiations led to delays of about a year after the pilot began in establishing and beginning to offer the subsidized employment activity to CBA group members.

For more information about pilot planning and implementation, please see the Expanding Opportunities & Reducing Barriers to Work: California Interim Report (Mabli et al. 2021).

C. Pilot services and operations

In January 2016, Fresno DSS began recruiting work registrants for CBA, including the unemployed/underemployed, high school dropouts, individuals with a criminal history, and individuals with limited work experience. As Exhibit IV.2 describes, RAB recruited and enrolled SNAP work registrants and those SNAP participants who DSS eligibility staff identified as interested in the pilot. Individuals assigned to the NS control group were not offered any existing SNAP E&T program services; individuals assigned to the ES control group were offered existing services; and those assigned to the CBA group were offered CBA services. RAB offered case management, job readiness workshops, education, occupational skills training, support services, and job retention to both the CBA and ES control groups. Individuals in the CBA group received an additional set of enhanced services, consisting of in-house GED preparation activities, subsidized employment, and financial incentives for completing education or training and continuing to participate in services. Individuals in both the CBA and ES control groups could receive services for 18 months, meaning that unless an individual chose to leave, they would receive services for 18 months and then transition out of these services.

Exhibit IV.2. CBA flow and pathways



1. Recruitment and enrollment

The CBA recruitment process began with Fresno DSS, which provided RAB with two lists for recruitment: (1) a list of all work registrants in Fresno County and (2) the warm referral report compiled after DSS eligibility workers confirmed individuals' interest in participating during their SNAP certification interviews. Eligibility workers flagged interested persons in the eligibility system and generated a monthly list for RAB containing each person's contact information (the warm work registrant referral list). The CFNs at RAB called individuals on both lists to invite them to a one-on-one in-person meeting. When inviting individuals to the in-person meeting, RAB also offered a \$25 gift card incentive for those who attended the interview and completed random assignment. Staff discussed the services and expectations for participation with individuals who attended the meeting and conducted a brief assessment to confirm their interests. RAB then completed the consent and registration process with interested individuals and randomly assigned them to one of the three research groups. Because Fresno County had two control groups and one served only about 300 individuals per year, individuals were not enrolled evenly across the groups; about 48 percent were assigned to the CBA group, 38 percent were assigned to the NS control group, and 16 percent were assigned to the ES control group.

The early months of the pilot brought challenges with the enrollment and recruitment processes. Fresno DSS and RAB made adjustments, so the number of individuals randomly assigned consistently increased each month through the end of 2016. One of the strategies that staff reported as making a significant difference was having RAB staff attend Fresno DSS staff meetings to promote and explain the services, and encourage eligibility workers to complete the SNAP E&T screening and referral process with all applicants and individuals at recertification interviews. Another strategy was for Fresno DSS to produce video segments for a staff news program called "Good Morning Fresno DSS" to promote the CBA and report on recruitment and enrollment progress with eligibility staff. Another change that made a significant difference in recruitment was discovering and resolving an issue with the warm referral report that RAB was receiving from Fresno DSS. The first several months of reports did not include all of the individuals whom DSS eligibility workers had referred because the query was too narrow. Once the report error was corrected, the CA DSS identified several hundred individuals interested in participating but who had not received a telephone call. RAB completed its enrollment in June 2017, enrolling 3,930 individuals in the pilot (about 300 more than it targeted).

Although reaching its enrollment goals on time was an accomplishment for RAB, the CFNs expressed frustration and a lack of job satisfaction because of the amount of time they spent recruiting and randomly assigning participants rather than providing case management services. This issue was especially relevant for CFNs with a background in social work or who worked in direct service provision before joining RAB but less relevant for those CFNs with a background in customer service and sales, who felt more comfortable with their recruitment role. During an interview, one CFN mentioned "I am passionate about helping people and it is hard to hear about their struggles and not be able to do anything about it in the moment, and not know if or when we will be able to do something to help them." A few staff also expressed discomfort with having to break the news to an individual at the time of random assignment that they would not be receiving services because they had been assigned to the NS control group. In addition, a CBA group member suggested during a focus group that the outreach process could be improved from that group's perspective as well. The individual suggested that, as SNAP participants already had relationships with Fresno DSS, those staff should make the first contact with individuals to help legitimize the process. This person also pointed out that the name of RAB (Reading and Beyond) was confusing to those not familiar with the organization because it did not sound like its services were

related to employment and training, which could have affected SNAP participants' decision to enroll in CBA.

2. Control group services and pathways

The pilot had two control groups: an NS control group that received no existing SNAP E&T program services and an ES control group that received existing SNAP E&T program services but not the three enhanced activities the CBA group received.

After RAB randomly assigned individuals to the ES control group, they completed a full intake assessment with their CFN, developed an individual client (and family) plan (ICP), arranged for support services, attended job preparation workshops, and received comprehensive case management services. These services and activities were identical to what the CBA group received (described in Section C.3). However, the ES control group did not receive in-house GED preparation; instead, they were referred to existing GED preparation services in the community. ES control group members also were not eligible to participate in subsidized employment and did not receive incentives for upgrading skills or job retention.

3. CBA group services and pathways

As with the ES control group, after individuals were randomly assigned to the CBA group, CFNs started the intake process, including conducting assessments and developing their ICP. The CFNs attempted to initiate the assessment during the same encounter after random assignment, using the in-person opportunity to begin relationship building as early as possible. However, assessments sometimes took place during the visit following enrollment. Assessments were based on a two-generation model and included questions about household demographics, housing situation, employment history, criminal history, educational background, transportation situation, mental and physical health, substance use, child care or educational needs of dependent children, and any additional barriers to training or work. After completing the assessment, the CFN and the individual developed an ICP with up to three goals on which to work in the next quarter, in addition to identifying longer-term goals and any immediate supports or community referrals that needed to be addressed. During focus groups and interviews, many individuals reported that CBA services had helped them find a new career path through education, job skills classes, and job search support. One focus group member said, *"They've been showing me about job interviews, how to get ready, study up on the company, how to dress, and a lot of things you need to know to be prepared. And it worked out."* Another individual mentioned, *"I just finished my nursing degree and they helped get funds for my licensing exam, so taking my exam on Thursday."*

Case management. During the 18-month service period, the CFNs worked closely with the individuals on their caseloads and were in regular contact with them—typically weekly, but a minimum of monthly. Contacts were made in person, by phone, and via email, and pertained to job search, education, and job retention activities and support services. Based on individual needs and their current situation, the CFN and individual discussed and created appropriate goals and a pathway to reach those goals in the ICP. Goal areas included employment, education and training, and wraparound services, and the ICP goals were revisited quarterly. The quarterly assessments were intended to be completed every three months to reassess strengths, barriers, and progress. Many of the same questions from the intake assessment were completed during the quarterly assessment so the CFN could see trends toward progress or identify unforeseen barriers. There was a downward trend in the number of individuals who completed their assessments in each quarter; about 94 percent of individuals completed the intake assessment, while only about 23 percent completed their first quarterly assessment and about 16 percent completed the last

quarterly assessment. This trend is representative of the difficulties the CFNs reported in keeping individuals engaged.

Case management services also included identifying and removing barriers that had been preventing individuals from gaining employment, including basic needs such as food, transportation, and housing. RAB supported the CFNs in accessing trainings to improve their case management skills, such as motivational interviewing.

Support services. Individuals in CBA received financial assistance when they requested it. Called ancillary assistance, they could use it for expenses directly related to obtaining or retaining employment. To be eligible to apply for ancillary assistance the individual had to have completed the job club workshop series. The individual was required to fill out a request form explaining how the expense was directly related to obtaining or retaining employment, and the other attempts they had made to find funding for the expense. The request had to be approved by the CFN, who in turn needed to have the request approved by the program manager. In addition, the individual, with help from the CFN, had to attach documentation of three prices/quotes from vendors to the form. The program manager reviewed each request on a case-by-case basis, and CFNs were instructed not to promise funding to the individuals. The kinds of requests that could be funded included training costs (up to \$1,000), transportation (monthly bus passes or \$48 monthly gas vouchers), car repairs, work clothing and uniforms, work or training materials and equipment (including eyeglasses), credentialing/licensure fees, and pre-hiring requirements such as drug testing fees. To receive assistance for training costs, individuals were required to attend a workshop called “Career Exploration” that informed them about educational programs and institutions in the area; how to balance school, work, and family; and helped them research potential job growth in the field they had chosen for training. In addition, individuals seeking support services for employment-related expenses were required to complete a workshop called “I Got the Job, What Next?” after obtaining part-time or full-time employment; it provided information on job retention strategies. The only exception to this process was related to bus passes, which were provided as needed for one or two trips at a time when individuals were in the office for in-person case management. Referrals were provided to organizations in the community for other services and needs, but there was no formal relationship with or reimbursement for those other organizations.

GED preparation classes. RAB staff called education navigators offered CBA group members in-house GED preparation tutoring to those who wanted to obtain a GED, high school diploma, or prepare for tests such as the Comprehensive Adult Student Assessment System (CASAS), Test of Adult Basic Education (TABE), or WorkKeys. This tutoring allowed individuals to complete their GED preparation without the additional burden of finding and enrolling in an outside program. Education navigators offered the in-house GED tutoring in partnership with the CFNs; it was available at all nine RAB sites. Individuals in the CBA group could work with outside GED preparation providers if they preferred a more traditional classroom experience or they could take advantage of both options if they chose.

Job readiness workshops. Individuals were required to participate in four weekly job readiness workshops. In Week 1, they learned the purposes of and differences between a resume and a cover letter. In Week 2, they gained a better understanding of what employers look for during an interview and how to prepare themselves accordingly. In Week 3, individuals had the opportunity to participate in mock interviews as a group and with a guest speaker (employer or hiring manager). In Week 4, they learned about effective job searching strategies. Each of the four workshops were facilitated by RAB staff. One individual in the CBA group noted the importance of obtaining assistance in fine-tuning resumes and cover letters because this person did not have social networks that could provide this type of support.

After completing the job readiness workshops, individuals were eligible to participate in other job search activities, occupational skills training, and/or subsidized employment.

Occupational skills training. Once individuals completed their job readiness workshops, those with a goal of obtaining new occupational skills were referred for training—typically to Fresno City College, the only community college in the area.

Subsidized employment. The goal of subsidized employment was to provide work experience for individuals in CBA who had little or none. RAB contracted with the Fresno EDC to recruit employers; maintain the Ready-to-Hire database, which was used for subsidized job posting; and handle employer agreements and subsidy payments. Subsidized employment services did not begin until October 2016 due to delays in contract negotiations between RAB and EDC. RAB staff had limited knowledge of and experience in implementing subsidized employment, so they proceeded in contract negotiations cautiously (although Fresno DSS and EDC had been operating a TANF-subsidized employment program for a few years before the pilot started).

For individuals interested in subsidized employment, the CFNs referred them to the RAB employer liaisons, who worked with them on interview skills and job searches using the Ready-to-Hire database. The employer liaisons conducted mock interviews with individuals to prepare them and build their confidence. They also used these interviews to determine whether individuals were ready to be added to the Ready-to-Hire database and placed in subsidized employment. Individuals were eligible to participate in subsidized employment for up to nine months. The subsidy to employers included two levels: 1) for positions paying \$12.00 per hour or more, the subsidy was 100 percent of the wage up to \$12 for three months and 75 percent of the wage for four to six months; and 2) for positions paying less than \$12.00 per hour, the subsidy was 50 percent for two months and 25 percent in the third month. After a few months, RAB staff observed that few individuals were obtaining subsidized employment positions. Fresno DSS and RAB staff met with EDC to understand why it was happening, and identified a few primary issues.

First, individuals were not passing their mock interview screening with a high enough score (at least 70 percent) for the employer liaisons to enroll them into the Ready-to-Hire database and begin searching for subsidized job opportunities. To resolve this issue, RAB implemented new procedures designed to support individuals who did not pass the screening on their first attempt; RAB gave them three additional practice interviews with other RAB staff before attempting the screening for a second time. RAB staff

An individual's experience in CBA

This individual in the CBA group had been unemployed for approximately one year. She had been providing in-home care to one client for eight years but was let go when her services were no longer needed. To find another placement, she needed three reference letters, which she was not able to obtain. After enrolling in CBA, her goal was to get her GED and find employment. She had been working with an education navigator for about a year to prepare for the GED test. She had been taking practice tests and was working on reading and math comprehension to help her pass. She also had participated in some occupational skills trainings to earn her food service and computer skills certificates. She continued to apply for jobs and had been interviewed at a grocery store. She faced a number of barriers, including housing (she had been living with her sister); transportation; and basic needs, such as access to food. Without an increase in the incomes of her or her husband, she did not have many options for improving her living situation. RAB had provided gas money so she could get to her GED preparation classes and interviews. It also provided referrals to food banks to address her need for food.

also determined that passing the screening at a rate of 70 percent was not necessary because the types of positions available in the Ready-to-Hire database were mainly entry level. After eliminating this requirement, individuals still needed to complete the screening but referral to the database was at the discretion of the employer liaison or CFN rather than the screening score. RAB saw an increased flow of individuals into the Ready-to-Hire database after these changes.

Second, EDC learned from employers that CBA group members were “competing” with TANF participants for subsidized employment positions and the TANF program’s subsidized jobs had a higher employer reimbursement rate. Therefore, all things being equal, employers were choosing to hire TANF participants. To resolve that issue, RAB and EDC agreed to increase the CBA employer subsidy to an amount equivalent to that of the TANF program so employers did not have an incentive to hire those in TANF instead of CBA group members to receive a higher subsidy. The subsidy for all employers changed to a 100 percent subsidy for Weeks 1 to 13; 75 percent from Weeks 14 to 26; and 50 percent from Weeks 27 to 39.

Third, the types of jobs offered by employers in the Ready-to-Hire database were not always a good fit for CBA group individuals, so RAB hired two new employer liaisons in January and February 2018 to increase employer outreach beyond the capacity of the EDC contract. Originally, EDC was the only organization in communication with businesses—it wanted to “own” employer engagement—but RAB employment liaisons were working exclusively with individuals, creating a communication and knowledge gap between the people who knew what jobs individuals desired and the types of positions employers needed to fill. Examples of job match suitability issues included job work schedules not accommodating single parents (graveyard shifts), physical requirements (ability to lift 50 pounds), or other job requirements (such as needing a commercial driver’s license). Giving employer liaisons additional capacity enabled RAB to increase contacts with individuals to conduct more mock job interviews and job interest inventories, and better match the needs of employers with the skill sets and interests of the individuals. One employer liaison suggested, “making direct contact with employers first to determine what kind of employees they need and then building training and recruitment around those needs would work better.”

Finally, employers were generally interested in the program as a pipeline for entry-level employees, but they found the paperwork and process to receive the subsidy burdensome. When interviewed, one employer of a large business that employed 500 people said, “I have openings for night shift positions because these are high turnover positions. I’m looking for a pool of candidates that will show up to work consistently.” This employer reported not having many opportunities for advancement and was interested in the subsidy but that was not the primary reason for participating in the program. Other smaller businesses reported they liked having the subsidy available, but they found the monthly paperwork to be onerous. RAB and EDC staff also reported that employers often found the process and level of paperwork excessive and it made it difficult to recruit additional employers. Some had said they would even participate without the subsidy, as long as they could get good candidates for their jobs.

DSS and RAB worked with EDC over several months to improve the processes and resolve these issues.

Incentives. Financial incentives were offered to some CBA group members to continue their education after they obtained employment because in the past RAB had found that individuals lose motivation once they obtain their first job. Incentives were paid for (1) engaging in an occupational skills training program to advance skills after obtaining employment (skills upgrade incentives) and (2) continuing to participate in CBA services after obtaining new employment (program retention incentives). Each of these two

incentives had a high and a low value associated with it. At the time of random assignment, those assigned to the CBA group were also randomly assigned to one of four groups that received differential incentives or a group that did not receive any incentives. Each of the four incentive groups received one of the following: (1) high skills upgrade and high program retention payments, (2) high skills upgrade and low program retention payments, (3) low skills upgrade and high program retention payments, or (4) low skills upgrade and low program retention payments. Each incentive payment ranged from \$15 to \$40, depending on the group and the type of incentive earned (Exhibit IV.3).

The incentives accrued in an account maintained by RAB. Individuals could see funds deposited during the 18-month service period but did not receive the single lump sum payment until they completed CBA services at the end of the 18-month service period. There was confusion among individuals in CBA about the difference between support services and financial incentive payments. It was particularly frustrating for those who believed they would be receiving incentive payments throughout the service period rather than at the end. One individual in a focus group stated, “If you go to school or work and show them paycheck stubs or your transcripts, then they will give you a stipend, right? An incentive. I’ve been in this program since June of last year and haven’t received anything.” Also, CFNs could not distribute incentive payments at the final case management contact with the individual. They could only remind individuals they would be receiving incentive payments in the mail. In some cases, RAB lost contact with individuals toward the end of their service period and were not able to send them their banked incentives.

Exhibit IV.3. Description of differential incentives for skills upgrade attainment and program retention

Skills upgrade	Program retention	
	High	Low
High	• \$40 per training unit^a up to \$480 • \$30 per month of retention up to \$360	• \$40 per training unit^a up to \$480 • \$15 per month of retention up to \$180
Low	• \$20 per training unit^a up to \$240 • \$30 per month of retention up to \$360	• \$20 per training unit^a up to \$240 • \$15 per month of retention up to \$180

^aA “unit” is equivalent to completing each class or other training milestone as defined by the education or training program.

4. CBA group services management, partnerships, and communication

Although CA DSS, Fresno DSS, and RAB worked together to plan and implement the pilot, RAB was responsible for delivering services. Fresno DSS oversaw the contract with RAB and managed the State reporting requirements. Fresno DSS and RAB had a long history of working together before the pilot.

In October 2016, RAB welcomed a new partner to the pilot to implement the subsidized employment activity—the Fresno EDC. EDC’s participation in the pilot was delayed until October 2016 because the contract between EDC and RAB took longer than expected to finalize. In late 2017, after some issues developed regarding moving individuals into subsidized employment, RAB leadership and EDC staff began meeting monthly. Employer engagement roles were revisited, and the contract between RAB and EDC was updated to clarify EDC’s and RAB’s employer liaison responsibilities in conducting outreach to subsidized employers.

In addition to regular meetings between Fresno DSS and RAB, staff from CA DSS, Fresno DSS, RAB, the evaluation team, and USDA FNS began meeting biweekly in spring 2015. Pilot staff said they found

these meetings helpful in staying on track, problem solving, and keeping up to date about what was happening with the pilot during the planning and implementation periods. These regular meetings were also a good place to identify when separate ad hoc meetings might be needed to further address issues or dive deeper into a particular topic or issue.

To raise awareness about the pilot and boost enrollment, RAB staff also began attending county staff meetings to promote and explain the services and encourage eligibility workers to complete the CBA screening and referral process. Fresno DSS eligibility staff members said these meetings helped them to better understand the services and feel more comfortable offering them to SNAP participants with whom they interacted. The meetings also provided staff from both organizations an opportunity to ask each other questions and share information.

Both Fresno DSS and RAB staff discussed the need to clearly communicate service guidelines and expectations to staff working directly with CBA group members. Managers felt that staff were sometimes confused or left in the dark about the role they were supposed to play in the process unless they received repeated messages from leadership distributed via multiple channels. Staff described a situation in which they were “*building the plane while flying it*,” often leading to confusion and frustration. Managers said that consistent and frequent communication was needed to alleviate these issues.

5. CBA group services and participation trends

The typical pattern of services for individuals in the CBA group began with comprehensive case management services, including completing the intake assessment, meeting with CFNs, and attending the series of four job readiness workshops. Focusing on case management services upfront allowed for relationship and rapport building that was helpful in identifying employment and training interests and goals, as well as any barriers that prevented the individual from achieving them. CFNs reported that identifying barriers took more time than anticipated, depending on the individual and the barrier. Job readiness workshops provided an opportunity to begin working on soft skills, such as resume and cover letter writing and interview skills, that individuals reported not having an opportunity to learn elsewhere. The CBA service model also emphasized helping individuals find jobs with upward mobility and supporting them in obtaining education, occupational skills training, and the life skills needed to first get a job, then a better job, and then a career. Some individuals were employed or underemployed and looking for opportunities to enhance their skills to compete for jobs that offered more or better hours, better pay, or promotion opportunities. CFNs assisted individuals in finding temporary or part-time jobs while they pursued educational goals, such as a degree in nursing or certification in real estate sales.

Exits. Although many individuals remained in CBA for the full 18-month service period, some left voluntarily or became ineligible for services (for example, they moved out of the county or became ineligible for SNAP benefits). For individuals in the CBA group who disengaged with services, RAB managers developed procedures for re-engaging those who were still enrolled but not actively participating in services, and standardized the process across the RAB offices and staff. CFNs indicated that individuals who stopped receiving services tended to encounter more barriers, including mental health issues or substance use, personal or family stressors, lack of child care, or transportation limitations. CFNs believed that barriers related to mental health, substance use, and criminal history were more difficult to address because perceived stigma often prevented individuals from openly identifying these issues as barriers. Individuals were not assessed by Fresno DSS before referral to RAB, and CFNs believed that the questions asked on the RAB assessment did not always elicit a candid response.

Participation trends and barriers. The intake assessment consisted of a series of questions designed to identify an individual's barriers to success. Depending on the barrier, CFNs would provide support services, mentorship and coaching, wraparound services, or referrals to services in the community. Wraparound services to address barriers included life skills, such as financial literacy, parenting, digital literacy, and nutrition management. For example, CFNs referred English language learners to English classes and monolingual individuals (including those who spoke English as their primary language) to classes to improve their language proficiency and compete for bilingual job positions; they also offered language learning software in the RAB computer lab.

CFNs and CBA group members in focus groups reported that the primary barriers to obtaining services and employment were child care, transportation, paperwork burdens, and mental health and substance use disorders. Although CBA staff provided referrals and support services to help mitigate some of these barriers, availability of community services, such as child care funding and quality providers, and lack of public transportation, limited how much assistance CBA could provide to individuals.

Child care barriers included a lack of available child care options for low-income families, long waiting lists, and the additional barrier of finding child care when the individual did not work during weekday business hours or have a consistent schedule. In some situations, individuals reported not being able to rely on family members for child care because their parents and grandparents were also working. CBA group members suggested that more substantial support for child care services would improve participation and outcomes.

Transportation barriers included limited public transportation options in Fresno County, especially in rural areas and during off-peak hours. This factor made it difficult to get to services or employment without a vehicle, especially for individuals working evening and night shifts. For those with vehicles, the cost of gas was a barrier. One CBA group member stated, *"I don't have a car. I use my parents' car, but there are a lot of us sharing it, and it is not always available when I need it."*

Individuals in the CBA group said paperwork could be a burden. For example, they encountered problems in producing documentation like transcripts or a doctor's note to obtain certain support services, such as books or eyeglasses, though none of them was deterred by it. For example, one individual reported having to obtain quotes from three eye doctors before determining the services that cost the least so the person could be approved to get glasses.

According to CFNs, the barriers that most frequently prevented individuals from continuing with services or successfully completing CBA were mental health and substance use issues (referred to as behavioral health when combined). Behavioral health issues were not always self-reported during the intake assessment when the relationships between individuals and CFNs were first developing and stigma sometimes prevented candid conversations. CFNs reported that they sometimes observed or reported behavioral health issues later in the pilot period. This delay limited the time for referring individuals to behavioral health services. CFNs also reported that behavioral health services in the area were not sufficient to support the needs of CBA group members. RAB continued to offer training to CFNs in an effort to increase their professional development and support them in gaining case management skills and providing services to identify and reduce barriers for individuals.

CFNs also mentioned not having interview clothes, needing prescription eyeglasses, and requiring car repairs were obstacles to individual's finding and keeping employment.

6. Staffing

Fresno DSS and RAB struggled with staff turnover, which created both administrative burdens for managers who worked to fill positions and train new staff, and interrupted case management engagement with CBA group members after assignment. Fresno DSS reported high turnover rates among eligibility workers responsible for referring work registrants to RAB for random assignment. In addition, both the Fresno DSS senior policy analyst and policy analyst positions assigned to the pilot experienced turnover during the recruitment phase of the pilot, and RAB experienced turnover in its director, program manager, education navigator, employer liaison, and numerous CFN positions.

RAB attributed the turnover in part to the efforts required in scaling up from a staff of 9 to a staff of more than 50 employees, which was done to implement the pilot. Toward the end of the service period, CFNs also left for other job opportunities in anticipation of CBA ending, which led to the consolidation of caseloads. Staff turnover disrupted operations at the rural offices more than urban offices because in some cases, only two CFNs were assigned to a rural office, requiring lead CFNs to be mobile and fill in when needed. Many CBA group members indicated that staff turnover made it difficult to maintain long-term relationships and communication with case managers. One individual, talking about his CFN, said, *“We had a close relationship, he would call me, he would see about how my kids are doing, he would shoot me text messages, emails. He would be at the college to pay for my books. But then I got a text from him saying that he got another job somewhere else, and that these other people in the office could help me. I didn’t hear from anyone for like two months. When I finally called, the name on the voicemail was not the same name as I had been told.”*

Program managers strongly emphasized the role CFNs were required to play in pilot recruitment efforts as increasing their job dissatisfaction, citing it as the number one complaint offered during exit interviews. Specifically, CFNs expressed a desire to provide direct service to CBA group members, explaining that they considered themselves helping professionals. To many of them, recruiting was more along the lines of sales than service, and was not enjoyable. This high turnover resulted in RAB managers hiring anywhere from one to five new employees every month, which placed a heavy administrative burden on them. Staff talked about the need to explicitly discuss recruiting requirements during the hiring process and offered the insight that candidates with case management experience struggled more with recruitment, whereas candidates with a customer service background did better in the CFN role.

For CBA group members, staff turnover impacted the relationship-building process that is so important when providing case management services, particularly when assessing barriers. It was somewhat offset by RAB’s outreach practices, including good use of communication tools, such as the ability to text CBA group members in addition to calling and emailing.

As the provider of CBA services, RAB was not able to build relationships with employers in the subsidized employment Ready-to-Hire database. To remedy this gap, RAB hired two additional employer liaisons and began working with employers directly and in coordination with EDC. EDC staff also conducted presentations for RAB CFNs and individuals on the Ready-to-Hire database and presented information on business sectors or employers that were hiring subsidized employees.

A key takeaway from the pilot was that all parties involved in implementing it underestimated the administrative work pilot operations required of their organizations. More full-time employees, funding, and staff time were required than originally anticipated, which put a strain on both Fresno DSS and RAB program managers.

7. Performance management

In preparation for the pilot, RAB staff recognized that they would need a greater ability to customize the collection of service data for all individuals in the pilot than their current system allowed. RAB developed a new stand-alone data system to allow maximum flexibility in capturing all of the data required for the pilot. It used a customizable off-the-shelf database system called TRAX to store and manage its administrative service use data. RAB was able to develop and customize this database in time for the pilot start date and collected service data using this tool for the entirety of pilot implementation. Although the system collected all required data from the start, not all data were initially in a usable format for extraction and reporting, especially those data related to pilot exits and unsubsidized and subsidized employment activities. RAB worked with TRAX system developers to make enhancements so staff could develop reports for monitoring the pilot. Fresno DSS, RAB, and EDC regularly reviewed TRAX service data to ensure that individuals in the CBA and ES control groups were flowing smoothly through their service pathways (that is, monitor how individuals moved through services and activities).

In addition to TRAX, multiple systems were used to monitor and track pilot performance, including CalWIN (SNAP eligibility system), EPIS (random assignment system), the Ready-to-Hire database, and the Apricot (financial system). Multiple systems created challenges and burdens for the pilot. The first challenge was the administrative burden on CFNs to input data from EPIS into TRAX, and from TRAX into Ready-to-Hire, as these systems were not interoperable. Another challenge was how TRAX collected data on case management activities. CFNs not only made case notes but had to use drop-down menus to code the specifics of each interaction they had with an individual, which was perceived as dual entry. Teaching CFNs to use TRAX appropriately was also reported as a training challenge and an administrative burden. Many CFNs struggled with and were frustrated by the amount of time needed for data collection and paperwork, as these activities took away from the time they could spend providing direct services to individuals.

RAB selected TRAX, a commercial off-the-shelf solution, for the pilot, because a former CFN had worked for the TRAX development team and made commitments to customize the data and reporting needed for the evaluation. However, customization was more difficult and took longer than expected. RAB had to make multiple requests to the software vendor to customize reports, which required additional resources and a significant amount of time to complete, thus delaying the creation of reports and RAB's ability to monitor performance through them.

Another system, Apricot, was used to manage financial services, such as requests for tuition or cost of books, and track financial incentives. This system was accessible only to lead CFNs, which sometimes caused delays in getting checks to CFNs and eventually to individuals participating in CBA.

RAB did not have a data management position dedicated to reporting until February 2018, and it had limited success in customizing TRAX to automate the monthly reports required for monitoring the pilot. Thus, it was difficult to track services and individual progress in real time. For this reason, CFN leads were limited in providing support to CFNs in managing their workload and monitoring when individuals were in the service pathway, which could help both in re-engagement and capturing success stories. After RAB was able to fill a data analyst position, the analyst conducted thorough reviews of data and provided regular reports on individual outcomes, which helped CFNs manage and organize their work. This development had a significant impact on external reporting and enhancing continuous internal process improvement efforts through more thorough monitoring of individual outcomes. The data analyst was able to review the data thoroughly, determine which data were missing, and create a list of tasks for leads

and CFNs, helping them to organize their work, avoid missing report variables, and improve accountability. It also allowed employer liaisons to better track how many CBA group members were hired by employers, the number referred to jobs, and the number that did not show up for interviews.

D. Sustainability and replicability

Services in California ended on December 31, 2018. At the same time, Fresno DSS also planned to stop contracting with RAB to provide services for the existing SNAP E&T program. Instead, at that time, the county was creating a program that focused on serving ABAWDs because its ABAWD waiver expired and such individuals would be newly subject to the three-month time limit beginning in 2019. Fresno DSS planned to contract with different providers to serve this population and therefore did not have plans to continue offering the types of services and activities provided to CBA group members as part of the pilot.

E. Key implementation analysis findings

Key findings from CBA's planning, implementation, operations, and close-out periods are summarized below.

- **Case management staff struggled with the recruitment process, which affected staff morale and turnover.** Program managers strongly emphasized the role that the requirement to participate in recruitment efforts played in job dissatisfaction among CFNs, citing it as the number one complaint offered during exit interviews. Explicitly discussing such recruiting requirements during the hiring process and considering candidates with customer service in addition to case management backgrounds could improve job satisfaction and reduce turnover.
- **Consistent staffing in case management and management positions was important for the fidelity of the program model.** Fresno DSS had turnover in policy analyst and eligibility worker positions. RAB also experienced turnover in its director, program manager, education navigator, employer liaison, and numerous CFN positions, and struggled to stay fully staffed. RAB attributed this struggle in part to the efforts required to scale up from a staff of 9 to a staff of more than 50 employees, which was done to implement CBA. RAB staff turnover affected relationships between CFNs and individuals, which slowed momentum in the trust building that was key to eliciting individuals' reporting of barriers, particularly those that carry stigma, such as mental health issues, substance use disorders, or a criminal background; all of these barriers take time to address.
- **Clear and frequent communication and training on recruitment, program guidelines and expectations, and roles and responsibilities are important, especially with frontline staff, early in implementation and during handoffs.** Facilitated meetings between Fresno DSS eligibility staff and RAB were important, as were meetings between RAB and EDC early in the process. One example of an important feedback loop was RAB's sharing success stories with eligibility workers who were recruiting SNAP participants so they could better understand the outcomes of their efforts. Each organization would have benefited from having more candid and frequent meetings to clarify roles, sharing continuous process improvement efforts, discussing budget modifications, reviewing invoicing between the county and provider, clarifying contract requirements, addressing feedback, and managing surveys and invoices from employers. Some suggestions for collaboration included

RAB being able to access the Ready-to-Hire database earlier in the process and employer liaisons being able to conduct employer recruitment both jointly with and independent of EDC.

- **In-house GED preparation services and the education navigators were highly regarded by staff and individuals.** Though participation rates were lower than anticipated, those individuals who participated in GED preparation classes found them helpful. CFNs reported that the education navigators were able to engage individuals who had not been successful in previous attempts to complete their GED at other locations. Also, some individual who participated in the in-house GED preparation classes shared their positive experiences with other CBA group members, which helped to encourage their peers to join the classes.
- **Subsidized employment worked best in labor markets where entry-level jobs were scarce or there was a specific industry need for positions that required short-term skills training.** Fresno County's top three industries have predominantly low-wage, entry-level positions (health care, retail, and agriculture). Manufacturing—particularly food processing—is also a common job. Some employers who participated in subsidized employment reported that their need for entry-level candidates was so great the subsidies did not incentivize them to hire CBA group members. They were more concerned about hiring candidates who had soft skills (for example, who were reliable and came to work on time) and could handle the working conditions, such as graveyard shifts, lifting requirements, and part-time or seasonal employment. Employer liaisons reported difficulty in finding appropriate jobs for CBA individuals who had some skills and were looking for mid-level positions.

Fewer individuals engaged in subsidized employment than originally targeted. RAB and EDC made changes to equalize the CBA and TANF subsidies in January 2018, but this change was late in the service period and many individuals were not able to benefit from it. RAB and EDC learned that it took time to figure out how to market the subsidy to employers, monitor the industry-specific needs of the business community, and then conduct and compile interest inventories from individuals to match the right candidate to the right subsidized employment position. They ultimately changed their design for subsidized employment so it became a better fit for the business needs of the community. They also learned that the original design for employer recruitment and dividing the engagement responsibilities between EDC and RAB staff limited the scope and effectiveness of outreach to employers. They made changes to address this issue, which they felt were positive but implemented too late to make a difference.

V. Participation analysis

In this chapter, we present findings on the services that CBA group members received and the employment or training-related activities in which they chose to participate. Using the administrative service use data recorded by service providers, we examine overall engagement in CBA, the types of activities in which individuals participated, the order in which they typically proceeded through them, and how long they spent in each type of activity. The chapter also presents details about participation in education, occupational skills training, and work-based learning activities; receipt of support services; receipt and intensity of case management services; and the timing of and reasons for exiting CBA. In addition, to account for potential differences in the implementation and availability of services for individuals who enrolled at different times, we estimated several service receipt measures by enrollment timing to describe differences in participation between those who enrolled in the pilot earlier compared to those who enrolled later. Appendix D contains additional data on the characteristics of those who did or did not complete CBA activities and a discussion of service receipt among subgroups, based on characteristics at the time of random assignment, as indicated in the baseline registration form.

A. Participation in CBA

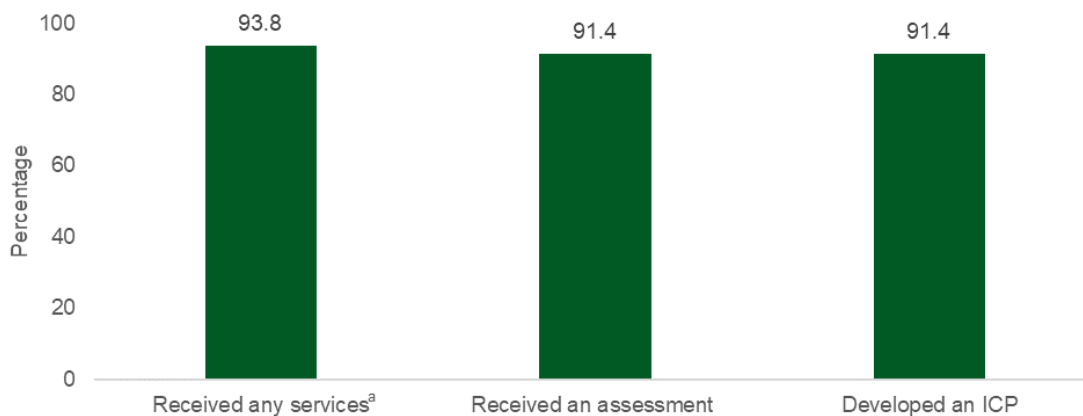
After random assignment, CBA group members were scheduled for their first appointment with a CFN to receive an in-depth assessment and develop a detailed plan that included both short-and long-term goals and a plan for how to meet them. After assessment, CBA offered individuals services and activities based on their needs, including (1) job readiness workshops, (2) GED preparation, (3) occupational skills training, (4) work-based learning opportunities, (5) case management, and (6) support services.

1. Overall engagement in CBA

Most (94 percent) individuals in the CBA group received services, meaning they started an assessment, ICP, or employment or training-related activity (Exhibit V.1).²² Most individuals started their assessment and ICP process with the CFN during the same meeting in which they were randomly assigned. However, about 9 percent of those assigned to CBA did not follow through to complete an assessment or develop an ICP. When comparing the baseline characteristics (age, gender, race and ethnicity, education, employment status, and presence of children in the household) of individuals who did and did not receive services, we find few differences between the two groups; the same was true for individuals who did and not receive an assessment (Appendix Table D.12).

After random assignment, most CBA group members received services and completed assessments.

²² The measure does not include case management and support services because individuals often engaged once to meet with a case manager or get a support service but did not return for more meaningful activities and services.

Exhibit V.1. Percentage of CBA group members who engaged in services

Source: SNAP employment and training evaluation administrative service use data.

Note: Estimates are based on data from 1,797 CBA group members.

^a “Received any services” measures engagement in activities including assessments, developing an ICP, and employment or training-related activities; the measure does not include orientations, case management, or support services.

ICP = individual client (and family) plan

Length and timing of engagement. On average, individuals who engaged in services spent about 15 months (439 days) in CBA (Appendix Table D.4). This is reasonable, as CBA was designed to provide services over an 18-month period for each individual. Overall, most individuals began receiving services within the first quarter after random assignment (92 percent), with the rest mainly engaging between Quarters 2 and 5 (Appendix Table D.5).

2. Engagement in activities

About 80 percent of CBA group members started an employment or training-related activity (Exhibit V.2). Individuals most commonly started job readiness workshops (72 percent), occupational skills training (32 percent), and GED preparation classes (22 percent). Few participated in work-based learning (5 percent).

Eighty percent of CBA group members participated in an activity, and most of those who started one completed it. Job readiness workshops were those most commonly started and completed.

Among those who started activities, 73 percent of individuals completed at least one activity (Appendix Table D.2). However, completion rates varied depending on the type of activity. Most individuals who started job readiness workshops completed them (77 percent; Exhibit V.3). Fewer individuals completed work-based learning (70 percent) or occupational skills training (69 percent), and just 15 percent completed GED classes. Compared to individuals who did not complete job readiness workshops, individuals who completed them were more likely to be female, Black, non-Hispanic, have a degree or certificate, and be employed at random assignment (Appendix Table D.13). There were no significant differences in the characteristics of those who did and did not complete work-based learning, and few differences between those who did and did not complete other activities.

Exhibit V.2. Percentage of CBA group members who started an activity

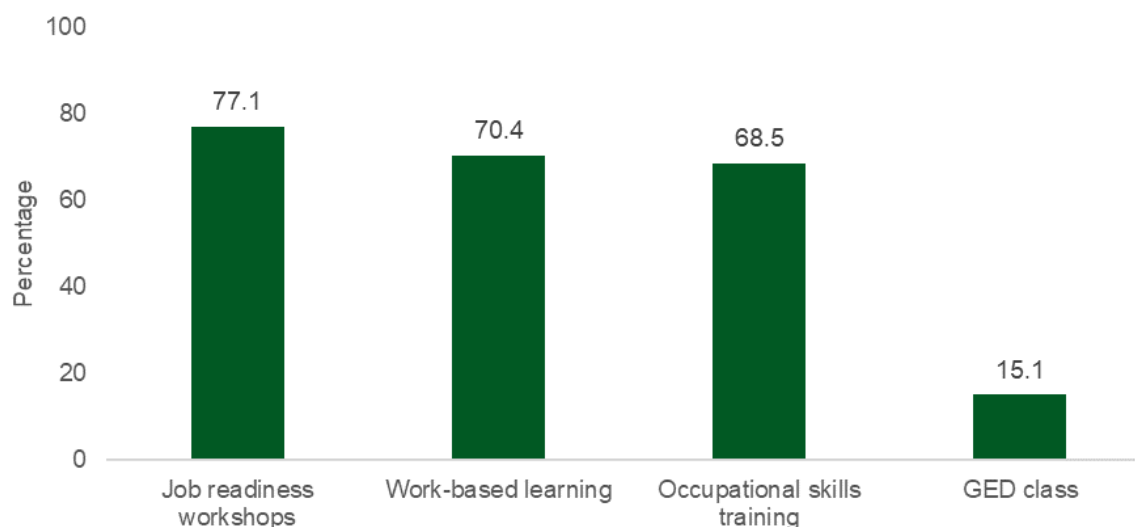


Source: SNAP employment and training evaluation administrative service use data.

Note: Estimates are based on data from 1,797 CBA group members.

GED = General Education Development

Exhibit V.3. Percentage of CBA group members who completed an activity, among those who started one



Source: SNAP employment and training evaluation administrative service use data.

Note: Estimates are based on data from 1,411 CBA group members.

GED = General Education Development

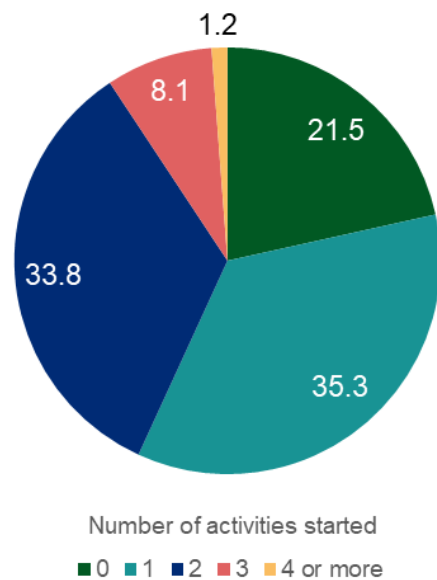
Length and timing of engagement. Individuals in the CBA group who started an activity spent an average of 5 to 22 months participating in it, depending on the activity (Appendix Table D.4). Individuals spent the most time in GED classes (647 days) and the least in work-based learning (161 days). Individuals spent a similar amount of time in occupational skills training and job readiness workshops (268 and 238 days, respectively). The time spent in job readiness workshops includes the elapsed time it

took individuals to complete the four workshops, which did not have to be completed concurrently and could be completed in conjunction with other activities. In other words, individuals were not actively engaged in job readiness workshops services during this entire period; each of the four workshops was about a week each. On average, individuals who started job readiness workshops completed about three of the four workshops.

Although most individuals started an activity in the first quarter after random assignment (71 percent), between 1 and 3 percent started activities between Quarters 2 and 5 (Appendix Table D.5). There was much more variation in the timing of activity completion—the largest percentage of those who started an activity completed it in the first quarter (36 percent), but many individuals also completed activities in Quarters 2 and 3 (8 and 4 percent, respectively), and 3 percent completed them in each quarter between Quarters 4 and 6.

Number and order of activities. Exhibit V.4 shows that most CBA group members participated in either one (35 percent) or two (34 percent) employment or training-related activities. Most individuals who participated in activities started job readiness workshops first (81 percent); considerably fewer started GED classes (14 percent) or occupational skills training (6 percent) first (Appendix Table D.4). Among those who participated in just one activity, most participated in job readiness workshops (81 percent), and fewer started GED classes (17 percent; Appendix Table D.4).

Exhibit V.4. Number of activities started by CBA group members (percentage)



Source: SNAP employment and training evaluation administrative service use data.

Note: Estimates are based on data from 1,797 CBA group members.

For CBA group members who participated in more than one activity, the most common combination of activities was job readiness workshops followed by occupational skills training (47 percent). The average length of time between the start of these two activities was more than six months (Appendix Table D.4). This suggests that CBA group members invested time in developing soft skills and job search skills before they started occupational skills training. In general, among individuals who started more than one activity, there was a period of longer than two months between starting the first activity and then starting the second one. This finding suggests that individuals generally did not engage in multiple activities

simultaneously. They likely had completed or were close to completing one activity before moving to the next.

Earlier versus later enrollment. Because some service and CBA policies changed over time, we examined whether there were differences in the start and completion rates of employment or training-related activities for those who enrolled in the pilot earlier versus later. Generally, we found no significant differences in the overall rates of starting or completing activities. However, those who enrolled later were more likely than those who enrolled earlier to start or complete work-based learning (a 5 and 3 percentage point difference, respectively; Appendix Table D.3). Delays in offering work-based learning activities early in the CBA service period and subsequent changes to improve the process for moving individuals into the activity likely contributed to the increase in participation.

B. Education, occupational skills training, and work-based learning

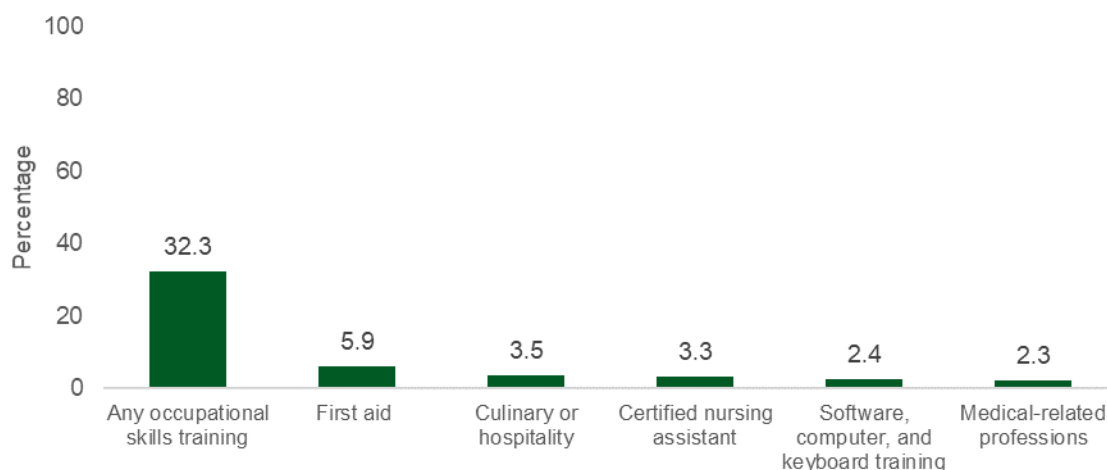
Among just education, occupational skills training, or work-based learning activities (excluding job readiness workshops), 50 percent of individuals started one of these activities, and 52 percent of those who started completed at least one (Appendix Table D.6). Thus, about two-thirds of all individuals who started an employment or training-related activity participated in education, training, or work-based learning. This section describes the types of education and occupational skills training CBA group members started and completed, as well as any degrees or certifications they earned. It also describes the types of work-based learning in which individuals participated and the average value of any subsidies employers received.

1. Education and occupational skills training

Less than one-quarter of CBA group members participated in education activities, with most of them working to obtain their GED. Twenty-two percent of CBA group members started a GED class, and 3 percent (or 15 percent of those who started) completed it. The same percentage also obtained their high school equivalency certification (Appendix Table D.6).

About one-third of CBA group members participated in some type of occupational skills training (Exhibit V.5). Individuals had many choices for occupational skills training, so no one type of training had a large percentage of CBA group members starting it. The five most common types of training started were in first aid (6 percent), culinary or hospitality (4 percent), certified nursing assisting (3 percent), software, computer, or keyboard skills (2 percent), or other medical-related professions (2 percent). These five types of training accounted for about 54 percent of the trainings that were started.

Among those who started an occupational skills training, the completion rate was highest for those starting a first aid or security training (97 percent each). Most individuals who started other types of training also completed them, including training in culinary or hospitality (90 percent), software, computer, and keyboard skills (90 percent), and certified nursing assisting (80 percent).

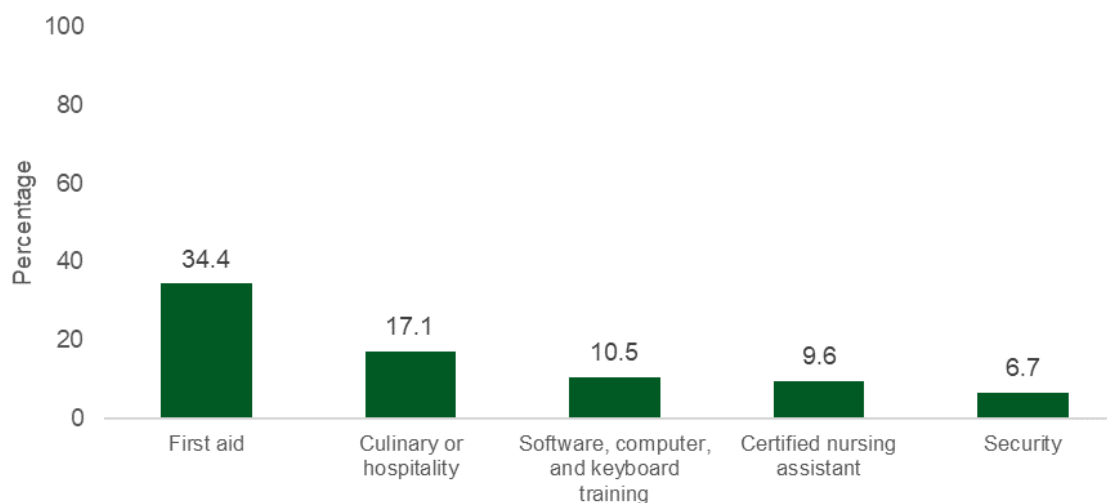
Exhibit V.5. Percentage of CBA group members who started any occupational skills training and the five most common types of training

Source: SNAP employment and training evaluation administrative service use data.

Note: Estimates are based on data from 1,797 CBA group members.

Many of the individuals who completed an occupational skills training program received a certification or credential (9 percent of all CBA group members; Appendix Table D.6). The five most common credentials earned were related to first aid (34 percent); culinary or hospitality (17 percent); software, computer, and keyboard skills (11 percent); certified nursing assisting (10 percent); and security (7 percent; Exhibit V.6). CBA group members earned certification and credentials between Quarters 1 and 8 (Appendix Table D.5).

About 9 percent of CBA group members earned an occupational skills training credential or certification—one-third of those were for first aid.

Exhibit V.6. Percentage of CBA group members who earned the five most common credentials, among those who received a credential

Source: SNAP employment and training evaluation administrative service use data.

Note: Estimates are based on data from 160 CBA group members.

2. Work-based learning

Few CBA group members engaged in work-based learning activities (5 percent), but most of them completed it (70 percent; Exhibit V.7). All of the work-based learning opportunities were in subsidized employment and could last up to nine months, but these opportunities did not always result in permanent employment. Those who participated in work-based learning spent an average of 25 hours per week for 23 weeks in their assigned jobs. Employers received an average of \$4,838 in total subsidies for each person employed with them.

Those in work-based learning participated for an average of 25 hours per week. Employers received an average subsidy of \$4,838 per person.

Exhibit V.7. Percentage of CBA group members who participated in work-based learning and average amount of subsidy received

Type of service	CBA group
Started work-based learning ^a (%)	4.9
Completed work-based learning (%)	3.4
Completed work-based learning, among those who started (%)	70.4
Average amount of subsidy per person, among those who started (\$)	4,837.50
Average number of hours per week spent in work-based learning, among those who started (#)	24.8
Average number of weeks spent in work-based learning, among those who started (#)	23.0
Sample size	1,797

Source: SNAP employment and training evaluation administrative service use data.

^a All work-based learning was subsidized employment.

C. Support services

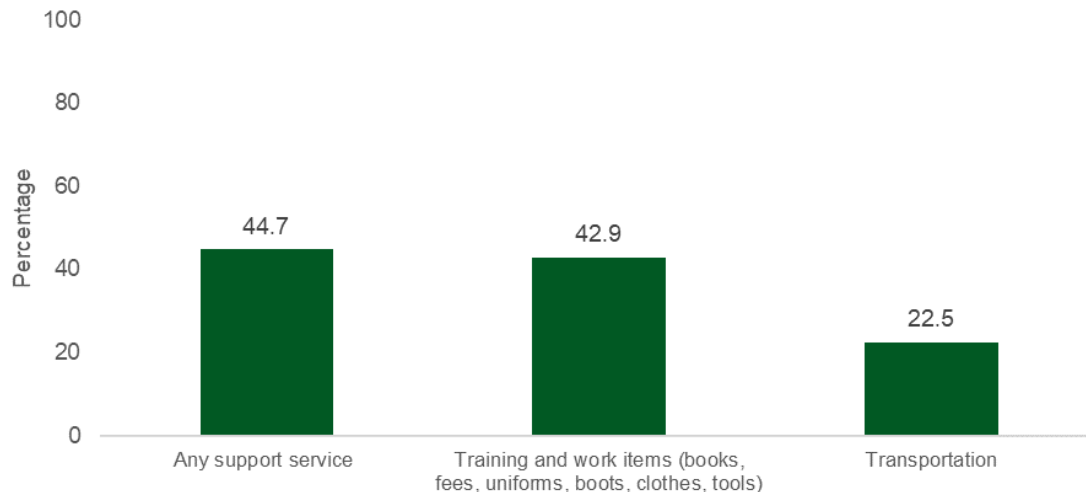
Forty-five percent of CBA group members received at least one support service. Most of these individuals received training and work items such as books, fees, uniforms, boots, and clothing (43 percent; Exhibit V.8). Twenty-three percent of individuals received transportation assistance.²³ Most individuals who received a support service received the first one within their first and second quarters after random assignment (22 percent and 10 percent, respectively), whereas 2 to 5 percent of individuals first received a support service in each of Quarters 3 through 6 (Appendix Table D.5).

Forty-five percent of CBA group members received a support service and received a total of \$614 on average.

²³ RAB staff tracked transportation supports separately from all other supports, but any support not related to transportation were tracked under one category (referred to as ‘training and work items’ in this chapter). Therefore, we were only able to measure two types of support services. Also, CBA did not provide direct supports for child care; individuals were referred to the local child care office for assistance.

Individuals who received a support service received some type of support service for six months, on average.²⁴ They received training and work items for the longest period of time (five months) and transportation assistance for an average of three months.

Exhibit V.8. Percentage of CBA group members who received support services, by type



Source: SNAP employment and training evaluation administrative service use data.

Note: Estimates are based on data from 1,797 CBA group members.

On average, CBA group members who received support services received a total of \$614 in support service payments (Exhibit V.9). This included an average of \$532 for training and work items and \$205 for transportation assistance.

Exhibit V.9. Amount of support services received among those who received support services

Type of service	Average amount
Average total amount of support services paid per person (\$)	614.40
Training and work items (books, fees, uniforms, boots, clothes, tools)	531.80
Transportation	205.40
Sample size	803

Source: SNAP employment and training evaluation administrative service use data.

Support services in relation to other measures. We assessed whether participation in CBA and employment or training-related activities differed for those who did and did not receive a support service. On average, individuals who received a support service remained in CBA 142 days longer than those who did not (Appendix Table D.7). In addition, 57 percent of individuals who started an employment or training-related activity received a support service, compared with 43 percent of those who did not start an activity. Most individuals who completed an activity received a support service (76 percent). Individuals who started and completed an employment or training-related activity received about \$12 more in support services than those who started but did not complete an activity (\$627 versus \$615; Appendix Table D.7).

²⁴ Individuals who received support services in more than one month did not necessarily receive them in consecutive months.

Earlier versus later enrollment. There was no significant difference between individuals who enrolled in CBA later compared to those who enrolled earlier in the rate of support service receipt (Appendix Table D.3).

D. Financial incentives

As described in Chapter IV, CBA group members were offered two types of differential financial incentives. The program retention incentives were offered to individuals who obtained a new full-time job but continued to participate in CBA services after that. The skills upgrade incentives were offered to individuals who obtained a new full-time job after enrolling CBA and engaged in an occupational skills training program while they were employed. Additionally, individuals were randomly assigned to receive no incentives or to receive a high or low amount for each of the two incentives, for a total of four incentive groups and one no incentive group. The high and low incentive groups were created to better understand the importance of the magnitude of the amount of financial incentives offered. About one-third of the CBA group was assigned to the no incentives group and two-thirds were assigned to the combinations of high and low incentive groups. Individuals who were randomly assigned to the “high” incentive group for the program retention incentive received \$30 per month of retention, and those randomly assigned to the “low” incentive group received \$15 per month of retention. Individuals randomly assigned to the “high” incentive group for the skills upgrade incentive received \$40 per training unit, and those randomly assigned to the “low” incentive group received \$20 per training unit.²⁵ Individuals could receive incentive payments of up to \$360 if they were assigned to a low incentive group and up to \$480 if they were assigned to a high incentive group.

One-quarter of those who were assigned an incentive were assigned to each incentive group—high program retention and high skills upgrade incentives; high program retention and low skills upgrade incentives; low program retention and high skills upgrade incentives; and low program and low skills upgrade incentives. Individuals earned incentives while in CBA, which were “banked” or put into an account for the individual. The total amount banked would be paid to individuals when they successfully completed CBA after 18 months. Only about 6 to 7 percent of individuals in each group banked an incentive, and 3 to 5 percent received those banked incentives (Exhibit V.10). Individuals who were randomly assigned to the low incentive group were generally less likely than those assigned to the high incentive group to bank or receive an incentive payment. Banked incentives ranged from \$84 (in the low/low group) to \$195 (in the high/high group), whereas the average amount paid to those who banked incentives ranged from \$108 to \$245. This indicates that those who banked higher amounts also were more likely to receive a payout.

Most of the incentive payments individuals received were for program retention incentives, with 15 percent of CBA members receiving a payment, versus only 3 percent who received payments for a skills upgrade incentive (Exhibit V.11). Among those who received the program retention incentive, those in the high incentive group earned an average of six separate incentives and received about \$200 total in incentive payments; those in the low incentive group earned an average of 7 separate incentives and received an average of \$99. Among those who received the skills upgrade incentive, individuals in both

²⁵ A unit is equivalent to completing each class or other training milestone as defined by the education or training program.

groups earned an average of six separate incentives, whereas the high incentive group received an average of \$224 in total, compared to \$114 for those in the low incentive group.

Exhibit V.10. Percentage of CBA group members receiving incentives and total amount of incentives paid, by assigned incentive group combinations

Incentive payments	Program retention incentive	Skills upgrade incentive	
		High	Low
Assigned to an incentive (%)	High	25.0	24.5
Banked an incentive payment (%)		6.7	6.1
Received an incentive payment (%)		4.7	4.1
Total average amount banked, among those who banked a payment (\$)		195	178
Total average amount paid, among those who received an incentive (\$)		245	220
Assigned to an incentive (%)	Low	25.2	25.0
Banked incentive payment (%)		6.6	5.8
Received an incentive payment (%)		3.9	2.7
Total average amount banked, among those who banked a payment (\$)		139	84
Total average amount paid, among those who received an incentive (\$)		165	108

Source: SNAP employment and training evaluation administrative service use data.

Note: CBA offered two types of incentives: 1,197 CBA group members were randomly assigned to a high or low group for each of the incentives (for a total of 4 incentive groups); 600 CBA group members were assigned to a no incentive group. Group members “banked” the incentive they earned for completing milestones and successfully exiting from CBA.

Exhibit V.11. Percentage of CBA group members who received a financial incentive and average amount of incentives, by type of incentive

Incentive payments	Program retention incentive			Skills upgrade incentive		
	High	Low	Total	High	Low	Total
Received an incentive payment (%)	8.7	6.6	15.3	1.9	1.4	3.2
Average total amount paid, among those who received the incentive (\$)	200	99	157	224	114	178
Average number of banked payments, among those who received the incentive (#)	6.4	6.5	6.4	5.5	5.6	5.6
Average amount per banked payment, among those who received the incentive (\$)	32	15	25	40	21	32
Sample size	593	603	1,196	601	593	1,194

Source: SNAP employment and training evaluation administrative service use data.

E. Case management

The CBA model was designed to provide intensive case management by assigning a CFN to work closely with each individual enrolled in the CBA group. Contact could be in person, over the telephone, or electronically through email, text, or social media. CFNs also recorded a few contacts with individuals conducted through mail, which generally involved providing key forms or documentation individuals needed in hard copy. Exhibit V.12 shows that most individuals in the CBA group (97 percent) had at least

one contact with a CFN. On average, those individuals with case management contacts had about 44 contacts while they were in CBA. Most contacts (39 percent) were electronic, but a similar number (36 percent) were by telephone. The average number of contacts per person per month was 3 among those with a contact. Average contacts per person were highest in the first quarter after random assignment (an average of 10 contacts per person), with between 6 and 8 contacts per person on average in each of Quarters 2 through 6. On average, individuals who had contact spent about 771 minutes, or about 13 hours, in contact with their CFN over the time they were in CBA (Exhibit V.12).

Almost all CBA group members were in contact with a CFN and had an average of 44 contacts during CBA.

Exhibit V.12. Amount and type of CBA group members' contacts with CFNs

Contact	Amount and type of contact
CBA members with any contact (%)	96.8
Average number of contacts per person (#)	42.6
Average number of contacts per person, among those with a contact (#)	44.0
Average number of contacts per person per month, among those with a contact (#)	3.2
Average total time in case management contact, among those with a contact (minutes) ^a	770.6
Among contacts, type of contact (%)	
Electronic (email, text, social media)	39.1
Telephone	35.6
In person	23.9
Mail	1.4
Sample size	1,797

Source: SNAP employment and training evaluation administrative service use data.

Note: Data in this table represent all contacts that case managers documented between themselves and individuals in CBA. Some of these contacts included indirect communications (such as mailing documents to an individual), but even these contacts likely provided a needed service that helped the individual. We did exclude some contacts, such as leaving a phone message or sending mass mailings, where applicable.

^aThe number of minutes represents the total amount of time each individual was in contact with a CFN among all contacts, averaged across all individuals who had a contact.

Earlier versus later enrollment. Those who enrolled in the pilot later were more likely to have contact with a CFN than those who enrolled earlier (99 percent compared to 94 percent; Appendix Table D.3).

F. Extent and timing of CBA exits

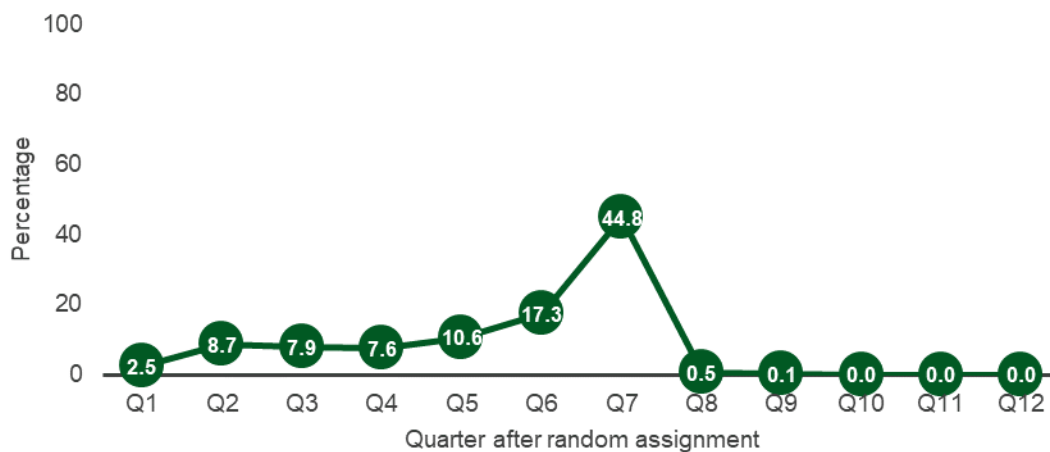
About one-quarter of CBA group members (27 percent) exited the pilot during their first year after random assignment; 73 percent left in their second year, and less than 1 percent left in their third year (Exhibit V.13). Most individuals left in the seventh quarter after random assignment (45 percent); 17 percent left CBA in Quarter 6, and 11 percent left in Quarter 5. This pattern indicates that most CBA group members exited after completing the intended 18 months (6 quarters) of CBA services. Among those who exited within 3 months, 6 percent received a support service, compared with 13 percent of those who exited within 12

Most individuals exited CBA within their second year after random assignment; 27 percent exited in their first year.

months (Appendix Table D.10). Most CBA group members exited after they participated in an employment or training-related activity (79 percent; Appendix Table D.10).

There were few differences in the characteristics of those who left CBA early (within Quarter 1) and those who left later (after Quarter 1), perhaps because most individuals remained in CBA through the first quarter. Those who exited earlier compared to those who exited later were less likely to be ages 18 to 49 (17 percentage point difference) and female (24 percentage point difference; Appendix Table D.11).

Exhibit V.13. Percentage of CBA group members who exited within each quarter



Source: SNAP employment and training evaluation administrative service use data.

Note: Estimates are based on data from 1,797 CBA group members.

Almost half of CBA group members exited after completing CBA services (Exhibit V.14). Thirty-eight percent of CBA group members chose to exit before they completed services (shown as discontinued services), or were terminated for cause or became ineligible to continue (11 percent and 5 percent, respectively). The providers did not track loss of SNAP as a reason for exit, but using SNAP administrative data, only 11 percent of CBA group members exited SNAP in the month before, the month of, or the month after their exit from CBA (Appendix Table D.10). This finding indicates that most CBA exits were not associated with losing SNAP benefits.

Using UI wage data, we examined the employment patterns around the time of exit from CBA. About 55 percent were already employed at the time of exit (at least three months before exit), and 10 percent started a job around the time of exit (between two months before to two months after the exit date; Appendix Table D.10). Thirty-five percent did not become employed around the time of exit.

Exhibit V.14. Percentage of CBA group members who exited, by reason

Exits	CBA group
Completed services	45.5
Discontinued services	38.0
Terminated for cause	11.1
Ineligible to continue	5.4
Sample size	1,797

Source: SNAP employment and training evaluation administrative service use data.

VI. Differences in service receipt for the CBA and control groups

In this chapter, we describe how CBA members, NS control group members, and ES control group members differed in their receipt of services based on participation in CBA, existing SNAP E&T, or other services and programs available in communities. Understanding differences in service receipt is important for interpreting findings about the impacts of CBA on employment, earnings, and receipt of public assistance (discussed in Chapter VII). Impacts on these outcomes are unlikely to occur without a meaningful difference in the services received by the CBA and control groups.

In presenting findings, we begin with a description of differences across the research groups in participation in job search training or assistance activities and education or training activities. We also examine differences in participation in specific components of education or training activities, including general job skills training, occupational skills training, education, and work-based learning activities.²⁶ We then examine differences across research groups in rates of completion, the amount of time spent in different activities, and receipt of case management and support services. (We discuss how these differences varied across a select number of subgroups in Appendix E.) Unless noted otherwise, participation in activities and receipt of services are measured over the 36-month period after random assignment.

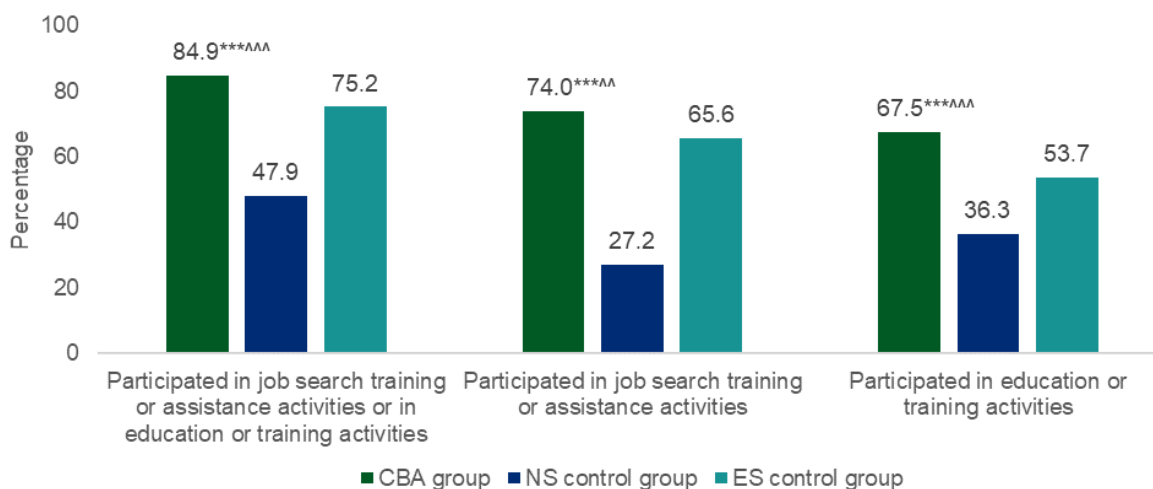
A. Differences between research groups in participation in activities

Fresno DSS operates a voluntary SNAP E&T program. The services available to individuals in the ES control group through the existing SNAP E&T program were identical to those available to individuals in the CBA group, except ES control group members did not receive financial incentives, in-house GED preparation, or the opportunity to participate in subsidized employment. Individuals in the NS control group received no SNAP E&T services. Individuals in all three research groups could receive services available in the community.

Individuals in the CBA group participated in activities at higher rates than individuals in each of the control groups. Eighty-five percent of the CBA group participated in a job search training or assistance activity or education or training activity compared to 48 percent of the NS control group and 75 percent of the ES control group (Exhibit VI.1). Individuals in the CBA group were more likely to participate in job search training or assistance activities than individuals in the NS control group (47 percentage point difference) and ES control group (9 percentage point difference). CBA group members were also more likely to participate in education or training activities than NS control group members (31 percentage point difference) and ES control group members (14 percentage point difference).

Relative to the control groups, the CBA group was more likely to participate in job search training activities or education and training activities during the three years following random assignment.

²⁶ The survey collected information on education or training activities or programs. For simplicity, we refer to them as “activities” in this chapter.

Exhibit VI.1. Participation in any CBA, existing SNAP E&T, or community-offered services

Source: SNAP employment and training evaluation 12- and 36-month surveys, weighted data.

Note: Estimates cover the 36 months following random assignment. Estimates are based on data from 689 CBA group members, 552 NS control group members, and 247 ES control group members.

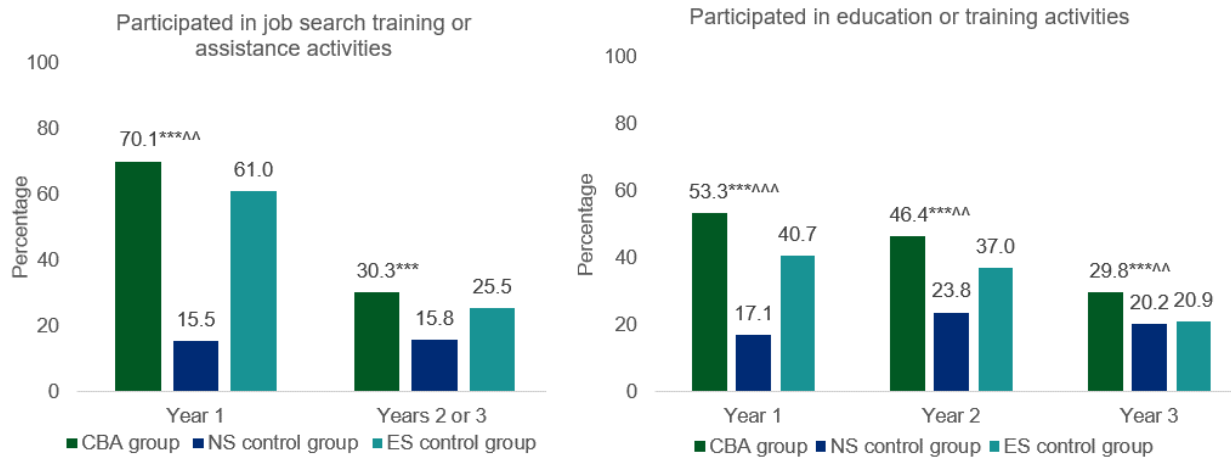
***/**/* Difference between the CBA group and NS control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

^^^/^/^ Difference between the CBA group and ES control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

Differences in service receipt between the CBA group and the control groups were largest in the first year after random assignment and decreased in size over time (Exhibit VI.2). For example, in Year 1, there was a 36 percentage point difference between the CBA group and the NS control group in the percentage of individuals who participated in education or training activities. By Year 3, this difference had decreased to 10 percentage points. This decrease over time was smaller for the CBA group compared to the ES control group (13 percentage points in Year 1, 9 percentage points in Year 3). Notably, although the average individual in the CBA group participated for about ten months, a strong difference in service receipt across research groups

There remained a strong difference between the CBA and control groups in rates of participation for all three years, even after the end of the service period.

remained in the third year after random assignment. Even after CBA stopped providing services, CBA group members continued receiving services in existing SNAP E&T or in the community at higher rates than both NS and ES control group members—26 percent of CBA group members participated in an education or training activity after CBA ended, compared to 20 percent of NS control group members and 20 percent of ES control group members (Appendix Table E.2a). The difference between the CBA and ES control groups in rates of participation were larger for individuals who enrolled earlier compared to later in the service period (16 versus 3 percentage point difference; Appendix Table E.10). The differences between the CBA group and NS control group in rates of participation were similar for individuals randomly assigned earlier and those randomly assigned later in the enrollment period (Appendix Table E.10).

Exhibit VI.2. Participation in CBA, existing SNAP E&T, or community-offered services, by year after random assignment

Source: SNAP employment and training evaluation 12- and 36-month surveys, weighted data.

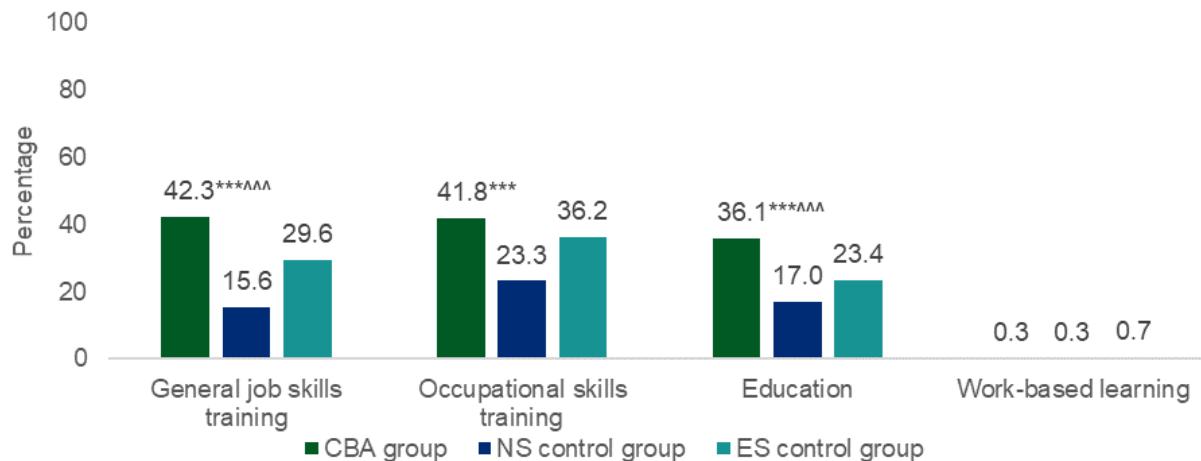
Note: Estimates cover the 36 months following random assignment. Estimates are based on data from 689 CBA group members, 552 NS control group members, and 247 ES control group members. The 12- and 36-month surveys collected the start and end dates for participation in education or training programs, but not for participation in job search training or assistance activities. As a result, annual estimates of participation in job search training and assistance activities cannot be estimated separately for Years 2 and 3 after random assignment.

***/**/ Difference between the CBA group and NS control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

^^/^^/ Difference between the CBA group and ES control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

CBA group members were more likely than NS and ES control group members to start specific components of education or training activities (Exhibit VI.3). The largest differences between the CBA and NS control groups were for general job skills training (27 percentage point difference), and occupational skills training and education (19 percentage point difference for each). There was no significant difference between the CBA group and NS control group in rates of participation in work-based learning. The largest differences between the CBA group and ES control group were for general job skills training (13 percentage point difference) and education (13 percentage point difference). There was no significant difference between the CBA and ES control groups in rates of participation in occupational skills training or work-based learning.

The CBA group had higher rates of participation than the control groups in general job skills training and education. CBA group members were also more likely than NS control group members to start occupational skills training.

Exhibit VI.3. Participation in specific CBA, existing SNAP E&T, or community-offered services

Source: SNAP employment and training evaluation 12- and 36-month surveys, weighted data.

Note: Estimates cover the 36 months following random assignment. Estimates are based on data from 689 CBA group members, 552 NS control group members, and 247 ES control group members.

***/** Difference between the CBA group and NS control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

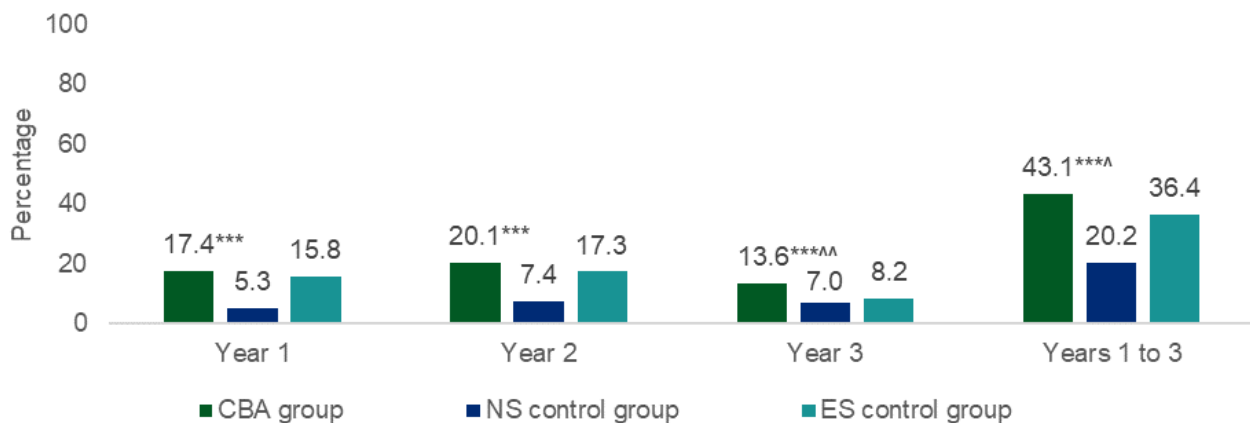
^^^/^ Difference between the CBA group and ES control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

B. Differences between research groups in activity completion

In addition to being more likely than the NS control group to start education and training activities, the CBA group was also more likely to complete them (Exhibit VI.4). In contrast, there were few differences in completion rates between the CBA group and the ES control group. Overall, CBA group members were 23 percentage points more likely than NS control group members to complete any type of education or training activity (data not shown), and 7 percentage points more likely than ES control group members.

Differences between the CBA group and the NS control group in rates of completion were largest in the first two years after random assignment (12 and 13 percentage point differences), and grew smaller in the third year (7 percentage point difference; Exhibit VI.4). There was no statistical difference in completion rates between the CBA group and the ES control group in Year 1 or Year 2, and a 5 percentage point difference in Year 3. Differences in completion rates between the CBA group and the ES control group were larger for individuals who enrolled earlier compared to later, but this difference was not statistically significant (Appendix Table E.10). Differences in completion rates between the CBA group and the NS group were similar for those enrolled earlier and later.

Some individuals—14 percent of CBA group members and 11 percent each of NS and ES control group members reported they were still engaged in an activity at the time of the 36-month follow-up survey. Individuals engaged in an activity at the time of the 36-month survey were most commonly still in occupational skills training, as reported by 7 percent each of CBA group members, NS control group members, and ES control group members.

Exhibit VI.4. Percentage of CBA group members who completed education or training activities, by year after random assignment

Source: SNAP employment and training evaluation 12- and 36-month surveys, weighted data.

Note: Estimates cover the 36 months following random assignment. Estimates are based on data from 689 CBA group members, 552 NS control group members, and 247 ES control group members.

***/**/* Difference between the CBA group and NS control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

^^^/^^/^ Difference between the CBA group and ES control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

Individuals in the CBA group also were more likely than those in the NS control group to complete specific types of activities, such as general job skills training (19 percentage point difference), occupational skills training (13 percentage point difference), and education (13 percentage point difference; Appendix Table E.3). There was no difference between the CBA group and NS control group in rates of completion in work-based learning activities. CBA group members were more likely than ES control group members to complete general job skills training activities and education; there was no statistical difference between the CBA group and ES control group members in completion of occupational skills training or work-based learning activities.

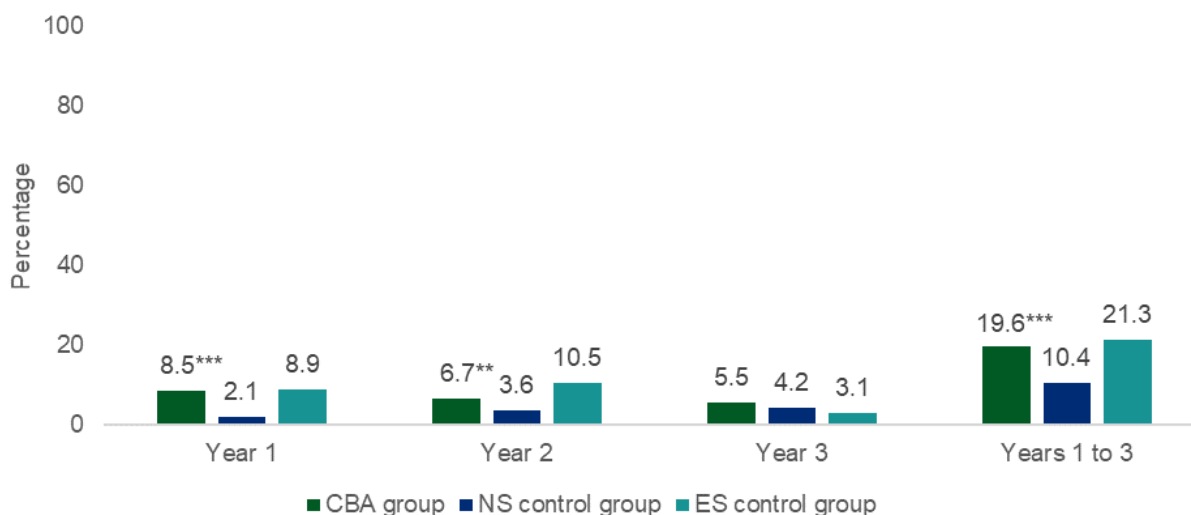
CBA group members were more likely than NS control group members to complete activities and earn an occupational certificate or license. There were few differences in activity completion between CBA group members and ES control group members.

Individuals in the CBA group spent, on average, about 6 months longer in activities than individuals in the NS control group (10 versus 4 months), and about 3 months longer in activities than individuals in the ES control group (10 versus 7 months; Appendix Table E.3). CBA group members also spent about three hours more per week in activities than NS control group members (seven versus four hours); there was no statistical difference between CBA group members and ES control group members in hours spent in activities. In each of the three years following random assignment, the CBA group spent more time per year and more hours per week in activities relative to the NS control group. In Years 1, 2, and 3, the CBA group spent more time per year in activities relative to the ES control group. There was no statistical

difference in hours spent per week in activities between the CBA group and the ES control group in any of the years.

Individuals in the CBA group were also more likely than those in the NS control group to receive an occupational certificate or license (9 percentage point difference; Exhibit VI.5). There were significant differences in the percentage of individuals who received one in Years 1 and 2 following random assignment, but not in Year 3.

Exhibit VI.5. Percentage of CBA group members who received an occupational certificate or license, overall and by year



Source: SNAP employment and training evaluation 12- and 36-month surveys, weighted data.

Note: Estimates cover the 36 months following random assignment. Estimates are based on data from 689 CBA group members, 552 NS control group members, and 247 ES control group members.

***/**/* Difference between the CBA group and NS control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

^^^/^/^ Difference between the CBA group and ES control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

The differences between the CBA group and each control group in rates of completion or receipt of an occupational certificate or license were similar for individuals randomly assigned earlier versus later in the enrollment period (Appendix Table E.10).

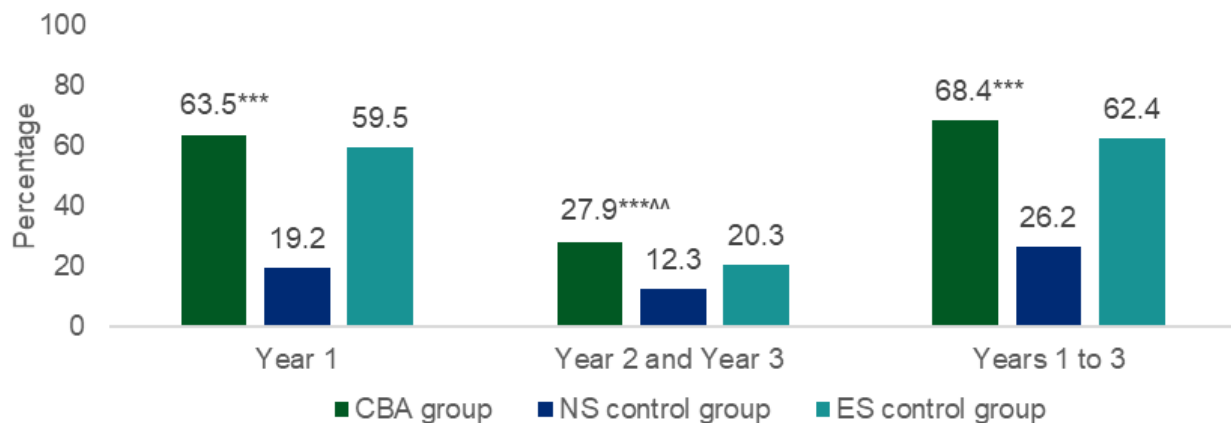
C. Differences between research groups in receipt of case management and support services

CBA group members were more likely than those in the NS control group to receive case management services, including career counseling and one-on-one assistance from employment professionals or case managers (42 percentage point difference; Exhibit VI.6). The difference between the two groups was largest and statistically significant in the first year following random assignment (44 percentage point difference); it decreased but remained statistically significant in the second and third years following random assignment (16 percentage point difference). There was no significant difference between the CBA group and the ES control group in the receipt of case management services in the first year after random assignment, but this difference became statistically significant in years 2 and 3 combined (8

percentage point difference). The difference in receipt of case management services was larger for the CBA group relative to the ES control group for individuals randomly assigned earlier in the enrollment period (22 percentage point difference versus -9 percentage point difference; Appendix Table E.10). The differences in the receipt of case management services between CBA group members and NS control group members were similar for individuals randomly assigned earlier compared to later in the enrollment period).

CBA group members were more likely than NS control group members to receive case management. CBA group members were also more likely than members of both control groups to receive support services.

Exhibit VI.6. Receipt of case management services through CBA, existing SNAP E&T, or community-offered programs, overall and by year



Source: SNAP employment and training evaluation 12- and 36-month surveys, weighted data.

Note: Estimates cover the 36 months following random assignment. Estimates are based on data from 689 CBA group members, 552 NS control group members, and 247 ES control group members. The 12-month survey requested information about receipt of case management services between the date of random assignment and the date of the 12-month interview. The 36-month survey requested information about receipt of case management services between the dates of the 12- and 36-month interviews. As a result, it is not possible to estimate receipt of assistance separately in Years 2 and 3.

***/**/* Difference between the CBA group and NS control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

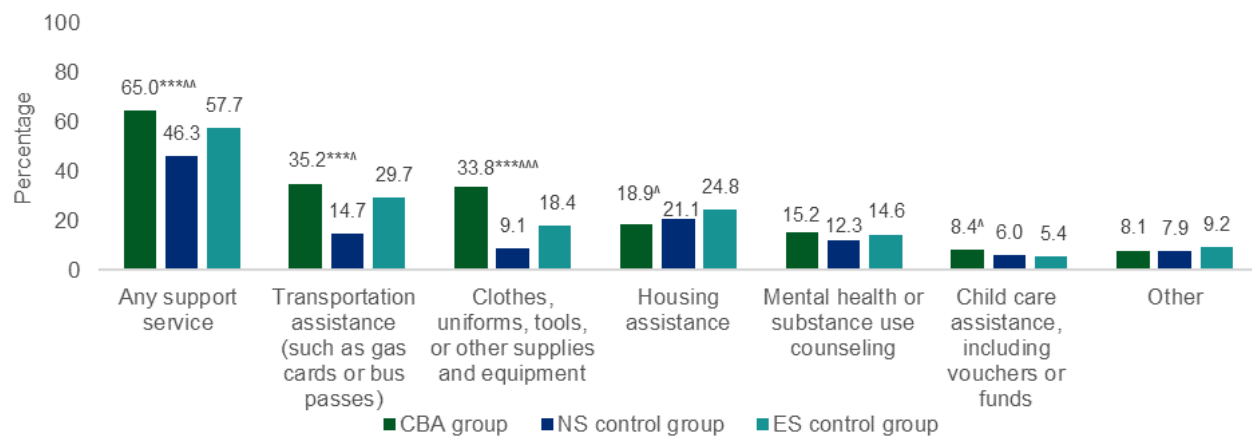
^^^/^^/^ Difference between the CBA group and ES control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

On average, CBA group members had 8 additional contacts with an employment professional or case manager relative to NS control group members (10 versus 2 contacts), and about 4 additional contacts relative to ES control group members (10 versus 6 contacts; Appendix Table E.6). The CBA group was less likely than the NS control group to communicate mostly by phone; there were no differences between the CBA group and the ES control group in the mode of contact.

CBA group members were more likely than those in the control groups to receive support services. About 65 percent of individuals in the CBA group received a support service compared to 46 percent in the NS control group and 58 percent in the ES control group (Exhibit VI.7). The largest differences between the CBA group and the NS control group were observed for clothes, uniforms, tools, or other supplies and

equipment (25 percentage point difference) and transportation assistance (21 percentage point difference). The largest differences between the CBA group and the ES control group were also observed for clothes, uniforms, tools, or other supplies and equipment (16 percentage point difference), as well as transportation assistance (6 percentage point difference), childcare assistance (3 percentage point difference), and housing assistance (-6 percentage point difference). There were no statistically significant differences between the CBA group and the control groups in receipt of mental health or substance use counseling or other support services.

Exhibit VI.7. Receipt of support services through CBA, existing SNAP E&T, or community-offered programs, overall and by type



Source: SNAP employment and training evaluation 12- and 36-month surveys, weighted data.

Note: Estimates cover the 36 months following random assignment. Estimates are based on data from 689 CBA group members, 552 NS control group members, and 247 ES control group members. "Other" included assistance with payment of utilities such as electricity, phone, heat, or gas; food assistance; and assistance with medical care.

***/**/* Difference between the CBA group and NS control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

^^/^/^ Difference between the CBA group and ES control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

Individuals in the CBA group were more likely than those in the NS control group to receive support services in the first year following random assignment and the ensuing two years (Appendix Table E.7). Differences between the two groups were largest in the first year after random assignment, and also larger for individuals randomly assigned later versus earlier in the enrollment period (Appendix Tables E.7 and E.10). CBA group members were also more likely to receive any support service than ES control group members in the second and third years after random assignment. Differences between the CBA group and ES control group members were similar in magnitude for those randomly assigned earlier versus later in the enrollment period (Appendix Table E.10).

VII. Impacts on employment, earnings, receipt of public assistance, and well-being

In this chapter, we examine whether the generally higher rates of engagement and service receipt among individuals in CBA, as described in Chapter VI, translated into impacts on employment, earnings, receipt of public assistance, and key measures of well-being, including food security, health, well-being, and housing. We also examine whether impacts differed according to whether individuals started or completed CBA activities. In Appendix F, we present information about how impacts on employment, earnings, receipt of public assistance, and food security varied across subgroups.

As described in Chapter II, we focus on impacts in the two-year period consisting of Years 2 and 3 after random assignment. We aim to balance any concerns about how the COVID-19 pandemic may have affected outcomes in Year 3 with measuring impacts on outcomes beyond Year 1 following random assignment after many individuals had time to participate in CBA activities.

A. Impacts of CBA on labor market outcomes

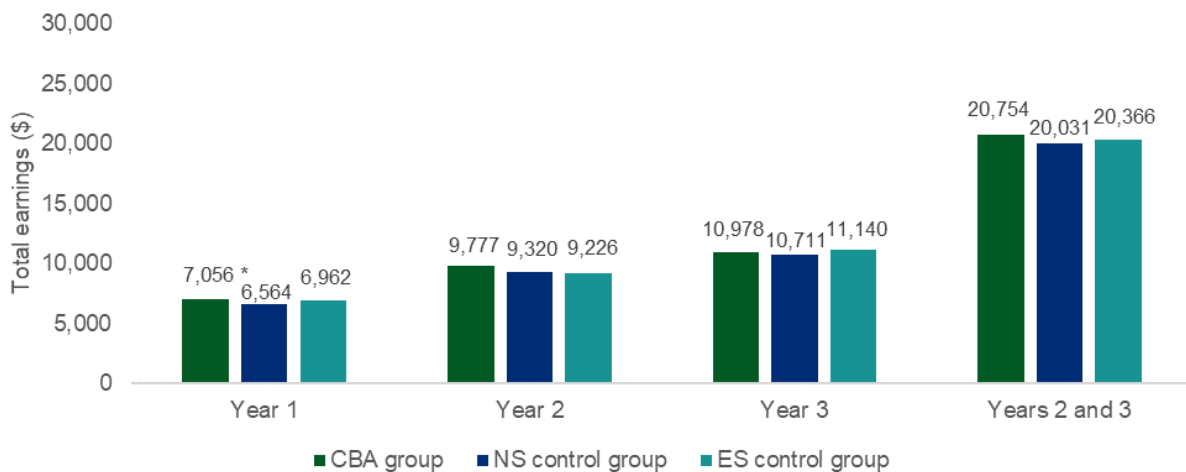
This section presents impacts on key labor market outcomes. Outcomes from both UI wage records and survey data were measured by year and quarter after random assignment. Some outcomes based on the survey data were measured at the time of the survey, approximately 36 months after random assignment.²⁷

1. Impacts on earnings, employment, and hours worked

Earnings. CBA led to an increase in earnings in Years 2 and 3 combined after random assignment based on survey data, but not UI data. Based on UI data, CBA group members earned \$724 more than NS control group members and \$388 more than ES control group members over Years 2 and 3, but these differences were not statistically significant. Based on survey data, CBA group members had higher earnings than NS control group members in Years 2 and 3 combined (a \$4,054 difference; Exhibit VII.2). CBA group members earned \$1,338 more than ES control group members over the two-year period, but this difference was not statistically significant. CBA group members earned more than NS control group members in each year after random assignment based on survey data. Based on each data source, all three research groups experienced increases in average earnings over time.

²⁷ For survey-based outcomes, we defined the quarter after random assignment as the first three months after the month of random assignment. The months included in this quarter sometimes differed from the calendar quarter, which we used to define the first quarter after random assignment for outcomes based on UI wage records.

Exhibit VII.1. Total earnings based on UI wage records, by year



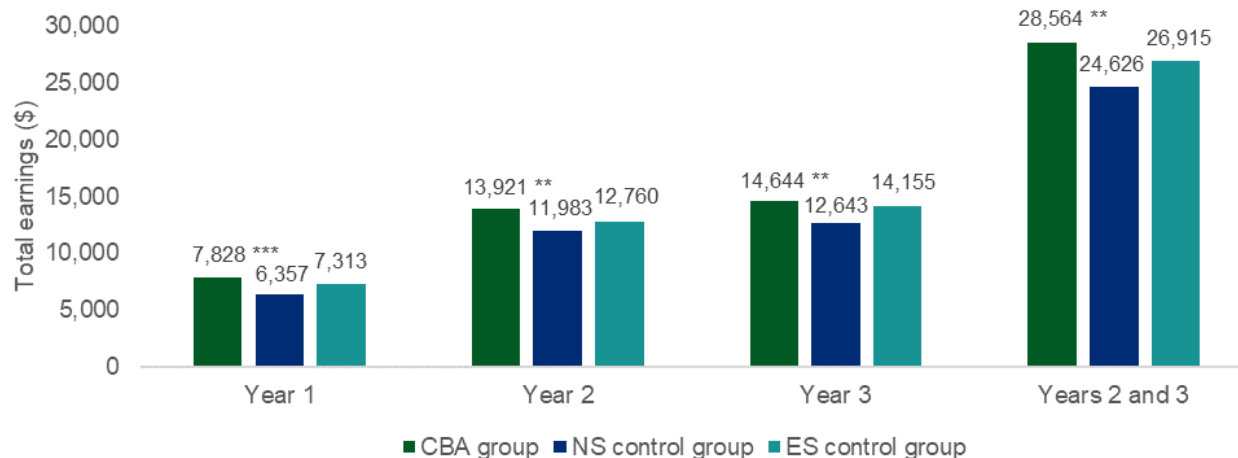
Source: SNAP employment and training evaluation UI wage records, weighted data.

Note: Estimates are based on data from 1,797 CBA group members, 1,465 NS control group members, and 633 ES control group members.

***/**/* Difference between the CBA group and NS control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

^^^/^^/^ Difference between the CBA group and ES control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

Exhibit VII.2. Total earnings based on survey data, by year



Source: SNAP employment and training evaluation 12- and 36-month surveys, weighted data.

Note: Estimates are based on data from 689 CBA group members, 552 NS control group members, and 247 ES control group members.

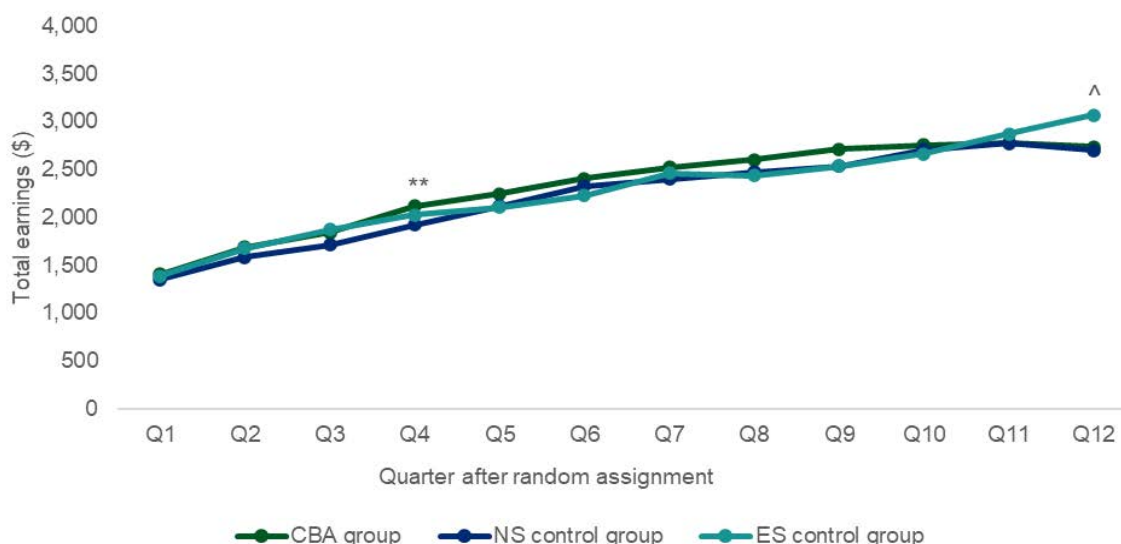
***/**/* Difference between the CBA group and NS control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

^^^/^^/^ Difference between the CBA group and ES control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

There were positive impacts of CBA on earnings relative to the NS control group in nearly every quarter starting in Quarter 3 based on survey data, with fewer statistically significant quarterly impacts based on

UI data (Exhibits VII.3 and VII.4). These findings were similar for individuals who were randomly assigned earlier versus later in the enrollment period (Appendix Table F.19).

Exhibit VII.3. Total earnings based on UI wage records, by quarter



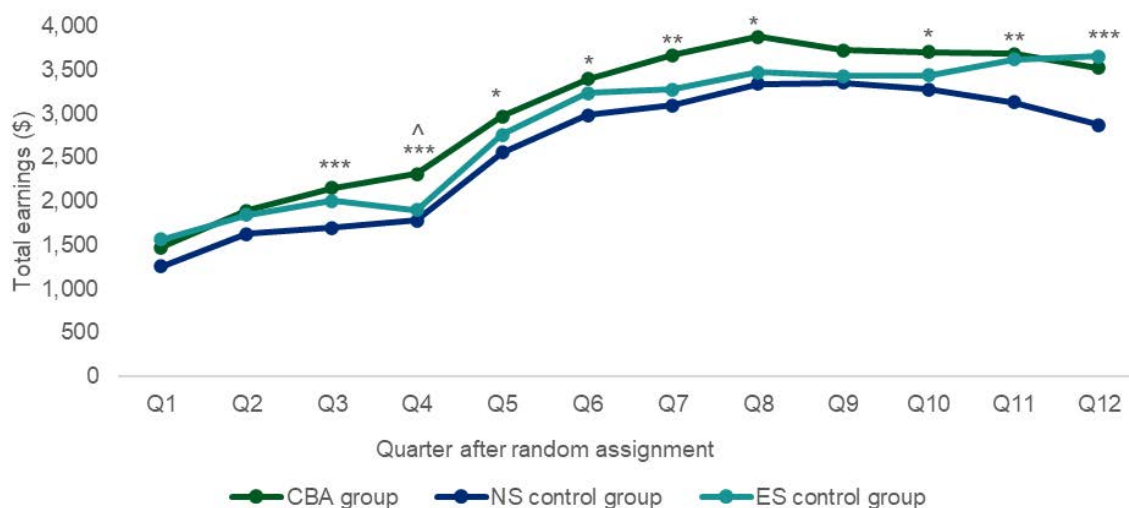
Source: SNAP employment and training evaluation UI wage records, weighted data.

Note: Estimates are based on data from 1,797 CBA group members, 1,465 NS control group members, and 633 ES control group members.

***/**/* Difference between the CBA group and NS control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

^^/^^/^ Difference between the CBA group and ES control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

Exhibit VII.4. Total earnings based on survey data, by quarter



Source: SNAP employment and training evaluation 12- and 36-month surveys, weighted data.

Note: Estimates are based on data from 689 CBA group members, 552 NS control group members, and 247 ES control group members.

***/**/* Difference between the CBA group and NS control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

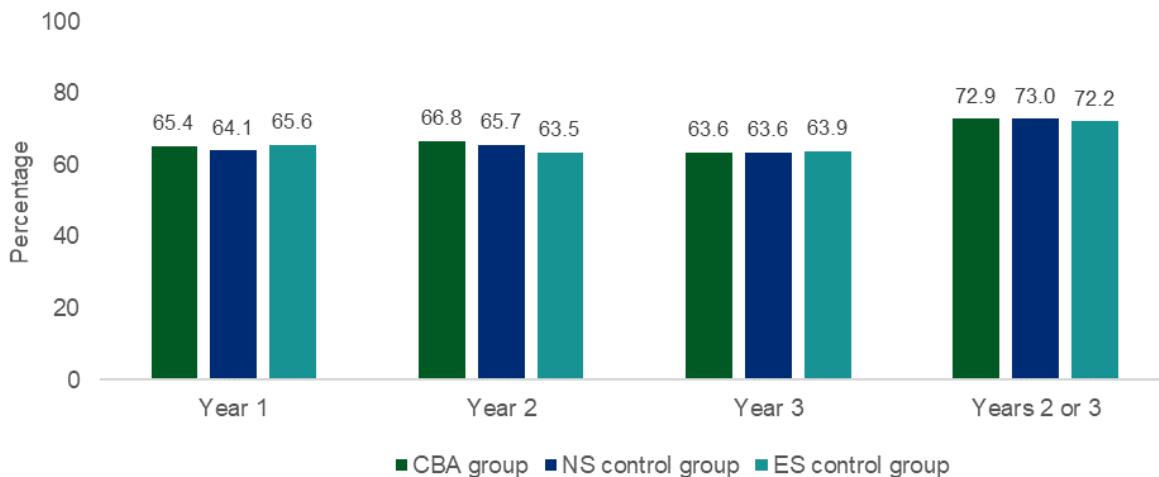
^^/^ Difference between the CBA group and ES control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

Employment. CBA had a positive impact on employment relative to the NS control group in the two-year period (Years 2 and 3) based on survey data, but not UI data. Based on the UI data, about 73 percent of CBA group members were ever employed in Years 2 or 3, compared to 73 percent of NS control group members and 72 percent of ES control group members (Exhibit VII.5). These differences were not statistically significant. Quarterly impacts were observed for only Quarters 8 and 9, with small and not statistically significant impacts for all other quarters (Appendix Table F.1).

Based on survey data, CBA led to a 6 percentage point increase in employment in the two-year period compared to the NS control group (79 versus 72 percent; Exhibit VII.6). The largest impact was in Year 1 (10 percentage points), but there were also impacts relative to the NS control group in Years 2 and 3 (7 percentage points in each year). There was no statistically significant difference in employment over Years 2 and 3 between CBA group members and ES control group members. Quarterly impacts for the CBA group relative to the NS control group were observed for most quarters between Quarter 2 and 12. Employment impacts of CBA relative to the NS control group were not statistically different for individuals who were randomly assigned earlier in the enrollment period and those who were randomly assigned later in the enrollment period. However, differences in employment between the CBA group and ES control group were larger for those who were randomly assigned later in the enrollment period based on survey data (Appendix Table F.19).

CBA led to an increase in employment relative to the NS control group in the two-year period from Year 2 to 3 based on survey data. These findings were not corroborated by the UI data, and there were no impacts of CBA on employment relative to the ES control group.

Exhibit VII.5. Employment rates based on UI wage records, by year

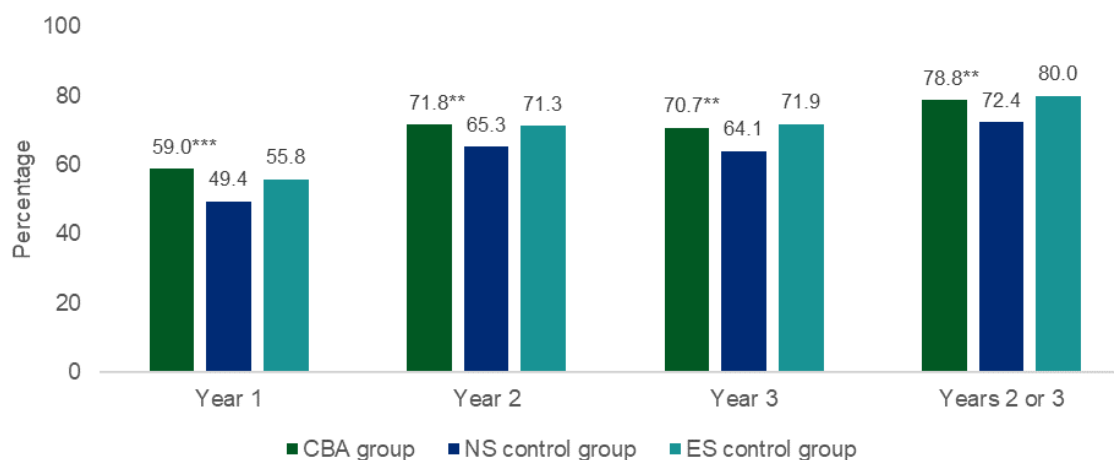


Source: SNAP employment and training evaluation UI wage records, weighted data.

Note: Estimates are based on data from 1,797 CBA group members, 1,465 NS control group members, and 633 ES control group members.

***/**/* Difference between the CBA group and NS control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

^^/^ Difference between the CBA group and ES control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

Exhibit VII.6. Employment rates based on survey data, by year

Source: SNAP employment and training evaluation 12- and 36-month surveys, weighted data.

Note: Estimates are based on data from 689 CBA group members, 552 NS control group members, and 247 ES control group members.

***/**/* Difference between the CBA group and NS control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

^^^/^/^ Difference between the CBA group and ES control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

Employment rates provide information about the percentage of individuals who were employed during a given time period but do not describe the extent or duration of employment. To assess these employment characteristics, we examined the average number of quarters (UI data) and months (survey data) individuals were employed each year. Findings were generally similar to those for rates of employment. Based on the UI data, there were no statistically significant differences in the number of quarters CBA group members were employed relative to the NS control group or ES control group. Based on the survey data, the CBA group was employed 2 more months, on average, than the NS control group; there was no statistically significant difference relative to the ES control group (Appendix Tables F.2 and F.4).

Hours worked. Individuals in the CBA group worked an average of 2 hours per week more than those in the NS control group over the two-year period (Years 2 and 3; Appendix Table F.5). CBA group members worked an average of 13 hours per week in Year 1 and increased to 19 hours per week in Years 2 and 3. In contrast, NS control group members worked an average of 10 hours per week in Year 1 and increased to 17 hours per week in Years 2 and 3. ES control group members worked an average of 11 hours per week and increased to 18 and 19 hours per week in Years 2 and 3, respectively; the difference between CBA group and ES control group members in average hours worked was not statistically significant in any year.

2. Impacts on characteristics of current jobs

Exhibit VII.7 presents characteristics of jobs individuals held at the time of the 36-month survey.²⁸ This information was available only for individuals employed at the time of the 36-month survey (52 percent of the CBA group, 48 percent of the NS control group, and 52 percent of the ES control group). For this reason, the measures in Exhibit VII.7 are nonexperimental and the results do not represent the causal effects of CBA on job characteristics.

Among individuals who were employed at the time of the 36-month survey, CBA group members and control group members held jobs with generally similar characteristics. In both research groups, around half of individuals were employed full time, and 58 to 61 percent earned less than \$500 per week (Exhibit VII.7). The majority of employed individuals in all three research groups received at least one employer-offered benefit, and there were no statistically significant differences in the types of benefits available at their job. Most employed individuals in all three research groups were regular status employees working full time or part time, but there were statistically significant differences in the percentage of individuals in most types of employment. CBA group members were less likely to be regular status employees (72 percent of the CBA group and 82 and 86 percent of the NS and ES control groups, respectively). CBA group members were also more likely to be self-employed or independent contractors (13 percent versus 7 and 8 percent of NS and ES control group members, respectively). Common occupations included personal care and service, office and administrative support, transportation and material moving, and sales.

Exhibit VII.7. Characteristics of current jobs among individuals employed at the time of the 36-month survey

Characteristic (%)	CBA group	NS control group	ES control group	CBA / NS control group difference	CBA / ES control group difference
Employed at the time of the 36-month survey interview	52.0	47.6	52.2	4.4	-0.4
Hours worked per week					
Less than 20	22.0	24.6	19.6	-2.6	2.4
21 to 34	25.3	25.6	27.7	-0.3	-2.2
35 or more (employed full time)	52.3	49.6	52.7	2.7	-0.7
Average	32.2	31.4	32.5	0.9	-0.2
Weekly earnings					
\$1 to \$499	58.1	60.9	56.2	-2.8	2.2
\$500 to \$999	35.4	36.2	38.7	-0.8	-3.0
\$1,000 to \$1,499	4.4	1.9	5.0	2.5	-0.9
\$1,500 to \$2,000	2.1	1.0	0.2	1.1	1.8**
\$2,000 and above	0.0	0.0	0.0	0.0	0.0

²⁸ The survey captured information about the jobs at which individuals were working at the time the survey was conducted (their “current job”). If individuals were working two or more jobs, they were asked to report on the one at which they worked the most hours.

Characteristic (%)	CBA group	NS control group	ES control group	CBA / NS control group difference	CBA / ES control group difference
Benefits available at job					
Any benefit	75.8	80.2	74.0	-4.4	2.3
Health insurance or HMO/PPO plan	55.3	55.9	59.1	-0.6	-3.2
Dental insurance	45.6	46.0	46.6	-0.4	-0.8
Paid vacation	43.2	45.4	45.0	-2.3	-0.9
Paid holidays	44.3	44.6	45.1	-0.3	0.0
Paid sick leave	64.8	69.4	65.3	-4.6	0.1
Any paid time off	70.3	73.1	69.0	-2.8	2.0
Pension or retirement benefits	42.9	42.1	45.2	0.8	-1.7
Tuition assistance or reimbursement	19.9	20.0	21.7	-0.1	-1.3
Type of employment					
Regular full or part time	72.1	82.3	85.6	-10.2***	-13.1***
Temporary or on call	11.7	8.0	6.4	3.7	5.2**
Self-employed or independent contractor or consultant	13.3	6.6	8.2	6.8***	4.8*
Day laborer	2.9	3.1	-0.2	-0.2	3.1***
Occupation					
Personal care and service	10.4	12.9	14.7	-2.5	-3.9
Office and administrative support	9.6	12.1	11.1	-2.5	-1.3
Transportation and material moving	9.3	12.8	16.4	-3.5	-7.0*
Sales	7.2	9.4	5.5	-2.2	1.6
Educational instruction and library	4.6	3.8	2.6	0.8	2.0
Food preparation and serving	5.0	4.0	5.6	1.0	-0.7
Healthcare support	6.7	3.7	2.9	3.1*	3.8**
Building and grounds cleaning and maintenance	3.2	5.1	4.3	-1.8	-1.0
Production	5.1	1.2	2.3	3.9***	3.0
Protective service	4.3	6.5	4.5	-2.2	-0.4
Sample size	444	313	160		

Source: SNAP employment and training evaluation 36-month survey, weighted data.

***/**/* Difference between the CBA group and NS control group or CBA group and ES control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

HMO = health maintenance organization; PPO = preferred provider organization.

3. Impacts on changes in earnings and employment over time

The findings presented above describe employment, earnings, and hours worked in each quarter and year since random assignment. Although these findings allow us to assess changes in the average value of the outcomes over time across all CBA or control group members, they obscure changes over time for each individual. In this section, we examine these types of changes or “dynamics” in employment, earnings, hours worked, and job characteristics.

As presented in Exhibit VII.5, based on UI data, employment rates were similar for the CBA group and control groups in Years 1, 2, and 3. There were also no statistically significant differences between the CBA group and control groups in employment patterns or the number of employment spells based on UI data (Appendix Table F.20).

As presented in Exhibit VII.6, employment rates were larger for CBA group members than NS control group members in all three years after random assignment, based on the survey data. CBA group members were more likely to be consistently employed than the NS control group (34 versus 29 percent, p -value = 0.06) and less likely to be seldom or never employed (25 versus 34 percent; Appendix Table F.22). CBA group members also were 4 percentage points more likely to experience no unemployment spells over the three years after random assignment than NS control group members (14 versus 10 percent). However, the percentage of individuals who experienced a job loss during the three-year period following random assignment was higher for the CBA group than the NS control group (64 versus 59 percent).²⁹ CBA group members were also more likely to find a job after the 12-month interview: among individuals who were not employed at the time of the 12-month interview, CBA group members were more likely than NS control group members to be employed at 36 months (37 versus 28 percent). Job retainment rates were similar between CBA and NS control group members, with 72 percent of CBA group members and 74 percent of NS control group members employed at both the 12-month and 36-month interview date.

There were no statistically significant differences between CBA group members and ES control group member in employment patterns, job loss, or unemployment spells. However, CBA group members were less likely than ES control group members to remain employed after the 12-month interview (72 versus 79 percent, p -value = 0.10)

At the time of both the 12- and 36-month surveys, most employed individuals in all three research groups worked a single job (Appendix Table F.23). About 40 percent of the CBA group had one job at the time of the 12-month survey; 5 percent had two jobs. At the time of the 36-month survey, these percentages were 47 and 6 percent, respectively. For the NS control group, 33 percent had one job and 4 percent had two jobs at the time of the 12-month survey. At the time of the 36-month survey, these percentages were 41 and 6 percent, respectively. About 37 percent of ES control group members held one job and 5 percent had two jobs at the time of the 12-month survey. At the time of the 36-month survey, this became 49 and 6 percent, respectively.

Exhibit VII.7 shows that CBA generally had no impacts on job characteristics around the time of the 36-month survey. There were also relatively few changes in the distributions of these characteristics from the 12-month to the 36-month survey (Appendix Table F.24). The CBA group was more likely than both the

²⁹ Because these estimates are based only on individuals who were employed at some point in the period and thus at risk of experiencing a job loss, they are not experimental impacts.

NS and ES control groups to earn \$1,000 to \$1,499 per week at the time of the 12-month interview, but the earnings distributions were more similar across research groups at the time of the 36-month interview. CBA group members also were more likely to receive paid holidays at their job as of the 12-month interview, but this difference was not present at the time of the 36-month interview.

The most common occupations at the time of the 12-month survey generally were similar to the most common ones at the time of the 36-month survey.

4. Conclusions

CBA led to an increase in average earnings relative to the NS control group (who received no SNAP E&T services) in the two-year period (Years 2 and 3) based on survey data; this finding was not corroborated by the UI data. CBA increased earnings relative to the NS control group in almost every quarter after random assignment; there were no statistically significant earnings impacts of CBA relative to the ES control group. Based on survey data, CBA increased employment rates and average hours worked per week relative to the NS control group in the two-year period. There were impacts on employment in each of the three years after random assignment. Impacts on employment were largest in the first year and decreased in size in the second and third years, but remained statistically significant. Based on the UI data, the two-year increase was much smaller in magnitude and not statistically significant. Based on both data sources, there were no significant differences between the CBA group and the ES control group in employment rates in any year.

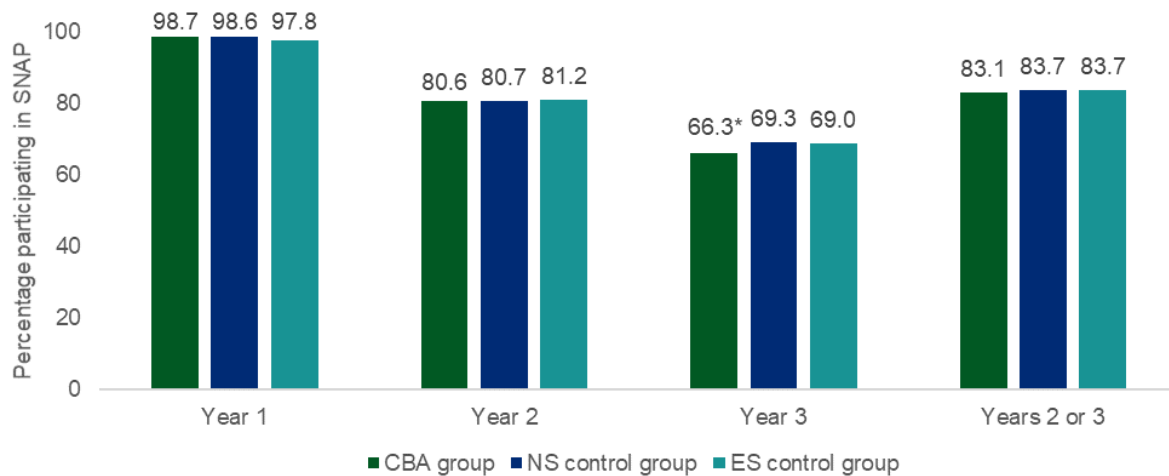
B. Impacts of CBA on receipt of public assistance

This section presents findings on the impact of CBA on the receipt of public assistance, as measured by SNAP administrative records and survey data. Most of the outcomes measuring receipt of SNAP, TANF, and Medicaid are based on the administrative data and were measured for each year and quarter after random assignment. Receipt of other forms of public assistance are based on survey data and capture receipt during Year 1 and during Years 2 and 3 combined after random assignment.

1. Impacts on SNAP participation

CBA did not lead to a statistically significant change in the likelihood of participating in SNAP in the two-year period (Years 2 and 3) after random assignment. About 83 percent of CBA group members and 84 percent each of NS control group members and ES control group members participated in SNAP during this period (Exhibit VII.8). The lack of impacts of CBA on SNAP participation reflects similar decreases each year in the rate of SNAP participation for the CBA and control groups. For example, SNAP participation rates decreased from about 99 percent for the CBA and NS control group and 98 for the ES control group in Year 1 to 66 percent of the CBA group and 69 percent of each control group in Year 3. There were significant differences between the CBA group and the NS control group in SNAP participation rates in Quarters 10 and 11, but nearly the same percentage of individuals in each group participated in SNAP in other quarters (Appendix Table F.8). There were no differences in impacts on SNAP participation among individuals who were randomly assigned earlier or later in the enrollment period (Appendix Table F.19).

*CBA generally did not
affect SNAP participation.*

Exhibit VII.8. SNAP participation rates based on SNAP administrative data, overall and by year

Source: SNAP employment and training evaluation SNAP administrative data, weighted data.

Note: Estimates are based on data from 1,797 CBA group members, 1,465 NS control group members, and 633 ES control group members.

***/**/* Difference between the CBA group and NS control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

^^^/^^/^ Difference between the CBA group and ES control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

The impacts of CBA on the average SNAP benefits received, both in absolute terms and as a percentage of the maximum benefit amount, were similar to those on SNAP participation rates. Average SNAP benefit amounts for the CBA group were similar to the NS and ES control groups and not statistically significant in Years 1, 2 or 3 (Exhibit VII.9). Average SNAP benefit amounts were \$35 to \$40 lower for the CBA group than for the ES control group in Quarters 4 and 5 (p -value = 0.09 and 0.08, respectively), but were smaller and not statistically significant in Quarters 6 to 12 (Appendix Table F.9). There were no significant differences in quarterly average SNAP benefit amounts between CBA group members and NS control group members.

Looking at SNAP benefit amounts received as a percentage of the maximum possible benefit (based on SNAP unit size) provides a better comparison across SNAP units of different sizes than the nominal benefit amounts. The findings for benefits received as a percentage of the maximum possible benefit were the same as for nominal benefits. Over the two-year period (Years 2 and 3), CBA group members received 46 percent of the maximum possible SNAP benefit, compared to 47 percent for the NS control group and 48 percent for the ES control group; these differences were not statistically significant (Exhibit VII.9). For both research groups, most of the decrease in the percentage of the maximum possible benefit received over time can be attributed to individuals exiting SNAP. For example, among the CBA group, the percentage of the maximum benefit amount received decreased by about 29 percentage points between Years 1 and 3. During this same period, the percentage of CBA group members participating in SNAP decreased by about 33 percentage points (Appendix Table F.8).

Exhibit VII.9. Impacts on average monthly SNAP benefit amount based on SNAP administrative data, overall and by year

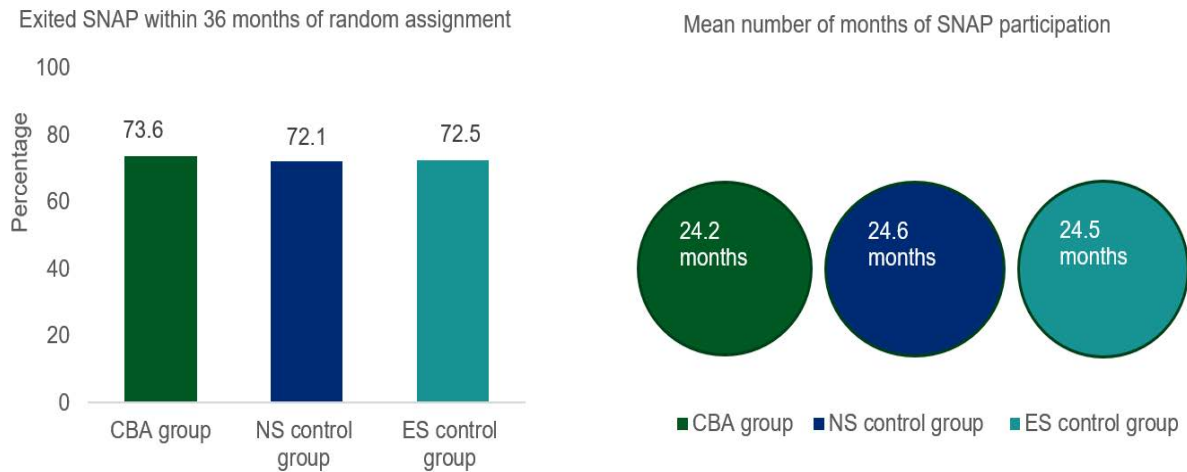
Average SNAP benefits	CBA group	NS control group	ES control group	CBA / NS control group difference	CBA / ES control group difference
Average SNAP benefits received (\$)					
Year 1	3,141	3,115	3,174	26	-33
Year 2	2,320	2,349	2,391	-30	-72
Year 3	1,878	1,922	1,900	-44	-22
Years 2 and 3	4,198	4,271	4,291	-73	-93
Average monthly SNAP benefits received as a percentage of maximum benefit amount ^a					
Year 1	70.3	70.0	70.8	0.2	-0.5
Year 2	51.6	52.0	52.3	-0.4	-0.7
Year 3	40.5	42.3	42.7	-1.8	-2.1
Years 2 and 3	46.0	47.1	47.5	-1.1	-1.5
Sample size	1,797	1,465	633		

Source: SNAP employment and training evaluation SNAP administrative data, weighted data.

^a Maximum household SNAP benefit amounts normalized by household size.

***/**/* Difference between CBA group and NS control group or CBA group and ES control group significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

On average, the CBA and control groups participated in SNAP for a similar number of months in the two-year period (Years 2 and 3). Each of the three research groups participated in SNAP for 14 to 15 months of the 24 months, on average, during this period (Appendix Table F.25). The CBA and ES control groups participated in SNAP for about 24 months during the 36-month period, and the NS control group participated for 25 months (Exhibit VII.10). CBA group members had similar likelihoods of exiting SNAP across the three years relative to control group members—74 percent of CBA group members, 72 and 73 percent each of NS and ES control group members, respectively, exited SNAP at some point during the three years after random assignment. Individuals who exited SNAP included those who left and did not re-enter SNAP in the period, as well as those who left and re-entered before the end of the period. Thus, even though 26 percent of the CBA group participated in SNAP for the full three years, SNAP participation in Quarter 12 was higher (54 percent), reflecting that individuals left and re-entered SNAP during the three-year period (Appendix Table F.8). The percentage of individuals who exited and then re-entered SNAP was similar for the CBA and control groups (54 versus 56 and 57 percent of the NS and ES control groups, respectively), with between 35 (CBA group) and 37 (ES control group) percent of each group re-entering within 4 months of exit (Appendix Table F.25). These patterns of exiting and re-entering SNAP resulted in all three research groups having a similar number of SNAP spells (a single spell consists of remaining on SNAP for the full three-year period or exiting and not re-entering). About 61 percent of the CBA group had a single SNAP spell, 28 percent had two spells, and 11 percent had three or more spells. For the NS control group, these percentages were 60, 27, and 13 percent, and for the ES control group they were 59, 31, and 10 percent.

Exhibit VII.10. SNAP Exit rates and mean number of months of SNAP participation based on SNAP administrative data

Source: SNAP employment and training evaluation SNAP administrative data, weighted data.

Note: Estimates are based on data from 1,797 CBA group members, 1,465 NS control group members, and 633 ES control group members.

***/**/* Difference between the CBA group and NS control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

^^^/^/^ Difference between the CBA group and ES control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

2. Impacts on TANF and other forms of public assistance

Impacts on TANF participation were estimated using SNAP administrative data. A small percentage of each research group participated in TANF in each year (Appendix Table F.10). CBA had no impact on TANF participation, relative to either control group, in any year after random assignment. The same was true for TANF benefit amounts, which were not significantly different from the control group benefits in Year 1, 2, or 3 (Appendix Table F.10).

Using the survey data, we also estimated impacts of CBA on receipt of other forms of public assistance, including receipt of general assistance; UI; Supplemental Security Income (SSI); Section 8, Housing Choice Vouchers, or Public Housing Assistance; Medicaid; and the Supplemental Nutrition Program for Women, Infants, and Children (WIC).³⁰ There were generally no impacts on the receipt of these forms of public assistance in Year 1, in Years 2 and 3, or during the three-year period (Appendix Table F.11). However, individuals in the CBA group were about 5 percentage points less likely than those in the ES control group to receive housing assistance in the first year after random assignment (p -value = 0.08), though this difference was smaller and not statistically significant in later years. The most commonly received benefit among all three research groups was Medicaid (93 percent of CBA group members, and 92 and 91 percent of NS and ES control group members, respectively).

³⁰ Because the 36-month survey requested information about receipt of public assistance benefits between the 12- and 36-month survey interviews, it was not possible to separately estimate receipt of public assistance in Years 2 and 3.

3. Conclusions

CBA generally did not affect SNAP participation. There were no statistically significant differences in any of the three years after random assignment. CBA also had no impact on SNAP benefit amounts in the three years after random assignment, both in absolute terms and as a percentage of the maximum benefit. There were no impacts of CBA on the rate of TANF participation, and few impacts on the receipt of other public assistance.

C. Impacts of CBA on food security, health, well-being, and housing status

This section presents findings on CBA's impacts on food security, health, well-being, and housing status, as reported in the survey data. Most of these outcomes reflect individuals' circumstances at the time of the 36-month follow-up survey. An exception was food security status, which was reported based on the 30 days before the survey.³¹

CBA led to lower rates of food insecurity than the NS control group; there were no impacts relative to the ES control group. About 43 percent of CBA group members were food insecure compared to 50 percent of NS control group members and 38 percent of ES control group members (Exhibit VII.11). CBA group members also experienced lower rates of very low food security (a severe form of food insecurity) relative to NS control group members (23 versus 31 percent). There were no differences in impacts on food insecurity among individuals who were randomly assigned earlier versus later in the pilot (Appendix Table F.19).

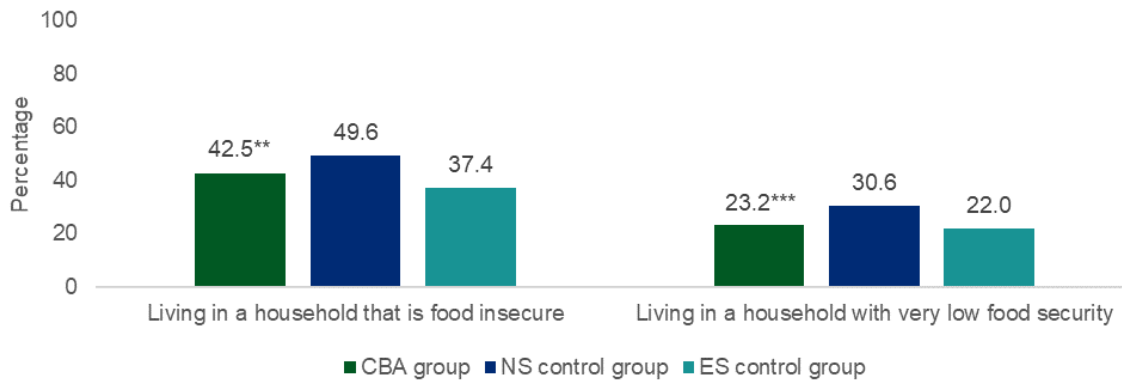
Among individuals who were food insecure at the time of the 12-month survey, those in the CBA group were 9 percentage points less likely than those in the NS control group to be food insecure at the time of the 36-month interview (Appendix Table F.27). CBA group members were also less likely than NS control group members to have very low food security at both the 12-month and 36-month interviews (48 versus 58 percent, p -value = 0.08). There were no such differences between the CBA and ES control groups.

There were few statistically significant differences between the CBA group and the control groups for other outcome measures related to health, well-being, and housing status (Appendix Table F.12). CBA group members were less likely than ES control group members to screen positively for depression (19 versus 26 percent, p -value = 0.06); there was no significant difference relative to NS control group members (21 percent). All three research groups had similar levels of health and self-esteem and self-efficacy scores. About 30 percent of CBA group members, compared to 27 percent of NS control group members and 24 percent of ES control group members, reported having very good or excellent health at the time of the survey. The majority of each research group owned or rented a home or apartment (62 compared to 59 and 61 percent among the NS and ES control groups, respectively). CBA group members

³¹ Food security is having access at all times to enough food for an active, healthy life. Individuals who experience food access limitations due to lack of money or other resources are said to be food insecure. Those who cannot afford enough to eat may experience a particularly severe form of food insecurity where at times one or more household member experiences reduced food intake and disrupted eating patterns referred to as very low food security. The outcomes of food insecurity and very low food security are based on responses to 10 questions about difficulty meeting basic food needs due to lack of money to be spent on food. Individuals who affirmed at least 3 out of 10 questions were classified as food insecure; those who affirmed at least 6 were classified as having very low food security.

were more likely than ES control group members to be homeless (3 percentage points); CBA group members and NS control group members were similarly likely to be homeless (4 percent each).

Exhibit VII.11. Impacts on food security, based on 36-month survey data



Source: SNAP employment and training evaluation 36-month survey, weighted data.

Note: Estimates are based on data from 689 CBA group members, 552 NS control group members, and 247 ES control group members.

***/**/* Difference between the CBA group and NS control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

^^^/^^/^ Difference between the CBA group and ES control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

D. Impacts of CBA on employment, earnings, and SNAP participation among individuals who started or completed an employment or training related activity

The findings presented in Sections A, B, and C do not differentiate between individuals enrolled in the pilot who participated in activities and those who did not. In the evaluation literature, this approach often is called an “intention-to-treat” (ITT) analysis. Impact estimates based on an ITT analysis provide information about expected effects for all SNAP participants to whom pilot activities were offered. However, because some individuals did not engage in the pilot or start an activity, ITT findings mask how well individuals who did participate may have fared. In this section, we present results of analyses that differentiate individuals in the CBA group who did and did not engage in CBA and participated in activities. This analysis, often referred to as a “treatment-on-the-treated” analysis, provides insights about how greater engagement in pilot activities may have translated into different participation experiences and, ultimately, into different impacts.³²

We assessed engagement in activities in three ways:

1. Comparing individuals who started an activity to those who did not
2. Comparing individuals who started and completed a job search or job search training activity to those who started but did not complete an activity

³² Because individuals in the CBA group chose whether to start an activity and/or complete one based on factors we could not necessarily observe, the findings presented in this section are nonexperimental. The results do not represent the causal effects of CBA on outcomes.

3. Comparing individuals who started and completed an education or training activity to those who started but did not complete one.³³

Earnings and employment. Based on survey data, there were positive impacts of CBA on earnings over the two-year period (Years 2 and 3) relative to the NS control group (\$5,000) for individuals who started an activity, and no impact for individuals who did not start an activity (Exhibit VII.12). For both those who started activities and those who did not start activities, there were no impacts of CBA on earnings relative to the ES control group. These findings are qualitatively similar based on UI data, though the differences in earnings between the CBA group and NS control group was smaller and not statistically significant.

Based on survey data, there were positive impacts on employment rates in Years 2 and 3 after random assignment for individuals who started an activity, but no impact on employment for those who did not start one (Exhibit VII.12). For individuals who started an activity, CBA led to a 7 percentage point increase in employment relative to the NS control group in employment rates over Years 2 and 3 (79 versus 72 percent), and no statistically significant difference in employment rates among individuals who did not start an activity. However, differences in impacts among individuals who did and did not start an activity were not statistically significant. There were no statistically significant differences between CBA group members and ES control group members in employment rates over Years 2 and 3 among those who did or did not start an activity.

Based on both UI and survey data, there were larger impacts of CBA on earnings over Years 2 and 3 for individuals who completed an education or training activity compared to those who started but did not complete one. For example, among individuals who completed an employment and training activity, CBA led to a \$4,141 increase in earnings over Years 2 and 3 relative to NS control group members based on UI data and a \$13,123 increase based on survey data; there was no corresponding impact among individuals who started but did not complete an activity (Appendix Tables F.14 and F.16).

³³ There are many ways to quantify the extent to which those enrolled in the pilot engaged in activities—for example, the number of workshops in which someone participated, the number of hours an individual spent in an occupational skills training program, or the number of basic education courses an individual completed over time. Our approach for measuring engagement in pilot activities balanced the objectives of contrasting groups with well-defined, policy-relevant differences in participation across pilots with limiting the number of groups so that each analysis group had a sufficient number of individuals to yield informative estimates.

Exhibit VII.12. Impacts on total earnings and annual employment rates in Years 2 and 3, based on UI wage records and survey data, by whether individuals started an employment or training-related activity

Outcome	Started an activity					Did not start an activity				
	CBA group	NS control group	ES control group	CBA / NS control group difference	CBA / ES control group difference	CBA group	NS control group	ES control group	CBA / NS control group difference	CBA / ES control group difference
Total earnings (\$)										
Based on UI data	21,035	20,219	20,073	816	988	19,283	19,561	19,764	-277	-295
Based on survey data	28,471	23,471	25,936	5,000***	2,824	28,529	27,608	27,189	921	1,269
Employment rate (%)										
Based on UI data	73.6	72.9	71.2	0.7	2.4	69.5	71.9	72.7	-2.4	-2.8
Based on survey data	79.0	72.0	77.5	7.0***	1.5	76.9	68.0	83.0	9.0	-6.3

Source: SNAP employment and training evaluation UI wage records, weighted data. SNAP employment and training 36-month survey, weighted data.

Note: Estimates based on survey data are from 606 CBA group members, 474 NS control group members, and 195 ES control group members who started an activity; and 83 CBA group members, 78 NS control group members, and 52 ES control group members who did not start one. Estimates based on UI data are from 1,473 CBA group members, 1,201 NS control group members, and 503 ES control group members who started an activity; and 324 CBA group members, 264 NS control group members, and 130 ES control group members who did not start one.

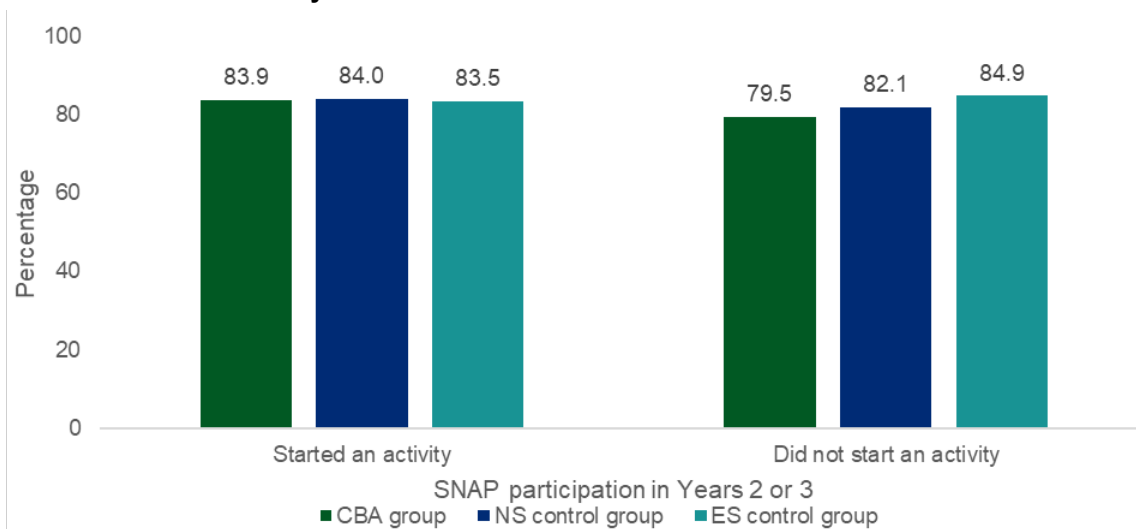
***/**/* Difference between the CBA group and control group is significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

^^^/^^/^ Significantly different from individuals who did not start an activity at the 0.01/0.05/0.10 level, two-tailed test.

Based on UI data, there were positive impacts of CBA on employment over Years 2 and 3 for individuals who completed an education or training activity, relative to both the NS and ES control groups (Appendix Table F.14). The impacts in Years 2 and 3 were larger for individuals who completed an education or training activity than for those who started but did not complete one (6 versus -5 percentage points relative to the NS control group, and 10 versus 4 percentage points relative to the ES control group). The findings based on the survey data were qualitatively similar to those based on the UI data relative to NS control group members (Appendix Table F.16).

SNAP participation. There were no impacts on SNAP participation or SNAP benefits received in the two-year period according to whether individuals started an activity or whether they completed one (Exhibit VII.13 and Appendix Tables F.17 and F.18). SNAP participation in Years 2 or 3 was about the same for the CBA group and the NS and ES control groups among individuals who started an activity (84 percent for each group), and was generally lower for the CBA group than the control groups among individuals who did not start one (between 80 and 85 percent). There were generally no differences in impacts on SNAP participation according to whether individuals completed an activity.

Exhibit VII.13. SNAP participation rates based on SNAP administrative data, by whether an individual started an activity



Source: SNAP employment and training evaluation UI wage records and SNAP administrative data, weighted data.

Note: Estimates are based on data from 1,472 CBA group members, 1,201 NS control group members, and 503 ES control group members who started an activity; and 324 CBA group members, 264 NS control group members, and 130 ES control group members who did not start one.

***/**/* Difference between CBA group and NS control group or CBA and ES control group significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

^^^/^^/^ Significantly different from individuals who did not complete an activity at the 0.01/0.05/0.10 level, two-tailed test.

VIII. Analysis of the costs and benefits of CBA group and control group services

In this chapter, we build on the findings from the impact analysis by comparing the benefits that individuals received in dollar terms through changes in earnings and public assistance with the costs of the services provided. This cost-benefit analysis describes the extent to which the benefits exceeded the costs of providing services to the CBA group when compared with the benefits and costs of providing services to the NS and ES control groups (referred to as the *net benefit*). The net benefit provides context for how well CBA group outcomes (benefits) offset the costs of administering the services. We calculate the net benefits from the perspectives of the individuals enrolled in CBA and of government and taxpayers. The benefit to society is the sum of the net benefits from the other two perspectives.

We first describe the costs of CBA, including those for planning, recruiting, and delivering services. We then present the estimated costs of all services provided to CBA group members through CBA, existing SNAP E&T, and the community and the costs of all services provided to NS and ES control group members through existing SNAP E&T and the community. We estimate the costs of all services because any benefits individuals experienced through increases in employment and earnings are the result of all of the services they received during the follow-up period, not just those offered through CBA. We then present the findings from the cost-benefit analysis and estimate the net benefit of services provided to the CBA group, compared with services provided to the NS and ES control groups. We conducted sensitivity analyses to test the robustness of our findings to changes in key assumptions and present those findings together with the cost-benefit analysis. All costs and the dollar values of benefits presented in this chapter have been adjusted to 2016 dollars, as this was the year that CBA started providing services and individuals started accruing benefits.

A. Description of the costs of CBA

This section provides detail on the total costs of CBA services, the costs of CBA services by type, and the average cost of CBA services per individual.

1. Total costs of CBA

FNS awarded CA DSS a grant of \$12,167,000 to develop and provide CBA services. CA DSS and its partners and providers reported spending \$9,194,027 on planning, recruiting, and delivering CBA services (Exhibit VIII.1).³⁴ These costs included \$197,736 for planning (2 percent of total costs) and \$1,784,252 for recruitment (19 percent). CBA service costs—for ongoing administration and delivering direct services—were \$7,212,038, which was 78 percent of total costs.³⁵ Ongoing administration, which included time for staff

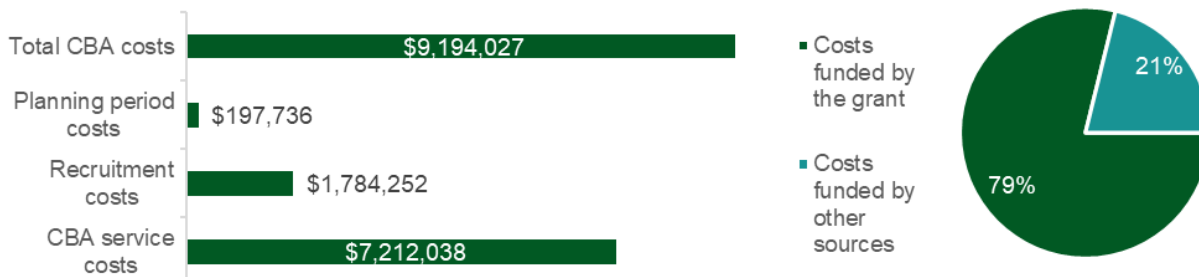
CBA cost a total of \$9,194,027, with service costs accounting for 78 percent of total expenditures.

³⁴ The costs for planning and recruiting affected both CBA and control group members, whereas the costs for operating CBA services affected the CBA group only.

³⁵ Service costs included costs of both ongoing administration and delivering direct services and activities. Ongoing administration costs included time for staff meetings, supervision, and other activities. Direct service costs included time staff spent providing services and activities to individuals, including time for tasks such as writing case notes or (continued)

meetings, supervision, and other activities, cost \$4,638,020 (51 percent of total costs, not shown). Direct service costs represented the remaining \$2,574,019 (28 percent, not shown). The FNS grant funded 79 percent of total costs (or \$7,251,079), and 21 percent (\$1,942,948) were leveraged from other sources.

Exhibit VIII.1. Summary of CBA costs



Source: SNAP employment and training evaluation actual reported costs by CBA grantee, partners, and providers, 2015–2018; and SNAP employment and training evaluation survey of direct service provider time use, 2016–2018.

Note: The planning period was considered to encompass the time between when DSS and their partners began designing CBA (after grant award) and CBA started enrolling individuals (July 2015 to January 2016). Quarterly workbooks reported the costs of the planning period, and recruitment and CBA services following the start of CBA. We estimated the breakdown of recruitment, CBA direct service, and ongoing administration costs using data from a time-use survey of direct service provider staff. All costs are presented in 2016 dollars.

Appendix Table G.2 summarizes costs through December 2018 by cost category, including (1) staff costs (including volunteer time), (2) partner and provider direct service costs, (3) supply and equipment costs, and (4) overhead and operating costs. DSS and CBA partners and providers reported spending \$6,430,628 on staff costs and \$1,302,169 on direct services from partners and providers. About 14 percent of all costs covered overhead and operating costs (\$1,275,826). The remaining costs (\$185,404) covered supply and equipment costs. The FNS grant covered the majority of all costs (79 percent). Funding from other sources was used primarily for staff costs, accounting for 24 percent of the total staff costs (\$1,545,277).

2. Costs of CBA services, by type of service

Service costs accounted for most of CBA expenditures. We estimated the costs of specific types of services offered through CBA, including those of ongoing administration and direct services. The two largest service expenditures for CBA services were for case management, which accounted for \$1,698,906 or 19 percent of total CBA costs, and work-based learning, which accounted for \$1,568,101 or 17 percent of total CBA costs (Exhibit VIII.2). Job readiness or life skills workshops and occupational skills training were the next largest service expenditures, accounting for 16 and 15 percent of total CBA costs, respectively.

recording administrative data, and direct costs for resources such as textbooks or support services. Both ongoing administration and direct service costs included the costs of staff, supplies and equipment, overhead, facilities, and indirect costs.

Exhibit VIII.2. Costs of CBA services, by service type

	Total service costs	Percentage of total
Total cost	\$9,194,027	100.0
Planning period costs	\$1,784,252	19.4
Recruitment costs	\$197,736	2.2
CBA service costs ^a	\$7,212,038	78.4
Assessments	\$435,029	4.7
Case management ^b	\$1,698,906	18.5
Job readiness or life skills workshop	\$1,469,470	16.0
Education	\$179,508	2.0
Occupational skills training	\$1,400,747	15.2
Support services	\$460,278	5.0
Work-based learning	\$1,568,101	17.1
Other direct service contracts	\$0	0.0

Source: SNAP employment and training evaluation actual reported costs by CBA grantee, partners, and providers, 2015–2018; and SNAP employment and training evaluation survey of direct service provider time use, 2016–2018.

Note: The estimated costs of case management, job readiness or life skills workshop, and assessments include costs for staff, supplies and equipment, and overhead and operating costs, which were allocated using the average percentage of time spent on these activities in the time-use survey. We assumed the reported costs of support services, other direct service contracts, work-based learning, occupational skills training, and education already include costs for staff, supplies and equipment, or overhead and operating costs. Other direct service contracts included a contract to support collection of case management and participation data. We assumed these costs were either built into those payments or the associated staff time and costs fell under case management. All costs are presented in 2016 dollars.

^a Total CBA service costs include the costs of direct services and ongoing administration.

^b Case management included one-on-one meetings with CBA group members and time spent on case notes or referrals.

3. Costs of CBA services, per individual

CBA group members each received different combinations of services through CBA based on their needs and interests. As a result, the costs of serving each CBA group member varied based on the number and types of services in which they participated. Exhibit VIII.3 describes the cost of CBA services per individual. We separately present costs of operating CBA from the costs of resources that were provided directly to CBA group members—subsidized earnings provided to individuals for activities such as work-based learning; and support services provided to offset the costs of participation in CBA, such as transportation or training supplies.³⁶

CBA services cost an average of \$5,682 per individual.

The total estimated costs of CBA services per individual ranged from \$112 to \$27,937 but were \$5,682 per CBA group member, on average. The majority of the costs were associated with operating CBA (\$5,130 per CBA group member). An additional \$425 was allocated to the costs of subsidized earnings

³⁶ Operating costs include all service costs other than those provided directly to individuals through subsidized earnings or support services. These costs represent the time and resources required to deliver services.

provided to individuals while in CBA, and \$128 allocated to support services provided to individuals while in CBA.

Exhibit VIII.3. Costs of CBA services per CBA group member

Per individual costs of services	Mean
Total CBA service costs	\$5,682
CBA operating costs ^a	\$5,130
Subsidized earnings while in CBA	\$425
Support services while in CBA	\$128
Sample size	1,797

Source: SNAP employment and training evaluation actual reported costs by CBA grantee, partners, and providers, 2015–2018; SNAP employment and training evaluation administrative service use data

Note: The costs of services per CBA group member are the means of the individual-level estimates of the costs of services for each CBA group member based on the services they received and the per individual costs by service type. The estimated mean costs per CBA group member include all individuals who enrolled in CBA, including those who disengaged soon after enrollment and those who participated in multiple services over a longer period. All costs are presented in 2016 dollars.

^a CBA operating costs are the estimated costs of direct services including the ongoing administration cost. We included the costs of any supplies and equipment incurred during the planning period in this estimate because those materials directly benefitted CBA group members once service delivery began. No other planning period or recruitment costs are included.

Cost per CBA group member, (CBA services only): standard error \$116; range \$112–\$27,937; confidence interval \$4,903–\$5,357.

B. Difference in costs of all services received by the CBA and control group members

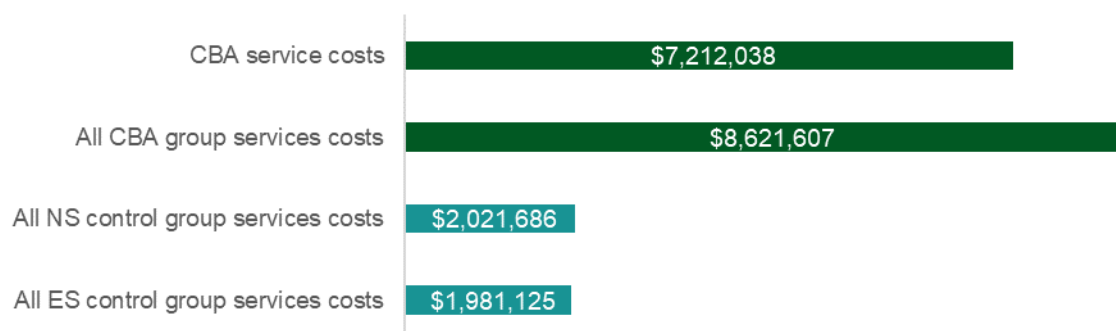
Whereas Section A describes the costs to DSS and its partners and providers for developing CBA and providing services to CBA group members, this section describes the costs of *all* services the CBA group members received through CBA, existing SNAP E&T, and the community during the CBA service period. In the cost-benefit analysis, we use the difference in the average costs of all services CBA, NS control, and ES control group members received per individual through CBA, existing SNAP E&T, or the community and compare these costs to benefits. We use these differences in costs because impacts of CBA on individuals' outcomes such as earnings were influenced by all services the sample members received during the 36-month follow-up period not just those received by the CBA group through CBA. In this section, we present estimates of the total costs of all services CBA, NS control, and ES control group members received and examine service cost differentials overall, by service type, and per individual.

1. Total costs of all CBA group and control group services

Based on data from the 12- and 36-month follow-up surveys, the estimated total cost of all CBA group services was \$8,621,607, including costs for both direct services and ongoing administration (Exhibit VIII.4). This estimate is about 20 percent higher than the cost of CBA services alone (\$7,212,038) which

suggests that CBA group members might have received some services from existing SNAP E&T and community-offered sources while they were enrolled in CBA.³⁷

Exhibit VIII.4. Total cost of all CBA group and control group services



Source: SNAP employment and training evaluation actual reported costs by CBA grantee, partners, and providers, 2015–2018; SNAP employment and training evaluation survey of direct service provider time use, 2016–2018; WIA Gold Standard Evaluation cost estimates 2012; FNS-583 data 2018; and SNAP employment and training evaluation 12- and 36-month surveys, weighted data.

Note: The estimates were calculated as the product of the costs per CBA group member for each type of direct service and the number of CBA group members who received each type of direct service in the SNAP employment and training evaluation 12- and 36-month survey data. NS and ES control group cost estimates were calculated as the product of the WIA costs per individual for each type of direct service and the number of NS and ES control group members who received each type of direct service in the SNAP employment and training evaluation 12- and 36-month survey data. All costs are presented in 2016 dollars.

The cost-benefit analysis assesses whether the enhanced CBA services were effective enough to offset the difference in costs between the services the CBA, NS control, and ES control groups received. The services the NS and ES control groups received measure what services would have been available to the CBA group members if CBA were not in place. The NS control group only had access to services available within the community, while the ES control group had access to existing SNAP E&T and services available within the community. The estimated cost of all control group services the NS group members received was \$2,021,686 and was \$1,981,125 for ES group members, which included costs for direct services and ongoing administration (Exhibit VIII.4). The costs of all services both control groups received were less than a quarter of the cost of all CBA group services.

2. Costs of all CBA and control group services, by type of service

The difference between CBA, NS control, and ES control group costs of all services could reflect multiple factors, including how many services individuals received, how long the average individual spent in a given type of service or in services overall, or how much staff time or other resources those services

³⁷ The difference between the costs of the CBA services in Section A and the costs presented for CBA group members in this section could reflect services that CBA group members received outside of CBA, but also could reflect the difference between administrative records of service use and each individual's recollection of services they received during the follow-up period. We examined the sensitivity of our findings to the use of these different data sources and found variation in reported participation in services by type, but the overall costs of services for the CBA group are similar and do not change the results of the cost-benefit analysis.

required. Exhibit VIII.5 presents estimated costs of key CBA, NS control, and ES control group services, by type of service.

- **All CBA group services.** Work-based learning and job readiness or life skills workshop were the largest expenditures among all of the services that CBA group members received through CBA, existing SNAP E&T, and the community. Work-based learning accounted for \$5,282,768 or 61 percent of total service costs, and job readiness or life skills workshops accounted for \$1,624,552 or 19 percent of total service costs. All other service types each accounted for less than 10 percent of the total, with support services being the largest, accounting for 8 percent of total service costs.
- **All NS control group services.** Education and work-based learning were the largest expenditures among all of the services that NS control group members received through the community. Education accounted for \$737,938 or 37 percent of total service costs, and work-based learning accounted for \$575,325 or 29 percent of total service costs. Case management, support services, and occupational skills training represented smaller shares total service costs—25, 6, and 4 percent, respectively.
- **All ES control group services.** Case management and education were the highest costs among all of the services that ES control group members reported receiving through existing SNAP E&T and the community. Case management accounted for \$650,705 or 33 percent of total service costs, and education accounted for \$622,755 or 32 percent of total service costs. Work-based learning and occupational skills training represented 28 and 4 percent of total costs, respectively.

Exhibit VIII.5. Costs by service type for the CBA, NS control, and ES control groups

	All CBA group services		All NS control group services		All ES control group services	
	Total service costs	Percentage of total	Total service costs	Percentage of total	Total service costs	Percentage of total
Total service costs ^a	\$8,621,607	100.0	\$2,021,686	100.0	\$1,981,125	100.0
Assessments	\$173,394	2.0	\$3,571	0.2	\$2,768	0.1
Case management ^b	\$423,097	4.9	\$496,905	24.6	\$654,004	33.0
Job readiness or life skills workshop	\$1,624,552	18.8	\$25,392	1.3	\$25,737	1.3
Education	\$233,089	2.7	\$737,938	36.5	\$622,755	31.4
Occupational skills training	\$167,233	1.9	\$70,763	3.5	\$74,055	3.7
Support services	\$717,474	8.3	\$111,793	5.5	\$57,751	2.9
Work-based learning	\$5,282,768	61.3	\$575,325	28.5	\$544,055	27.5
Other direct service contracts	\$0	0.0	--	--	--	--

Source: SNAP employment and training evaluation actual reported costs by CBA grantee, partners, and providers, 2015–2018; SNAP employment and training evaluation survey of direct service provider time use, 2016–2018; WIA Gold Standard Evaluation cost estimates 2012; FNS-583 data 2018; and SNAP employment and training evaluation 12- and 36-month surveys, weighted data.

Note: Cost estimates by service type were calculated as the product of the costs per individual for each type of direct service and the number of CBA or NS and ES control group members who received each type of service according to survey data on participation. All costs are presented in 2016 dollars.

^a Total service costs include the costs of direct services and ongoing administration.

^b Case management includes one-on-one meetings with CBA or NS and ES control group members and time spent on case notes or referrals.

Among most service types, costs for the CBA group were higher compared to the control groups. The exceptions were education (\$233,089 for the CBA group and \$737,938 and \$622,755 for the NS and ES control groups, respectively) and case management (\$423,097 for the CBA group and \$496,905 and \$654,004 for the NS and ES control groups, respectively).

3. Costs of all CBA and control group services per individual

CBA, NS control, and ES control group members each received different combinations of services, and the costs of serving each individual varied based on the number and types of services in which they participated. In addition to providing context on the costs required to provide these types of services to individuals, the per individual costs of all CBA, NS control, and ES control group services are the basis for the cost differentials used in the cost-benefit analysis.

Using data from the survey, Exhibit VIII.6 describes the cost of all services CBA, NS control, and ES control group members received during the CBA service period, per individual. We present operating costs separately from the costs of the resources provided directly to CBA, NS control, and ES control group members—subsidized earnings provided to individuals for activities such as work-based learning, and support services provided to offset the costs of participation in services, such as transportation or training supplies.

All services CBA group members received through CBA, existing SNAP E&T, and the community cost \$6,320 per individual, on average.

Exhibit VIII.6. Costs of all services per CBA, NS control, and ES control group members

	All CBA group services	All NS control group services	All ES control group services
Total service costs	\$6,320	\$1,380	\$3,129
Operating costs ^a	\$4,777	\$911	\$2,178
Subsidized earnings while in services	\$1,358	\$393	\$859
Support services while in services	\$184	\$76	\$91
Sample size	1,797	1,465	633

Source: SNAP employment and training evaluation actual reported costs by CBA grantee, partners, and providers, 2015–2018; SNAP employment and training evaluation administrative service use data; WIA Gold Standard Evaluation cost estimates 2012; and SNAP employment and training evaluation 12- and 36-month surveys, weighted data.

Note: The costs of services per CBA, NS control, and ES control group member are the means of the individual-level estimates of the costs of services for each CBA, NS control, and ES control group member based on the services they received and the per individual costs by service type. All costs are presented in 2016 dollars.

^a Operating costs are the estimated cost of direct services including the ongoing administration cost.

Cost per CBA group member (CBA services, existing E&T services, or community-offered services):

standard error \$237; range \$112–\$24,099; confidence interval \$4,312–\$5,242.

Cost per NS control group member: standard error \$123; range \$0–\$28,119; confidence interval \$669–\$1,153.

Cost per ES control group member: standard error \$286; range \$0–\$34,812; confidence interval \$1,616–\$2,741. The costs of all services CBA group members received (from CBA, existing SNAP E&T, and the community) ranged from \$112 to \$24,099 but was about \$6,320 per CBA group member, on average. The largest component of this cost was operating costs, which were \$4,777. The costs of subsidized earnings and support services accounted for a smaller share of the overall cost—\$1,358 and \$184, respectively.

The cost of all services NS control group members received through existing E&T services and the community ranged from \$0 to \$28,119 but was \$1,380 per NS control group member on average. Operating costs accounted for the largest share of this cost (\$911), and subsidized earnings and support services represented smaller shares (\$393 and \$76, respectively). The cost of all services per NS control group member was less than one-quarter of the cost of all services per CBA group member, on average. The costs of all services ES control group members received through the community ranged from \$0 to \$34,812 but were an average of \$3,129 per individual. Most of these were operating costs (\$2,178). Subsidized earnings and support services were higher for the ES group than the NS group (\$859 and \$91, respectively). The cost of all services per ES control group member was one-half of the cost of all services per CBA group member, on average.

All services NS control group members received through existing SNAP E&T and the community cost \$1,380 per individual, on average. Services the ES control group received through the community cost \$3,129, on average.

C. Cost-benefit analysis of CBA group services

The purpose of the cost-benefit analysis is to estimate the benefits in dollar terms relative to the dollar costs of providing services. This section presents the findings of the cost-benefit analysis. We present results using the two sources of data on benefits used in the impact analysis: (1) UI wage records and (2) 36-month survey data.³⁸ The cost-benefit analysis uses a framework to present a comprehensive listing of CBA group benefits and costs relative to the NS and ES control groups from multiple perspectives, including those of (1) individuals enrolled in CBA, (2) government and taxpayers, and (3) society as a whole, which represents the sum of the other two perspectives. The primary cost-benefit finding from each perspective was the net benefit (the difference between total benefits and total costs). A positive net benefit means the benefits outweighed the costs, whereas a negative net benefit means the costs outweighed the benefits. In addition, we estimated the ratio of benefits to costs, which describes the return to society on each dollar invested. The benefit-cost ratio is the quotient of the total benefit and the absolute value of the total costs. We also describe how our results differed according to changes in key assumptions for each of the cost-benefit accounting frameworks presented below.

4. Costs and benefits of all services for CBA group members, based on UI wage records

The net benefit of services for the CBA group compared to the NS control group was positive for CBA group members but negative for government and taxpayers during the 36-month follow-up period (Exhibit VIII.7). This resulted in an overall negative net benefit to society. The benefit-cost ratio, or return on investment to society, was close to zero. These results emerged because the differences in the cumulative earnings of CBA and NS control group members during the 36-month follow-up period did not offset the costs of the services, on average. The services benefitted CBA group members through higher cumulative earnings and support service payments while they were in services, which resulted in a

³⁸ We included impacts on cumulative earnings and SNAP and TANF benefit receipt in the cost-benefit analysis even if they were not statistically significant. These estimates are the best information we have on the qualitative differences in outcomes between the two groups. We noted statistically significant impacts where they were present in the exhibits.

net benefit to individuals, but these services were a greater cost to government and taxpayers than they were a benefit through tax payments.

- **Society.** On average, all CBA group services cost society \$3,499 more than NS control group services per individual. This difference primarily reflects the differential costs of CBA group services, which were not offset by the benefits accrued through earnings and fringe benefits during the 36-month follow-up period.

*The net benefits of all services CBA group members received were **positive** for CBA group members but **negative** for government and taxpayers and for society during the 36-month follow-up period, compared to NS control group members (based on UI wage records).*

- **CBA group members.** On average, CBA group members benefitted by \$845, compared with the NS control group. Differences in cumulative earnings accounted for most of the benefits to CBA group members, who earned about \$1,089 more than NS control group members. The difference in earnings was not statistically significant, however. We assumed any subsidized earnings received while participating in work-based learning activities were included in the \$1,089 difference in earnings. The CBA group also benefitted from higher fringe benefits compared to the NS control group (by \$228). CBA group members paid \$360 more in taxes than the NS control group, on average. In addition, CBA group members received fewer SNAP and TANF benefits (by \$41 and \$179, respectively), compared to the NS control group.
- **Government and taxpayers.** Providing CBA group services cost government and taxpayers \$4,343 more per individual, on average, than providing NS control group services. This difference was due mostly to the costs of providing services (including CBA and community services), which cost more than NS control group services by an average of \$4,940, including \$3,866 in operating costs, \$966 in subsidized earnings, and \$108 in support services. CBA group members received lower amounts of SNAP and TANF benefits, relative to NS control group members, which was a benefit to government and taxpayers in benefit allotments (of \$41 and \$179, respectively) and administration costs (\$16).

Exhibit VIII.7 Benefits and costs associated with CBA services, existing SNAP E&T, or community-offered services, for the CBA group compared to the NS control group, UI wage records

	Perspective		
	CBA group members	Government and taxpayers	Society
Benefits (\$)			
Employment and earnings			
Earnings (UI wage records)	1,089	0	1,089
Fringe benefits	228	0	228
Tax payments	-360	360	0
Use of public benefits			
SNAP benefits	-41	41	0
TANF benefits	-179	179	0
Reduced administration costs	0	16	16
Total benefits	737	596	1,333
Costs (\$)			
Net operating costs ^a	0	-3,866	-3,866
Net subsidized earnings while in services ^b	0	-966	-966
Net support services while in services ^b	108	-108	0
Total costs	108	-4,940	-4,832
Net benefit (\$)	845	-4,343	-3,499
Benefit-cost ratio			0.28

Source: SNAP employment and training evaluation UI wage records, weighted data; SNAP administrative data; SNAP employment and training evaluation actual reported costs by CBA grantee, partners, and providers, 2015–2019; SNAP employment and training evaluation administrative service use data; WIA Gold Standard Evaluation cost estimates, 2012; and SNAP employment and training evaluation 12- and 36-month surveys, weighted data.

Notes: Earnings, SNAP benefits, and TANF benefits are the impact estimates presented in Chapter VII. The net benefit is the difference between total benefits and total costs. A negative net benefit is a net cost. The benefit-cost ratio is the quotient of the total benefits and the absolute value of the total costs. A benefit-cost ratio greater than one represents greater benefits than costs; a number less than one suggests fewer benefits than costs. All benefits and costs are presented in 2016 dollars. The standard error of the cost per CBA group member is \$116 and of the cost per NS control group member is \$123.

^a This estimate is the difference between CBA and NS control group costs per individual. This value excluded planning period costs but included the costs of supplies and equipment incurred during the planning period that supported ongoing services once they started.

^b Subsidized earnings and support services directly benefit individuals while they are enrolled in services. We assumed the subsidized earnings benefitting individuals were reflected in the earnings impacts presented as the first row in the benefits section of the exhibit. All earnings presented in the first row in the benefits section of the exhibit are included in the fringe and tax estimates, though we do not know the extent to which subsidized earnings would have translated into these benefits in practice. These subsidized earnings are offset by the costs to government and taxpayers, which is represented in the second row of the costs section of the exhibit. We presented the support services as a benefit (positive transfer) to individuals under the third row of the cost section of the exhibit, and these support services are offset by the costs to government and taxpayers in the same row. Both subsidized earnings and support services are assumed to have a net neutral (zero) benefit to society because the benefits are offset by the costs.

***/**/* Difference in earnings between the CBA group and control group significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

Findings based on UI wage records that compared the benefits and costs of CBA relative to the ES group were similar to those relative to the NS group. The net benefit of services for the CBA group compared to the ES control group was negative to society (by \$2,547, Exhibit VIII.8). The benefit-cost ratio was close

to zero (0.18). Net benefits were positive for CBA group members (\$73) but negative for government and taxpayers (by \$2,620) during the 36-month follow-up period. The costs of the services to society (\$3,097) were higher than the increase in earnings and fringe benefits (\$432 and \$90, respectively) and the benefit of reduced administration costs (\$28) during the 36-month follow-up period, on average.

Exhibit VIII.8 Benefits and costs associated with CBA services or community-offered services, for the CBA group compared to the ES control group, UI wage records

	Perspective		
	CBA group members	Government and taxpayers	Society
Benefits (\$)			
Employment and earnings			
Earnings (survey data)	432	0	432
Fringe benefits	90	0	90
Tax payments	-203	203	0
Use of public benefits			
SNAP benefits	-112	112	0
TANF benefits	-228	228	0
Reduced administration costs	0	28	28
Total benefits	-20	570	550
Costs (\$)			
Net operating costs ^a	0	-2,598	-2,598
Net subsidized earnings while in services ^b	0	-499	-499
Net support services while in services ^b	93	-93	0
Total costs	93	-3,190	-3,097
Net benefit (\$)	73	-2,620	-2,547
Benefit-cost ratio			0.18

Source: SNAP employment and training evaluation UI wage records, weighted data; SNAP administrative data; SNAP employment and training evaluation actual reported costs by CBA grantee, partners, and providers, 2015–2019; SNAP employment and training evaluation administrative service use data; WIA Gold Standard Evaluation cost estimates, 2012; and SNAP employment and training evaluation 12- and 36-month surveys, weighted data.

Notes: Earnings, SNAP benefits, and TANF benefits are the impact estimates presented in Chapter VII. The net benefit is the difference between total benefits and the absolute value of the total costs. A negative net benefit is a net cost. The benefit-cost ratio is the quotient of the total benefits and total costs. A benefit-cost ratio greater than one represents greater benefits than costs; a number less than one suggests fewer benefits than costs. All benefits and costs are presented in 2016 dollars. The standard error of the cost per CBA group member is \$116 and of the cost per ES control group member is \$286.

^a This estimate is the difference between CBA and ES control group costs per individual. This value excluded planning period costs but included the costs of supplies and equipment incurred during the planning period that supported ongoing services once they started.

^b Subsidized earnings and support services directly benefit individuals while they are enrolled in services. We assumed the subsidized earnings benefitting individuals were reflected in the earnings impacts presented as the first row in the benefits section of the exhibit. All earnings presented in the first row in the benefits section of the exhibit are included in the fringe and tax estimates, though we do not know the extent to which subsidized earnings would have translated into these benefits in practice. These subsidized earnings are offset by the costs to government and taxpayers, which is represented in the second row of the costs section of the exhibit. We presented the support services as a benefit (positive transfer) to individuals under the third row of the cost section of the exhibit and these support services are offset by the costs to government and taxpayers in the same row. Both subsidized earnings and support services are assumed to have a net neutral (zero) benefit to society because the benefits are offset by the costs.

***/**/* Difference in earnings between the CBA group and ES control group significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

We conducted sensitivity analyses to test the robustness of our findings based on UI wage records to changes in key assumptions, including (1) the values of benefits associated with increases in earnings, such as fringe benefits and taxes; (2) the values of costs and benefits when accounting for factors such as inflation and present value; (3) the assumption that subsidized earnings were reported to State UI agencies and are reflected in earnings impacts; and (4) the services CBA group members received were primarily through CBA and not from existing SNAP E&T and the community. These results were robust to changes in all of our key assumptions about benefits and costs from all perspectives (Appendix Tables G.10–G.12). The costs to the government and taxpayers always outweighed the benefits to the CBA group members compared with both NS and ES control group members, so the net benefit to society was negative regardless of changes in assumptions, ranging from \$1,967 to \$3,593 per individual (compared to both control groups). The CBA group services led to a positive net benefit for individuals based on changes to all assumptions related to fringe benefits, taxes, and discount rates, compared to both control groups. Estimated net benefits per individual ranged from \$16 to \$899. Assuming subsidized earnings were *not* included in UI wage records resulted in a net benefit of \$1,810 per individual, compared to \$845 under our main assumptions (for the CBA group compared to the NS control group). CBA group services resulted in a negative net benefit to government and taxpayers compared to both control groups regardless of changes to key assumptions, ranging from \$1,983 to \$4,454 per individual.

5. Costs and benefits of all services for CBA group members, according to 36-month survey data

The findings based on 36-month follow-up survey data were different than those based on UI wage records for the CBA group compared to the NS control group, but similar for the CBA group compared to the ES control group. The net benefits of all CBA group services were positive for CBA group members and for society, but negative for government and taxpayers during the follow-up period, compared to the NS group (Exhibit VIII.9). The benefit-cost ratio was 1.21.

*The net benefits of all services CBA group members received were **positive** for CBA group members and society but were **negative** for government and taxpayers during the 36-month follow-up period, compared to the NS control group (based on survey data).*

The increases in cumulative earnings for the CBA group, relative to the NS control group, were over four times higher according to survey data. As a result, the benefits of CBA group services offset the costs of those services during the follow-up period, on average.

- **Society.** CBA group services benefitted society \$991 more than NS control group services per individual. This estimated net benefit according to survey data was different than that according to UI wage records data primarily because earnings estimates were higher according to survey data (\$1,089 according to UI wage records and \$4,803 according to survey data). The difference in earnings according to survey data was statistically significant and was a benefit to CBA group members and society during the 36-month follow-up period.
- **CBA group members.** According to survey data, CBA group members received a net benefit of \$4,587, relative to the NS control group. The CBA group had higher cumulative earnings and fringe benefits compared to the NS control group (by \$4,803 and \$1,004, respectively). We assumed any subsidized earnings received while participating in work-based learning activities were included in the difference in earnings. CBA group members paid \$1,107 more in taxes than NS control group members, on average. Other benefits and costs to individuals were the same as those in the findings based on UI wage records, with support services providing a benefit to CBA group members (\$108

more than NS control group members); CBA group members received fewer SNAP and TANF benefits, compared to the NS control group.

Exhibit VIII.9. Benefits and costs associated with CBA services, existing SNAP E&T, or community-offered services, for the CBA group compared to the NS control group, 36-month survey data

	Perspective		
	CBA group members	Government and taxpayers	Society
Benefits (\$)			
Employment and earnings			
Earnings (survey data)	4,803***	0	4,803
Fringe benefits	1,004	0	1,004
Tax payments	-1,107	1,107	0
Use of public benefits			
SNAP benefits	-41	41	0
TANF benefits	-179	179	0
Reduced administration costs	0	16	16
Total benefits	4,479	1,343	5,822
Costs (\$)			
Net operating costs ^a	0	-3,866	-3,866
Net subsidized earnings while in services ^b	0	-966	-966
Net support services while in services ^b	108	-108	0
Total costs	108	-4,940	-4,832
Net benefit (\$)	4,587	-3,596	991
Benefit-cost ratio			1.21

Source: SNAP employment and training evaluation 12- and 36-month surveys, weighted data; SNAP administrative data; SNAP employment and training evaluation actual reported costs by CBA grantee, partners, and providers, 2015–2019; SNAP employment and training evaluation administrative service use data; and WIA Gold Standard Evaluation cost estimates, 2012.

Notes: Earnings, SNAP benefits, and TANF benefits are the impact estimates presented in Chapter VII. The net benefit is the difference between total benefits and total costs. A negative net benefit is a net cost. The benefit-cost ratio is the quotient of the total benefits and total costs. A benefit-cost ratio greater than one represents greater benefits than costs, and a number less than one suggests fewer benefits than costs. All benefits and costs are presented in 2016 dollars. The standard error of the cost per CBA group member is \$116 and of the cost per NS control group member is \$123.

^a This estimate is the difference between CBA and NS control group costs per individual. This value excluded planning period costs but included the costs of supplies and equipment incurred during the planning period that supported ongoing services once they started.

^b Subsidized earnings and support services directly benefit individuals while they are enrolled in services. We assumed the subsidized earnings benefitting individuals were reflected in the earnings impacts presented as the first row in the benefits section of the exhibit. All earnings presented in the first row in the benefits section of the exhibit are included in the fringe and tax estimates, though we do not know the extent to which subsidized earnings would have translated into these benefits in practice. These subsidized earnings are offset by the costs to government and taxpayers, which is represented in the second row of the costs section of the exhibit. We presented the support services as a benefit (positive transfer) to individuals under the third row of the cost section of the exhibit, and these support services are offset by the costs to government and taxpayers in the same row. Both subsidized earnings and support services are assumed to have a net neutral (zero) benefit to society because the benefits are offset by the costs.

***/**/* Difference between CBA group and NS control group significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

- **Government and taxpayers.** Government and taxpayers experienced a cost of \$3,596 per individual for providing all CBA group services, based on survey data. Government and taxpayers benefitted by \$1,107 in taxes per CBA group member compared with NS control group members. As presented in the UI wage record findings, providing services cost government and taxpayers an average of \$4,940 more CBA group member, compared to NS control group members, and these costs were not offset by benefits to government and taxpayers during the 36-month follow-up period.

Findings based on survey data that compared the CBA and ES groups showed a negative net benefit to society (by \$1,681) for providing services to the CBA group compared to the ES control group (Exhibit VIII.10). Compared to the findings based on UI wage records comparing the CBA and ES control groups, CBA group members experienced a larger net benefit of \$1,651 during the 36-month follow-up period (compared with \$73 based on UI wage records). This difference was driven by a larger difference between groups in cumulative earnings, based on survey data (\$1,975 according to survey data, compared with \$432 based on UI wage records). The benefit-cost ratio was 0.78. The costs of the services to society (\$3,097) were higher than the increase in earnings and fringe benefits (\$1,975 and \$413, respectively) during the 36-month follow-up period, on average.

We conducted a similar set of sensitivity analyses to test our key assumptions based on survey data, including (1) the values of benefits associated with increases in earnings, such as fringe benefits and taxes; (2) the values of costs and benefits when accounting for factors like inflation and present value; and (3) the services CBA group members received were primarily through CBA and not from existing SNAP E&T services or the community. These results were robust to changes in our all of key assumptions about benefits and costs from all perspectives (Appendix Tables G.10–G.12). Regardless of changes in assumptions CBA group services led to a net benefit for society compared to the NS control group (ranging from \$751 to \$1,571), but there was a negative net benefit for society compared to the ES control group (ranging from \$101 to \$820). CBA group members experienced a net benefit from CBA group services compared with both control groups for all assumptions related to fringe, taxes, and discount rates, ranging from \$1,552 to \$4,827. Government and taxpayers faced a negative net benefit for CBA group services compared to both control groups regardless of changes to key assumptions, ranging from \$1,695 to \$3,837.

Exhibit VIII.10 Benefits and costs associated with CBA services or community-offered services, for the CBA group compared to the ES control group, 36-month survey data

	Perspective		
	CBA group members	Government and taxpayers	Society
Benefits (\$)			
Employment and earnings			
Earnings (survey data)	1,975	0	1,975
Fringe benefits	413	0	413
Tax payments	-491	491	0
Use of public benefits			
SNAP benefits	-112	112	0
TANF benefits	-228	228	0
Reduced administration costs	0	28	28
Total benefits	1,558	858	2,416
Costs (\$)			
Net operating costs ^a	0	-2,598	-2,598
Net subsidized earnings while in services ^b	0	-499	-499
Net support services while in services ^b	93	-93	0
Total costs	93	-3,190	-3,097
Net benefit (\$)	1,651	-2,332	-681
Benefit-cost ratio			0.78

Source: SNAP employment and training evaluation 12- and 36-month surveys, weighted data; SNAP administrative data; SNAP employment and training evaluation actual reported costs by CBA grantee, partners, and providers, 2015-2018; SNAP employment and training evaluation administrative service use data; and WIA Gold Standard Evaluation cost estimates, 2012.

Notes: Earnings, SNAP benefits, and TANF benefits are the impact estimates presented in Chapter VII. The net benefit is the difference between total benefits and total costs. The benefit-cost ratio is the quotient of the total benefits and total costs. A negative net benefit is a net cost. A benefit-cost ratio greater than one represents greater benefits than costs, and a number less than one suggests fewer benefits than costs. All benefits and costs are presented in 2016 dollars. The standard error of the cost per CBA group member is \$116 and of the cost per ES control group member is \$286.

^a This estimate is the difference between CBA and ES control group costs per individual. This value excluded planning period costs but included the costs of supplies and equipment incurred during the planning period that supported ongoing services once they started.

^b Subsidized earnings and support services directly benefit individuals while they are enrolled in services. We assumed the subsidized earnings benefitting individuals were reflected in the earnings impacts presented as the first row in the benefits section of the exhibit. All earnings presented in the first row in the benefits section of the exhibit are included in the fringe and tax estimates, though we do not know the extent to which subsidized earnings would have translated into these benefits in practice. These subsidized earnings are offset by the costs to government and taxpayers, which is represented in the second row of the costs section of the exhibit. We presented the support services as a benefit (positive transfer) to individuals under the third row of the cost section of the exhibit and these support services are offset by the costs to government and taxpayers in the same row. Both subsidized earnings and support services are assumed to have a net neutral (zero) benefit to society because the benefits are offset by the costs.

***/**/* Difference between CBA group and ES control group significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

IX. Conclusion

The goal of the 10 SNAP E&T pilots was to test innovative strategies to increase SNAP participants' employment and earnings, and reduce their need for public assistance benefits. Through its comprehensive data collection and rigorous experimental design, this evaluation assessed whether CBA—the innovative SNAP E&T program California designed and implemented targeting SNAP work registrants—was effective in achieving these goals.

Several interrelated analyses have been the basis of this final report. Findings from the implementation analysis describe the planning and implementation of the pilot, its services and operations, and the components that may be sustainable or replicable. Findings from the participation and impact analyses describe receipt of services, participation in activities, and impacts on individuals' outcomes for up to three years after enrollment. Finally, the cost-benefit analysis describes the costs of services and compares the benefits of receiving services to the costs of providing them. In this chapter, we summarize and discuss key findings from all of these analyses.

A. Summary of findings

CA DSS, Fresno DSS, and RAB based CBA on the existing SNAP E&T program that served a small number of SNAP participants in Fresno County. CBA expanded these services across the County and added work-based learning, GED preparation classes, and more robust support services. CBA also provided financial incentives for completing education and training and for remaining in services. Fresno DSS met their recruiting targets and many CBA group members engaged in services, but fewer individuals participated in subsidized employment than Fresno DSS and RAB anticipated, due to a range of implementation issues and the process for placing individuals with employers. Despite the program's challenges with participation in activities, CBA group members were more likely than both NS and ES control group members to start an activity, complete an activity, and receive support services. Differences in service receipt and participation in activities were much larger for the CBA group relative to NS control group than the ES control group. CBA group members also were more likely than those in the NS control group to receive case management. The CBA group's increased engagement led to an increase in earnings over time relative to the NS control group, but there was no effect relative to the ES control group. Although CBA group members earned significantly more than NS control group members, the overall cost of implementing the pilot outweighed its benefits compared to both the NS and ES control groups. We describe these findings in more detail below. Section C gives more context for the findings.

1. CBA implementation

After some initial challenges with recruitment, CBA staff were able to improve recruit and meet their enrollment goals within 18 months. CFNs worked closely with most of those assigned to the CBA group to identify and help them meet their career goals. Although participation rates were lower than the provider anticipated for the in-house GED preparation classes, those individuals who participated found it helpful, and CFNs noted that the education navigators were able to engage individuals who had not been successful in previous attempts to complete their GED at other locations. However, staff encountered challenges with other parts of CBA, including the subsidized employment activity and provision of financial incentives. Fewer individuals participated in subsidized employment than planned, due to delays in offering the activity and some process issues. RAB and EDC made several changes to address these issues, which staff felt were positive but implemented too late to make a difference in the overall take-up

of subsidized employment. In addition, few CBA group members ultimately received the financial incentives they banked for meeting certain milestones. CBA group members had to complete the 18-month program to receive their incentives, and CFNs could not distribute incentive payments at the final case management contact with the individual. Instead, they were sent in the mail, but RAB lost contact with some individuals and were not able to send them their banked incentives.

2. Service receipt among CBA group members

Most (94 percent) of the individuals randomly assigned to the CBA group engaged in some type of service, meaning they started an assessment, ICP, or employment or training-related activity offered by CBA. About 80 percent of CBA group members ultimately started an employment or training-related activity after they completed intake and assessments. Individuals most commonly started job readiness workshops (72 percent), while fewer participated in occupational skills training (32 percent), GED preparation classes (22 percent) and work-based learning (5 percent). Among individuals who started an activity, completion rates were highest for job readiness workshops (77 percent), work-based learning (70 percent), and occupational skills training (69 percent) and lowest for GED classes (15 percent). Many of the individuals who completed an occupational skills training program received a certification or credential (9 percent of all CBA group members).

Almost all CBA group members had at least one contact with a CFN (97 percent), and 45 percent received a support service. Many received training and work items such as books, fees, uniforms, books, and clothing (43 percent), while 23 percent received transportation assistance. On average, CBA group members who received support services received \$614 in total support service payments. In addition, CBA group members were offered two types of differential financial incentives: service retention incentives and education and training incentives. About 15 percent of individuals received a payment for a service retention incentive, while only 3 percent were paid for an education and training incentive.

Individuals spent an average of 15 months in CBA. Almost three-quarters of individuals exited CBA within their second year (73 percent), with most exiting in the seventh quarter after random assignment once they completed the intended 18 months of CBA services. Almost half of individuals (46 percent) exited after completing services. Thirty-eight percent chose to exit before completing services; others were terminated for cause or became ineligible to continue (11 and 5 percent, respectively).

3. Differences between CBA and control groups in service receipt

The ability of CBA to impact employment, earnings, and individuals' receipt of public assistance benefits depended in part on whether there were differences between the CBA and control groups' receipt of services and participation in and completion of employment or training-related activities. Relative to both control groups, the CBA group was more likely to participate in job search training activities and in education and training activities during the three years following random assignment; there were larger differences between the CBA group and the NS control group than between the CBA and ES control group. According to the survey data, rates of participation in job search training or assistance activities for the CBA group were 47 percentage points higher relative to the NS control group and 9 percentage points higher relative to the ES control group. CBA group members were also more likely to participate in education or training activities than NS control group members (31 percentage point difference) and ES control group members (14 percentage point difference). These differences existed despite the finding that 48 percent of NS control group members and 75 percent of ES control group members participated in job search training activities or in education and training activities. The significant difference between the

CBA and control groups in rates of participation was observed for all three years, even after CBA services ended. The CBA group also had higher rates of participation than both control groups in most types of activities, including general job skills training, and education. CBA group members were also more likely than NS control group members to participate in occupational skills training.

CBA group members were more likely than NS control group members to complete an activity, though there were fewer differences in activity completion between CBA group members and ES control group members. Overall, CBA group members were 23 percentage points more likely than NS control group members and 7 percentage points more likely than ES control group members to complete any type of education or training activity. Differences between the CBA and NS control groups in rates of completion were larger in the first two years after random assignment than in the third year. The CBA group spent, on average, about six months longer and three hours more per week in activities than the NS control group, and three months longer in activities and a similar amount of time per week compared to the ES control group. The CBA group was more likely than the NS control group to receive an occupational certificate or license (9 percentage point difference).

The CBA group also was more likely than the NS control group to receive case management (42 percentage point difference). In addition, CBA group members were more likely than members of both control groups to receive support services (19 percentage point difference relative to NS control group members and 7 percentage point difference relative to ES control group members). The largest difference between the CBA group and both control groups was observed for clothes, uniforms, tools, or other supplies and equipment (34 percent for the CBA group versus 9 percent for the NS control group and 18 percent for the ES control group).

4. Impacts of CBA on individuals' outcomes

Findings from analyses of the two primary outcomes in the second and third year after random assignment show that CBA led to an increase in earnings based on survey data, but not UI data, and generally did not affect rates of SNAP participation. Earnings in this period increased by \$3,938 for the CBA group relative to the NS control group; CBA group members earned \$1,666 more than the ES control group members during this period, but this difference was not statistically significant. Each research group experienced increases in average earnings over time, but the CBA group earned more than the NS control group in each year after random assignment. Similarly, based on UI data, CBA group members earned \$724 more than NS control group members and \$388 more than ES control group members over Years 2 and 3, but these differences were not statistically significant. Related analyses of employment based on survey data revealed that CBA increased the percentage of individuals who were employed, relative to the NS control group, in each year after random assignment (10 percentage points in Year 1 and 7 percentage points in both Years 2 and 3). These findings were similar for the average amount of time individuals were employed in each year, with impacts in Years 1, 2, and 3. Based on UI wage records, there were no employment impacts of CBA relative to either the NS or ES control group. There were few differences in impacts on earnings or employment in the two-year period (Years 2 and 3) across subgroups defined by age, barriers to employment, employment history, presence of children in the household, and household income.

Similar percentages of individuals in each research group participated in SNAP throughout the three-year follow-up period. SNAP participation rates decreased each quarter after random assignment by about the same amount for each research group, resulting in similar participation rates in the two-year period in Years 2 and 3 (83 percent for the CBA group and 84 percent for each control group). This pattern of

findings suggests that CBA did not increase earnings by enough to change SNAP participation. There generally were no differences in impacts on SNAP participation across subgroups.

Changes to CBA policies or procedures after the pilot began generally did not affect the likelihood of CBA group members starting or completing most activities. Analyses that compared impacts among individuals who were randomly assigned earlier versus later in the enrollment period showed no differences in impacts on earnings among CBA group members who enrolled before or after changes were made to expanding support service provision and the processes for entering subsidized employment.

5. CBA costs and cost-benefit analyses

CA DSS and its partners and providers reported spending \$9,194,027 from April 2015 to December 2018 on the planning and implementation of CBA (\$197,736 during the planning period, \$1,784,252 for recruitment, and \$7,212,038 for CBA services). The FNS grant funded 79 percent of these costs; partners and providers leveraged other funding sources for the remaining 21 percent. The cost-benefit analysis compares the benefits individuals received through earnings and public assistance with the average costs of all services CBA, NS control, and ES control group members received per individual. The costs of all services CBA group members received through CBA, existing SNAP E&T services, or the community were about 20 percent higher than the costs of CBA (\$8,621,607, or \$6,320 per individual, on average). The costs of all services NS control group members received through the community (\$2,021,686, or \$1,380 per individual, on average, among 1,465 NS control group members) were less than one quarter of the costs of all services CBA group members received. The costs of all services ES control group members received through existing SNAP E&T and the community (\$1,981,125, or \$3,129 per individual, on average, among 633 ES group members) were about half of the costs of all services CBA group members received.

CBA group benefits and costs relative to the two control groups are presented from multiple perspectives, including those of (1) individuals enrolled in the CBA group, (2) government and taxpayers, and (3) society as a whole, which represents the sum of the other two perspectives. The net benefits of all services CBA group members received were positive for CBA group members but negative for government and taxpayers and for society during the 36-month follow-up period based on both data sources and compared to both control groups. Compared with the NS control group, the net benefit to society was negative by \$3,499 per CBA group member according to UI wage records and positive by \$991 per CBA group member according to 36-month survey data. Compared with the ES control group, the net benefit to society was negative by \$2,547 per CBA group member according to UI wage records and by \$681 per CBA group member according to 36-month survey data. These findings generally reflected net benefits to CBA group members which were outweighed by costs to government and taxpayers.

B. Placing findings in the context of the workforce evaluation literature

The study findings are consistent with the previous literature that has often found small labor market effects of employment and training programs for low-income populations offering similar services as CBA. Comprehensive literature reviews are provided in Barnow and Smith (2015), Card et al. (2018), Vollmer et al. (2017), and Goger et al. (2020). This literature covers a range of employment and training activities and support services offered by both ongoing programs as well as grant programs similar to CBA, using impact designs with rigorous control (or comparison) groups.

The literature suggests that programs serving low-income populations can typically engage individuals and increase their receipt of services relative to those received by the study control groups in their local areas. These differences can be large, especially for the receipt of occupational skills training and subsidized employment, translating into positive effects on the percentages of individuals who participate in training activities and the attainment of associated certificates and credentials. However, few of the studies have found that the programs lead to long-term increases in earnings or independence from public assistance (at least over the time period covered by the studies, which is typically less than four years).

There are notable exceptions supporting that the types of activities and services (such as subsidized employment and case management) offered by CBA are effective in improving labor market outcomes. McConnell et al. (2021) found using nationally representative samples from a randomized control trial that had access to WIOA intensive services—one-on-one staff assistance such as assessments, coaching, career counseling, and service referrals—increased earnings by about 15 percent over a three-year follow-up period and yielded benefits that exceeded costs from the perspective of society. This evaluation, however, found no earnings effects of WIOA-funded occupation skills training. Further, several reviews of the existing literature on the role of supportive services in employment and training programs suggest that low-income populations receiving supportive services, in combination with technical training and other ancillary services, such as case management, can have more positive employment and earnings outcomes compared to groups that do not receive such wraparound services (Davis et al. 2013; Gueron and Hamilton 2002; Maguire et al. 2010; U.S. Department of Labor, U.S. Department of Commerce, U.S. Department of Education, U.S. Department of Health and Human Services 2014). Another notable exception is the random assignment evaluation of STEP Forward (Walter et al. 2017) which found that the impacts of subsidized employment offered to the treatment group continued into the fourth year, well after the subsidies had ended. Similarly, Reed et al. (2012) found statistically significant positive impacts of registered apprenticeships, even nine years after program entry.

The literature also suggests that interventions that *combine* several strategies to help low-income individuals find and keep jobs appear more effective than any *single* strategy (Vollmer et al. 2017). Further, “meta-analyses”—that use regressions to combine and analyze impacts from different studies—find that total program effects are more than the sum of the effects of each of the program’s strategies. Thus, implementation and other factors that affect how well multiple components of a program are operationalized and delivered are crucial determinants of a program’s success. Relatedly, the literature has consistently found considerable diversity in program impacts across individuals (females and the long-term unemployed tend to experience larger benefits) and across labor market conditions (programs are less likely to show positive effects during periods of economic growth), but the patterns are not always consistent across studies.

Overall, the observed increases in the rates of take-up and completion of CBA activities and receipt of services, and the earning impacts for CBA fit within the broader related literature. Although comparing the findings in this evaluation to those in the literature is informative, it is important to consider that differences in target populations, local economies, and varied experiences in implementing activities and services available in a pilot or program make it challenging to form direct comparisons to other studies. The next section provides context for the evaluation findings from this perspective.

C. Discussion

Together the services received by the ES and NS control groups are representative of the service environment in Fresno County. The existing SNAP E&T program (offered to the ES group) was robust

but typically available to only two to three hundred people each year and historically served individuals with children. Thus, most work registrants and relatively few ABAWDs received services through the existing SNAP E&T program in the county. The NS control group, therefore, is more representative of what was available to most SNAP participants in the county. The results from both comparisons are important for understanding how well the CBA services worked for the potential SNAP E&T population as a whole. The impacts of CBA compared to the ES control group describe how effective the enhancements to the existing program were, while comparisons to the NS control group describe how effective the CBA services were relative to the receipt of no services or just those widely available within the community.

Overall, we find that CBA services relative to those received by the ES control group generally produced small differences in earnings and employment that were not significant, while CBA services relative to those received by the NS control group increased earnings based on survey data and produced a similar pattern of findings based on the UI data, despite the latter difference being smaller in magnitude and not statistically significant. These findings should not be surprising, given the services offered to each group. CBA primarily offered three enhancements over the existing SNAP E&T program: financial incentives, in-house GED preparation (instead of or in addition to referrals to other providers), and the opportunity to participate in subsidized employment. However, because of the slow implementation of the subsidized employment activity and few individuals receiving incentives or completing GED preparation classes, the services that the CBA and ES control groups received were relatively identical. So, we would not expect to see many impacts between these two groups due to the lack of contrast in the services they received. Despite CBA not fully offering all of the planned services as widely as they anticipated, the model did prove to be successful when compared to individuals who were not offered any services.

CBA relative to the ES control group. In addition to the similarity in the services offered to the CBA and ES control groups, the lack of an impact may reflect the small differences in rates of participation and completion of employment or training-related activities between the CBA and ES control groups. There was less than a 10 percentage point difference in the rate of participation in activities, so CBA only improved the take-up of services by a small amount. Also, the increase in completion rates for an activity was only 7 percentage points. The impacts on outcomes such as earnings could have been diluted by those who did not participate in or complete activities. To assess this possibility, we compared impacts for individuals who did and did not start an employment or training-related activity and those CBA group members who completed activities and those who did not. This exploratory analysis showed that there were impacts on earnings and employment for individuals who completed an education or training activity, but no impact for those who completed a job search or job search assistance activity or those who started but did not complete an activity. These findings suggest that the completion of CBA education or training activities may have played a role in connecting some individuals to meaningful employment. Learning more about why some individuals participate and complete activities and some do not, including the barriers they may face, would help administrators and providers identify strategies for promoting greater participation in employment or training-related activities. This information would enhance understanding of challenges faced by CBA group members, allowing providers to adapt their activity content or delivery, case management, or support services to better meet individuals' needs and to achieve a greater impact. These findings also highlight the need to examine why completion of employment or training-related activities did not lead to impacts on earnings. Additional analyses should explore whether receiving certificates, diplomas, degrees, or occupational licenses can affect differentially the prospect of employment for CBA group members.

CBA relative to the NS control group. CBA increased earnings relative to the NS control group based on survey data. This is a notable accomplishment given the prevalence and extent of barriers CBA group members faced—only 23 percent were employed at the time of random assignment, and 25 percent did not have a high school diploma. However, these findings are not entirely surprising given the control group was not offered any SNAP E&T program services and had to seek them out any other employment and training services in the community on their own. This resulted in increases in the percentage of CBA group members who participated in and completed employment or training-related activities relative to the NS control group. CBA nearly doubled the percentage of individuals who participated in these activities compared to NS control group members. CBA group participated in activities for more than twice as many months as the NS control group did and nearly twice as many hours per week. This also led to considerably higher completion rates; CBA more than doubled the rate of completion of activities relative to the NS control group. CBA also nearly doubled the rate of receipt of occupational certificates or licenses. The CBA group also continued to have higher participation and completion rates through Year 3, suggesting that participation in CBA activities may have supported continued participation in existing SNAP E&T or community-offered activities even after the end of the service period.

CBA also led to higher rates of receipt of case management and support services, which could have helped individual reduce their barriers and move into employment. CBA almost tripled the rate of receipt of case management relative to the NS control group, and increased the rate of receipt of support services, though not by as much. Higher rates of case management and support services also may have allowed individuals to overcome barriers associated not only with starting employment or training-related activities, but also sustaining participation over time and ultimately completing those activities. This additional time in activities and potential skill or certification obtainment, could have led to higher paying jobs than those in the NS group.

Although CBA led to increased earnings relative to the NS control group, this did not result in reduced participation in SNAP. It is possible that the increase in earnings partly reduced SNAP benefit amounts as a percentage of the maximum benefit (the difference between research groups in benefits as a percentage of the maximum benefit was negative in most quarters and became statistically significant in Quarters 10 and 11 after random assignment), but the increase in earnings was not large enough to make individuals ineligible to receive SNAP. It is also possible that the increase in earnings did reduce the likelihood of participating in SNAP, but this reduction was offset by some CBA group members being more likely to continue to participate in SNAP because they valued the CBA-provided activities. Some individuals may have also continued to participate in SNAP because the CBA-provided services addressing barriers to employment would be discontinued if they did not. Examining the SNAP participation patterns for CBA group members who became employed in the two-year period (Years 2 and 3) would enhance understanding of the relationship between SNAP participation and earnings for the individuals enrolled in the pilot.

Although there was a positive impact on earnings for the CBA group relative to the NS control group, the net benefit of CBA relative to both control groups was negative. This primarily reflects the differential costs of CBA group services, which were not offset by the benefits accrued through earnings and fringe benefits during the 36-month follow-up period. When interpreting these findings, it is important to consider that CBA services were new and experimental. The purpose of the SNAP E&T pilot was to test new approaches to services. CBA targeted a new population, with more and differing barriers than RAB had served in the past. Even though we excluded the costs of planning and recruitment in considering the cost differential between CBA and control group services, the costs of CBA group services were likely

higher for the three years of the pilot than they would have been if administered over a longer period of time. In addition, it is possible that some individuals realized benefits which do not appear in the cost-benefit analysis results – for example, increases in earnings that individuals earned after the observation period of 36-months, or unmeasured benefits such as changes in food security, health, or well-being.

Although the findings relative to the two control groups were mixed, SNAP E&T program administrators can learn from the implementation of the CBA model, particularly related to developing a subsidized employment component. As State administrators may be considering offering subsidized employment in their SNAP E&T programs, insights from CBA can be helpful. CBA staff suggested that subsidized employment may provide the most opportunities for individuals in labor markets where entry-level jobs were scarce or there was a specific industry need for positions that required short-term skills training. Fresno County's top industries predominantly included low-wage, entry-level positions (health care, retail, agriculture, manufacturing), and many individuals were not interested in this work or there was little growth potential. Some employers who participated in subsidized employment as part of CBA reported that their need for entry-level candidates was so great that the subsidies did not incentivize them to hire CBA group members. They were more interested in hiring candidates who had soft skills (for example, who were reliable and came to work on time) and could handle the working conditions, such as graveyard shifts, lifting requirements, and part-time or seasonal employment. Employer liaisons also reported that it was difficult to find appropriate jobs for CBA individuals who had some skills and were looking for mid-level positions; building up a reserve of these kind of positions would be an important consideration, as not all SNAP participants are low-skilled. CBA staff learned that it took time and staff commitment to identify how to market the subsidy to employers, monitor the industry-specific needs of the business community, and conduct and compile interest inventories from individuals to match the right candidate to the right subsidized employment position.

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