Evaluation of the Cascades Job Corps College and Career Academy (CCCA) Pilot

Technical Appendix

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About This Report

The **CCCA Pilot Evaluation** conducted qualitative and quantitative studies of the **Cascades Jobs Corps College and Career Academy** (CCCA) pilot operating from 2017 to 2019. Findings from the evaluation are reported in four parts:

- Final Report (*Klerman, et al, 2021*)
- Detailed Report of the Implementation Analysis
- Technical Appendix
- An Implementation Brief *(Working Together: A First Look at Lessons from the Cascades College and Career Academy and Other Job Corps Partnerships with Community and Technical Colleges)*

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Appendix A: Theoretical Roots of the Cascades Job Corps Model

In 2015, the Department of Labor, in collaboration with the Department of Education, developed the Cascades Job Corps College and Career Academy (CCCA) to "test innovative approaches designed to assist at-risk youth [ages 21 and under at the time of enrollment] to complete rigorous academic and technical training programs, qualify for employment opportunities in in-demand occupations that pay a living wage and provide opportunities for advancement, enroll in and successfully complete postsecondary education, and develop workforce and independent living skills needed for self-sufficiency."[1] This appendix describes the pilot designers' vision for the CCCA pilot. Drawing from ideas prominent in the youth employment and training field, as well as the secondary and post-secondary education fields, that vision aimed to blend the best of the Job Corps model with innovative practices, several of them evidence-based, to improve outcomes for young people.

Like other Job Corps centers, the CCCA pilot was to provide general education classes, career and technical training (CTT), career readiness, and stabilizing and supportive services (such as physical and mental health services) in a residential setting. *Unlike other Job Corps centers*, the pilot was to incorporate several evidence-based practices that had been shown in other settings to be advantageous for youth programming. In particular, the key evidence-based innovations were to:

1. Make more explicit how the educational advanced students' career goals (Kemple and Willner 2008; Cotner et al. 2021).
2. Enroll students in cohorts to build peer support (Scrivener et al. 2015; Weiss et al. 2014).
3. Support and enable students to take college classes in the pursuit of their high school diploma college degree, or an industry-recognized certificate (Berger et al. 2013; An 2013).
4. Provide students CTT organized into structured career pathways with stackable certificates.
5. Provide students with work-based experience including employer mentorship.[2]
6. Give students greater input into center policies by taking a human-centered design approach to increase student input, which in turn increases their sense of belonging in the program and decreased dropout rates (Catalano et al. 2002; Durlak et al. 2011).

This appendix cites evidence from research available when the pilot was conceived and later studies consistent with and supporting the efficacy of those ideas. Some of the cited studies were published before the pilot was designed; others were in progress. Section A.1 discusses evidence supporting efforts to improve outcomes for younger students (the focal population for the pilot). Sections A.2 through A.4 consider innovative practices in education, career and technical training, and engagement, respectively. Finally, Section A.5 considers components of the implemented pilot that did not quite fulfill the vision.

A.1 Focal Population

A seminal evaluation of Job Corps (Burghardt, 2001) found that the program, on average, had positive impacts on students' hours of education (by about 1,000 hours) and receipt of GED (by 15 percentage

[1] Request for proposal DOL-OPS-16-R-00020, p. 5.

[2] The solicitation for the program provider (DOL-ETA-16-R-00010, p. 9) asked bidders to develop partnership opportunities with a local employer, Janicki Bioenergy, to establish both learning and career opportunities for students at the center.

points) and Career and Technical Education certificates (by 23 percentage points). In addition, three and four years after random assignment, participants earned more than they would have otherwise, by about $22 per week ($1,150 annually). However, these short-term impacts were greater for 20- to 24-year-old ($50 per week) students than for 16- to 17-year-old students ($17.2 per week) or 18- to 19-year-old students (no significant impact). Furthermore, a long-term follow-up study on this sample found that the earnings of its younger participants (16- to 19-year-old students) did not remain higher than they would have been (Schochet, Burghardt, and McConnell 2008). Thus, while the program was deemed to be cost effective for 20- to 24-year-old participants, it was not for the younger participants. As Schochet, Burghardt, and McConnell (2006) note, "The challenge is to improve program services to sustain the earnings gains for the younger students." The findings from this study were reflected in a 2014 White House review of job training (Biden 2014), which prioritized testing models of Job Corps for disconnected youth. The CCCA pilot was a direct response to this policy direction.

Because of the decision to focus on a younger population, pilot designers envisioned that CCCA would have elements of both the impactful Career Academy model (Kemple and Willner 2008) and dual enrollment high school programs provided in a residential setting. The dual enrollment aspect of the CCCA—enabling students to take education and occupation training courses at a college—was in part seen as a promising practice to increase educational attainment (An, 2013). It may also have been intended to improve Job Corps' cost effectiveness by using the existing teaching capacity of colleges. A growing number of Job Corps centers were starting to send some of their students to local colleges for some of their courses. Consistent with and expanding that policy direction and the desire to improve the outcomes for Job Corps younger participants, the pilot was tailored to better serve younger students ages 16 to 21[3] who were interested in attending college—a segment of Job Corps' population DOL felt was not well served.

A.2 Innovative Educational Practices

The pilot education and training classes were to be closely linked to students' prospective careers. The classes were to incorporate cohort enrollment and support for co-enrollment in college courses. This program features incorporated cutting edge, innovative practices—career themed general education, small learning communities, and secondary/postsecondary co-enrollment.

These features were consistent with City University of New York's GED-to-college bridge program. That program offered contextualized GED preparation as well as career and college advising. According to a study using a randomized controlled trial and 369 college students, program participants were twice as likely to pass the GED exam as GED Prep students. Program participants were also three times more likely to enroll in college than students in traditional adult basic education classes at the school (Martin & Broadus, 2013).

The Northeast Wisconsin Technical College (NWTC)'s bridge-to-college program further refined the model. Students in the GED Bridge classes received contextualized curriculum, managed cohort enrollment, and enhanced planning and support for transition to postsecondary education. According to a study using a randomized controlled trial and 340 college students, program participants assigned to the GED Bridge program attended those classes over a longer period and were more likely to earn GEDs and to enroll in college courses (Treskon, Kusayeva, and Walter 2020).

[3] That is, excluding the older Job Corps students, aged 22 to 24.

Evaluations of Washington State's Integrated Basic Education and Skills Training (I-BEST) Program in three community colleges in Washington have similar findings. I-BEST offers occupational training paired with basic skills instruction (including GED coursework for those who sought it), team teaching, and additional supports for a population with low education levels. According to a study using a randomized controlled trial and 632 college students, program participants increased enrollment in credit-bearing courses and receipt of workforce credentials (Glosser et al. 2018). Finally, the Institute for Educational Science Practice Guide (Cotner et al. 2021) found across nine high quality studies, career-contextualized basic education increases college credit accumulation and industry-recognized credential attainment, but decreases post-secondary degree attainment.

The pilot also adopted career-contextualized learning. Martin and Broadus (2013) found that small pathway-themed cohorts that pursued career-contextualized learning increased the likelihood of getting a GED and enrolling in college. Small cohorts of students were to arrive monthly. Their first class would be an industry-specific orientation. There followed an industry-specific Foundations course that provided an overview of the industry. This Foundations course allowed students to confirm their interest in this industry and learn some of the foundational skills needed to succeed in the industry. After completing Foundations, students were to take both skills training and education classes concurrently. All education and training services were to be pathway-themed to highlight their relevance.

Students would also be encouraged to take general education college classes that would provide them high school credits or credits toward a college degree or certificate. The pilot was to provide academic and non-academic support services to support student success. For example, pilot staff are to provide on-demand support and supplementary instruction for college classes. Students would also be expected to attend Evening and Weekend Studies programming (adding significantly more programming hours over the course of the pilot program). This programming would be an opportunity to complete homework and to receive tutoring and assistance with course assignments.

A.3 Innovative Career and Technical Training Practices

The envisioned career training component also incorporated a set of structured career pathways with stackable industry recognized credentials. This stackable credential approach allows even students who leave early to have a valuable credential. Price and colleagues (2016) evaluated new and modified manufacturing pathways in several Wisconsin community colleges using a quasi-experimental matched comparison group analysis using 3,178 treatment group college students. These programs enabled participants to earn short-term credentials that stack toward one-year and two-year technical diplomas, and sometimes toward Associates degrees. Compared to conventional programs in technical colleges, this approach had a positive impact on college credit accumulation and attainment of industry-recognized credentials. Similarly, a study using a comparative individual fixed effects strategy and 2,552 college graduates (Meyer, Rodriguez, Bird and Castleman 2020) found that completing two or more certificates in the same field increased employment by 4 percentage points and quarterly earnings by $570 (a seven percent increase) compared to similar students who completed only one certificate. Cascades planned to implement this approach to training, introducing it to students in the initial industry Foundation course.

Program designers also envisioned that CCCA students would get exposure to work through employer partnerships that would offer work-based learning opportunities and possibly employer mentorship. Follow-up analysis of the Career Academy's impact data link the increased post-high school earnings for young men participating in Career Academies to career awareness sessions and internships that provided participants with helpful work experience and job references.

A.4 Innovative Engagement Practices

A core challenge for youth training programming is the potential for youth to leave the program before they have learned enough to benefit from the program's services. To address this engagement problem, the CCCA pilot designers specified practices that increase student input into center policy making. Designers also increased the sense of support and belonging through cohort enrollment. According to a survey of 305 high school students and focus groups with 108 of those students, Whitlock (2006) and others have found that schools that gave students opportunity to have meaningful input into school policies and practices—both inside and outside the classroom— led to a greater sense of school connectedness. Similarly, according to a mixed-method study of qualitative and quantitative data from six initiatives, Deschenes and colleagues (2010) found the same thing for non-school youth programs.

Program designers also wanted to create a center climate that would "foster a positive learning and living environment that sets high expectations for behavior, focuses on prevention of misconduct, and incorporates appropriate interventions to promote socially acceptable behaviors." The designers expected this would be accomplished through character and social-emotional skill building classes (e.g., classes in conflict resolution and coping skills, resiliency, and leadership).

A.5 The Unrealized Vision

As described in the *Detailed Report of the Implementation Analysis*, many of the envisioned components were not implemented or were not fully in place during the study. Unimplemented features included:

- **Secondary education contextualized specifically to healthcare or IT.** Instead, students accessed Job Corps' traditional GED programming or participated in Skagit Valley School District's online and in-person high school education services through the Washington Connections Academy program.[4]
- **Components involving employers.** There were relatively few work-placed training opportunities as pilot students received the opportunity to complete work-based learning activities only on a case-by-case basis. Additionally, pilot students in college often did not want to participate in work-based learning that required longer-term commitments because it would have conflicted with their college schedules or required them to shift focus from their schoolwork. The pilot did not staff or develop formal work-based mentoring or apprenticeship opportunities.
- **Career readiness and placement services.** The pilot delayed staffing career transition services. When eventually hired, the staff had to develop and implement these services simultaneously and with little specialized training. As a result, pilot students received limited transition services—especially if they left during the earlier phases of the pilot.
- **Leadership, character, and social emotional skill building classes.** The initial pilot design included scheduled time in the evenings and weekends for students to complete homework, get academic support, and participate in life skills classes and activities to build, for example, study skills and leadership skills. Hiring delays contributed to delays in providing these services. In addition, students expressed a need for less scheduled time. As a result, instead of the planned life

[4] Washington Connections Academy is a free K–12 online public school. https://www.connectionsacademy.com/washington-online-school

skills programming, the pilot used the time to further incorporate the conventional Job Corps Career Success Standards activities.

Thus, while this evaluation of the programming Cascades put in place is quite useful to the field, the full envisioned college and career academy model is not tested here.

Appendix B: Cascades Pilot Evaluation Data Sources

This appendix discusses the quantitative data sources used for the Implementation Analysis, Program Flow Analysis, Service Contrast Analysis, and Impact Analysis of the Evaluation of the Cascades Job Corps College and Career Academy (CCCA) pilot program. Exhibit B-1 provides a tabular summary.

The remainder of this appendix is structured as follows. Section B.1 discusses the National Job Corps administrative data. Section B.2 discusses CCCA-specific administrative data. Section B.3 describes the survey data sources used primarily for the Service Contrast Analysis and Impact Analysis, including the Baseline Information Form (BIF), Participant Data System (PDS), and the 18-month follow-up survey. Finally, Section B.4 describes the additional administrative data sources, including the Renaissance data, and the National Student Clearinghouse (NSC) and National Directory of New Hires (NDNH) administrative data sets.

Exhibit B-1 Summary of Data Sources for the CCCA Evaluation

Data Source	Data Items	Population	Use in the Evaluation
National Job Corps Administrative Data			
National Job Corps administrative applicant data (OASIS)	• Applicant eligibility status and application timing • Applicant demographics • Other applicant background information including education and socioeconomic indicators	All Job Corps applicants (including CCCA applicants)	• Implementation Study (characteristics comparison) • Program Flow Study (characteristics comparison, application milestones) • Survey Contrast Analysis and Impact Analysis (baseline characteristics, baseline balance testing, subgroup identifiers, survey non-response weights, regression covariates)
National Job Corps administrative student data (See Section B.1 for specific data systems)	• Student enrollment in Job Corps • Student academic levels at the time of enrollment • Duration of enrollment at Job Corps • Student enrollment in program activities at Job Corps • Student completion of academic activities at Job Corps • Separations from Job Corps	All students who enroll at a Job Corps center (including CCCA)	• Program Flow Study (enrollment status, academic level at enrollment, duration of stay, activities conducted or completed at Job Corps, separation reason) • Service Contrast Analysis (timing and length of enrollment)
CCCA-specific Administrative Data			
CCCA program administrative student data	• Student enrollment in program activities/training • Training completion	Subset of experimental study sample treatment group who enroll at CCCA	• Program Flow Study (activities conducted or completed at CCCA)

APPENDIX B: CASCADES PILOT EVALUATION DATA SOURCES

Data Source	Data Items	Population	Use in the Evaluation
Survey Data			
Baseline Information Form (BIF)	• Demographic data • Employment history • Education history • Earnings and income • Public benefits receipt • Barriers to employment • Employment goals and expectations • Socio-emotional well-being • Contact information	Full experimental study sample	• Survey Contrast Analysis and Impact Analysis (baseline characteristics/ balance testing, subgroup identifiers, survey non-response weights, regression covariates)
Participant Data System (PDS)	• Random assignment date • Pathway at application (healthcare or IT) • Assignment status (treatment group or control group)	Full experimental study sample	• Implementation and Program Flow Study (treatment group status) • Survey Contrast Analysis and Impact Analysis (treatment group status, pathway, identifying cohort)
18-Month Follow-up Survey	• Receipt of training (e.g., college-level courses, occupational training) • Receipt of training-related supports (e.g., career advising, life skills training) • Receipt of certificates; educational degrees completed • Current employment status, and length of employment or military service • Current hours worked • Public benefits receipt	Survey Cohort of the experimental study sample	• Survey Contrast Analysis and Impact Analysis (outcomes)
Other Administrative Data			
Renaissance Star assessment data	• Star Math and Reading test date, test type, scaled score, and grade level equivalent for tests taken by students just prior to random assignment.	Full experimental study sample	• Implementation Study (assessment levels) • Program Flow Study (characteristics comparison) • Survey Contrast Analysis and Impact Analysis (subgroup identifier, regression covariates)
National Student Clearinghouse (NSC)	• Cumulative college enrollment (overall, full-time, part-time, and full-time-equivalent, FTE) • Timing of college enrollment (overall, full-time or part-time) • Degree or certificate completion	Full experimental study sample	• Survey Contrast Analysis and Impact Analysis (outcomes)

Data Source	Data Items	Population	Use in the Evaluation
National Directory of New Hires (NDNH)	• Earnings (reported quarterly, observed from 6 quarters before random assignment to at least 6 quarters after random assignment) • Any employment (positive earnings within the quarter)	Full experimental study sample	• Survey Contrast Analysis and Impact Analysis (outcomes)

B.1 National Job Corps Administrative Data

The Job Corps Data Center (JCDC) supplied the CCCA Evaluation with student-level data on all Job Corps students who had a new application and interview with Job Corps between October 2016 and November 2019.[5] Follow-up data for these applicants were provided through March 2021, when the last data extract for the CCCA Evaluation was received.

These data come from three different JCDC systems: OASIS (Outreach and Admissions Student Input System); CIS (Center Information System); and CTS (Career Transition System). Extracts from OASIS include data from all applicants—to CCCA and to other Job Corps centers—whether or not applicants were actually accepted to Job Corps (n=191,527); these data include information collected at application on applicant demographics and educational background.[6] Extracts from CIS are limited to enrollees (n=126,489) and cover dates of enrollment, and activities, services, and courses taken while attending Job Corps. Extracts from CTS are limited to those who complete Job Corps and receive post-completion services, including enrollment in Advanced Training which includes a third year at Job Corps with concurrent college enrollment (n=67,724). A unique, non-identifiable student identification code was used to link across datasets in order to create a student-level analysis file.

B.2 CCCA Administrative Data

Each month throughout the pilot and for six months after the completion of the pilot, CCCA staff submitted monthly reports with aggregate counts of student enrollment and CCCA-specific milestone achievements (e.g., course completion, High School or GED completion, credentials). At the end of the pilot, the evaluation team requested individual-level records, but these data were not readily available. CCCA staff reported that the data had been tallied by various staff across multiple computers and systems, and they suspected some of the data had been lost over time with staff turnover but could not say with certainty how much data was lost.

Between August 2019 and July 2020 CCCA staff worked to recover as much information as possible. Data extracts in the form of Excel spreadsheets and an Access database covered a range of information for treatment group members who arrived at CCCA, though many of the extracts included only a subset of students, and the subsets often did not overlap. Some information—arrivals and departures, high school diploma and GED completion, enrollment at Skagit Valley College—was more complete and

[5] As noted in Appendix D, the various parts of the CCCA Evaluation focus on different subsets of students who applied to Job Corps between these dates.

[6] Although the first study participants were not randomly assigned until February 2017, the interview process includes multiple interviews and the completion of paperwork that, in all, can take several months. The data extract from JCDC maximizes the information provided from the period between initial application and enrollment for even the earliest cohort of study participants.

incorporated into the Program Flow Analysis. Table notes specify when CCCA administrative data was used, and how.

B.3 Survey Data

The following section describes the survey sources for the CCCA Evaluation: the Baseline Information Form (Section B.3.1), the Participant Data System (Section B.3.2), and the 18-month follow-up survey (Section B.3.3).

B.3.1 Baseline Information Form

Prior to being randomly assigned, all members of the experimental study sample completed the BIF.[7] The BIF collected key identifiers (name, Social Security number, and date of birth) and basic demographic, socioeconomic, and psychosocial characteristics, including gender, education, employment history, educational attainment, and views about themselves and their goals. It also collected key contact information, including participant's address, cell phone number and email address, and contact information for the participant's mother, grandmother, and one other friend or family member who would likely have knowledge of his or her whereabouts at the time of follow-up data collection.

B.3.2 Participant Data System (PDS)

The evaluation collected study enrollment data for all members of the experimental study sample in a web-based Participant Data System (PDS) developed and managed by Abt Associates. The PDS recorded BIF responses, the date of random assignment, assignment status (treatment or control group), and pathway (healthcare versus IT).

B.3.3 18-Month Follow-Up Survey

The evaluation fielded a follow-up survey for students in the "Survey Cohort" of the study sample, those randomly assigned between November 1, 2017, and December 31, 2018 (see Appendix Section D.2.1 for more information on the cohorts of the study sample).[8] The follow-up survey was fielded starting 18 months after random assignment (see Appendix C for detail on the survey methods and response rates). For members of both the treatment and control groups of the Survey Cohort, the survey collected information on receipt of education and occupational training and related support services; work-based training; completion of additional education and receipt of credentials; employment and military service, criminal activity, and receipt of public benefits.

B.4 Other Administrative Data

This section describes additional administrative data sources for the CCCA Evaluation: the Renaissance Star Assessment Data (Section B.4.1), the National Student Clearinghouse (Section B.4.2), and the National Directory of New Hires (Section B.4.3).

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[7] Applicant responses to the BIF were collected in the Participant Data System (see Section B.3.2). The BIF is available on the OMB's website: https://omb.report/icr/201609-1290-001/doc/68878201

[8] Impacts on outcomes measured from the follow-up survey can only be estimated on the Survey Cohort. Students arriving before this period (the "Pre-Survey Cohort") were not surveyed because of concern that the CCCA program was not yet sufficiently mature. Students arriving after this period (the "Post-Survey Cohort") were not surveyed because there would be less than 18 months of follow-up.

B.4.1 Renaissance Star Assessment Data

Students who applied to Job Corps in the Pacific Northwest (PNW) region between February 2017 and June 2019 who were eligible for and interested in the CCCA pilot program were given the Renaissance Star Math® and Star Reading® assessments.[9] (Students who enrolled at Cascades were also retested over time after arrival at the Cascades center.)

CCCA staff shared quarterly testing reports with the evaluation team, in the form of static (point-in-time) reports that were retrieved from the Renaissance Star system once per calendar quarter between January 2017 and June 2019. After matching the Star data by student name to names as reported on the BIF, and accounting for data entry variations between the data sources, the evaluation team found that the reports received from CCCA were missing data for nearly one-third of the students in the full study sample.

To fill in the missing records, between October and December 2020 DOL assisted the evaluation team in obtaining additional deliveries of Star assessment data directly from Renaissance. Matching on student name and date of birth, Renaissance provided extracts of Math and Reading assessment test results, including testing dates. Combined with the original data received from CCCA, this provided Math and Reading assessment scores for 98.9% of the experimental study sample.

Key variables from the Star assessment data include math and reading scaled scores and grade level equivalency.[10] Renaissance converts the scaled scores into grade level equivalents that are norm-referenced. For example, if a student meets a grade equivalent of 10.0 for the Star Math exam, this means that the student scored as well as did the typical student at the beginning of grade 10. Renaissance top-codes the grade equivalents when they exceed three grade levels above the student's actual grade placement at the time of the test. Most Job Corps applicants were recorded as having a pre-test grade placement between sixth and seventh grade, and as a result many scores above a ninth-grade equivalent were top-coded at "9th grade and above."

B.4.2 National Student Clearinghouse (NSC)

The National Student Clearinghouse provides information on enrollment and degrees for participating U.S. degree-granting Title IV educational institutions—those approved for federal student loans by the U.S. Department of Education. For the Impact Study, Abt established a Memorandum of Understanding with NSC that allows for matching of study participants on Social Security number (SSN) and collected NSC data for all students in the experimental study sample. Students who were not matched to any NSC records for the period after random assignment are treated as not having enrolled at an educational institution.

The NSC data provide information on college enrollment, including dates of enrollment and enrollment status (enrolled full-time, three-quarter time, half-time, or less than half-time). Students are assumed to be not enrolled during any dates that are not covered by these NSC enrollment records. The NSC data also provide information on credentials received while enrolled, (including short-term credentials and associates and bachelor's degrees). Other Abt analysis suggests that the NSC provides high-quality data

[9] Students who applied to Job Corps from the Pacific Northwest between February 2017 and June 2019 were reviewed for eligibility for the CCCA pilot study. Students who met eligibility criteria for Job Corps and were between ages 16 and 21 were given career advising and asked to complete the Star Reading and Star Math assessments. Students who met the academic skills threshold and expressed interest in an IT or Healthcare pathway were offered the opportunity to provide informed consent and participate in random assignment.

[10] The scaled Star assessment scores range from 0 to 857 for math and 0 to 1400 for reading.

on enrollment at public two- and four-year colleges, and receipt of an associate or bachelor's degree at those institutions. It is less well suited to measure receipt of shorter-term certificates, or enrollment or credential receipt at private two-year colleges.[11]

B.4.3 National Directory of New Hires (NDNH)

The National Directory of New Hires, which is compiled and maintained by the Office of Child Support Enforcement (OCSE) in the U.S. Department of Health and Human Services, is a national database of new hire date, quarterly wages, and Unemployment Insurance data submitted to OCSE by State Directories of New Hires, employers, and state workforce agencies, augmented with federal government payroll information.[12] As with NSC data, NDNH data are available for the full study sample, up to some minor matching issues discussed below.

To collect data for the CCCA Evaluation, OCSE performed a match to records in the Social Security Administration (SSA) NUMIDENT database[13] based on a combination of student name and Social Security number (SSN) before including that record in the match to the NDNH database.

Students who are not matched in the NUMIDENT database are considered "missing" for these purposes, because their employment records are not available. Among all members of the experimental study sample, 3.5 percent of the study sample have missing NDNH data; for members of the Survey Cohort only, 3.8 percent have missing NDNH data. See Appendix Section D.2.5 for more information on how the evaluation addresses missing NDNH data.

NDNH records that match to SSA data but do not match to any earnings records, overall or per quarter, are treated as having zero earnings and being not employed (overall, or in that quarter). For those students who were successfully matched, the evaluation has complete data from six quarters before random assignment through at least seven quarters after random assignment for the Survey Cohort and through at least six quarters after random assignment for all members of the study sample. This evaluation gained access to NDNH data through a Memorandum of Understanding between DOL's Chief Evaluation Office and HHS/OCSE. Analysis occurred on a DOL secure server subject to the provisions of the DOL/OCSE agreement. In particular, the file on the DOL server has no identifiers and non-NDNH data matched to OCSE data (e.g., treatment/control, information from the BIF) is reviewed by OCSE.

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[11] Based on internal Abt calculations, the NSC captures information for approximately 99 percent of all public two- and four-year colleges, and approximately 95 percent of private not-for-profit four-year colleges. However, even in participating institutions, it appears that not all programs report to NSC. Furthermore, the NSC has lower coverage for private for-profit four-year institutions (approximately 75 to 80 percent) and for private two-year colleges (approximately 40 percent of not-for-profit institutions, and 25 percent of for-profit institutions).

[12] These records do not, however, include information for jobs that are "off the books"; however, randomization should balance the incidence of omitted earnings between the treatment and control groups. Other types of jobs that are excluded from UI earnings records include self-employment, employment in service for relatives, domestic service, and some casual employment "not in the course of the employer's business." Because wage records must be matched to study members by SSN, the evaluation also might underestimate earnings if the SSN was reported incorrectly by the student or employer to the state agency, or by the student to Job Corps at application.

[13] Maintained by SSA, the NUMIDENT file contains the information from the application for a Social Security number. For more information: https://secure.ssa.gov/POMS.nsf/lnx/0203325025. For these purposes, the key information is name and date of birth.

Appendix C: Survey Methods for the 18-Month Follow-Up Survey

This appendix summarizes the 18-month survey methodology for the CCCA evaluation by describing the survey sample (Section C.1); participant tracking efforts for 18 months prior to survey eligibility (Section C.2); survey pre-test findings (Section C.3); data collection protocols (Section C.4); and study challenges (Section C.5).

C.1 18-Month Survey Sample

This section describes how the 18-month follow-up survey sample was generated. Section 2.1 describes the enrollment process. Section 2.2 outlines how the survey sample groups were created.

C.1.1. Enrollment in CCCA

Job Corps generated applicants for CCCA both by directly recruiting for CCCA and by offering CCCA to youth who applied for an unspecified Job Corps center in the Pacific Northwest. Applicants were then screened for Job Corps-wide requirements and for the CCCA-specific requirement of passing a minimum threshold for reading and math skills. Chapter 2 of the *Final Report* provides more detail on the application process.

Applicants interested in and deemed eligible to enroll in CCCA received the study's informed consent form and were given time to read the form and ask questions. In addition, staff described the evaluation and random assignment process in greater detail, typically in a one-on-one meeting.

Applicants who agreed to be part of the study were asked to complete one of two informed consent forms based on their age. Applicants aged 18 and older completed the participant consent form. Applicants younger than age 18 completed a youth assent form and their parent/legal guardian was asked to complete a parental consent form. The consent forms described their role as a participant in the study and explained that they could withdraw at any time. It also let them know that the evaluation team would be contacting them to learn about their experiences since applying to CCCA.

Next study participants completed the web-based Baseline Information Form (BIF). The BIF collected data on their characteristics as of random assignment and their contact information including name, address, phone number, and personal email address. It also requested their Social Security number and date of birth, and asked about their educational background, demographics, household characteristics, employment status and wages, and receipt of public assistance.

After staff collected a youth's signed consent form and completed BIF, the youth was randomly assigned in the study's web-based system. The outcome of random assignment was available immediately, and staff informed youth of their treatment or control group status. The next steps depended on that status:

- Treatment group members received instructions on enrollment into Cascades Job Corps.
- Control group members received information about other Job Corps centers where they could enroll or alternative services available in the community.
- Study participants in both groups were reminded that they might (1) be asked periodically to update their contact information on file with the evaluation team, and (2) receive a follow-up survey in the future.

C.1.2 Analysis Cohorts and Survey Sample Groups

CCCA study enrollment took place from February 2017 through June 2019, during which 1,155 Job Corps applicants were randomized into the study. Only a subset of the study participants was contacted for the follow-up survey – those who applied to Job Corps between November 2017 and December 2018 (n=612). The study team labelled this group the Survey Cohort. Youth who applied to Job Corps and were randomly assigned into the study before then were labelled a Pre-Survey Cohort (n=216). Youth in this cohort were sent study materials (except for the advance letter that would have notified them that a survey interviewer would be calling) and were asked to update their contact information to gauge response to study communication. However, they were not invited to participate in the 18-month survey because CCCA was not fully implemented until the Fall of 2017 and students entering the study before then were not likely to receive the full set of services CCCA was designed to offer.

Those who applied to Job Corps and were randomly assigned to the study after December 2018 were not contacted for the survey either, because there would not have been enough time in the study to ask about their experiences for at least 18 months after random assignment. Exhibit C.1-1 shows the number of students who were sent tracking materials and/or contacted for the survey, by month of random assignment.

Exhibit C.1-1 Analysis cohorts and sample groups

Analysis Cohort	Sample Group	Random Assignment Month	N	Received Study Communications/ Tracking materials	Eligible for 18-Month Follow-up Survey
Pre-Survey Cohort (February 2017 – October 2017)	**1**	February 2017– August 2017	135	Yes – excluding the advance letter	No; CCCA program model implementation was determined not to be mature yet.
	2	September 2017	41		
	3	October 2017	40		
Survey Cohort (November 2017 – December 2018)	**4**	November 2017	53	Yes – including the advance letter	Yes
	5	December 2017	31		
	6	January 2018	48		
	7	February 2018	45		
	8	March 2018	47		
	9	April 2018	44		
	10	May 2018	59		
	11	June 2018	44		
	12	July 2018	38		
	13	August 2018	62		
	14	September 2018	39		
	15	October 2018	34		
	16	November 2018	45		
	17	December 2018	23		

Notes: The Random Assignment Month is the month in which participants were deemed eligible for the pilot and consented to enroll in the study. In most cases, this occurred shortly after applying to Job Corps but prior to arriving at a Job Corps center. The random assignment process is described in more detail in the Final Report. The Survey Cohort (Sample Groups 4–17) included 306 treatment and 306 control group participants, totaling 612 youth eligible for the 18-month follow-up survey. There were two additional analysis cohorts not depicted here that did not receive study communications or participate in the survey: Post-Survey Cohort 1 (randomized between January 2019–March 2019) with 185 study participants, and Post-Survey Cohort 2 (randomized April 2019–June 2019) with 119 study participants. An additional 23 students asked to be withdrawn from the study after random assignment. These students did not receive study communications after Abt received their request for withdrawal, and they are not included in any cohort (nor are they included in Exhibit 1).

C.2. Tracking Participants

Tracking participants allows the evaluation team to update contact information provided at enrollment (in the BIF). During the 18 months after random assignment and prior to the follow-up survey (from October 2017 through April 2020, the "tracking period"), the team communicated with study participants in Sample Groups 1–17 periodically via email, texts, letters, and postcards. This chapter describes those efforts in detail and the results of those efforts.

During the tracking period, each sample group member received some form of study communication approximately every 3 months, for a total of seven communications in the 18 months before the survey. With each communication, the team reminded study participants to update their contact information. The study provided them several ways to do that, depending on the communication mode:

- A website that made an online contact update form accessible at any time (provided in all communications).
- A paper contact update form with a pre-paid envelope (postal mail letters only).
- A toll-free number to update information with a team member and ask questions about the study (provided in all communications).

In addition, study participants received $2 as a thank you for every response. The team sent cash incentives monthly via postal mail. At the end of the study communications schedule, an advance letter informed participants that interviewers from the evaluation team would be calling soon to ask for their participation in the survey. This advance letter helped legitimize interviewers' attempts to reach study participants over the phone. It also reminded study participants of the study objective and that their participation was valuable. Overall, the study communications protocol provided consistent and constant reminders about the study and upcoming survey. Exhibit C.2-1 shows the timing, mode, and description of those communications.

Exhibit C.2-1 18-month tracking modes and timing

Timing (after study enrollment)	Mode	Description
2 months	Welcome email	Introduced the study and provided a link to update contact information.
5 months	Text message	Provided a link to an online contact update form to participants who consented to receive text messages.
8 months	Letter (postal mail)	Provided study information, a paper contact update form, and a pre-paid return envelope.
11 months	Letter (postal mail)	
14 months	Sealed postcard (postal mail)	Provided instructions for how to update contact information online or by phone.
17 months	Email	Provided a link to an online contact update form.
18 months	Advance letter (postal mail)	Informed participants that survey interviewers would be calling soon to ask for their participation.

Note: The study sent a monetary reward of $2 via postal mail for every response provided in this Exhibit. See **Tracking Communications** (Appendix I.1.) for copies of each of these tracking communications.

The tracking effort followed the schedule in Exhibit C.2-1, with a few exceptions. Sample Group 1 consisted of participants who joined the study over the period February–August 2017 (see Exhibit C.1-1). Because they were combined, its participants did not follow the "Timing (after study enrollment)" schedule presented in Exhibit C.2-1. Also, for Sample Group 2, tracking activity at 8 months included an email instead of a mailed letter. For Sample Groups 1–6, tracking activity at 11 months was an email, and at 17 months it was a mailed letter. For Sample Groups 4–6, tracking activity at 17 months was sent 2 months before the 18-month survey, rather than 1 month. Finally, for Sample Group 16, tracking activity at 17 months was sent 1 month early.

Across all tracking efforts, a total of 163 participants (20 percent) updated or confirmed their contact information at least one time during the 18-month tracking period. See Appendix I.2 for the tracking schedule by sample group and tracking response rates by sample group.

C.3. 18-Month Survey Pre-test Findings

In February 2018, the evaluation team conducted a pre-test of the 18-month survey. The purpose was to test the clarity of the questions and the logic, operational, and procedural aspects of the survey, in addition to the overall participant burden (the number of minutes to complete the survey). This section summarizes pre-test findings (Section C.3.1) and improvements made to the survey because of those findings (Section C.3.2).

C.3.1. Pre-testing the 18-Month Follow-up Survey

The pre-test involved volunteer treatment and control participants. For treatment cases, staff at CCCA recruited 20 volunteers from among the pre-survey cohort sample members. For control cases, interviewers received a list of 20 participants from the pre-survey cohort sample, randomly selected by the evaluation team.

For the pre-test, Abt completed a total of nine interviews by phone. Four interviews were completed with control cases and five with treatment cases. At the end of the pre-test, each participant received a $25 postal money order as a thank you for their time.

The duration of the nine completed interviews ranged from 32 minutes to 68 minutes, with an average duration of 47 minutes. Exhibit C.3-1 shows the average duration (in minutes) for each section of the pre-test survey, as well as the shortest and longest duration for each.

Exhibit C.3-1 Average duration in minutes for each survey section among 9 pre-test respondents

Survey Section	Average	Shortest	Longest
A (Introduction)	4	1	9
B (Training and Education)	29	16	42
C (Employment)	3	1	5
D (Social Skills and Other Life Circumstances)	6	5	7
E (Address collection)	2	1	3
Total (Overall)	47	32	68

Note: For one interview, the section timings for B, C, D, and E is missing and for another interview the section timings for C and D are missing. In these two cases, the section timing for the missing section is not included in the average.

Overall, control interviews were longer in duration, averaging 53 minutes, whereas the treatment interviews averaged 42 minutes. The duration of Survey Section B (Training and Education) varied with the reported number of programs and providers but consistently took the longest. Survey Section B asked the respondent whether they attended programs such as (1) any high school diploma classes, GED classes, or similar; and/or (2) any courses for credit towards a certificate, credential, or degree or vocational courses or training programs for a specific job, trade, or occupation.

If the respondent said yes to either question (or both), the interviewer then collected the provider names that offered the program. From these responses, the interviewer generated a list of provider and program combinations. For each provider and program combination, the interviewer then guided the respondent through a series of questions. For example, if the respondent listed two providers and then named two programs for provider 1 and two programs for provider 2, then the interviewer would ask a series of questions four times, one time for each combination. Exhibit C.3-2 provides the Survey Section B timing for the nine pre-test survey respondents, as well as the number of providers and programs the respondents reported participating in.

Exhibit C.3-2 Survey Section B pre-test timings and number of providers and programs for nine respondents

Respondent	Survey Section B Administration Time (minutes)	# of Providers	# of Total Programs (number of loops)
Respondent 1	42	1	1
Respondent 2	35	2	2
Respondent 3	35	3	4
Respondent 4	35	3	3
Respondent 5	28	2	4
Respondent 6	20	1	1
Respondent 7	17	1	1
Respondent 8	16	1	1

Note: The table does not include one respondent with a missing section timing for Section B. For reference, this respondent had 2 providers and 3 total programs and a total survey response duration of 68 minutes.

C.3.2. Survey Improvements

The pre-test made clear that the survey took longer than the desired estimated burden of 30 minutes. Administration time would fall slightly once the survey was programmed for computer-assisted administration, however, not enough to achieve the 30-minute estimate. In addition, reducing the number of question items only in Section B—while keeping the items required to answer the evaluation's research questions—would not adequately shorten the survey. Furthermore, some respondents were confused about what information the survey sought on programs in which they had enrolled.

In net, it appeared that the survey ran too long primarily because respondents misinterpreted the level of detail sought in the Training and Education section. For example, if a respondent had completed a welding program, and for this program had completed the courses Intro to Welding and Algebra, the survey was interested in capturing information only on the welding program overall—not on the individual courses completed for it. The team decided to review the question wording to be more explicit that the item was asking about the overall program rather than specific courses.

To accommodate combining course information to gather program information, the team added question B4 to the survey:

> B4. You mentioned that you attended high school diploma classes, GED classes, or similar education classes for improving reading and math skills at [PROVIDER], and that you also attended college courses for credit, or vocational courses, or a training program at [PROVIDER]. Were these programs a part of the same enrollment offered by [PROVIDER] or separate enrollments?
>
> **IF UNKNOWN, PROBE:** Was this one experience at this provider, or did you attend this provider at two different time periods?

Question B4 flagged duplicate providers the respondent listed across program types. Each program listed by a respondent for the duplicate provider appeared on screen for the interviewer and survey respondent to review. The respondent then could combine programs into one experience if they were for an overall program offered by the provider.

Once the survey instrument was finalized, the survey was programmed in Computer-Assisted Personal Interviewing (CAPI) system and rigorously tested by a number of study staff to ensure it performed as expected under various logical conditions. Changes to the programmed survey instrument were made if necessary (i.e., if issues with the survey/programming were noticed after fielding began). Survey interviewers received memos outlining any survey instrument changes and got time to practice any updates before the updates were implemented in the field.

C.4. 18-Month Follow-up Survey Data Collection

This section describes the evaluation team's data collection efforts, including interviewer training (Section C.4.1), sample release schedule (Section C.4.2), the data collection protocol (Section C.4.3), and adjustments due to the COVID-19 pandemic (Section C.4.4). Section C.4.5 reports achieved response rates.

C.4.1. Interviewer Training

In August 2019, the Abt team provided interviewer training via WebEx to six experienced field interviewers. Field interviewers were located in the Washington/Oregon region and had prior experience working on fielding surveys for Abt Associates. As a result, all field interviewers were familiar with the CAPI system and data security and had recent experience with phone and in-person follow-up survey data collection.

The goals of the interviewer training were maximizing data quality by reiterating research standards, equipping interviewers with the tools and knowledge to locate respondents for the 18-month follow-up survey, highlighting skills to gain respondent participation, and administering the survey in a standardized manner. The training reviewed the survey instrument thoroughly, including probing, going through section loops, anticipated respondent questions, and addressing ambiguity. The material covered in the training, along with additional background information about the evaluation, was compiled into a study manual and provided to each interviewer as a paper copy. The study manual was a main point of reference for field interviewers and ultimately helped them interact knowledgeably and confidently with the survey respondents over the life of the project.

After training, interviewers completed practice cases. They were also provided with a host of tools to aid their data collection efforts (see Appendix I.3.). After interviewers were confident with the survey instrument, project material, and study protocol and had thoroughly reviewed their study manual, they could begin working their assigned cases.

C.4.2 Sample Release Schedule

The survey data field period began on August 26, 2019 and concluded on July 31, 2020. The CCCA survey sample groups were released in sequential order, usually on or around the 15th business day of each month. There were two exceptions. At the start of the survey fielding period four sample groups were released at the same time to make up for delayed OMB approval for the survey. Towards the end of the field period, Sample Group 15 was released on the first day of the month instead of the 15th, and Groups 16 and 17 were released at the same time due to their small sample sizes and the decision to end data collection one month early (in July 2020). See Appendix I.4. for release date by sample group.

C.4.3 Data Collection Approach

The approach to locating participants and engaging them in the survey had multiple components that reflect variation in Job Corps enrollment across the treatment and control groups. Under the evaluation design, random assignment occurred after youth submitted their application to Job Corps and their eligibility for enrolling was determined. However, not everyone who was deemed eligible actually enrolled and not everyone who enrolled, remained on center at the Job Corps Center for at least 18 months.

That is, some students changed their minds about attending between the time of random assignment and their expected date of arrival at the Job Corps center. As a result, not all study participants who were assigned to the treatment group attended Cascades Job Corps. Our sample of treatment and control group members also included some individuals who subsequently enrolled in another Job Corps center (and moved on campus), but some who did not (for additional detail on the analysis samples, see Appendix D.1.1.).

Study participants in the Survey Cohort could therefore be located in any of three places:

- Enrolled at Cascades Job Corps and living on campus—treatment, but never control group members.
- Enrolled in another Job Corps program and living on its campus—control and occasionally treatment group members. (Some study participants enrolled at other Job Corps centers might not have been required to live on campus and thus could have been enrolled in the program but living off-campus.)
- Not enrolled at Job Corps and living elsewhere—treatment or control group members. These participants either did not enter Job Corps after applying or they completed their time in Job Corps and left. (Youth enrolled at Job Corps were allowed to withdraw and leave Job Corps at any time.)

The survey was scheduled for 18 months after random assignment. Median time enrolled at a conventional Job Corps center is about 9 months. Thus, though some treatment group members would likely still be at the center at the time of the survey, many would not. To understand enrollment counts at Cascades Job Corps at the time of the survey, the evaluation team analyzed the enrollment data provided by Cascades and the Job Corps administrative data.

Exhibit C.4-1 shows the ever-enrolled status of the sample members. Most of the treatment group members enrolled in CCCA (82 percent), while fewer than half of the control group members enrolled in another Job Corps site (44 percent). A small share of those offered CCCA (treatment group) enrolled in some other Job Corps center (4%).

Exhibit C.4-1 Counts and percentages of the study participants who ever enrolled by assignment and site

Site	Treatment (#)	Treatment (%)	Control (#)	Control (%)	Sample Size	Total Percentage
CCCA (Job Corps)	251	82%	-	-	251	41%
Other Job Corps site	11	4%	134	44%	145	24%
No Job Corps site listed	44	14%	172	56%	216	35%
Total	**306**	**100%**	**306**	**100%**	**612**	**100%**

Analyses of these data indicated that there was a concentration of the treatment group at Cascades and a concentration of the control group at a small number of other Job Corps centers. This distribution of study participants among a small number of Job Corps centers had the potential to yield cost savings for the survey if students could be located at one of a handful of centers. However, in practice, we found that the administrative data lagged, and it was difficult at the time of the survey to determine with certainty which survey members were still at which centers.

We received student enrollment updates for the treatment group from Cascades Job Corps about every 2 months. Enrollment data among control group members were not provided frequently enough to be helpful. Analysis of the enrollment data among the treatment group members found that 34 percent of treatment cases arrived and were still enrolled in Cascades Job Corps at the time the survey was administered; 51 percent arrived at Cascades Job Corps but left prior to the survey; and 15 percent never arrived at Cascades after being accepted (Exhibit C.4-2). This shows that many students were leaving Cascades Job Corps earlier than the 18-month survey. We determined it was likely that students enrolled in a control Job Corps center were departing their respective sites at the same rate.

Exhibit C.4-2 Treatment enrollment rates at Job Corps at the time of sample release

Enrollment Status	Percentage
Enrolled at Cascades during 18-month survey	34%
Left Cascades prior to survey	51%
Listed as never attending Cascades	15%

Note: Treatment cases only (*n*=306). Sample release timing for each cohort is listed in Appendix C.4.2.

After attempting to complete interviews by phone only with disappointing response rates, it became apparent that the survey would need to expand to include an in-person field effort. This decision was influenced by (1) the higher than anticipated percentage of treatment group students leaving Cascades Job Corps and other Job Corps centers prior to the 18-month survey (see Exhibit C.4-2); (2) the assumption that control group students were leaving their respective sites at the same rate as Cascades enrollees; and (3) that 56 percent of control cases did not attend Job Corps (see Exhibit C.4-1). We began an in-person locating effort in the Washington/Oregon region for those study participants who were unresponsive to phone attempts or no longer residing at Cascades Job Corps.

Students included in the survey sample were not clustered in a particular area, but rather located across the Pacific Northwest. Given that dispersion of sample members, the evaluation team hired interviewers located in different parts of the Washington/Oregon region to complete in-person locating efforts. Because of the distance from where the hired interviewers were located, the only regions that field interviewers were unable to easily accommodate were Spokane and Seattle (WA). A specific protocol guiding each method of data collection – phone, in-person, and on-site appointments – is discussed in detail in Section C.4.3.

C.4.4. Data Collection Protocol

Our protocol involved three participant locating components: (1) phone, text, and email outreach, (2) in-person locating for respondents unresponsive to phone, and (3) in-person survey interviews for participants living on site at Cascades Job Corps. The survey was fielded using CAPI for both phone and in-person interviews.

Most often, the study team used more than one protocol for each study participant and sample groups were in the field, on average, for 21 weeks starting in the month the group was released (see Section 5.2 for additional detail about the timing of sample release). The data collection protocol instructed interviewers to contact participants first through a combination of phone calls, text messages, and emails for about 6 weeks. After exhausting these efforts, the interviewer began in-person locating. In-person locating required interviewers to visit participants' home addresses in an attempt to speak with them. In addition to phone and in-person locating, a survey interviewer had a standing appointment at Cascades Job Corps to complete survey interviews with participants still located on center.

Participant contact information was collected at the time of random assignment and updated over the 18-month follow-up period through tracking efforts (see Exhibit C.2-1 for the tracking modes and timing). Specifically, survey interviewers received participants' personal information including name, address, phone numbers, consent to text and email, and up to three secondary contacts. "Secondary contacts" are people (names, phone numbers) provided by the study participant whom survey interviewers could contact if they had trouble reaching the participant.

Interviewers were assigned sample members from all active sample groups at any given time so they managed a variety of efforts at the same time – some cases may have been in the field for a while and are close to exhausting locating efforts while others may have just recently been released and/or more responsive. Interviewers were trained to complete as many surveys as possible. Study participants received a $25 gift card in appreciation for their time spent completing the interview. Gift cards were either mailed or provided in person, depending on the mode of completion (phone vs. in-person).

Phone Protocol

As study participants became eligible for the follow-up survey (i.e., approximately 18 months after they were randomly assigned), interviewers initially contacted participants by phone. Interviewers attempted to complete surveys intensively by phone for 4 to 6 weeks before beginning in-person locating efforts. Students living on site at Cascades Job Corps could complete the survey in person at any time after they became eligible to complete it. The interviewers called each phone number listed for the study participant (including alternate numbers) at least five times. If the study participant's information resulted in unsuccessful attempts, then interviewers reached out to the study participant's secondary contacts. Phone attempts to reach study participants and their secondary contacts were staggered across different times of day and days of the week to maximize the chance of contact.

Under the supervision of the Field Manager, the interviewers carefully managed the project. The Field Manager communicated directly with interviewers, providing ongoing feedback on their work, and helping them contact their most hard-to-reach cases. If participant phone numbers resulted in no contacts, then the interviewers worked closely with the Field Manager to try to get updated contact information from LexisNexis Accurint®, a web-based locating tool which uses multiple sources including the U.S. Postal Service's National Change of Address database. Accurint searches were performed on cases with bad phone numbers (e.g., disconnected, did not belong to the respondent, or interviewer unable to reach anyone to confirm the phone number). If a new phone number was located through Accurint, the interviewer attempted the new number up to five times. Interviewers also tried internet search engines such as Google to locate non-respondents.

To improve response rates, interviewers also reached back out to participants who previously had a soft refusal, leaving voicemail messages as needed. "Soft refusals" are scenarios where the participant denied the interview request and the interviewer has a reason to believe that the respondent might be willing to participate at a later date (e.g., the participant said they are really busy all the time and could not think of a good time to complete).

Interviewers were trained to document every phone attempt. Doing so built an extensive contact history for the team and for subsequent interviewers who might work the case. Having a history of attempts per case provided details so the Field Manager could check that the interviewer had exhausted all leads in attempting to complete the case. Interviewers gave participants adequate time in between contact attempts to avoid participant burnout. Field interviewers were also encouraged to send a "Trying to Reach You" email—and text messages (see Appendix I.3.1 and Appendix I.3.2.) to non-responders who had given permission for texts—to reiterate the importance of the study and our attempts to reach them.

Locating Participants Not Enrolled at Job Corps

After phone attempts were exhausted, the interviewer began in-person locating by visiting the home address listed for the participant.[14] This effort was initiated for participants who appeared to not be currently enrolled in Job Corps. If the participant was home, the interviewer would attempt to get them to complete the survey or set up an appointment to complete the interview later. If the participant was not home, the interviewer would attempt to gather updated contact information from others in the household. The interviewer would first confirm that the participant lived at the address, and if so, leave a message and study flyer for them.

If no one was home, the interviewer left a study flyer and a "Sorry I Missed You" postcard on the door (see Appendix I.3.3.). Both the study flyer and the postcard had the interviewer's phone number and the study participant's identification number as a reference and for ease of scheduling an appointment. Interviewers also mailed study flyers to study participants to validate the survey and assure their and the survey's legitimacy. If it was confirmed that the home address was not correct, then the interviewer worked with the Field Manager to locate a second address for the participant.

In-person visits were attempted at varying times of the day and days of the week, with a general guideline of attempting one to six visits. After in-person efforts concluded for a case, the interviewer allowed the

[14] Approximately 60 percent of participants (353 out of 612) completed the survey over the phone, and 40 percent required locating efforts.

sample to rest about 1 week and then periodically attempted to reach the participant over the phone until their assigned sample group closed. Sample groups were closed after consultation with key project staff.

Completing Interviews On-Site at Job Corps

Job Corps campuses are a controlled environment where visitors must be approved prior to visiting. Students live in a dormitory-like setting on campus. For security reasons, survey interviewers were not allowed to go door-to-door to locate study participants. It was thus crucial that the evaluation team established a working relationship with both treatment and control Job Corp center sites, particularly at Cascades Job Corps where 34 percent of treatment participants were still enrolled at the time of the 18-month survey (Exhibit C.4-2).

The team also attempted to establish a working relationship with the two control Job Corp centers with the most study participants: Tongue Point and Columbia Basin. The team requested that these sites allow a survey interviewer to visit the campuses should a control group member request to complete the survey in person. We held an introductory call with Tongue Point's Center Director. During the call, we introduced the study and its objective for reaching control group students, answered questions about the study, and noted the potential need for completing interviews on site. We were unable to contact a center director from Columbia Basin Job Corps.

It is important to note that control group Job Corps sites were not invested in the CCCA evaluation and therefore were not required to assist in our effort. However, Abt's contact at DOL reached out to representatives at both control group Job Corps locations, notifying them of our efforts and our intention to make contact. Abt received no requests from control group members living in a Job Corps center to complete the survey in person.

Efforts to complete surveys in person at Cascades Job Corps (treatment group members only) were well received. The evaluation team established a bi-weekly schedule with the CCCA Evaluation Liaison and stayed in regular communication throughout the course of the project. Study participants still enrolled at Cascades Job Corps at the time of the survey were assigned to an interviewer completing on-site visits at Cascades Job Corps. The survey interviewer had a designated room in which to complete interviews. Prior to the interviewer's arrival, the CCCA Evaluation Liaison would remind students about the on-site interviewer during student assemblies and via email. In addition, the CCCA Evaluation Liaison posted flyers around campus about the study. The flyers included general study information and a phone number to call for questions. Personalized advance letters were also sent to Job Corps centers to notify participants of our upcoming effort to reach them.

Cascades students could visit the survey interviewer to complete the survey, schedule an appointment to complete it later, check their date of survey eligibility, or update their contact information for future use. The survey interviewer placed a large project flyer on the door of the designated survey room during the visit; in addition, the interviewer placed a sign to let students know when an interview was in progress. Questions the interviewer could not answer were directed to the study hotline. Maintaining a regular bi-weekly appointment supported the survey's presence, legitimized the study, and built rapport with students and staff at Cascades. Students were aware of our efforts and understood they could stop by whenever the interviewer was there to ask questions or complete the survey. Exhibit I.4-6 in Appendix I.4. shows our scheduled blocks during October 2019–March 2020.

An obstacle in reaching students living on campus at Cascades was their lack of easy access to a public phone. This was particularly important for students who did not own a cell phone. If the student did not

own a phone, then the only opportunity to speak with them was if they proactively visited the survey interviewer during one of the scheduled blocks. Students could use a public phone on campus only with permission from site staff. It is unclear whether this phone was located in a private setting.

In addition, students enrolled at Cascades were provided with a new Cascades-specific email address after their enrollment in CCCA (e.g., firstname_lastname@cascadesjobcorps.com). This information was not collected in the study's BIF, however, because the address was not yet available when the BIF was completed. The evaluation team got this email address only if the student voluntarily provided it during the tracking phase.

C.4.5. Adjustments to Data Collection Protocol

We carefully tracked completion rates by analyzing a bi-weekly production report. "Production reports" informed the team on completion rates by sample group, treatment and control status, and site. This allowed us to analyze differences and respond to any issues identified. In addition, the Field Manager played a considerable role in communication between the interviewers and the team and provided a bi-weekly update of interviewer experiences. Adequate and timely communication allowed the team to attend to issues as they arose and mitigate any potential setbacks.

After ten weeks in the field, the study team identified areas for improvement within the survey production and data collection protocol. At the end of November 2019, we made adjustments to increase outreach efforts, such as increasing the frequency/location of pre-survey communication and expanding in-person fielding. At that time, Sample Groups 4–7 had been in the field for 12 weeks, Sample Group 8 for 9 weeks, and Sample Group 9 for 5 weeks.

Potentially in response to our protocol adjustments, Sample Groups 9–14 performed better than Sample Groups 4–8. But on March 16, 2020, all in-person field efforts came to a halt due to the COVID-19 pandemic. The Washington/Oregon area was one of the first regions in the United States to experience high rates of COVID-19 infections, and "stay-at-home" orders were implemented statewide. Consequently, Sample Groups 14–17 did not receive any in-person locating efforts. All efforts following the start of the pandemic were limited to phone outreach only. An unanticipated benefit of the stay-at-home orders was that more participants and their secondary contacts were home and interviewers obtained a higher response rate (an average of 69 percent between March 2020 and May 2020 during this time, compared with an average of 60 percent between August 2019 and February 2020).

Due to the COVID-19 pandemic, Sample Groups 4–8, 9–13, and 14–17 experienced different data collection protocols; that is, over the course of data collection, our protocol had three phases: (1) initial, (2) revised, and (3) response to COVID-19. Sample Groups 4–8 received the initial protocol; Sample Groups 9–13 received the revised protocol; and Sample Groups 14–17 received the response to COVID-19 protocol, which relied heavily on phone attempts but otherwise followed the revised protocol excluding those efforts related to the in-person field attempts. Exhibit C.4-3 summarizes these phases.

Exhibit C.4-3 Data collection protocol descriptions, for three different time periods

Initial Protocol *Implemented August 2019*	**Revised Protocol** *Implemented November 2019*	**Response to COVID-19** *Implemented March 16, 2020*

• Primarily received by Sample Groups 4–8
• Participants receive advance letter before 18-month survey
• Interviewer completes phone attempts to participant phone numbers and secondary contacts until exhausted
• "Trying to Reach You" email and text message sent to all eligible participants
• Study participants receive flyer to home address
• Accurint® searches completed for all dead-end cases (e.g., phone number no longer valid)
• Maintain a bi-weekly standing appointment at Cascades Job Corps to complete interviews
• Interviewers complete in-person locating for all treatment cases no longer enrolled at Cascades and all control cases
• Sample reconciliation by the Field Manager and Field Director for every sample group
• Weekly one-on-one meetings between the Field Manager and interviewers to discuss the status of remaining cases
	• Primarily received by Sample Groups 9–13
	• Participants who enrolled at Job Corps receive a second advance letter; letter sent to the Job Corps centers
	• Participants receive a third advance letter sent to home addresses of their first listed secondary contacts (e.g., mother, father, grandmother) 4 weeks after 18-month mark
	• Participants who live too far away (3+ hours away from the closest interviewer) receive a FedEx letter 4 weeks after 18-month mark
	• Interviewers gather new contact information from study participants on site at Cascades Job Corps
	• In-depth case review by senior project staff member of each remaining case after 6–8 weeks. Feedback provided to interviewers after review.
	• In-person locating occurred in the Spokane (WA) region over a weekend for Sample Groups 4–12. Because the location was too far from interviewers for ongoing in-person efforts, the Abt survey team scheduled a blast in-person locating effort for cases located around this region - interviewers spent one weekend in the area targeting all viable cases across nine groups.
		• Primarily received by Sample Groups 14–17
		• Released Sample Groups 16 and 17 at the same time due to the small sample size (*n*=23) in Group 17
		• Relied heavily on phone attempts and received a combination of data collection efforts from the initial protocol and revised protocol *excluding the following:*
		  ○ A bi-weekly standing appointment at Cascades Job Corps
		  ○ In-person locating for all control and treatment group participants not on site at Cascades Job Corps
		  ○ FedEx letter to cases who live too far away from an interviewer (3+ hours away)
		  ○ In-person locating in the Spokane (WA) region over a weekend for Sample Groups 13–17

C.4.6. Achieved Response Rates

From a sample of 612 study participants, interviewers completed 381 interviews from August 2019 through July 2020, achieving a 62 percent response rate (Exhibit C.4-4).

As shown in Appendix I.4**,** treatment group participants completed at a moderately higher rate than did control group participants: 68 percent vs. 57 percent, an 11 percentage point differential (Exhibit I.4-3 in Appendix I.4). Participants assigned to Cascades Job Corps completed at a higher rate than did those assigned to an alternative Job Corps site or those with no site affiliation (68 percent vs. 59 percent vs. 58 percent, see Exhibit I.4-4 in Appendix I.4). Across all sample groups, the average time a sample group was in the field was 21 weeks, with the longest at 28 weeks and the shortest at 13 weeks (Exhibit I.4-2 in Appendix I.4). This means that the 18-month follow-up survey was actually completed between 20 and 25 months after random assignment.

In addition, we analyzed response rates by the three protocol types. Exhibit C.4-5 shows response rates by sample groups and protocol. Sample Groups 4–8 achieved a 53 percent completion rate, Sample Groups 9–13 achieved a 68 percent completion rate, and Sample Groups 14–17 achieved a 66 percent completion rate. See Appendix I.4. for additional response rate metrics.

Exhibit C.4-4 Overall Survey Dispositions

Disposition	Total	Percentage
Interview Completed		
In-person Complete	27	4%
Phone Complete – received in-person locating	44	7%
Phone Complete – received no in-person locating	310	51%
Total	**381**	**62%**
Eligible, Interview Not Completed		
Respondent Is a Hard Refusal (hostile or other hard refusal)	75	12%
Take off List – Respondent Refusal (soft refusal or request to be removed from survey outreach)	5	1%
Respondent Not Available during Survey Period	2	<1%
Unlocatable	143	23%
Homeless / Living in Shelter	2	<1%
Deceased	1	<1%
Incarcerated	3	1%
Total	**232**	**38%**
Grand Total	**612**	**100%**

Exhibit C.4-5 Data collection efforts by sample groups

Sample Groups	Sample Size	Completes	% Complete	Effort
4–8	224	119	53%	Initial protocol
9–13	247	169	68%	Revised protocol
14–17	141	93	66%	Response to COVID-19 protocol
Total	**612**	**381**	**62%**	

C.5. Survey Challenges

The goal for the 18-month follow-up survey effort was to reach an 80 percent response rate. However, it was difficult to locate study participants, even more so than the evaluation team had initially projected. In most cases, phone numbers were invalid, and the response rate to emails was very low.

Other study factors that are perceived to likely lower the response rate in this study included:

1. A high percentage (66 percent) of the treatment sample members—considerably higher than projected—were no longer on site at the Cascades Job Corps Center when the evaluation released the survey. This led to more in-person work to locate study participants and fewer appointments and completions at Job Corps.
2. Our plan assumed enrollment updates from control group Job Corp sites, but data were not available in real time for these individuals. This made it difficult to determine which participants were living at home or at Job Corps.

3. Participants living on site at the Cascades Job Corps Center did not have easy access to a public phone. This made it difficult to reach students without a cell phone.

4. Although the team reached out to treatment group members over email, mailed them letters, and posted flyers around campus, it was impossible to locate every study participant in person who was living on site at Cascades. If participants did not own a cell phone, then the only opportunity to speak with them was during in-person scheduled blocks in a designated room. This required the study participants to be proactive.

5. Staff assigned study participants a new Cascades-specific email address after their enrollment in CCCA. The evaluation team did not receive the new address unless the participant provided it during tracking.

6. Treatment and control group members included cases across the state and not central to a specific area in Washington/Oregon. This made clustering our sample for in-person attempts difficult.

7. A high number of sample members had their site status labeled as "No Site"—this included 35 percent of all members and 56 percent of control group members. This meant they never attended a Job Corps center.

8. The COVID-19 pandemic had an impact on our data collection efforts, particularly in halting in-person work. Conversely, it made some cases easier to locate because of lockdowns in the Washington/Oregon region during our data collection efforts.

Appendix D: Additional Technical Information on Methodology

This appendix includes additional technical material about various aspects of the CCCA Evaluation's methods and analyses. Specifically, Section D.1 describes methods used for the Program Flow Analysis reported in Chapter 3 of the *Final Report*, including a description of the sample and comparison groups (Section D.1.1), the data used (Section D.1.2), and the descriptive measures constructed from those data (Section D.1.3). Section D.2 describes the methods for the Service Contrast Analysis and Impact Analysis, reported in Chapter 4 of the *Final Report*. This includes a description of the three sample cohorts for the study sample (Section D.2.1), the data used for the analysis (Section D.2.2), an overview of the analysis methods (Section D.2.3), a description of the covariate selection method (Section D.2.4), and how missing data are treated (Section D.2.5). Section D.2 ends with a discussion of methods to address the multiple comparisons problem (Section D.2.6).

D.1 Program Flow Analysis

This section provides additional detail on the evaluation's Program Flow Analysis. This analysis focuses on tabulations comparing students who participated in CCCA with students who participated in other Job Corps programs. Specifically, the analysis compares students' demographic characteristics and their flow through Job Corps activities, including arrival, ongoing enrollment, completion of credentials, separation reasons, and post-Job Corps placements. The remainder of this section proceeds as follows. Section D.1.1 describes the sample and comparison groups for the Program Flow Analysis. Section D.1.2 lists the data sources and how they are used. Section D.1.3 provides additional detail on the descriptive measures used in the analysis.

D.1.1 Sample and Comparison Groups

In contrast to the Service Contrast Analysis and Impact Analysis, which estimate the impact of being offered access to the CCCA pilot program, the Program Flow Analysis describes who ultimately enrolled at CCCA, and how their experiences in the program compared with students who enrolled at other Job Corps centers. To put CCCA into the broader Job Corps context, when possible, the Program Flow Analysis compares CCCA students to other Job Corps students. In particular, to match the characteristics and application and enrollment timing of CCCA applicants, the analysis compares CCCA students to Job Corps students who were age 16 through 21 at the time they applied for Job Corps, had a new application to Job Corps between November 2017 and December 2018, and enrolled with an arrival prior to July 2019. These application and enrollment dates align with those for the experimental study sample's Survey Cohort, the focus of the results reported in Chapter 4 of the *Final Report*. (See Section D.2.1 for more detail on the cohorts of the experimental study sample.).

Within these constraints, students included in the Program Flow Analysis are divided into four groups:

(1) **CCCA students:** students in the experimental study sample's treatment group who enrolled in CCCA (excluding students who withdrew from the study after random assignment)[15];

[15] A small number of students (n=5) were excluded from the Program Flow Analysis because they were part of the CCCA treatment group but attended a different Job Corps center.

(2) **CCCA-eligible students:** students who qualified for CCCA and enrolled in the study but were randomly assigned to the control group and attended Job Corps elsewhere from Cascades (excluding students who withdrew from the study after random assignment);

(3) **Other Pacific Northwest (PNW) Job Corps students:** students with a home address in Idaho, Oregon, or Washington who attended Job Corps elsewhere from Cascades, other than those students already included in the "CCCA-Eligible students" group; and

(4) **Non-PNW Job Corps students:** all other Job Corps enrollees who attended Job Corps elsewhere from Cascades.

Sample sizes are presented in Exhibit D.2-1 below, as part of the discussion of data sources.

D.1.2 Data

The Program Flow Analysis relies primarily on the National Job Corps administrative data, in particular data from OASIS (application data, including student characteristics), data from CIS (enrollment dates and activities while enrolled), and data from CTS (Advanced Training/college enrollment). (See Appendix Section B.1 for more information on these data sources.) Analysis of data from OASIS includes tabulations of key student characteristics at application to Job Corps: gender, age, race/ethnicity, prior education, and prior public assistance receipt. Analysis of data from CIS includes tabulations of students' length of stay at Job Corps, reasons for separation from Job Corps, and pursuit of high school level education while enrolled. Analysis of data from CTS focuses on enrollment in Advanced Training, which includes an additional year at Job Corps while also enrolled in college courses.

In addition, for students in the "CCCA" and "Other CCCA-Eligible" groups, the analysis uses Renaissance Star assessment data on math and reading levels around the time of enrollment in Job Corps (see Appendix Section B.4.1 for more information on the Renaissance data).

D.1.3 Descriptive Measures

This section provides technical detail on the descriptive measures presented in Chapter 3 of the *Final Report*. These measures are primarily built from National Job Corps administrative data available for all four comparison groups (see Section D.1.1), including for those students who attended CCCA.

- **Academic Achievement.** Applicants to Job Corps who were recruited for the CCCA pilot program were given the Renaissance Star academic assessments for math and reading just prior to random assignment. Job Corps applicants that were not recruited for the CCCA pilot were given a different assessment shortly after arriving on center, the Tests of Adult Basic Education (TABE®). The Star and TABE assessments use different scoring scales. However, developers for both assessments provide a nationally norm-referenced grade level equivalent for math and reading scores. This grade-level equivalent provides information on how a student's score compares with other test-takers in different grades. For instance, a grade-level equivalent of 7th grade represents how a typical 7th grader would perform on similar material (which may or may not be considered material taught during 7th grade). Some students had multiple Star or TABE scores. To assess achievement levels at application to Job Corps, the Program Flow Analysis uses scores from the assessment that occurred closest to and prior to the date of random assignment (for "CCCA" and "Other CCCA-Eligible" students) or closest to and after the date of arrival (for "Other PNW Job Corps" and "Non-PNW Job Corps" students).

- **Arrivals to Job Corps.** The Job Corps Data Center provided arrival data (date, center name) in data extracts from OASIS and CIS. Students often have several arrival dates because they can leave and then return to Job Corps. For students who enrolled at Job Corps between November 2017 and June 2019, the study team selected as the formal "arrival date" the first arrival to a Job Corps center that occurred after either: (1) the random assignment date, for "CCCA" and "CCCA-Eligible" students; or (2) the interview date, for "Other PNW" and "Non-PNW" Job Corps students.
- **Length of Stay.** The Job Corps Data Center provided arrival, separation, and length of stay data in data extracts from CIS for students who enrolled in Job Corps between November 2017 and June 2019. Follow-up data were available through March 2021, the date of the last data delivery. For students who separated from Job Corps prior to March 2021, the total length of stay is calculated as the sum of all spells across all centers. For students still enrolled at the time of the last data delivery, the length of the current spell is calculated as the difference between the arrival date and March 2021.
- **Disciplinary Separations.** The Job Corps Data Center provided for all students who separated from Job Corps through March 2021, separation dates, types, and reasons were provided in data extracts from CIS. Unless otherwise noted, the study focuses on the first separation when presenting tabulations of separations by type. For those coded as disciplinary separations, the study tabulates separations by reason - minor infractions (e.g., failing to follow instructions, unexcused absence, using profanity), level II infractions (e.g., pattern of minor infractions, theft, cheating, vandalism), and level I infractions (e.g., use of drugs, assault, threat to safety).
- **Educational Progress while on Site.**
  - *High school programs*—For all students who enrolled in Job Corps, CIS records start dates and completion dates for high school diploma programs and high school equivalency programs. The study tabulates the percent of students who started a high school-level program after arriving at Job Corps, and the percent who finished such a program (among all students, and among students who started a program).
  - *College programs*—College enrollment is not universally recorded across all Job Corps centers. For CCCA, the study received college enrollment data from Skagit Valley College, a partner during the CCCA pilot. For students enrolled at other Job Corps centers, a small number of Job Corps students participate in Advanced Training programs that include college enrollment; these enrollments are recorded in CTS. For the "CCCA" comparison group (students enrolled at CCCA), the study tabulates college enrollment rates based on the Skagit Valley College data. For the other three comparison groups (students who enrolled in other Job Corps centers, see Section D.1.1), the study tabulates the percent of students participating in Advanced Training after arrival at Job Corps as a measure of college enrollment.

D.2 Service Contrast Analysis and Impact Analysis

This section provides additional detail on the evaluation's Service Contrast Analysis and Impact Analysis. Among students who were eligible for and applied to the CCCA program, the study compares outcomes between:

- Students who by random assignment were offered access to CCCA (the treatment group); and

- Students who by random assignment were not offered access to the CCCA program, but were encouraged to apply to the traditional Job Corps program (the control group).[16]

This comparison reflects the impact of being offered access to the CCCA pilot program versus having access only to previously existing training opportunities in the community, including other Job Corps centers through the traditional Job Corps program. Most (87 percent) of the treatment group members enrolled at CCCA; others turned down the offer and did not enroll at CCCA. About half (56 percent) of the control group members applied to the traditional Job Corps program and enrolled at an alternate Job Corps center (see Exhibit 3-4 of the *Final Report*).

This section discusses the methods for the following two parts of the CCCA Evaluation:

1. ***Service Contrast Analysis***—estimates impacts of CCCA versus no CCCA on students' receipt of education and training services (e.g., total months of training completed, receipt of support services such as academic advising and tutoring).

2. ***Impact Analysis***—estimates impacts of CCCA versus no CCCA on:

   a) **Short-term outcomes**—outcomes such as college enrollment and credits received, receipt of a high school diploma, receipt of post-secondary degree or occupational certificate, and receipt of an industry-recognized occupational credential.

   b) **Ultimate outcomes**—labor market outcomes, such as intensity of employment and earnings, and broader measures of well-being, such as receipt of public benefits. Given the short follow-up period of 18 months, any analysis of these outcomes must be interpreted with care.

The remainder of this appendix proceeds as follows. Section D.2.1 describes the cohorts of the experimental study sample. Section D.2.2 lists the data sources for the Service Contrast Analysis and Impact Analysis and how they are used. Section D.2.3 provides an overview of the regression methods for estimating impacts, followed by a discussion of how covariates are selected (Section D.2.4) and how missing data are treated (Section D.2.5). Last, Section D.2.6 discusses how the evaluation addresses the multiple comparisons problem.

D.2.1 Sample Cohorts

The experimental study sample includes applicants to the CCCA pilot program who were randomized between February 2017 and March 2019.[17] The evaluation divides this sample into three cohorts based on randomization date:

1. **Pre-Survey Cohort** (randomized February 2017–October 2017). This cohort includes study members who were randomized when the CCCA pilot was in the early stages of development and, as a result, changing rapidly. Because treatment group members who enrolled at CCCA during this period would not experience the pilot program in its fully implemented form, their outcomes do not reflect the full

[16] Throughout, this section uses the phrase "offered access to CCCA." This phrasing over-simplifies: Randomization occurred prior to a Job Corps final wellness review. Some treatment group members did not pass that wellness review and were not offered the opportunity to enroll in CCCA.

[17] The CCCA program randomized student applicants between February 25, 2017 and July 1, 2019. See footnote 19 for why the evaluation limited the post-survey cohort to applicants randomized through March 2019. The last member of the experimental study sample was randomized on March 29, 2019.

impact of CCCA. The evaluation team therefore chose not to include this cohort in the follow-up survey conducted 18 months after random assignment, and to exclude this cohort from the main impact estimates on education and earnings outcomes measured from the administrative data sources.[18]

2. **Survey Cohort** (randomized November 2017–December 2018). This cohort includes study members who were randomized between the time when the early steps of the CCCA pilot (the orientation and Foundations Course) were reasonably in place[19] and December 2018.[20] The evaluation attempted to survey all members of the Survey Cohort for the 18-month follow-up survey; the main estimates of impact for the Service Contrast Analysis and Impact Analysis are estimated using that cohort only.

3. **Post-Survey Cohort** (randomized January 2019–March 2019). This cohort includes students randomized from January 2019 through the end of March 2019—regardless of whether or when they arrived at CCCA.[21]

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[18] In contrast, the evaluation collects administrative Job Corps enrollment, education, and earnings data for all sample cohorts.

[19] Early implementation work for the CCCA Evaluation conducted in December 2017 found that the first six weeks of the CCCA pilot program (the orientation and Foundations courses) were fully established and anticipated that the rest of the components would be in place by the time students who enrolled in November 2017 reached that point in the program. Given the cohort structure of the CCCA pilot (with alternating IT and healthcare cohorts starting approximately every four weeks), there was a lag between random assignment (which occurred immediately after student eligibility was confirmed and informed consent was administered) and arrival on campus. The evaluation therefore included in the Survey Cohort all students who were randomized beginning in November 2017.

[20] The Survey Cohort includes only those students who were randomly assigned through December 2018 because, given the original evaluation timeline, there were fewer than 18 months of follow-up available for later applicants.

[21] The choice of March 2019 as the end of the post-survey cohort balances two considerations: sample size and strength of intervention.

With respect to sample size, randomization of applicants to CCCA continued through July 1, 2019. A later end to the post-survey cohort would yield a larger sample.

With respect to strength of intervention, students randomized later received a weaker intervention. This is because receipt of the pilot was determined not by date of randomization but instead by date of arrival at CCCA. Students who arrived at CCCA before July 1 were enrolled in the pilot and Adams attempted to provide them with services consistent with the original pilot program beyond July 1. Students arriving after July 1 were offered the non-pilot program at CCCA that replaced the pilot. This replacement program was a relatively conventional Job Corps implementation.

The standard analysis of random assignment data requires choosing a cutoff date such that everyone randomized before that date (whether or not they arrived before July 1) is included in the sample and everyone assigned after that date is not included. The natural alternative—excluding those randomized to the treatment group but not arriving by July 1—yields an invalid random assignment analysis. The analysis is invalid because the evaluation cannot identify those in the control group who would not have arrived by July if assigned to the treatment group. Thus, dropping those who do not arrive by July 1 yields unbalanced treatment and control groups.

Analysis of arrival rates suggests that those randomly assigned through March 2019 had arrival rates (by July 1) similar to those randomly assigned earlier. Those randomly assigned in April 2019 and later were much less likely to arrive by July 1. The evaluation therefore chose the end of March 2019 as the cutoff date for the post-survey cohort.

Exhibit D.2-1 lists the sample sizes, by group, for the three study cohorts.

Exhibit D.2-1 Sample Counts by and Group Assignment

	Treatment Group	Control Group	Total	Data Source
Pre-Survey Cohort (February 2017–October 2017)	139	77	**216**	CIS, NSC, and NDNH only
Survey Cohort (November 2017–December 2018)	306	306	**612**	CIS, Survey, NSC, and NDNH
Post-Survey Cohort (January 2019–March 2019)	123	62	**185**	CIS, NSC, and NDNH only
Total	**568**	**445**	**1,013**	

KEY: CIS = Center Information System of the National Job Corps administrative data, NDNH=National Directory of New Hires. NSC=National Student Clearinghouse.
SOURCE: CCCA Evaluation Participant Data System.
NOTE: See Exhibit D.2-2 for information on randomization ratios by date.

D.2.2 Data

This section discusses the data sources for the outcomes and baseline information for the CCCA Evaluation's Service Contrast Analysis and Impact Analysis. See Appendix B for more detail on these data sources.

The Service Contrast Analysis and Impact Analysis draw outcomes from four data sources:

- **National Job Corps administrative data, Center Information System (CIS) database.** Among other things, the CIS database collects data on dates of enrollment in Job Corps for all Job Corps enrollees (see Appendix Section B.1 for more detail). Data are available for the full study sample (i.e., all three cohorts). The evaluation observes longer follow-up periods for those CCCA applicants randomly assigned earlier, and shorter follow-up periods for those randomized later. Data are available for 27 months after random assignment for the Survey Cohort, but through only 25 months for the full study sample. The evaluation's Service Contrast Analysis uses CIS data on dates of enrollment in Job Corps to estimate impacts on length and timing of enrollment in any Job Corps center (including but not limited to CCCA) through 27 months after random assignment.
- **18-month Follow-Up Survey.** The 18-month follow-up survey was fielded for students in the "Survey Cohort." The survey collected information on receipt of education and training, educational attainment, and employment (see Appendix Section B.3.3 for more detail). The Service Contrast Analysis estimates impacts on survey-based outcomes on enrollment in education and occupational training, receipt of work-based training, receipt of support services (e.g., academic advising or tutoring), and the content of training received. The Impact Analysis estimates impacts on survey-based outcomes on educational attainment, employment, criminal activity, and receipt of public benefits. Estimates of impacts on these survey-based outcomes can only be estimated on the Survey Cohort.
- **National Student Clearinghouse (NSC).** The NSC provides information on enrollment in college and degrees completed, collected from participating post-secondary U.S. institutions (see Appendix Section B.4.2 for more detail). Data are available for the full study sample. In addition,

data are available nearly in real time (i.e., it is nearly current for the date the data are pulled). As with the Job Corps CIS data, the evaluation observes longer follow-up periods for those CCCA applicants randomized earlier. Data are available through eight quarters after random assignment for the Survey Cohort, but only through seven quarters for the full study sample.

The Service Contrast Analysis estimates impacts on NSC-based outcomes on college enrollment, including (1) the proportion ever enrolled in college by month or quarter since random assignment, (2) cumulative months of enrollment through each month since random assignment, and (3) total months of college enrollment through six quarters after random assignment. The analysis separately estimates impacts on enrollment overall, full-time enrollment, part-time enrollment, and full-time-equivalent enrollment. The Impact Analysis estimates impacts on NSC-based outcomes on receipt of any college credential or degree.

- **National Directory of New Hires (NDNH).** The NDNH provides information on employment and earnings for jobs covered by Unemployment Insurance, augmented with data from the federal payroll system (see Appendix Section B.4.3 for more detail). As with the CIS and NSC data, NDNH data are available for the full study sample, up to the minor matching issue discussed in Appendix Section B.4.3. Data are available with a lag of about two quarters (e.g., data pulled in late-May 2021 are current through 2020 Q4). The evaluation observes seven quarters of follow-up for the Survey Cohort, and six quarters for the full study sample. The Impact Analysis estimates impacts on NDNH-based outcomes on earnings (e.g., cumulative earnings over the first six quarters after randomization, earnings in each quarter) and employment (e.g., ever employed in the first six quarters after randomization, employment in each quarter quarter).

Because the Survey Cohort represents the strongest implementation of the CCCA program, the results presented in Chapter 4 of the *Final Report* for CIS-, NSC-, and NDNH-based outcomes only consider estimates of impacts for the Survey Cohort. Estimates of impact for the full study sample for these outcomes are reported in Appendix H of this volume. Estimates of impact for survey-based outcomes are only available for the Survey Cohort.

In addition, the Survey Contrast Analysis and Impact Analysis use baseline data from four data sources:

- **Baseline Information Form (BIF).** The BIF provides data on student demographics, socioeconomic, and psychosocial characteristics, collected directly before random assignment (see Appendix Section B.3.1 for more detail).
- **Participant Data System (PDS).** The PDS is used to store student information on the BIF, as well as date of random assignment, assignment status (treatment or control group), and pathway (healthcare versus IT). The evaluation uses the date of random assignment to identify a student's cohort (pre-survey, survey, or post-survey).
- **National Job Corps administrative data, Outreach and Admission Student Input System (OASIS) database.** Among other things, OASIS collects demographic information on all Job Corps applicants (see Appendix Section B.1 for more detail). The Service Contrast Analysis and Impact Analysis use OASIS data on race and completed education to supplement the demographic information collected in the BIF.

- **National Directory of New Hires (NDNH)**. The evaluation uses NDNH quarterly earnings and employment data for the six quarters before random assignment as candidate covariates for the regression analyses. Data access issues cause the evaluation to limit use of NDNH pre-random assignment variables as covariates only for analyses of NDNH-based outcomes.

Each of these baseline data sources are available for the full study sample. (For the pre-randomization NDNH data, these data are available for the full sample up to the minor matching issue discussed in Appendix Section B.4.3.)

The Service Contrast Analysis and Impact Analysis use baseline data from the BIF and OASIS to (1) describe the study sample and assess baseline balance between members of the study sample randomized to the treatment group and control group (both overall, and for members of the Survey Cohort only, see Appendix Section H.1), and (2) create survey non-response weights (see Section D.2.5). The evaluation uses data from the BIF, OASIS, and the PDS (pathway at random assignment) to define subgroups (see Section D.2.3). Last, the evaluation uses baseline data from the BIF, OASIS, and NDNH to improve the precision of the impact estimates as candidate covariates; NDNH-based baseline data are only used as candidate covariates for NDNH-based outcomes (see Section D.2.4).

D.2.3 Overview of Methods

This section discusses the use of linear regression, weighting, and subgroup impacts for the Service Contrast Analysis and Impact Analysis.

Linear Regression. Because the Service Contrast Analysis and Impact Analysis use a random assignment design, a simple comparison of mean outcomes for treatment and control participants would yield valid (i.e., unbiased and consistent) estimates of the causal impact of being offered CCCA. The evaluation can and does provide more precise estimates using linear regression to estimate impact, while controlling for a small number of baseline characteristics (used as covariates):

$$y_i = \alpha + D_i\delta + X_i\beta + \varepsilon_i. \qquad \text{[Eq. D.1]}$$

In Equation D.1, y_i represents the outcome variable (e.g., hours of training) for respondent i, which is modelled as potentially varying with whether the study participant was offered the program (D_i is equal to one if i is a treatment group member, or zero if a control), the respondent's background characteristics X_i (measured at randomization) with coefficients β, and an idiosyncratic individual-specific error ε_i. Selection of covariates X_i is discussed below in Section D.2.4. The parameter of interest, δ, is the impact of being offered the CCCA program.

As is standard practice in the analysis of random assignment data, the analysis uses linear regression as the main estimation approach for all outcomes: continuous, bounded (e.g., hours of training or earnings), and binary (e.g., any education or training since randomization) outcomes (often called the linear probability model, Judkins and Porter, 2015). For binary outcomes, this approach has the advantage that impact is estimated in easily interpreted units: percentage points (not the harder to interpret log odds estimated by logistic regression).[22]

In the impact tables for the Survey Contrast Analysis and the Impact Analysis, the "Control Group Mean" column reports the (unadjusted) mean outcome for the control group, and the "Treatment Group Mean"

[22] See Angrist and Pischke (2009).

reports the unadjusted control group mean plus the impact estimate.[23] The standard error reported in the impact tables quantifies the precision of the impact estimate. The standard error is a function of the size of the sample, the multi-level structure of the model, and the variability of the outcome across study sample members after controlling for the selected covariates. A smaller standard error indicates a more precise estimate.

Weighting. For survey-based outcomes, weighting is necessary to adjust for differential survey non-response. Creation of survey non-response weights is discussed in Section D.2.5. No weights are needed or used for CIS-, NSC-, and NDNH-based outcomes for the Survey Cohort. There is no non-response and the randomization ratio was constant at 1:1.[24]

Although Chapter 4 only reports results for the Survey Cohort, Appendix H reports impacts for CIS-, NSC-, and NDNH-based outcomes estimated with the full study sample (i.e., all three cohorts: Pre-Survey, Survey, and Post-Survey).[25] For these estimates weighting is necessary to address varying randomization ratios across the course of the study.[26] These varying ratios were implemented to balance evaluation power with the need to fill the CCCA center. Randomization ratios for the treatment and control groups are listed in Exhibit D.2-2. The analysis of CIS-, NSC-, and NDNH-based outcomes calculated on the full study sample also includes fixed effects (i.e., dummy variables) for each of these periods.

Exhibit D.2-2 Randomization Ratios

Dates	Cohort	Ratio
February 1, 2017 - May 4, 2017	Pre-Survey Cohort	1:1
May 5, 2017 – September 4, 2017	Pre-Survey Cohort	3:1
September 5, 2017 – October 31, 2018	Pre-Survey Cohort	1:1
November 1, 2017 – December 31, 2018	Survey Cohort	1:1
January 1, 2019 – March 29, 2019	Post-Survey Cohort	2:1

SOURCE: Internal study team tracking documentation.
NOTE: Ratio is randomization ratio; that is, treatments per control.

For most continuous, count, and binary outcomes, the evaluation estimates the Equation D.1 model using weighted least squares regression so that the interpretation of impact estimates is comparable for the different types of outcomes. The use of weighted least squares regression for binary outcomes is consistent for percentage point impacts. Analysis proceeds using SAS (Statistical Analysis System)

[23] See the text box **How to Read Impact Tables** at the start of Chapter 4 of the *Final Report* for an explanation of how to read and interpret the impact tables for the Impact Analysis.

[24] A 1:1 treatment-control randomization ratio means that a given applicant was equally likely to be randomized into the treatment or control group. By contrast, a 3:1 treatment-versus-control randomization ratio means that students were three times more likely to be randomized into the treatment group than the control group.

[25] As the name suggests, survey outcomes are only available for the Survey Cohort. There are therefore no survey-based analyses for the full study sample.

[26] Because the randomization ratio was fixed at 1:1 for the Survey Cohort, weighting for survey-based outcomes does not also need to address varying rates of randomization. Likewise, no dummy variables for randomization period are needed in analyses of survey-based outcomes, which are available only for the Survey Cohort.

PROC SURVEYREG. Unlike PROC REG, PROC SURVEYREG computes appropriate standard errors for survey non-response weights (Richardson et al. 2019).[27]

Random assignment occurs at the individual level with no stratification. No cluster correction is implemented.

All statistical tests are two-sided.

Subgroup Impacts. The impact estimates for certain subgroups that received services are also of interest. In particular, the Service Contrast Analysis and Impact Analysis compare the difference in impacts for three pre-specified subgroups defined by (1) pathway at application to the CCCA program (healthcare versus IT), (2) gender, and (3) age (16-17 versus 18-21 at application). In addition, the evaluation compares impacts for two additional subgroups added during the course of the analysis: (4) by Star score at application to the program (average math and reading scores below the 9th grade level versus at the 9th grade level and above), and (5) by completed education at application (less than a high school education versus a high school degree/GED or more).

The analysis estimates subgroup impacts, separately for each binary subgroup, using:

$$y_i = \alpha + D_i\delta + G_i\vartheta + D_iG_i\gamma + X_i\beta + \varepsilon_i, \qquad \text{[Eq. D.2]}$$

where Equation D.2 interacts the treatment group indicator D with a binary subgroup indicator G. To explore the presence of heterogeneous impacts, the evaluation tests whether γ equals zero. For example, if G is a binary variable for gender (e.g., 0 for male, 1 for female), the estimate of γ is statistically different from zero, then the analysis rejects that the impact estimates are equal for both genders.

The evaluation's general approach to discussing subgroup results proceeds subgroup by subgroup. For each subgroup, the analysis begins by considering the test for differential impacts across subgroups. In general, unless that test suggests a differential impact (i.e., unless $\gamma = 0$ can be rejected), the *Final Report* does not discuss the subgroup results beyond noting the lack of a significant difference—even if there is evidence of an impact different from zero in one subgroup. (All subgroup results are presented in Appendix H.) The evaluation adopts this approach because, in the absence of clear evidence of a differential impact, the impact estimate δ is a plausible estimate of the impact for both subgroups.[28]

D.2.4 Covariates and Covariate Selection

To maximize precision of the estimated impacts, the evaluation team selects regression covariates using the SAS implementation of LASSO, the least absolute shrinkage and selection operator (Tibshirani 1996). This method identifies the set of regressors that provide the strongest effect on increasing the precision of the impact estimate while avoiding overfit that could offset the benefits of regression adjustment.

The analysis runs LASSO three times:

[27] Unlike SAS's standard PROC REG, PROC SURVEYREG provides valid standard error estimates when using weights, such as sampling weights and survey non-response weights.

[28] In addition, this approach serves as a rough correction for multiple comparisons issues (see Section D.2.6 for more discussion of the multiple comparisons problem).

1. To select covariates for survey-based outcomes, the evaluation team runs LASSO on the confirmatory outcome, *total months of education or occupational training since randomization*; the evaluation team uses the covariates chosen by this process for all survey-based outcomes.

2. To select covariates for CIS- and NSC-based outcomes, the evaluation team runs LASSO on the NSC-based secondary outcome *total months of full-time enrollment at a postsecondary degree-granting educational institution between randomization and the end of the sixth quarter after randomization*;[29] the evaluation team uses the covariates chosen by this process for all CIS- and NSC-based outcomes.[30]

3. To select covariates for NDNH-based outcomes, the evaluation team runs LASSO on *cumulative quarterly earnings between the first and sixth quarter after randomization*; the evaluation team uses the covariates chosen by this process for all NDNH-based outcomes.

In all instances, the evaluation team runs LASSO on the Survey Cohort only. The evaluation team uses the covariates selected in this process both for the main impact estimates run on the Survey Cohort only and also for the impact estimates run on the full study sample (for CIS-, NSC-, and NDNH-based outcomes).[31]

Specifically, for the survey- and the CIS-/NSC-based outcomes, the analysis proceeds as follows:

1. Begin with the set of study baseline variables from the BIF and from the Job Corps administrative OASIS dataset (see Section D.2.2 for more information).

2. Build a set of candidate covariates by pruning some variables and combining and recoding others. Exhibit D.2-3 lists the candidate covariates run through LASSO. For each candidate covariate, observations with missing data are grouped with the omitted category. Appendix Section F.3 provides details on how the candidate covariates are defined and which category is omitted.

[29] See Section D.2.6 for the list of secondary outcomes.

[30] The evaluation uses the same set of covariates for the CIS- and NSC-based outcomes because both datasets provide information on enrollment in education since randomization, and both cover the same sample (the full study sample with no missing data, see Section D.2.5), and all CIS-based outcomes are exploratory only (see Section D.2.6 for a discussion of confirmatory, secondary, and exploratory outcomes).

[31] As discussed in Section D.2.3, analyses run on the full sample also include as covariates dummies for each of the different randomization periods (i.e., the time periods with varying rates of probability of being randomized to the treatment group). These randomization rates varied for members of the pre-survey and post-survey cohorts (see Exhibit D.2-2).

Exhibit D.2-3 Baseline Characteristic Covariate Candidates for LASSO Implementation

- Race/ethnicity (binary, White non-Hispanic vs. Other)
- Speaks language other than English at home (binary)
- Mother's highest education (categorical, by terciles)
- Mother's employment status (binary)
- Months since left school (binary, above median vs. other)
- Star Math grade-level equivalence (categorical, by terciles)
- Star Reading grade-level equivalence (categorical, by terciles)
- Ever had an Individualized Education Plan (binary)
- Ever repeated a grade (binary)
- Ever suspended from school (binary)
- Ever worked full-time prior to random assignment (binary)
- Participant/family receiving SNAP at random assignment (binary)
- Participant/family ever received TANF prior to random assignment (binary)
- Ever homeless, a runway, or in foster care prior to random assignment (binary)
- Self-efficacy (binary, below median on 9-element self-efficacy scale vs. other)
- Future orientation (binary, below median on 5-element future orientation scale vs. other)
- Reaction to challenge, negative components (binary, below median on the 6 negative elements of the reaction to challenge scale vs. other)
- Reaction to challenge, positive components (binary, below median on the 4 positive elements of the reaction to challenge scale vs. other)
- Timing of random assignment (binary, flag for 18-month follow-up period during COVID-19)

KEY: SNAP=Supplemental Nutrition Assistance Program. TANF=Temporary Assistance for Needy Families.

3. The evaluation also includes the following two sets of variables as required regressors (i.e., "forces them in"):

   – Variables identifying the key subgroups defined at baseline: pathway at application to CCCA (healthcare vs. IT), gender, age (16-17 versus 18-21), Star score (average reading and math scores below the 9th grade level versus at the 9th grade level and above), and education level (less than a high school education versus a high school degree/GED or more).[32]

   – Candidate covariates for which a simple baseline equivalence test suggests any evidence of imbalance (i.e., $p<.05$).[33]

[32] In addition, for NSC- and NDNH-based outcomes, for analyses run on the full study sample (i.e., combining the Pre-Survey, Survey, and Post-Survey Cohorts), the evaluation includes as covariates dummy variables for the Pre-Survey Cohort and the Post-Survey Cohort.

[33] When properly conducted, up to pure random variation, random assignment should yield balance between the treatment and control groups in baseline (pre-randomization) variables. The evaluation tests balance; see Appendix Section H.1.

4. Residualize the dependent variable and the remaining candidate covariates by regressing them against the list of required regressors.[34]

5. Run LASSO using these residualized variables and the required regressors. (For the survey-based data, run LASSO without using survey weights.)

6. Use as covariates the required regressors plus the additional candidates selected by LASSO using 10-fold cross-validation.

For NDNH-based outcomes, the evaluation uses an equivalent procedure with one adjustment: the list of candidate covariates is expanded to include quarterly employment and earnings in each of the six quarters preceding randomization.[35] See Appendix Section F.4 for the list of candidate covariates selected for each data source.

See Appendix B for more detail on the baseline data sources (the BIF and OASIS). See Appendix Section F.3 for a description of how the candidate covariates are constructed, and Appendix Exhibit F.4-1 for the list of covariates used for each data source used for the impact regressions.

D.2.5 Missing Data

This section discusses how the evaluation addresses missing data in the outcome and baseline data sources for the Service Contrast Analysis and Impact Analysis.[36] Outcome data sources include the 18-month follow-up survey, the Job Corps CIS database, NSC data, and NDNH data. Baseline data sources include the BIF and the Job Corps OASIS database.

There is substantial unit non-response to the follow-up survey, with an overall response rate of 62 percent (see Appendix C for more detail on the survey methods). To address survey unit non-response (missing data for members of the Survey Cohort who did not respond to the 18-month follow-up survey), the evaluation team creates non-response weights which are used in estimating impacts for survey-based outcomes. Specifically, separately by treatment status, the evaluation team estimates a logistic regression of survey response (an indicator of whether the given sample member responded to the survey) on all of the regressors that were candidates for LASSO, plus the required regressors. Using the predicted response probabilities—that is, the predicted probability that a given sample member would respond given that person's characteristics—the evaluation team groups the sample into five groups with equal numbers of survey respondents. All respondents in each group receive the same non-response weight, defined such that the sum of the weights is equal to the sum of the predicted response probabilities of respondents in that group.[37]

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[34] This step proceeds by analogy with the Frisch-Waugh-Lovell Theorem from econometrics. Specifically, residualizing isolates the variation in the remaining covariate candidates that is uncorrelated with variation in the covariates already being included in the model.

[35] As discussed in Appendix Section F.3, pre-employment NDNH data on quarterly earnings and employment can only be used as covariates for the main analyses of the NDNH data.

[36] The analysis methods applied in the impact regressions provide valid estimates of impact under the assumption that data are missing at random. While not innocuous, this assumption is conventional in experimental studies. In part, this is because there is no additional information to use to implement a better approach.

[37] An alternative would be to simply weight by the inverse of the probability of response (as estimated by the logistic regression). That approach was not adopted because in some cases, particularly when continuous baseline variables are used

In general, conditional on survey unit response, item non-response rates are low.[38] Therefore, with one exception, the analysis makes no further adjustment for survey item non-response (missing data for individual survey questions).

The one exception is as follows. For several survey questions, item non-response prompted a follow-up question asking for response ranges (e.g., an open-ended question on hours of schooling per week, followed by a categorical question on whether the respondent's school hours fell within a given range). For respondents who offered only a categorical answer, the evaluation team imputes hours of schooling based on the mean of the open-ended responses offered by other respondents within the same treatment group that fell within the range of that category.[39] The Outcome Measures exhibits in Appendix E provide detailed descriptions of variable definitions and note which outcomes are subject to these imputations.

For the CIS data, study participants who are not matched to a record in the Job Corps CIS database are classified as not having attended Job Corps, thus by construction there are no missing data. Likewise, for the NSC data, study participants who are not matched to a record in the NSC database are classified as not having attended an educational institution, thus again by construction there are no missing data.[40]

As discussed in Appendix Section B.4.3, for the NDNH data, 3.5 percent of the full study sample, and 3.8 percent of Survey Cohort, have failed to match name and SSN against SSA master records; those records are not passed to NDNH for matching.[41] Sample members who are not matched in the SSA database are considered "missing," because their employment records are not available. The analysis simply drops these participants from the analysis for NDNH-based outcomes.[42]

Because of the minimal level of missing data for the NDNH, impacts on NDNH-based outcomes for the Survey Cohort are analyzed via ordinary least squares without weights. Likewise, because both the CIS and NSC have no missing data, impacts for the Survey Cohort are likewise analyzed via ordinary least squares without weights. However, for all three data sources, when impacts are estimated for the full study sample, the evaluation uses weighted least squares to address the varying randomization ratios across the course of the study (see Exhibit D.2-2 above).

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to model the response propensity, estimated response propensities may get close to zero for some respondents. When this occurs, the nonresponse-adjusted weight for those respondents become very large. This leads to larger design effects.

Assigning constant adjustment factors to five response propensity strata is one way to prevent this unfortunate possibility. It is a common technique in follow-up surveys. The number 5 is based on Cochran's famous work on the limited returns from more than five strata.

38 Among survey respondents, missing data rates are less than 5 percent for all outcomes except the number of college credits completed (6 percent missing) and the proportion receiving Medicaid in the three months prior to follow up (14 percent).

39 For instance, for respondents who did not respond to the initial question on hours of schooling but reported that they attended school between five and 12 hours per week, the analysis imputes actual hours using the mean of reported hours for other respondents within the same treatment group who provided an answer to the initial question that fell between five and 12 hours per week.

40 Sample members are matched to the NSC data based on name and SSN. There is no way to tell whether a failure to match a sample member to the NSC database is because of incomplete or inaccurate name and SSN information.

41 See footnotes 12 and 45 for more detail on how OCSE matches records.

42 As discussed in Appendix Section D.5.2, sample members whose NDNH records match to SSA data but do not match to any earnings records (overall, or per quarter) are treated as having zero earnings and being not employed (overall, or in that quarter).

Given that completing the BIF was required of CCCA applicants before being randomized into the study sample, there is no unit non-response to the BIF. As discussed in the previous section, the evaluation team handles item non-response for covariates by grouping missing data with the excluded category. Given that BIF variables are only used as covariates and estimates are consistent even without covariates (or with this coding), this seems sufficient.

D.2.6 Multiple Comparisons

Seeking to determine the overall effectiveness of an intervention—such as asking whether a program has a statistically significant impact on several outcomes— must be done with care. In a single hypothesis test, one traditionally rejects the null hypothesis of no impact using a 1, 5, or 10 percent statistical threshold for the *p*-value.[43] Yet even if all true impacts are zero—that is, even if the program has *no true effect* on any outcome—as the number of hypothesis tests increases, the likelihood of at least one test yielding a statistically significant result (and therefore rejecting the null hypothesis of no impact) increases rapidly to well above the stated 1, 5, or 10 percent threshold for a single test.[44]

This situation, referred to as the "multiple comparisons" problem, can arise when a study asks many research questions about the same study sample (see Schochet 2008). Because the evaluation uses multiple hypothesis tests to measure whether CCCA had an impact, the evaluation team addresses the multiple comparisons problem by defining a single confirmatory outcome, and treating the others as secondary or exploratory, as described below:

- **Confirmatory.** The evaluation addresses the problem of multiple comparisons by pre-specifying a single confirmatory outcome—both to prioritize the study findings and as a summative measure of program effectiveness. In the long term, as is common for job training programs, the confirmatory outcome for the CCCA Evaluation should be earnings. However, given the relatively short follow-up period for this study (18 months), it may be too early to expect to see earnings impacts. Instead, this evaluation uses a shorter-term confirmatory outcome: *total months of education or occupational training in the first 18 months after random assignment*. [45] This is a composite outcome that is applicable even for students still at CCCA at the time of follow-up. Discussion of the evaluation's logic model (Section 1.3 in the *Final Report*) implies that more education and training should—later—lead to higher earnings.
- **Secondary.** In addition to this single confirmatory outcome, the evaluation also estimates the impact of a wide range of other outcomes. The evaluation pre-specified the following four additional outcomes as "secondary" outcomes, reflecting key outcomes that help assess *how* and

[43] Namely one accepts as statistically significant only those impact estimates that are sufficiently different from zero that such an estimate would only happen by chance 1, 5, or 10 percent of the time, if the true impact were in fact zero.

[44] For example, even if all null hypotheses are true (i.e., in reality there are no effects), the chance of at least one test yielding a statistically significant impact estimate (at the 5 percent level) across four hypothesis tests is almost 20 percent (assuming that the tests are independent of one another).

[45] This confirmatory outcome and the three survey-based secondary outcomes (discussed below) were originally defined as since random assignment—implicitly, through the date of the survey interview. Concern about varying intervals from random assignment to the survey interview caused the evaluation to specify these three outcomes—and when possible other outcomes—as from random assignment to 18 months after random assignment.

For most, but not all outcomes, the survey's structure allows that coding. For some outcomes, dating is not possible, so the responses are from random assignment through the date of the survey interview. Those outcomes are clearly noted in the exhibit notes.

why the intervention was or was not effective. The first three secondary outcomes are based on data collected in the 18-month follow-up survey; the fourth is based on NSC data:

  - Received a GED, high school equivalence diploma, or high school diploma in the first 18 months after random assignment;
  - Received any postsecondary degree or occupational credential or certificate in the first 18 months after random assignment;
  - Total months of education, occupational training, or employment (including military service) in the first 18 months after random assignment; and
  - Total months of full-time enrollment at a postsecondary degree-granting educational institution between random assignment and the end of the sixth quarter after randomization.

- **Exploratory.** The remaining outcomes are classified as "exploratory" outcomes. These analyses augment our understanding of the main impact estimates by providing insight about the magnitude, sign, and significance of the main impact findings.

For the confirmatory and secondary outcomes, as well as some exploratory outcomes, the evaluation also assesses impacts separately by the key subgroups defined in Section D.2.3 above. All subgroup analyses are treated as exploratory.

The Executive Summary for the *Final Report* includes a discussion of findings for all confirmatory and secondary outcomes (whether or not those impacts are statistically significant). However, only the estimated impact on the confirmatory outcome is used to determine the success of the CCCA pilot. This strategy maximizes statistical power of the study to detect an impact. The evaluation defines a single confirmatory outcome to avoid multiple comparisons issues; it does not make any other formal correction for that. Statistically significant secondary and exploratory findings (including subgroup findings) should not be used to determine the success of the CCCA pilot (and the evaluation does not make any formal multiple comparisons corrections for these estimated impacts). However, analyses of secondary and exploratory outcomes address the study's research questions, provide additional suggestive evidence on program effectiveness, and provide the context for the confirmatory outcome.

Appendix E: Definitions of Outcomes

The exhibits in this appendix list the outcomes for the CCCA Evaluation's Service Contrast Analysis and Impact Analysis. These outcomes include those reported on in the impact tables included in Chapter 4 of the *Final Report* plus those included in Appendix H of this volume. In this appendix, Section E.1 describes the construction of outcomes for the Service Contrast Analysis, Section E.2 describes the construction of short-term outcomes for the Impact Analysis, and Section E.3 describes the construction of longer-term outcomes for the Impact Analysis. For most of the longer-term outcomes, the CCCA Evaluation's 18-month follow-up period is likely too soon to expect to see impacts.[46]

For each outcome, the appendix exhibits list the outcome name and description, including the data source in parentheses (survey, CIS, NSC, or NDNH). See Appendix B for more information on the data sources. For outcomes measured in the follow-up survey, the exhibit provides the corresponding survey question number. Outcomes that are confirmatory or secondary for the CCCA Evaluation are indicated using **bold red text**. All other outcomes are exploratory. See Appendix Section D.2.6 for more on the classification of outcomes into confirmatory, secondary, and exploratory. Conditional outcomes—those outcomes that are defined for only part of the study sample—are indicated using *italics*.

E.1 Service Contrast Analysis Outcomes

Exhibit E.1-1 Service Contrast Analysis: Enrollment in Job Corps

Overview of Outcome Measures: Enrollment in Job Corps

The outcomes listed below are based on Job Corps administrative data from the Center Information System (CIS) database. These outcomes are exploratory for the CCCA Evaluation and measure enrollment in Job Corps since random assignment. Unless otherwise noted, these outcomes are set to zero for those sample members who never enrolled in Job Corps. Conditional outcomes—those outcomes that are defined for only a subset of the study sample —are indicated using *italics*.

Outcome	Outcome Description
Ever enrolled in Job Corps through the end of the given month	Ever enrolled in Job Corps through the end of the given month, measured from random assignment (CIS; binary). Defined for month 1 through month 27 after random assignment, based on the date of random assignment (e.g., if randomly assigned on September 12, 2018, month 1 spans September 12 through October 11, 2018). Constructed based on Job Corps enrollment dates.
Total days enrolled in Job Corps through the end of the given month	Number of days enrolled in Job Corps through the end of the given month, measured from random assignment (CIS; continuous). Defined for month 1 through month 27 after random assignment, based on the date of random assignment. Constructed based on Job Corps enrollment dates.

[46] Given CCCA's goal of keeping students in training for up to three years and given the CCCA Evaluation's 18-month follow-up period, if the program worked as intended there should not be positive impacts on outcomes such as earnings or employment by the time these impacts are measured. In particular, if treatment group members stay in training as long as intended, there should be negative impacts on employment and earnings by 18 months after random assignment because they are more likely to still be at CCCA, and therefore not working or earning income. The same will hold for outcomes affected by employment and earnings, such as receipt of public benefits.

A direct impact on public benefits is also possible. While in Job Corps, the program provides food and medical care. This would depress use of the Supplemental Nutrition Assistance Program and Medicaid.

Total days enrolled in Job Corps through the end of the given month, if ever enrolled to date	For those study members ever enrolled in Job Corps through the end of the given month, number of days enrolled through the end of the month, measured from random assignment (CIS; continuous). Defined for month 1 through month 27 after random assignment, based on the date of random assignment. Constructed based on Job Corps enrollment dates. Outcomes not defined (set to missing) for sample members who were never enrolled in Job Corps through the end of the given month.
Enrolled in Job Corps in given month	Sample member was enrolled in Job Corps during the given month (CIS; binary). Defined for month 1 through month 27 after random assignment, based on the date of random assignment. Constructed based on Job Corps enrollment dates.

Exhibit E.1-2 Service Contrast Analysis: Education and Training Outcomes

Overview of Outcome Measures:
Participation in Education and Training

The outcomes listed below are based on participant responses to the 18-month follow-up survey. The CCCA Evaluation selected ***total months of education or training attended in the first 18 months after random assignment*** as the confirmatory outcome, meaning the key measure by which the evaluation assesses whether the CCCA pilot improved students' education outcomes by 18 months after random assignment. All other outcomes described below are exploratory.

Outcome	Outcome Description
Ever attended any high school classes, occupational training, or work-based training	Respondent attended or participated in any of the following types of education or training (survey B1-B2, B14, B22; binary): 1. High-school-level training 2. Occupational training (college or technical) 3. Work-based training Outcome reflects any attendance in high-school level or occupational training in the first 18 months after random assignment, or any work-based training between random assignment and survey interview.
Education and Occupational Training	
Ever attended	Respondent attended at least one high school or GED class or any occupational training program in the first 18 months after random assignment, whether or not the respondent completed the given program (survey B1-B2, B14; binary).
Attended any high school or GED classes	Respondent attended any high school diploma courses, GED courses, or similar education courses for improving literacy and math skills in the first 18 months after random assignment (survey, B1, B14; binary).
Attended any occupational training programs	Respondent attended any courses for credit toward a credential or postsecondary degree, or technical courses or training programs for a specific job, trade, or occupation in the first 18 months after random assignment (survey, B2; binary). This includes enrollment in a community college, a 2-year college, or a 4-year college, either on campus or online. This also includes programs where the respondent is trained for a specific occupation or job, usually leading to a certificate, license, or other industry credential.
Total months of education or training attended **[Confirmatory outcome]**	Total months of education or occupational training attended in the first 18 months after random assignment (survey B5-B9, B14; continuous). Constructed as the sum of all non-overlapping training spells.

Total months, for attendees	For those who attended at least one educational or occupational training program in the first 18 months after random assignment, number of months attended (survey B1-2, B5-B9, B14; continuous). Outcome not defined (set to missing) for survey respondents who attended no education or occupational training program.
Total hours of education or training attended[a]	Total hours of education or occupational training attended in the first 18 months after random assignment (survey B5-B11, B14; continuous). Constructed as the product of usual hours per week of training and total weeks attended for each training spell.
Total hours, for attendees	For those who attended at least one educational or occupational training program in the first 18 months after random assignment, number of hours attended (survey B1-2, B5-B11, B14; continuous). Outcome not defined (set to missing) for survey respondents who attended no education or occupational training program.
Hours per week, for attendees	For those who attended at least one educational or occupational training program in the first 18 months after random assignment, equal to total hours attended divided by total weeks attended, where total weeks attended is equal to total months attended multiplied by 4.35 (survey, B1-2, B5-B11, B14; continuous). Outcome not defined (set to missing) for survey respondents who attended no education or occupational training program.
Completed or currently attending at least one training program	Respondent completed at least one education or occupational training program in the first 18 months after random assignment, or was currently attending such a program 18 months after random assignment (survey B1-B2, B6, B14; binary).
Work-Based Training	
Any work-based training	Respondent participated in any of the following types of work-based training between random assignment and survey interview (survey B22a-e; binary): 1. Internship or similar 2. Work-study job 3. Employer-provided training 4. Apprenticeship 5. Other work-related training experience
Internship, practicum, clinical experience, or similar	Respondent participated in an internship, practicum, externship, clinical experience, job shadowing, or similar program between random assignment and survey interview (survey B22a; binary).
Work-study job	Respondent participated in a work-study job between random assignment and survey interview (survey B22b; binary).
Employer-provided training	Respondent participated in a course taught by instructors from a local employer, or in a course offered on site at a local employer, between random assignment and survey interview (survey B22c; binary).
Apprenticeship	Respondent participated in an apprenticeship between random assignment and survey interview (survey B22d; binary).
Other work-related training	Respondent participated in another work-related training experience between random assignment and survey interview (survey B22e; binary).

NOTE:
[a] For study participants who did not respond to the initial open-ended survey question on weekly hours for a given training (B10), the survey included a follow-up categorical question on ranges of hours of the given activity (B11). For respondents who provided only a categorical response, the evaluation imputes weekly hours using the mean of responses for other respondents in the given treatment group whose weekly hours value fell within that range. See Appendix Section D.2.5 for more detail.

Exhibit E.1-3 Service Contrast Analysis: College Enrollment

Overview of Outcome Measures: College Enrollment

The outcomes listed below are based on administrative data from the National Student Clearinghouse (NSC). The CCCA Evaluation selected as secondary the following outcome: ***total months of full-time equivalent enrollment at a degree-granting postsecondary educational institution between random assignment and the end of the sixth quarter after random assignment***. The remaining outcomes listed below are exploratory and provide additional insight on impacts on other dimensions of college enrollment. These outcomes are set to 0 for those sample members who never enrolled in a postsecondary educational institution.

Outcome	Outcome Description
Full-time-equivalent (FTE) months enrolled in college **[Confirmatory outcome]**	Total FTE months enrolled in a degree-granting postsecondary educational institution between random assignment and the end of quarter 6 after random assignment (NSC; continuous). The quarter of random assignment is deemed quarter 0. Constructed based on reported dates of attendance and enrollment status per spell (full-time, three-quarter time, half-time, and less than half-time). FTE is calculated as follows: one month of full-time enrollment is counted as 1 FTE month, three-quarter time enrollment as 0.75 FTE months, half-time enrollment as 0.5 FTE months, and less than half-time as 0.25 FTE months.
Total months enrolled in college	Total months enrolled in a degree-granting postsecondary educational institution between random assignment and the end of quarter 6 after random assignment (NSC; continuous).
Full-time months enrolled in college	Total months enrolled full-time in a degree-granting postsecondary educational institution between random assignment and the end of quarter 6 after random assignment (NSC; continuous).
Part-time months enrolled in college	Total months enrolled part-time (three-quarter time, half-time, or less than half-time) in a degree-granting postsecondary educational institution between random assignment and the end of quarter 6 after random assignment (NSC; continuous).
Enrolled in college in given month	Ever enrolled in a degree-granting postsecondary educational institution during the given month (NSC; binary). Defined for month 1 through month 24 after random assignment, based on dates of enrollment.

Exhibit E.1-4 Service Contrast Analysis: Support Services Received Outcomes

Overview of Outcome Measures: Support Services Received

The two tables below provide information on how outcomes on support services are defined. These outcomes are based on participant responses to the 18-month follow-up survey. The first table describes the types of support services; the second table describes the outcome measures defined for each support service. The eight outcomes on support services received are a combination of the two outcomes in the second table defined for each of the four types of support services included in the first table. These outcomes are exploratory for the CCCA Evaluation. These outcomes are set to zero for those survey respondents who attended no education or occupational training in the first 18 months after random assignment.

Supports Received	Support Description
Academic advising	Academic advising; for example, one-on-one meetings with a counselor to discuss course selection and progress toward meeting academic goals (survey B12a).
Tutoring	Tutoring (survey B12c).

Career counseling	Career counseling; for example, tests to see what jobs the respondent is suited for, information about education or job training programs, or information about what jobs are available in the local area (survey B12d).
Job search assistance	Job search assistance; for example, help with developing a resume or interviewing skills, networking skills, assistance in searching for work, or referrals to jobs (survey B12e).

Outcome	Outcome Description
Any	Respondent attended at least one education or training program in the first 18 months after random assignment in which the respondent received the given support service (binary).
Number of times[a]	Number of times respondent received the given support service while attending an education or training program in the first 18 months after random assignment (continuous).

NOTE:
[a] For study participants who did not respond to the initial open-ended survey question on number of times the service was received (B12_1), the survey included a follow-up categorical question on ranges (e.g., 3-4 times; B12_2). For respondents who provided only a categorical response, the evaluation imputes number of times received using the mean of responses for other respondents in the given treatment group whose reported number fell within that range. See Appendix Section D.2.5 for more detail.

Exhibit E.1-5 Service Contrast Analysis: Content of Training Outcomes

Overview of Outcome Measures:
Content of Training

The outcomes listed below are based on participant responses to the 18-month follow-up survey. These outcomes are exploratory for the CCCA Evaluation and measure the attention to general skills in the training received since random assignment. These outcomes are set to 0 for those survey respondents who received no training between random assignment and survey interview.

Outcome	Outcome Description
General skill received:	Respondent attended any education or training program between random assignment and survey interview in which the following general skill was covered:
1. Study skills	1. Study skills, such as locating information, taking notes, and preparing for classes and exams (survey B21a; binary)
2. Help with problems	2. Finding help with problems at school, work, or home (survey B21b; binary)
3. Time management	3. Managing time effectively (survey B21c; binary)
4. Working in groups	4. Working in groups (survey B21d; binary)
5. Communicating well	5. Communicating well; for example, good listening and speaking skills (survey B21e; binary)
6. Managing stress	6. Managing stress, anger, or frustration (survey B21f; binary)
7. Behaving professionally	7. Behaving professionally; for example, how to dress, show good attendance habits, and be respectful (survey B21g; binary)
8. Managing money	8. Managing money and personal finances (survey B21h; binary)
9. Handling parenting	9. Handling parenting and other family responsibilities (survey B21i; binary)

E.2 Short-Term Impact Analysis Outcomes

Exhibit E.2-1 Short-Term Impact Analysis: Educational Attainment Outcomes

Overview of Outcome Measures: Educational Attainment

The outcomes listed below are based on participant responses to the 18-month follow-up survey. The CCCA Evaluation defines the following two outcomes as secondary because of their intermediate role between training completion and employment: ***received a high school diploma, GED, or high school equivalence diploma in the first 18 months after random assignment*** and ***received any post-secondary degree or occupational certificate in the first 18 months after random assignment***. All other outcomes included in this table are exploratory for the CCCA Evaluation, measuring impacts on different components of education completed between random assignment and survey interview.

Outcome	Outcome Description
Educational Attainment	
Received any degree, certificate, credential, or license	Received any of the following between random assignment and survey interview (survey B13, B15-B17; binary): 1. A high school-level degree; 2. A post-high school degree or occupational certificate; 3. Any college credits; or 4. An industry-recognized certification, credential, or license.
Received a high school diploma, GED, or high school equivalence diploma [Secondary]	Received a GED, high school equivalence diploma, High School Certificate of Completion, or high school diploma between random assignment and survey interview (survey B15, B16b; binary).
Received a postsecondary degree or occupational certificate [Secondary]	Received any diploma, postsecondary academic degree, or career or occupational training credential or certificate between random assignment and survey interview (survey B16a; binary).
Number of college credits earned	Number of college credits earned between random assignment and survey interview (survey B13a, continuous).
Received any industry-recognized certification, credential, or license	Received any industry-recognized certification, credential, or license awarded by the state, or by an industry or professional association between random assignment and survey interview (survey B17; binary).

Exhibit E.2-2 Short-Term Impact Analysis: College Enrollment and Degree Outcomes

Overview of Outcome Measures: Receipt of College Degrees

The outcomes listed below are based on administrative data from the National Student Clearinghouse (NSC). These outcomes are exploratory for the CCCA Evaluation and measure postsecondary degree receipt.

Outcome	Outcome Description
Received a college degree (associates or higher) between random assignment and the given quarter	Received an associates or higher degree from a degree-granting postsecondary educational institution between random assignment and the end of the given quarter after random assignment (NSC; binary). The quarter of random assignment is deemed quarter 0. Defined for quarter 1 through quarter 8 after random assignment.
Received any college credential or degree between random assignment and the given quarter	Received a college credential or degree (associates or higher) from a degree-granting postsecondary educational institution between random assignment and the end of the given quarter (NSC; binary). Defined for quarter 1 through quarter 8 after random assignment.

E.3 Longer-Term Impact Analysis Outcomes

Exhibit E.3-1 Longer-Term Impact Analysis: Employment (Survey Outcomes)

Overview of Outcome Measures: Employment (Survey Outcomes)

The outcomes listed below are based on participant responses to the 18-month follow-up survey. The CCCA Evaluation defines as secondary ***total months of education, occupational training, employment, or military service in the first 18 months after random assignment*** because it reflects the total time spent in a productive capacity since random assignment. All other outcomes listed are exploratory for the CCCA Evaluation and measure various dimensions of employment at follow-up and since random assignment. Conditional outcomes—those outcomes that are defined for only a subset of survey respondents—are indicated using *italics*.

Outcome	Outcome Description
Employment	
Employed or in the military 18 months after random assignment	Respondent was employed or in the military 18 months after random assignment (survey C1-C2, C5; binary).
Ever employed or in the military	Respondent held at least one job or was in the military in the first 18 months after random assignment (survey C1-C2; binary).
Ever employed	Respondent held at least one job in the first 18 months after random assignment (survey C1-C2; binary).
Ever in the military	Respondent was in the military in the first 18 months after random assignment (survey C1-C2; binary).
Intensity of Employment	
Total hours worked per week 18 months after random assignment[a]	Hours worked in a typical week at respondent's main job 18 months after random assignment; zero if unemployed 18 months after random assignment (survey C1, C6-C7; continuous).
Hours worked per week, if employed	For those employed 18 months after random assignment, hours worked in a typical week at respondent's main job 18 months after random assignment (survey C1, C6-C7; continuous). Outcome not defined (set to missing) for survey respondents who were not employed 18 months after random assignment.

Total months of employment or military service	Total months employed or in the military in the first 18 months after random assignment (survey C1, C4-C5; continuous). Constructed as the sum of all non-overlapping employment spells.
Total hours of employment or military service[a]	Total hours employed or in the military in the first 18 months after random assignment (survey C1, C4-C7; continuous). Constructed as the product of total hours worked per week and total weeks employed for each employment or military service spell.
Combined Employment and Education/Training	
Total months in education, training, employment, or military service [Secondary]	Total months of education, occupational training, or employment (including military service) in the first 18 months after random assignment (survey B5-B9, C1, C4-C5; continuous). Constructed as the sum of total months of education or training attended, and total months of employment or military service.
Total months, if any	For those who attended at least one educational or occupational training program or were ever employed or in military service in the first 18 months after random assignment, number of months in training or employed/in the military (survey B1-2, B5-B9, B14, C1, C4-5; continuous). Outcome not defined (set to missing) for survey respondents who attended no education/occupational training and were never employed/in the military in the first 18 months after random assignment.
Total hours in education/training or employed/in the military	Total hours either in education/training activities or employed/in the military since random assignment (survey B5-B11, C1, C4-C7; continuous). Constructed as the sum of total hours of education or training attended, and total hours of employment or military service.
Total hours, if any	For those who attended at least one educational or occupational training program or were ever employed or in military service in the first 18 months after random assignment, number of hours in training or employed/in the military (survey B1-2, B5-B11, B14, C1, C4-7; continuous). Outcome not defined (set to missing) for survey respondents who attended no education/occupational training and were never employed/in the military in the first 18 months after random assignment.
Hours per week, if any	For those who attended at least one educational or occupational training program or were ever employed or in military service in the first 18 months after random assignment, equal to total hours attended/employed divided by total weeks attended/employed, where total weeks is equal to total months multiplied by 4.35 (survey, B1-2, B5-B11, B14, C1, C4-7; continuous). Outcome not defined (set to missing) for survey respondents who attended no education/occupational training and were never employed/in the military in the first 18 months after random assignment.

NOTE:

[a] For study participants who did not respond to the initial open-ended survey question on weekly hours worked (C6), the survey included a follow-up categorical question on ranges of hours worked (C7). For respondents who provided only a categorical response, the evaluation imputes weekly hours using the mean of responses for other respondents in the given treatment group whose weekly hours value fell within that range. All responses capped at 60 hours per week. See Appendix Section D.2.5 for more detail.

Exhibit E.3-2 Longer-Term Impact Analysis: Employment and Earnings (NDNH Outcomes)

Overview of Outcome Measures: Employment and Earnings (NDNH)

The outcomes listed below are based on administrative data from the National Directory of New Hires (NDNH). These outcomes are exploratory for the CCCA Evaluation and measure employment and earnings through six quarters (18 months) after random assignment. Conditional outcomes—those outcomes that are defined for only a subset of the study sample — are indicated using *italics*.

Outcome	Outcome Description
Employment	
Total quarters employed during quarters 1 through 6	Number of quarters employed from quarter 1 through quarter 6 after random assignment (NDNH; continuous). The quarter of random assignment is deemed quarter 0.
Ever employed in quarters 1 through 6	Ever employed during quarter 1 through quarter 6 after random assignment (NDNH; binary).
Ever employed in given quarter	Ever employed in the given quarter after random assignment (NDNH; binary). Defined for the first 7 quarters after random assignment, and the four quarters immediately before random assignment.
Earnings	
Cumulative earnings in quarters 1 through 6	Total earnings from quarter 1 through quarter 6 after random assignment (NDNH; continuous). The quarter of random assignment is deemed quarter 0.
Cumulative earnings, if ever employed, in quarters 1 through 6	For those sample members who were ever employed in quarters 1 through 6, total earnings from quarter 1 through quarter 6 after random assignment (NDNH; continuous). Outcome not defined (set to missing) for sample members who were never employed in quarters 1 through 6.
Earnings in given quarter	Earnings in the given quarter after random assignment (NDNH, continuous). Defined for the first 7 quarters after random assignment, and the four quarters immediately before random assignment.

Exhibit E.3-3 Longer-Term Impact Analysis: Risky Behaviors and Benefits Outcomes

Overview of Outcome Measures:
Risky Behaviors and Benefits Receipt

The outcomes listed below are based on participant responses to the 18-month follow-up survey. These outcomes are exploratory for the CCCA Evaluation and measure risky behaviors and public benefit receipt at follow-up.

Outcome	Outcome Description
Risky Behaviors	
Any arrest since random assignment	Respondent was arrested or taken into custody for a crime or illegal offense between random assignment and survey interview (not including minor motor vehicle violations) (survey D3; binary).
Illegal drug use in last week	Respondent used marijuana or any illegal drug, took a prescription drug in a way that was not prescribed, or inhaled something to get high in the week prior to the survey interview (survey D4a; binary).
Conducted a property offense in last week	Respondent conducted a property offense in the week prior to the survey interview, such as shoplifting, burglary, larceny, theft, auto theft, bad checks, fraud, forgery, arson, vandalism, or possession of stolen goods (survey D4c; binary).
Public Benefit Receipt	
Received SNAP in last three months	Respondent (or respondent's family if living with them) received Supplemental Nutrition and Assistance Program (SNAP) benefits, also known as food stamps, in the three months prior to the survey interview (survey D5; binary).
Received TANF in last three months	Respondent (or respondent's family if living with them) received Temporary Assistance for Needy Families (TANF) benefits, also known as welfare or cash assistance, in the three months prior to the survey interview (survey D6; binary).
Received Medicaid in last three months	Respondent (or respondent's family if living with them) received Medicaid in the three months prior to the survey interview (survey D7; binary).

Appendix F: Definitions of Baseline Measures

This appendix provides information on how variables built from baseline data are constructed for the CCCA Evaluation's Service Contrast Analysis and Impact Analysis. Most of these variables are built from data collected in the Baseline Information Form from CCCA program applicants before random assignment (see Appendix Section B.3.1 for more detail on the BIF). Additional baseline measures are built from data from the National Job Corps' OASIS database (see Appendix Section B.1) and from the NDNH (see Appendix Section B.4.3). The evaluation uses baseline information for four purposes: (1) to describe the study sample, including the full study sample and the Survey Cohort; (2) to check random assignment in the study sample through baseline balance testing between the members of the treatment group and control group; (3) to define subgroups; and (4) as covariates to improve precision of impact estimates. This appendix describes the construction of each of these sets of variables.

In particular, Section F.1 describes the construction of baseline measures used to describe the study sample and to check random assignment by measuring balance between those randomly assigned to the treatment and control groups. Section F.2 describes the construction of the subgroups for the Service Contrast Analysis and the Impact Analysis. Section F.3 describes the construction of the candidate covariates from which covariates are selected as controls for the impact estimate regressions, and Section F.4 lists the set of candidate covariates selected as regression controls.

F.1 Sample Characteristics

Exhibit F.1-1 provides variable definitions and details for baseline measures used to describe the study sample and to measure baseline balance between those students randomly assigned to the treatment group and the control group. These tables are reported in Appendix Section H.1 of this volume. These variables are based on information collected in the OASIS database at application to Job Corps, and in the BIF immediately before random assignment.[47]

[47] The BIF is available on the DOL website: Add URL once available from DOL.

Exhibit F.1-1 Sample Characteristics at Baseline

Baseline Measure	Description
Gender	Respondent's sex (male or female) (BIF; binary).
Race/Ethnicity: • Asian • Black or African-American • White • American Indian or Alaska Native • Native Hawaiian or Other Pacific Islander • Hispanic/Latino • Multiple races	At application to Job Corps, respondent selected the following race/ethnic categorization: • Non-Hispanic Asian, and no other race (OASIS; binary). • Non-Hispanic Black or African-American, and no other race (OASIS; binary). • Non-Hispanic white, and no other race (OASIS; binary). • Non-Hispanic American Indian/Alaskan Native, and no other race (OASIS; binary). • Non-Hispanic Native Hawaiian/other Pacific Islander, and no other race (OASIS; binary). • Hispanic/Latino and not American Indian/Alaskan Native or Native Hawaiian/other Pacific Islander (OASIS; binary) • More than one race from the list above, or Hispanic/Latino and American Indian/Alaskan Native or Native Hawaiian/other Pacific Islander (OASIS; binary).
Spoke language other than English at home when growing up	Respondent spoke language other than English at home when growing up (BIF; binary).
Age	Respondent's age at random assignment, in years, calculated from the student's birth date and date of random assignment (PDS, continuous).
One or more dependents	Respondent had one or more dependents at application to Job Corps (OASIS; binary).
High school educational attainment: • High school diploma • GED • High school equivalence (other than GED) • No high school attainment	At application to Job Corps, respondent help the following type of high school diploma: • Regular high school diploma (OASIS; binary). • General education development (GED) exam (OASIS; binary). • Other high school equivalence other than GED (OASIS; binary). • No high school degree (OASIS; binary).
Currently employed	Respondent was employed at the time of application to Job Corps (OASIS; binary).
Never worked for pay	Respondent had never worked for pay at random assignment (BIF; binary).
Current or most recent wage	Respondent's current or most recent wage at random assignment; equal to zero for those who had never worked (BIF; continuous).
Current receipt of SNAP	Respondent, or respondent's family if the respondent was living with them at the time, was receiving Supplemental Nutrition and Assistance Program (SNAP) at random assignment (BIF; binary).
Ever received TANF	Respondent, or respondent's family, ever received Temporary Assistance for Needy Families (TANF) before random assignment (BIF; binary).
Ever arrested	Respondent was ever arrested before random assignment (BIF; binary).

F.2 Subgroup Identifiers

This section provides variable definitions and details for the subgroups for the CCCA Evaluation's Service Contrast Analysis and Impact Analysis. As discussed in Appendix Section D.2.3, the evaluation compares the difference in impacts for five subgroups: (1) by pathway at application to the CCCA

program (healthcare versus IT), (2) by gender, (3) by age at random assignment (16-17 versus 18-21), (4) by Star score at application to the program (average math and reading scores below the 9th grade level versus at the 9th grade level and above), and (5) by completed education at application to Job Corps (less than a high school education versus a high school degree/GED or more). Exhibit F.2-1 provides information on how the subgroup identifiers are defined and constructed, including the data source.

Exhibit F.2-1 Subgroup Identifiers

Subgroup	Description
Pathway (PDS)	
Healthcare	Respondent selected the healthcare pathway at application to the CCCA program. A small number of students requested to change pathways after random assignment (11 in the Survey Cohort, 24 overall in the full study sample). For analysis purposes, students were classified by the *original* track selected at the time of random assignment.
Information technology (IT)	Respondent selected the Information technology (IT) pathway at application to the CCCA program.
Gender (BIF)	
Male	Respondent's reported gender at random assignment is male.
Female	Respondent's reported gender at random assignment is female.
Age (PDS)	
Age 16 – 17	Respondent's age at random assignment (measured in years) was 16 or 17.
Older than 17	Respondent's age at random assignment (measured in years) was 18 or older.
Star Assessment Level (Renaissance)	
Star score below 9th grade	Respondent's average grade level equivalent on the Star math and reading assessments, taken shortly before random assignment, was below the 9th grade level. Students' grade level equivalents on the Star math and reading test were averaged to calculate an overall average grade level equivalent; the median value of this overall grade level equivalent among CCCA and CCCA-Eligible students was 9.0 (9th grade).
Star score 9th grade or above	Respondent's average grade level equivalent on the Star math and reading assessments, taken shortly before random assignment, was at or above the 9th grade level.
High School Completion (OASIS)	
Less than high school	Respondent had not received a high school-level degree (diploma, GED, or equivalency) at application to Job Corps.
High school/GED or more	Respondent had received a high school diploma, GED, or high school equivalency before applying to Job Corps.

F.3 Candidate Covariates

This section lists the candidate covariates for the impact regressions for the Service Contrast Analysis and the Impact Analysis (see Exhibit F.3-1). As described in Appendix Section D.2.4, the evaluation uses LASSO to select the set of regression controls to estimate impacts from these candidate covariates.

Exhibit F.3-1 below lists the candidate covariates and excluded category for each. For the BIF- and OASIS-based candidate covariates, the evaluation codes any respondents with missing data as part of the excluded category. The last two candidate covariates listed in the exhibit—NDNH-measured employment and earnings in the six quarters before random assignment—are only used as candidate covariates for

NDNH-based outcomes. As discussed in Appendix Section D.2.5, for sample members who are included in the NDNH analyses, there is no missing NDNH data.[48]

Exhibit F.3-1 Candidate Covariates for Impact Regressions

Candidate Covariate (Measured at Baseline)	Variable Type	Excluded Category
Race/ethnicity (White non-Hispanic vs. Other)	Binary	White non-Hispanic
Speaks language other than English at home	Binary	Other
Mother's highest education (three dummies defined by terciles)	Categorical	Middle tercile
Mother's employment status	Binary	Employed
Months since left school (above median vs. other)	Binary	Other
Star Math grade-level equivalence (three dummies defined by terciles)	Categorical	Middle tercile
Star Reading grade-level equivalence (three dummies defined by terciles)	Categorical	Middle tercile
Ever had an Individualized Learning Plan (IEP)	Binary	No IEP
Ever repeated a grade	Binary	Never repeated
Ever suspended from school	Binary	Never suspended
Ever worked full-time prior to random assignment	Binary	Never full-time
Participant/family receiving SNAP at random assignment	Binary	No SNAP
Participant/family ever received TANF prior to random assignment	Binary	No TANF
Ever homeless, a runaway, or in foster care prior to random assignment	Binary	Never homeless
Self-efficacy scale (below median vs. other)	Binary	Other
Future orientation scale (below median vs. other)	Binary	Other
Reaction to challenge scale – negative components (below median vs. other)	Binary	Other
Reaction to challenge scale – positive components (below median vs. other)	Binary	Other
Timing of random assignment (dummy for respondents whose 18-month follow-up falls March 2020+/COVID-19)	Binary	Other
Employment (NDNH only; dummies for each of 6 quarters pre-randomization)	Binary	Employed
Earnings (NDNH only; variable for each of 6 quarters pre-randomization)	Continuous	N/A

KEY: N/A=not applicable.

F.4 Regression Covariates

This section reports the set of covariates that the evaluation uses when estimating the impacts discussed in Chapter 4 of the *Final Report*. As explained in Appendix Section D.2.4, the evaluation uses LASSO to select the set of candidate covariates included as controls for the impact estimate regressions.

The evaluation runs LASSO three times: (1) for survey-based outcomes, (2) for CIS- and NSC-based outcomes, and (3) for NDNH-based outcomes.

In addition to the LASSO-selected covariates, the evaluation also includes a set of required covariates:

- The five subgroup identifiers (see Appendix Section F.2); and

[48] The approximately 4 percent of full study sample members whose name and SSN failed to match against the SSA master records are treated as unit non-response in the NDNH data and dropped from NDNH analyses. For those sample members who are successfully matched to the SSA master records, any quarters with missing earnings data are treated as not employed in that quarter (zero earnings).

- Any candidate covariates that are significantly different at the 5 percent level between the treatment group and control group members of the Survey Cohort.
- For impact regressions run on the full study sample for CIS-, NSC-, and NDNH-based outcomes, the evaluation also requires as covariates:
- Identifiers for the Pre-Survey Cohort distinguishing the three randomization ratios used (see Appendix Section D.2.3 for more detail):
    - Pre-Survey Cohort random assignment (RA) period 1: those randomized between February 1, 2017 and May 4, 2017, randomized at 1:1 treatment versus control;
    - Pre-Survey Cohort RA period 2: those randomized between May 5, 2017 and September 4, 2017, randomized at 3:1 treatment versus control; and
    - Pre-Survey Cohort RA period 3: those randomized between September 5, 2017 and September 30, 2017, randomized at 1:1 treatment versus control.
- An identifier for the Post-Survey Cohort.

Separately by data source, Exhibit F.4-1 lists the set of required covariates and the set of candidate covariates selected by LASSO for impacts reported in Chapter 4 of the *Final Report*.

Exhibit F.4-1 Regression Covariates Selected for the CCCA Evaluation's Impact Regressions

Data Source	Required Covariate	LASSO-Selected Covariates
Survey-Based Outcomes	• Pathway subgroup • Gender subgroup • Age subgroup • High school completion subgroup • Star grade level equivalent subgroup • Ever repeated a grade • Star Math grade-level equivalence: bottom tercile	• Mother's highest education: bottom tercile • Out of school for five months or longer • Ever suspended from school • Reaction to challenge scale (negative components): below median
CIS- and NSC- Based Outcomes	• Pathway subgroup • Gender subgroup • Age subgroup • High school completion subgroup • Star grade level equivalent subgroup • Ever repeated a grade • Star Math grade-level equivalence: bottom tercile Full Study Sample: • Pre-Survey Cohort, RA period 1 • Pre-Survey Cohort, RA period 2 • Pre-Survey Cohort, RA period 3 • Post-Survey Cohort	• Speaks language other than English at home • Out of school for five months or longer • Star Math grade-level equivalence: top tercile • Star Reading grade-level equivalence: bottom tercile top tercile • Ever suspended from school • Indicator that 18-month follow-up period includes COVID (March 2020+)
NDNH-Based Outcomes	• Pathway subgroup • Gender subgroup • Age subgroup • High school completion subgroup	• Speaks language other than English at home • Ever worked full-time prior to random assignment

Data Source	Required Covariate	LASSO-Selected Covariates
	• Star grade level equivalent subgroup • Ever repeated a grade • Star Math grade-level equivalence: bottom tercile Full Study Sample: • Pre-Survey Cohort, RA period 1 • Pre-Survey Cohort, RA period 2 • Pre-Survey Cohort, RA period 3 • Post-Survey Cohort	• Ever homeless, a runaway, or in foster care prior to random assignment • Quarterly earnings prior to quarter of random assignment: 1st quarter prior 2nd quarter prior 4th quarter prior • Ever employed in 6th quarter prior to quarter of random assignment

Appendix G. Detailed Results – Program Flow Analysis

This appendix provides additional detail for the Participant Flow Analysis discussed in Chapter 3 of the *Final Report*. This appendix is organized by the sections of Chapter 3: student characteristics, length of stay, disciplinary separations, and enrollment in education.

G.1 Student Characteristics

Exhibit G.1-1 (means) and Exhibit G.1-3 (p-values) provides additional detail for Exhibits 3-1 and 3-2 in the *Final Report*; Exhibit G.1-2 provides detail for Exhibit 3-3.

Exhibit G.1-1 Student Characteristics (Means)

	CCCA (*n*=261)	Other PNW (*n*=1,724)	Non-PNW (*n*=39,493)	CCCA-Eligible (*n*=168)
Age (years)	18.9	18.5	18.6	18.9
Male (%)	64.4	74.7	63.6	63.7
Hispanic (%)	12.6	21.3	20.4	12.5
Black (%)	6.5	6.4	49.7	10.7
White (%)	72.4	66.0	23.5	73.2
Other Race (%)	21.1	27.7	26.8	16.1
Married (%)	0.0	0.2	0.2	0.0
Has Dependents (%)	1.5	2.2	4.1	1.2
Disability (%)	62.5	41.8	30.9	44.0
Has Prior HS/GED degree (%)	44.8	32.2	33.6	45.2
Months out of School (months)	11.6	8.7	9.5	9.7
Has Prior Conviction (%)	3.4	1.6	1.8	3.4
Prior Military (%)	0.4	0.5	2.4	0.4
Homeless (%)	2.4	3.3	4.2	2.4
Average Annual Family Income ($)	$310.21	$501.50	$1,271.76	$394.82
Receives Public Assistance (%)	29.6	23.0	28.6	29.6
Has Previous Employment (%)	30.0	21.2	38.7	30.0
Average Weeks Unemployed (weeks)	13.0	18.2	12.6	9.2
Achieved 9th Grade Level or Above at Entry (%)	52.9	29.0	21.1	52.4
Average Math Grade Level Equivalent at Baseline	8.6	7.3	6.5	8.5
Average Reading Grade Level Equivalent at Baseline	8.6	7.8	7.2	8.6

KEY: PNW=Pacific Northwest.
SOURCE: Outreach and Admissions Student Input System, Center Information System and Renaissance Star Assessments data. *N*=41,646 (includes students ages 16-21 who applied to Job Corps between November 2017 and December 2018 and who arrived prior to July 2019; excludes withdrawals).

Exhibit G.1-2 Student Characteristics (Means) by Pathway

	CCCA (n=261)		CCCA-Eligible (n=168)	
	Healthcare	IT	Healthcare	IT
Age (years)	18.6	19.1	18.6	19.1
Male (%)	28.3	89.0	27.3	87.3
Hispanic (%)	18.9	8.4	16.7	9.8
Black (%)	6.6	6.5	15.2	7.8
White (%)	67.9	75.5	66.7	77.5
Other Race (%)	25.5	18.1	18.2	14.7
Married (%)	0.0	0.0	0.0	0.0
Has Dependents (%)	0.9	1.9	3.0	0.0
Disability (%)	62.3	62.6	40.9	46.1
Has Prior HS/GED degree (%)	43.4	45.8	43.9	46.1
Months out of School (months)	8.9	13.4	8.8	10.3
Has Prior Conviction (%)	1.9	1.9	3.0	1.0
Prior Military (%)	0.0	0.6	3.0	2.0
Homeless (%)	8.5	5.2	4.5	3.9
Average Annual Family Income ($)	$360.32	$275.94	$447.94	$360.45
Receives Public Assistance (%)	42.5	19.4	30.3	27.5
Has Previous Employment (%)	52.8	38.7	31.8	43.1
Average Weeks Unemployed (weeks)	14.2	12.0	7.9	10.2
Achieved 9th Grade Level or Above at Entry (%)	41.5	60.6	47.0	55.9
Average Math Grade Level Equivalent at Baseline	8.5	8.7	8.5	8.5
Average Reading Grade Level Equivalent at Baseline	8.5	8.8	8.6	8.7

SOURCE: Outreach and Admissions Student Input System, Center Information System and Renaissance Star Assessments data. *N*=429 (includes CCCA and CCCA-eligible students ages 16-21 who applied to Job Corps between November 2017 and December 2018 and who arrived prior to July 2019; excludes withdrawals).

Exhibit G.1-3 Student Characteristics (p-values for two-tailed t-test comparisons)

	CCCA v Other PNW	CCCA v Non-PNW	CCCA v. CCCA-Eligible	Other PNW v Non-PNW	Other PNW v CCCA-Eligible	Non-PNW v CCCA-Eligible
Age (years)	0.00133***	0.01468**	0.96180	0.00760***	0.00414***	0.03002**
Male (%)	0.00113***	0.80832	0.88695	0.00000***	0.00484***	0.99011
Hispanic (%)	0.00018***	0.00020***	0.96515	0.40505	0.00156***	0.00229***
Black (%)	0.93545	0.00000***	0.14026	0.00000***	0.08033*	0.00000***
White (%)	0.03177**	0.00000***	0.85598	0.00000***	0.04565**	0.00000***
Other Race (%)	0.01695**	0.02448**	0.18943	0.43958	0.00018***	0.00023***
Married (%)	0.08326*	0.00000***	.***	0.47385	0.08326*	0.00000***
Has Dependents (%)	0.42445	0.00101***	0.76296	0.00000***	0.26685	0.00076***
Disability (%)	0.00000***	0.00000***	0.00019***	0.00000***	0.57062	0.00079***
Has Prior HS/GED degree (%)	0.00014***	0.00032***	0.93374	0.23720	0.00135***	0.00285***
Months out of School (months)	0.00402***	0.02842**	0.15313	0.01017**	0.26019	0.77279
Has Prior Conviction (%)	0.12995	0.73167	0.92228	0.00008***	0.15747	0.87433
Prior Military (%)	0.95579	0.83494	0.10882	0.71492	0.09871*	0.10610
Homeless (%)	0.01011**	0.03441**	0.28137	0.03246**	0.27793	0.55638
Average Annual Family Income ($)	0.10276	0.00000***	0.68667	0.00000***	0.59332	0.00001***
Receives Public Assistance (%)	0.76425	0.04280**	0.97080	0.00000***	0.77083	0.11395
Has Previous Employment (%)	0.00001***	0.00000***	0.23802	0.00000***	0.02785**	0.00001***
Average Weeks Unemployed (weeks)	0.02549**	0.84229	0.13455	0.00003***	0.00004***	0.04687**
Achieved 9th Grade Level or Above at Entry (%)	0.00000***	0.00000***	0.92081	0.00000***	0.00000***	0.00000***
Average Math Grade Level Equivalent at Baseline	0.00000***	0.00000***	0.11585	0.00000***	0.00000***	0.00000***
Average Reading Grade Level Equivalent at Baseline	0.00000***	0.00000***	0.70709	0.00000***	0.00000***	0.00000***

KEY: PNW=Pacific Northwest. *p<.10, **p<.05, ***p<.01

SOURCE: Outreach and Admissions Student Input System, Center Information System and Renaissance Star Assessments data. *N*=41,646 (includes students ages 16-21 who applied to Job Corps between November 2017 and December 2018 and who arrived prior to July 2019; excludes withdrawals.

Exhibit G.1-4 Student Characteristics by Pathway (p-values for two-tailed t-test comparisons)

	CCCA-Healthcare v CCCA-IT	CCCA-Healthcare v CCCA-Eligible Healthcare	CCCA-Healthcare v CCCA-Eligible IT	CCCA-IT v CCCA-Eligible Healthcare	CCCA-IT v CCCA-Eligible IT	CCCA-Eligible Healthcare v CCCA-Eligible IT
Age (years)	0.03516**	0.79447	0.02393**	0.03811**	0.81127	0.02693**
Male (%)	0.00000***	0.88431	0.00000***	0.00000***	0.67005	0.00000***
Hispanic (%)	0.01891**	0.71405	0.06209*	0.11006	0.70273	0.21366
Black (%)	0.96126	0.09448*	0.73170	0.07721*	0.67630	0.16186
White (%)	0.18805	0.86549	0.12400	0.19723	0.71669	0.13532
Other Race (%)	0.16075	0.25653	0.05264*	0.98362	0.47499	0.55956
Married (%)	n/a	n/a	n/a	n/a	n/a	n/a
Has Dependents (%)	0.49650	0.37200	0.31961	0.64904	0.08326*	0.15888
Disability (%)	0.95887	0.00645***	0.01914**	0.00334***	0.00955***	0.51186
Has Prior HS/GED degree (%)	0.70176	0.94479	0.69903	0.79989	0.96604	0.78712
Months out of School (months)	0.01275**	0.96432	0.37401	0.02182**	0.08046*	0.40549
Has Prior Conviction (%)	0.97758	0.64913	0.58353	0.64904	0.51961	0.38355
Prior Military (%)	0.31888	0.15888	0.15832	0.28641	0.38910	0.67381
Homeless (%)	0.30731	0.29454	0.17247	0.84477	0.63762	0.84694
Average Annual Family Income ($)	0.68663	0.84627	0.99959	0.68480	0.64866	0.84293
Receives Public Assistance (%)	0.00009***	0.10589	0.02315**	0.09648*	0.14000	0.69368
Has Previous Employment (%)	0.02498**	0.00615***	0.16339	0.32566	0.48296	0.13824
Average Weeks Unemployed (weeks)	0.58715	0.15157	0.30274	0.25119	0.53121	0.53088
Achieved 9th Grade Level or Above at Entry (%)	0.00233***	0.48725	0.03833**	0.06475*	0.45172	0.26241
Average Math Grade Level Equivalent at Baseline	0.00806***	0.79243	0.76869	0.03839**	0.02684**	0.98954
Average Reading Grade Level Equivalent at Baseline	0.00161***	0.40921	0.08110*	0.05385*	0.17243	0.45587

NOTE: n/a Test Not Applicable (not enough observations). *p<.10, **p<.05, ***p<.01
SOURCE: Outreach and Admissions Student Input System, Center Information System and Renaissance Star Assessments data. *N*=41,646 (includes students ages 16-21 who applied to Job Corps between November 2017 and December 2018 and who arrived prior to July 2019; excludes withdrawals.

G.2 Length of Stay

Exhibit G.2-1 provides additional detail supporting the discussion of length of stay in Section 3.2 of the *Final Report*.

Exhibit G.2-1 Median Length of Stay by Student Characteristics

	CCCA		Other PNW		Non-PNW		CCCA-Eligible	
	Months	N	Months	N	Months	N	Months	N
Overall	10.3	244	6.9	1,629	6.0	37,307	7.5	158
Male	10.8	156	6.6	1,217	5.9	23,603	8.0	97
Female	7.6	88	7.4	412	6.2	13,704	6.9	61
Age 16-17 years	7.3	79	5.2	630	5.4	13,482	5.7	47
Age 18-21 years	11.3	165	8.0	999	6.3	23,825	8.1	111
IT	10.8	142	N/A	N/A	N/A	N/A	8.3	95
Healthcare	8.0	102	N/A	N/A	N/A	N/A	5.8	63
White	10.8	171	6.6	1,037	6.0	8,369	7.5	108
Black	3.6	14	8.3	101	5.7	18,369	7.8	17
Other	6.1	38	6.2	203	6.4	3,891	7.8	18
Hispanic	11.6	21	7.6	288	6.7	6,678	5.7	15
Recorded Disability	9.0	150	7.9	680	6.7	11,291	8.9	68
No Recorded Disability	10.8	94	6.2	949	5.7	26,016	6.6	90
Has Prior HS/GED	12.7	106	8.2	511	6.9	12,311	8.0	74
No Prior HS/GED	8.2	138	6.2	1,118	5.4	24,996	6.6	84
Below Median Math GLE	7.6	79	7.3	1,070	6.1	29,319	6.7	58
Above Median Math GLE	12.2	162	7.6	417	6.7	6,605	7.5	99
Below Median Reading GLE	7.6	83	7.0	930	6.0	25,049	6.0	48
Above Median Reading GLE	11.3	158	8.0	556	6.7	10,940	8.0	109

KEY: GLE=grade level equivalent. N/A=not applicable. PNW=Pacific Northwest.

SOURCE: Outreach and Admissions Student Input System, Center Information System and Renaissance Star Assessments data. *N*=41,646 (includes students ages 16-21 who applied to Job Corps between November 2017 and December 2018 and who arrived prior to July 2019; excludes withdrawals).

NOTES: Length of stay sums together all lengths of stay at all Job Corps centers following initial interview. Log-rank test rejects equality of CCCA and Other Job Corps overall survival functions ($p < .01$). Log-rank tests also reject equality of all survival functions for subgroups between CCCA and Other Job Corps. Log-rank tests reject equality of survival functions across all subgroup categories within CCCA program except race categories (i.e., cannot reject equality of White, Black, Hispanic, and Other). Last, log-rank tests reject equality of survival functions across all subgroup categories within Other Job Corps.

G.3 Disciplinary Separations

Exhibit G.3-1 provides additional detail for Exhibit 3-5 in the *Final Report*.

Exhibit G.3-1 Disciplinary Separation Rates

	CCCA (n=252)	Other PNW (n=1,704)	Non-PNW (n=39,379)	CCCA-Eligible (n=168)
All Disciplinary (%)	20.2	22.5	27.8	20.8
Level I Disciplinary (%)	12.3	16.6	21.2	14.9
Violence	5.2	5.6	12.1	6.0
Drugs and Alcohol	7.1	9.9	8.7	8.9
Level II Disciplinary (%)	7.9	5.9	6.6	6.0
Accumulation of violence-related violations	2.8	3.3	1.5	2.4
Accumulation of violations	4.4	2.2	4.0	3.0

SOURCE: Center Information System. *N*=41,503 (includes students ages 16-21 who applied to Job Corps between November 2017 and December 2018 and who arrived prior to July 2019; excludes withdrawals and 143 students with missing disciplinary separation reason).
NOTES: Tabulation summarizes reason for first separation from any Job Corps center. Pearson Chi squared test rejects equality of CCCA Treatment Survey Sample and Other Job Corps distributions ($p < .01$)

Exhibits G.3-2 and G.3-3 provide detail supporting discussions of variation in disciplinary separations by student characteristics and the timing of separations relative to the arrival date in Section 3.3 of the *Final Report*.

Exhibit G.3-2 Overall Disciplinary Separation Rates by Student Characteristic

	CCCA (*n*=252)		Other PNW (*n*=1,704)		Non-PNW (*n*=39,379)		CCCA-Eligible (*n*=168)	
	%	N	%	N	%	N	%	N
Overall	20.2	252	22.5	1,704	27.8	39,379	20.8	168
Male	23.3	163	25.5	1,272	31.1	25,058	25.9	108
Female	14.6	89	13.9	432	21.9	14,321	11.7	60
Age 16-17 years	23.5	81	28.4	649	35.8	14,094	23.4	47
Age 18-21 years	18.7	171	19.0	1,055	23.3	25,285	19.8	121
IT	20.9	148	N/A	N/A	N/A	N/A	23.5	102
Healthcare	19.2	104	N/A	N/A	N/A	N/A	16.7	66
White	17.3	173	20.3	1,084	19.9	8,853	18.1	116
Black	23.5	17	32.7	104	34.4	19,255	44.4	18
Other	25.6	39	33.5	215	25.2	4,169	15.0	20
Hispanic	30.4	23	19.3	301	21.2	7,102	21.4	14
Recorded Disability	18.1	155	20.5	706	26.7	12,136	16.7	72
No Recorded Disability	23.7	97	23.9	998	28.3	27,243	24.0	96
Has Prior HS/GED	15.6	109	15.4	544	17.8	13,185	11.4	79
No Prior HS/GED	23.8	143	25.9	1,160	32.8	26,194	29.2	89
Below Median Math GLE	18.8	85	24.3	1,116	29.5	30,965	25.4	63
Above Median Math GLE	20.7	164	19.9	447	20.1	7,023	17.3	104

Below Median Reading GLE	22.9	83	26.5	962	30.8	26,452	25.0	52
Above Median Reading GLE	18.7	166	17.6	601	21.1	11,601	18.3	115

KEY: GLE=grade level equivalent. N/A=not applicable.
SOURCE: Outreach and Admissions Student Input System, Center Information System and Renaissance Star Assessments data. *N*=41,503 (includes students ages 16-21 who applied to Job Corps between November 2017 and December 2018 and who arrived prior to July 2019; excludes withdrawals and 143 students with missing disciplinary separation reason).
NOTES: Tabulation summarizes reason for first separation from any Job Corps center. HSD = high school diploma or GED at entry. Pearson Chi squared test rejects equality of CCCA Treatment Survey Sample and Other Job Corps distributions ($p < .01$)

Exhibit G.3-3 Timing of Disciplinary Separation (in months)

Separation Reason	CCCA (*n*=233)	Other PNW (*n*=1,690)	Non-PNW (*n*=38,985)	CCCA-Eligible (*n*=166)
All Disciplinary	8.23	4.59	3.96	4.38
Level I Disciplinary	7.66	4.25	3.57	3.95
Violence	9.03	4.31	3.74	2.56
Drugs and Alcohol	6.70	4.07	3.24	4.88
Level II Disciplinary	9.08	5.54	5.22	5.45
Accumulation of violence-related violations	8.52	5.26	4.46	3.43
Accumulation of violations	9.06	5.71	5.73	7.05

SOURCE: Outreach and Admissions Student Input System, Center Information System and Renaissance Star Assessments data. *N*=41,074 (includes students ages 16-21 who applied to Job Corps between November 2017 and December 2018 and who arrived prior to July 2019; excludes withdrawals and excludes 572 students with missing information about the separation type or date).
NOTES: Tabulation summarizes reason for first separation from any Job Corps center.

G.4 Enrollment in Education

Exhibit G.4-1 provides additional detail for Exhibit 3-6 in the *Final Report*. Exhibit G.4-2 presents detail on enrollment by pathway, cited in the text of Section 3.4 in the *Final Report*.

Exhibit G.4-1 Secondary Education Services

	CCCA (*n*=261)	Other PNW (*n*=1,724)	Non-PNW (*n*=39,493)	CCCA-Eligible (*n*=168)
Completed HS/GED Prior to JC (%)	44.8	32.2	33.6	45.2
Completed HS Diploma Prior to JC (%)	41.4	28.4	30.8	36.3
Completed GED Prior to JC (%)	3.8	3.5	1.9	7.7
Started GED (%)	33.0	21.5	8.6	24.4
Earned GED (%)	29.9	15.4	7.1	20.2
Earned GED, among those who started after arrival (%)	*90.7*	*71.4*	*82.1*	*82.9*
Median time to GED completion (months)	3.0	4.0	4.4	2.7
Started High School Diploma (%)	17.6	21.8	21.4	17.9
Earned High School Diploma (%)	9.6	15.8	17.9	13.1
Earned HS, among those who started after arrival (%)	*54.3*	*72.8*	*83.7*	*73.3*
Enrolled in college while on site (%)	78.5	1.1	1.0	7.1

SOURCE: Center Information System, Career Transition System, and enrollment data from Skagit Valley College. *N*=41,646 (includes students ages 16-21 who applied to Job Corps between November 2017 and December 2018 and who arrived prior to July 2019; excludes withdrawals). College enrollment while on site is measured by Skagit Valley College enrollment data for the CCCA group only; enrollment in Advanced Training programs at Job Corps (as measured in the CIS) is used as a proxy measure for college enrollment among CCCA-Eligible, Other PNW and Non-PNW JC students, as Advanced Training includes college enrollment.

Exhibit G.4-2 Secondary Education Services by Pathway

	CCCA: Healthcare (*n*=106)	CCCA: IT (*n*=155)	CCCA-Eligible: Healthcare (*n*=66)	CCCA-Eligible: IT (*n*=102)
Completed HS/GED prior to JC (%)	43.4	45.8	43.9	46.1
Started GED (%)	29.2	35.5	21.2	26.5
Earned GED (%)	27.4	31.6	18.2	21.6
Started high school diploma (%)	17.9	17.4	18.2	17.6
Earned high school diploma (%)	6.6	11.6	12.1	13.7
Enrolled in college while on site (%)	68.9	85.2	9.1	5.9

SOURCE: Center Information System, Career Transition System, and enrollment data from Skagit Valley College. *N*=429 (includes CCCA and CCCA-Eligible students who applied to Job Corps between November 2017 and December 2018 and who arrived prior to July 2019; excludes withdrawals). College enrollment while on site is measured by Skagit Valley College enrollment data for the CCCA group only; enrollment in Advanced Training programs at Job Corps (as measured in the CIS) is used as a proxy measure for college enrollment among CCCA-Eligible and Other JC students, since Advanced Training includes college enrollment.

Exhibit G.4-3 Secondary Education Services (p-values for two-tailed t-test comparisons)

	CCCA v Other PNW	CCCA v Non-PNW	CCCA v. CCCA-Eligible	Other PNW v Non-PNW	Other PNW v CCCA-Eligible	Non-PNW v CCCA-Eligible
Started GED (%)	0.00024 ***	0.00000 ***	0.05399 *	0.00000 ***	0.40647	0.00000 ***
Earned GED (%)	0.00000 ***	0.00000 ***	0.02248 **	0.00000 ***	0.13798	0.00004 ***
Median time to GED completion (months)	0.06194 *	0.00000 ***	0.21637	0.00000 ***	0.97816	0.02240 **
Started High School Diploma (%)	0.10829	0.11087	0.95110	0.74310	0.21421	0.23224
Earned High School Diploma (%)	0.00216 ***	0.00001 ***	0.27040	0.02012 **	0.32105	0.06651 *
Enrolled in college while on site (%)	0.00000 ***	0.00000 ***	0.00000 ***	0.75781	0.00303 ***	0.00250 ***

SOURCE: Center Information System, Career Transition System, and enrollment data from Skagit Valley College. *N*=41,646 (includes students ages 16-21 who applied to Job Corps between November 2017 and December 2018 and who arrived prior to July 2019; excludes withdrawals). College enrollment while on site is measured by Skagit Valley College enrollment data for the CCCA group only; enrollment in Advanced Training programs at Job Corps (as measured in the CIS) is used as a proxy measure for college enrollment among CCCA-Eligible, Other PNW and Non-PNW JC students, as Advanced Training includes college enrollment. *p<.10, **p<.05, ***p<.01

Exhibit G.4-4 Secondary Education Services by Pathway (p-values for two-tailed t-test comparisons)

	CCCA-Healthcare v CCCA-IT	CCCA-Healthcare v CCCA-Eligible Healthcare	CCCA-Healthcare v CCCA-Eligible IT	CCCA-IT v CCCA-Eligible Healthcare	CCCA-IT v CCCA-Eligible IT	CCCA-Eligible Healthcare v CCCA-Eligible IT
Started GED (%)	0.28978	0.23517	0.65720	0.02662 **	0.12430	0.43429
Earned GED (%)	0.45945	0.15790	0.33351	0.02864 **	0.07155 *	0.59143
Median time to GED completion (months)	0.52590	0.11695	0.42390	0.21818	0.74695	0.43144
Started High School Diploma (%)	0.91684	0.96628	0.95853	0.89338	0.96276	0.93033
Earned High School Diploma (%)	0.15841	0.24475	0.09127 *	0.91586	0.62279	0.76265
Enrolled in college while on site (%)	0.00266 ***	0.00000 ***	0.00000 ***	0.00000 ***	0.00000 ***	0.45343

SOURCE: Center Information System, Career Transition System, and enrollment data from Skagit Valley College. *N*=41,646 (includes students ages 16-21 who applied to Job Corps between November 2017 and December 2018 and who arrived prior to July 2019; excludes withdrawals). College enrollment while on site is measured by Skagit Valley College enrollment data for the CCCA group only; enrollment in Advanced Training programs at Job Corps (as measured in the CIS) is used as a proxy measure for college enrollment among CCCA-Eligible, Other PNW and Non-PNW JC students, as Advanced Training includes college enrollment. *p<.10, **p<.05, ***p<.01

Appendix H. Detailed Results – Service Contrast Analysis and Impact Analysis

This appendix provides additional detail for the Service Contrast Analysis and Impact Analysis discussed in Chapter 4 of the *Final Report*. This appendix begins by providing background characteristics for the experimental study sample, both for the Survey Cohort and for the full sample, and tests for balance in the characteristics of those students randomized to the treatment group versus control group. The next six sections of this appendix are organized by the sections of Chapter 4: participation in Job Corps (Section H.1), education and occupational training receipt (Section H.2), receipt of other services (Section H.3), educational attainment (Section H.4), labor market outcomes (Section H.5), and broader measures of well-being (Section H.6). In line with the results reported in Chapter 4, all results reported in Sections H.1 through H.6 are estimated on the Survey Cohort only. The appendix ends with supplemental results estimated for the full experimental study sample measured in the CIS, NSC, or NDNH databases (Section H.7).

The exhibits included in Sections H.1 through H.6 include rows for all outcomes listed in Appendix E, including those reported in the Chapter 4 exhibits, and those outcomes discussed in Chapter 4 but not included in the Chapter 4 exhibits. These tables include additional detail beyond that shown in the Chapter 4 exhibits: outcome-specific sample size, *p*-value, and more significant digits.[49]

Exhibit H-1 provides background information for the Survey Cohort, and tests for differences in the characteristics of those students randomized to the treatment group versus control group. Exhibit H-2 reports the same information for the full experimental study sample (Pre-Survey, Survey, and Post-Survey Cohorts).

[49] For monetary outcomes, however, the appendix tables show the same number of significant digits as shown in the Chapter 4 exhibits.

Exhibit H-1 Job Corps Cascades: Baseline Balance Testing, Survey Cohort

Baseline Variable	Entire Sample	Treatment Group	Control Group	Difference
Gender (%)				
Female	37.7	37.3	38.2	-0.9
Male	62.3	62.7	61.8	0.9
Race/Ethnicity (%)				
Non-Hispanic Asian	1.5	1.0	2.0	-1.0
Non-Hispanic Black or African American	7.8	6.9	8.8	-1.9
Non-Hispanic White	70.3	71.2	69.3	1.9
Non-Hispanic American Indian or Alaska Native	1.8	1.6	2.0	-0.4
Non-Hispanic Native Hawaiian or Other Pacific Islander	1.0	1.3	0.7	0.6
Hispanic ethnicity	9.3	9.2	9.5	-0.3
Other or multiple races	8.3	8.8	7.8	1.0
Spoke language other than English at home when growing up (%)	14.9	13.0	16.8	-3.8
Average age (years)	18.4	18.4	18.3	0.1
One or more dependents	1.8	1.6	2.0	-0.4
High School Educational Attainment (%)				
High school diploma	37.4	41.2	33.7	7.5
GED	6.2	4.6	7.8	-3.2
High school equivalency (other than GED)	0.5	0.3	0.7	-0.4
No high school attainment	55.9	53.9	57.8	-3.9
Employment Status (%)				
Currently employed	20.6	19.9	21.3	-1.4
Never worked for pay	49.3	50.3	48.4	1.9
Family Receipt of Public Benefits (%)				
Current receipt of Supplemental Nutrition Assistance Program (SNAP)	33.3	31.3	35.4	-4.1
Ever received Temporary Assistance for Needy Families (TANF)	36.1	36.2	35.9	0.3
Ever arrested (%)	12.1	11.3	12.9	-1.6

NOTES: Sample size of 612 Includes 306 treatment group and 306 control group study members. Statistically significant differences at the p<0.05 level (using two-sided t-tests) are indicated with a * in the 'Difference' column.

Exhibit H-2 Job Corps Cascades: Baseline Balance Testing, full study sample (Pre-Survey, Survey, Post-Survey Cohorts)

Baseline Variable	Entire Sample	Treatment Group	Control Group	Difference
Gender (%)				
Female	38.3	38.0	38.7	-0.7
Male	61.7	62.0	61.3	0.7
Race/Ethnicity (%)				
Non-Hispanic Asian	1.7	1.8	1.6	0.2
Non-Hispanic Black or African American	9.7	9.5	9.9	-0.4
Non-Hispanic White	67.3	66.5	68.3	-1.8
Non-Hispanic American Indian or Alaska Native	1.5	1.6	1.3	0.3
Non-Hispanic Native Hawaiian or Other Pacific Islander	1.2	1.1	1.3	-0.2
Hispanic ethnicity	10.3	11.1	9.2	1.9
Other or multiple races	8.4	8.5	8.3	0.2
Spoke language other than English at home when growing up (%)	15.1	14.8	15.5	-0.7
Average age (years)	18.3	18.4	18.3	0.1
One or more dependents (%)	2.0	1.9	2.0	-0.1
High School Educational Attainment (%)				
High school diploma	37.9	38.9	36.6	2.3
GED	5.6	4.4	7.2	-2.8
High school equivalency (other than GED)	0.4	0.2	0.7	-0.5
No high school attainment	56.1	56.5	55.5	1.0
Employment Status (%)				
Currently employed	19.6	18.5	21.0	-2.5
Never worked for pay	50.9	52.5	49.0	3.5
Family Receipt of Public Benefits (%)				
Current receipt of Supplemental Nutrition Assistance Program (SNAP)	34.7	32.9	37.1	-4.2
Ever received Temporary Assistance for Needy Families (TANF)	36.2	36.0	36.5	-0.5
Ever arrested (%)	13.4	12.9	14.0	-1.1

NOTES: Sample size of 1,013 Includes 568 treatment group and 445 control group study members. Statistically significant differences at the p<0.05 level (using two-sided t-tests) are indicated with a * in the 'Difference' column.

H.1 Participation in Job Corps

Exhibit H.1-1 provides more detailed results corresponding to Exhibits 4-1 and 4-2 in the *Final Report*. For each of the first 27 months after random assignment, the first panel of Exhibit H.1-1 reports the proportion of students ever enrolled in Job Corps through the end of the given month, the second panel reports total days enrolled through the end of the month, and the third panel reports the proportion enrolled in the given month.

Exhibit H.1-1 Enrollment in Job Corps by Month, for Survey Cohort (from NOJC administrative data)

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size
Cumulative Job Corps Enrollment								
Ever enrolled in Job Corps through end of given month, measured from random assignment:								
Month 1 (%)	28.8	2.6	26.2***	2.8	<.001	1002	306	306
Month 2 (%)	65.4	16.3	49.1***	3.4	<.001	300	306	306
Month 3 (%)	78.6	34.6	44.0***	3.6	<.001	127	306	306
Month 4 (%)	80.4	41.2	39.2***	3.6	<.001	95	306	306
Month 5 (%)	82.4	46.1	36.4***	3.6	<.001	79	306	306
Month 6 (%)	83.6	49.7	33.9***	3.5	<.001	68	306	306
Month 7 (%)	84.5	52.0	32.6***	3.5	<.001	63	306	306
Month 8 (%)	84.6	53.3	31.3***	3.5	<.001	59	306	306
Month 9 (%)	85.1	53.9	31.2***	3.5	<.001	58	306	306
Month 10 (%)	85.1	55.2	29.9***	3.5	<.001	54	306	306
Month 11 (%)	85.5	55.6	30.0***	3.5	<.001	54	306	306
Month 12 (%)	86.3	55.9	30.4***	3.4	<.001	54	306	306
Month 13 (%)	86.3	55.9	30.4***	3.4	<.001	54	306	306
Month 14 (%)	86.3	55.9	30.4***	3.4	<.001	54	306	306
Month 15 (%)	86.3	56.2	30.1***	3.4	<.001	53	306	306
Month 16 (%)	86.3	56.2	30.1***	3.4	<.001	53	306	306
Month 17 (%)	86.3	56.5	29.7***	3.4	<.001	53	306	306
Month 18 (%)	86.3	56.5	29.7***	3.4	<.001	53	306	306
Month 19 (%)	86.3	56.5	29.7***	3.4	<.001	53	306	306
Month 20 (%)	86.3	56.5	29.7***	3.4	<.001	53	306	306
Month 21 (%)	86.3	56.9	29.4***	3.4	<.001	52	306	306
Month 22 (%)	86.3	56.9	29.4***	3.4	<.001	52	306	306
Month 23 (%)	86.3	56.9	29.4***	3.4	<.001	52	306	306
Month 24 (%)	86.3	56.9	29.4***	3.4	<.001	52	306	306
Month 25 (%)	86.3	56.9	29.4***	3.4	<.001	52	306	306
Month 26 (%)	86.3	56.9	29.4***	3.4	<.001	52	306	306
Month 27 (%)	86.3	56.9	29.4***	3.4	<.001	52	306	306
Days Enrolled in Job Corps								
Total days enrolled in Job Corps through end of given month, measured from random assignment:								
Month 1	2.6	0.1	2.5***	0.3	<.001	2036	306	306
If any, days enrolled to date	*NR*	*NR*	*NR*	*NR*	*NR*	*NR*	*86*	*8*
Month 2	16.3	2.4	13.9***	1.0	<.001	571	306	306
If any, days enrolled to date	*25.3*	*15.2*	*10.1****	*1.8*	*<.001*	*66*	*196*	*49*
Month 3	37.0	9.7	27.3***	1.8	<.001	281	306	306
If any, days enrolled to date	*47.3*	*28.3*	*19.0****	*2.1*	*<.001*	*67*	*242*	*105*
Month 4	57.6	19.5	38.1***	2.6	<.001	196	306	306
If any, days enrolled to date	*72.1*	*47.3*	*24.8****	*2.7*	*<.001*	*52*	*249*	*126*
Month 5	77.4	30.3	47.1***	3.5	<.001	156	306	306
If any, days enrolled to date	*94.0*	*65.7*	*28.3****	*3.5*	*<.001*	*43*	*256*	*141*

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size
Month 6	97.0	41.4	55.6***	4.4	<.001	134	306	306
If any, days enrolled to date	*116.4*	*83.4*	*33.0****	*4.2*	*<.001*	*40*	*259*	*152*
Month 7	116.1	52.2	63.9***	5.3	<.001	122	306	306
If any, days enrolled to date	*137.5*	*100.5*	*37.1****	*5.1*	*<.001*	*37*	*262*	*159*
Month 8	133.9	62.4	71.5***	6.1	<.001	115	306	306
If any, days enrolled to date	*158.7*	*117.1*	*41.5****	*6.0*	*<.001*	*35*	*262*	*163*
Month 9	150.8	72.1	78.7***	7.0	<.001	109	306	306
If any, days enrolled to date	*177.7*	*133.7*	*44.0****	*6.9*	*<.001*	*33*	*264*	*165*
Month 10	166.5	81.7	84.8***	7.9	<.001	104	306	306
If any, days enrolled to date	*196.4*	*147.9*	*48.4****	*7.9*	*<.001*	*33*	*264*	*169*
Month 11	180.9	90.6	90.2***	8.7	<.001	100	306	306
If any, days enrolled to date	*212.8*	*163.2*	*49.6****	*8.8*	*<.001*	*30*	*265*	*170*
Month 12	194.4	98.9	95.5***	9.6	<.001	97	306	306
If any, days enrolled to date	*226.5*	*176.9*	*49.6****	*9.8*	*<.001*	*28*	*267*	*171*
Month 13	206.5	106.6	99.9***	10.4	<.001	94	306	306
If any, days enrolled to date	*240.7*	*190.8*	*49.9****	*10.8*	*<.001*	*26*	*267*	*171*
Month 14	218.3	113.6	104.7***	11.2	<.001	92	306	306
If any, days enrolled to date	*254.4*	*203.2*	*51.1****	*11.7*	*<.001*	*25*	*267*	*171*
Month 15	229.9	120.0	109.9***	12.0	<.001	92	306	306
If any, days enrolled to date	*268.0*	*213.5*	*54.4****	*12.7*	*<.001*	*25*	*267*	*172*
Month 16	241.0	125.9	115.1***	12.8	<.001	91	306	306
If any, days enrolled to date	*280.9*	*223.9*	*56.9****	*13.7*	*<.001*	*25*	*267*	*172*
Month 17	251.3	131.3	120.1***	13.5	<.001	92	306	306
If any, days enrolled to date	*292.7*	*232.2*	*60.6****	*14.6*	*<.001*	*26*	*267*	*173*
Month 18	261.3	136.0	125.3***	14.2	<.001	92	306	306
If any, days enrolled to date	*304.4*	*240.6*	*63.8****	*15.5*	*<.001*	*27*	*267*	*173*
Month 19	271.2	140.5	130.7***	15.0	<.001	93	306	306
If any, days enrolled to date	*316.0*	*248.6*	*67.4****	*16.4*	*<.001*	*27*	*267*	*173*
Month 20	280.6	145.0	135.6***	15.7	<.001	94	306	306
If any, days enrolled to date	*327.0*	*256.4*	*70.6****	*17.3*	*<.001*	*28*	*267*	*173*
Month 21	289.5	149.3	140.2***	16.4	<.001	94	306	306
If any, days enrolled to date	*337.3*	*262.6*	*74.8****	*18.3*	*<.001*	*28*	*267*	*174*
Month 22	297.7	153.2	144.5***	17.1	<.001	94	306	306
If any, days enrolled to date	*347.0*	*269.5*	*77.5****	*19.2*	*<.001*	*29*	*267*	*174*
Month 23	305.8	156.8	149.0***	17.8	<.001	95	306	306
If any, days enrolled to date	*356.5*	*275.8*	*80.8****	*20.1*	*<.001*	*29*	*267*	*174*
Month 24	313.6	160.1	153.4***	18.5	<.001	96	306	306
If any, days enrolled to date	*365.5*	*281.6*	*83.9****	*21.0*	*<.001*	*30*	*267*	*174*
Month 25	320.6	163.4	157.2***	19.1	<.001	96	306	306
If any, days enrolled to date	*373.8*	*287.3*	*86.5****	*21.9*	*<.001*	*30*	*267*	*174*
Month 26	327.0	166.5	160.4***	19.8	<.001	96	306	306
If any, days enrolled to date	*381.3*	*292.9*	*88.4****	*22.8*	*<.001*	*30*	*267*	*174*
Month 27	332.8	169.3	163.5***	20.3	<.001	97	306	306
If any, days enrolled to date	*388.2*	*297.8*	*90.4****	*23.6*	*<.001*	*30*	*267*	*174*
Job Corps Enrollment								
Enrolled in Job Corps in given month, measured from random assignment:								
Month 1 (%)	28.8	2.6	26.2***	2.8	<.001	1002	306	306
Month 2 (%)	64.7	16.0	48.7***	3.4	<.001	304	306	306
Month 3 (%)	75.6	34.0	41.6***	3.6	<.001	122	306	306
Month 4 (%)	73.8	36.6	37.2***	3.7	<.001	102	306	306
Month 5 (%)	69.2	39.9	29.4***	3.8	<.001	74	306	306
Month 6 (%)	68.0	41.2	26.8***	3.9	<.001	65	306	306
Month 7 (%)	65.8	39.5	26.2***	3.9	<.001	66	306	306

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size
Month 8 (%)	61.9	36.9	25.0***	3.9	<.001	68	306	306
Month 9 (%)	58.4	34.0	24.4***	3.9	<.001	72	306	306
Month 10 (%)	54.8	33.7	21.2***	3.9	<.001	63	306	306
Month 11 (%)	50.0	32.7	17.3***	3.9	<.001	53	306	306
Month 12 (%)	47.1	28.8	18.3***	3.8	<.001	64	306	306
Month 13 (%)	42.7	27.1	15.6***	3.8	<.001	57	306	306
Month 14 (%)	40.0	25.2	14.9***	3.7	<.001	59	306	306
Month 15 (%)	38.9	22.9	16.0***	3.7	<.001	70	306	306
Month 16 (%)	38.1	20.9	17.2***	3.6	<.001	82	306	306
Month 17 (%)	36.1	18.6	17.4***	3.5	<.001	94	306	306
Month 18 (%)	33.5	17.3	16.2***	3.4	<.001	93	306	306
Month 19 (%)	33.6	15.0	18.6***	3.3	<.001	123	306	306
Month 20 (%)	32.7	15.0	17.7***	3.3	<.001	118	306	306
Month 21 (%)	30.6	15.0	15.6***	3.3	<.001	104	306	306
Month 22 (%)	28.9	13.7	15.2***	3.3	<.001	111	306	306
Month 23 (%)	28.0	12.7	15.2***	3.2	<.001	119	306	306
Month 24 (%)	26.7	11.4	15.2***	3.1	<.001	133	306	306
Month 25 (%)	24.6	11.1	13.5***	3.1	<.001	122	306	306
Month 26 (%)	22.7	10.8	11.9***	3.0	<.001	110	306	306
Month 27 (%)	20.4	9.8	10.6***	2.9	<.001	108	306	306

SOURCE AND FOLLOW-UP PERIOD: Center Information System, from random assignment to 27 months after random assignment.
NOTES: All outcomes in this table are exploratory. *Outcomes in italics* apply to the subset of sample members who attended any training through the given month, and thus are non-experimental. Non-experimental results are not reported (NR) when 15 or fewer survey respondents of either the program or control group attended any training. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero. Table reports impacts estimated on the Survey Cohort only.
Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.1-2 provides detailed results corresponding to Exhibit 4-3 in the *Final Report*.

Exhibit H.1-2 Variation in Impact on Days in Job Corps through 27 Months, for Survey Cohort, by Baseline Characteristics (from NOJC administrative data)

Outcome/Subgroup	Sample Size	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value
Total days at Job Corps through end of month 27						
By high school completion:						
Less than high school	358	275.0	165.6	109.4***	25.8	<.001
High school/GED or more	254	413.3	174.8	238.5***	32.0	<.001
Difference				129.1***	41.0	.002
By Star grade level equivalent:						
Star score below 9th grade	289	300.6	160.1	140.5***	28.7	<.001
Star score 9th grade or above	323	362.3	178.2	184.1***	28.5	<.001
Difference				43.6	40.2	.279
By age:						
Older than 17	421	368.4	186.0	182.5***	25.2	<.001
Ages 16-17	191	254.3	132.9	121.4***	33.1	<.001
Difference				−61.1	41.4	.140
By pathway:						
IT	366	371.5	175.1	196.3***	26.8	<.001
Healthcare	246	275.7	160.5	115.2***	30.9	<.001
Difference				−81.1**	40.8	.047

Outcome/Subgroup	Sample Size	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value
By reported gender:						
Male	381	371.3	176.4	194.9***	26.0	<.001
Female	231	269.9	157.8	112.1***	32.1	<.001
Difference				−82.8**	41.2	.045

SOURCE AND FOLLOW-UP PERIOD: Center Information System, from random assignment to 27 months after random assignment.
NOTES: All outcomes in this table are exploratory. Table reports impacts estimated on the Survey Cohort only.
Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.1-3 provides results discussed but not shown in Section 4.1 of the *Final Report*.

Exhibit H.1-3 Variation in Impact on Enrollment at Job Corps in Month 27 after Random Assignment, by Baseline Characteristics (from NOJC administrative data)

Outcome/Subgroup	Sample Size	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value
Currently enrolled at Job Corps in month 27 (%)						
By high school completion:						
Less than high school	358	12.0	13.2	−1.2	3.5	.729
High school/GED or more	254	31.9	4.8	27.0***	4.5	<.001
Difference				28.3***	5.7	<.001
By Star grade level equivalent:						
Star score below 9th grade	289	17.4	8.0	9.4**	3.9	.017
Star score 9th grade or above	323	23.2	11.5	11.7***	4.1	.005
Difference				2.3	5.7	.686
By age:						
Older than 17	421	25.2	10.5	14.7***	3.6	<.001
Ages 16-17	191	9.9	8.3	1.6	4.3	.711
Difference				−13.1**	5.6	.020
By pathway:						
IT	366	26.9	9.7	17.1***	4.0	<.001
Healthcare	246	10.9	9.9	1.0	4.0	.797
Difference				−16.1***	5.7	.005
By reported gender:						
Male	381	25.2	9.5	15.7***	3.8	<.001
Female	231	12.6	10.3	2.4	4.2	.578
Difference				−13.3**	5.7	.019

SOURCE AND FOLLOW-UP PERIOD: Center Information System, from random assignment to 27 months after random assignment.
NOTES: All outcomes in this table are exploratory. Table reports impacts estimated on the Survey Cohort only.
Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

H.2 Education and Occupational Training Receipt

Exhibit H.2-1 provides detailed results corresponding to Exhibit 4-4 in the *Final Report*.

Exhibit H.2-1 Participation in Education and Training (from survey)

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size
Ever attended any high school classes, occupational training, or work-based training (%)	93.5	87.0	6.5**	3.2	.042	7	208	174
Education and Occupational Training								
Ever attended (%)	91.5	81.2	10.3***	3.7	.006	13	208	175
Attended any high school or GED classes (%)	53.6	45.4	8.2*	4.3	.060	18	207	175
Attended any occupational training programs (%)	84.4	68.6	15.8***	4.5	<.001	23	208	174
Total months of education or training attended	***9.5***	***6.6***	***2.8******	***0.6***	***<.001***	***43***	***205***	***173***
Total months, for attendees	*10.2*	*8.2*	*2.0****	*0.6*	*<.001*	*25*	*190*	*139*
Total hours of education or training attended	1,320.2	918.5	401.7***	96.1	<.001	44	203	173
Total hours, for attendees	*1,426.7*	*1,134.0*	*292.7****	*97.8*	*.003*	*26*	*188*	*139*
Hours per week, for attendees	*31.0*	*31.4*	*−0.5*	*1.3*	*.721*	*−1*	*188*	*139*
Completed or currently attending at least one training program (%)	53.9	57.4	−3.5	5.3	.506	−6	208	173

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.
NOTES: ***Confirmatory outcome is bolded and italicized***; exploratory outcomes are neither bolded nor italicized. *Non-bolded outcomes in italics* apply to the subset of survey respondents who attended any training, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.
Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.2-2 provides results discussed but not shown in Section 4.2 of the *Final Report*.

Exhibit H.2-2 Variation in Impact on Months of Education or Training, by Baseline Characteristics (from survey)

Outcome/Subgroup	Sample Size	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value
Total months of education or training						
By high school completion:						
Less than high school	208	8.6	7.3	1.3	0.8	.126
High school/GED or more	170	10.5	5.5	5.0***	0.9	<.001
Difference				3.8***	1.2	.002
By Star grade level equivalent:						
Star score below 9th grade	170	8.4	6.8	1.5*	0.9	.091
Star score 9th grade or above	208	10.4	6.4	4.0***	0.8	<.001
Difference				2.5**	1.2	.040

Outcome/Subgroup	Sample Size	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value
By age:						
Older than 17	272	10.0	6.6	3.4***	0.7	<.001
Ages 16-17	106	8.2	6.6	1.6	1.1	.144
Difference				−1.8	1.3	.170
By pathway:						
IT	231	9.9	6.2	3.6***	0.8	<.001
Healthcare	147	8.9	7.2	1.7*	0.9	.070
Difference				−2.0	1.2	.109
By reported gender:						
Male	238	10.0	6.6	3.5***	0.8	<.001
Female	140	8.5	6.7	1.8*	0.9	.053
Difference				−1.7	1.2	.171

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.
NOTES: All outcomes in this table are exploratory. "Pathway" refers to the career pathway selected at random assignment, IT or healthcare. Table reports impacts estimated on the Survey Cohort only.
Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.2-3 provides detailed results corresponding to Exhibit 4-5 in the *Final Report*.

Exhibit H.2-3 College Enrollment, for Survey Cohort (from NSC)

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size
Months Enrolled in College between Random Assignment and Quarter 6								
Full-time-equivalent (FTE) months	**2.0**	**0.6**	**1.4*** **	**0.2**	**<.001**	**249**	**306**	**306**
Total months	2.9	0.7	2.2***	0.2	<.001	307	306	306
Full-time months	1.0	0.4	0.6***	0.2	<.001	159	306	306
Part-time months	1.8	0.3	1.5***	0.2	<.001	509	306	306

SOURCE AND FOLLOW-UP PERIOD: National Student Clearinghouse; through the end of the sixth quarter after random assignment, counting the quarter of random assignment as Quarter 0.
NOTES: **Secondary outcomes are bolded**; exploratory outcomes are not bolded. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero. Table reports impacts estimated on the Survey Cohort only.
Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.2-4 provides results discussed but not shown in Section 4-2 of the *Final Report*.

Exhibit H.2-4 College Enrollment by Month Since Random Assignment, for Survey Cohort (from NSC)

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size
College Enrollment between Random Assignment and Month 24								
Enrolled in college in the given month:								
Month 0 (%)	2.1	2.9	−0.8	1.4	.533	−29	306	306
Month 1 (%)	1.5	2.3	−0.7	1.2	.538	−32	306	306
Month 2 (%)	0.5	2.3	−1.8*	1.0	.077	−79	306	306
Month 3 (%)	1.5	2.0	−0.4	1.1	.698	−22	306	306
Month 4 (%)	5.4	2.6	2.8*	1.6	.087	105	306	306
Month 5 (%)	8.8	2.6	6.2***	1.9	.001	237	306	306
Month 6 (%)	13.4	3.3	10.1***	2.2	<.001	309	306	306

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size
Month 7 (%)	20.4	2.9	17.5***	2.4	<.001	594	306	306
Month 8 (%)	27.3	2.6	24.7***	2.6	<.001	945	306	306
Month 9 (%)	28.3	3.6	24.7***	2.7	<.001	686	306	306
Month 10 (%)	29.1	4.6	24.6***	2.8	<.001	537	306	306
Month 11 (%)	27.9	5.2	22.7***	2.8	<.001	433	306	306
Month 12 (%)	27.1	5.2	21.9***	2.8	<.001	419	306	306
Month 13 (%)	27.1	4.9	22.2***	2.8	<.001	453	306	306
Month 14 (%)	25.7	6.2	19.5***	2.8	<.001	314	306	306
Month 15 (%)	25.1	7.5	17.6***	2.9	<.001	235	306	306
Month 16 (%)	24.3	7.8	16.5***	2.9	<.001	210	306	306
Month 17 (%)	22.9	8.8	14.1***	2.9	<.001	159	306	306
Month 18 (%)	22.3	8.5	13.8***	2.9	<.001	162	306	306
Month 19 (%)	21.1	8.5	12.6***	2.8	<.001	148	306	306
Month 20 (%)	18.4	8.5	9.9***	2.8	<.001	117	306	306
Month 21 (%)	16.0	6.9	9.1***	2.6	<.001	133	306	306
Month 22 (%)	14.9	7.2	7.7***	2.5	.002	108	306	306
Month 23 (%)	12.3	7.5	4.8*	2.4	.051	64	306	306
Month 24 (%)	12.4	7.5	4.9*	2.5	.052	65	296	293

SOURCE AND FOLLOW-UP PERIOD: National Student Clearinghouse; through the end of the eighth quarter after random assignment, counting the quarter of random assignment as Quarter 0.
NOTES: All outcomes in this table are exploratory. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero. Table reports impacts estimated on the Survey Cohort only.
Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.2-5 provides detailed results corresponding to Exhibit 4-6 in the *Final Report*.

Exhibit H.2-5 Variation in Impact on FTE Months of College Enrollment, by Baseline Characteristics (from NSC)

Outcome/Subgroup	Sample Size	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value
Full-time-equivalent (FTE) months enrolled in college through quarter 6						
By high school completion:						
Less than high school	358	1.0	0.4	0.6***	0.2	.002
High school/GED or more	254	3.4	0.9	2.5***	0.4	<.001
Difference				1.9***	0.4	<.001
By Star grade level equivalent:						
Star score below 9th grade	289	1.3	0.4	0.9***	0.2	<.001
Star score 9th grade or above	323	2.6	0.7	1.9***	0.3	<.001
Difference				1.0***	0.4	.010
By age:						
Older than 17	421	2.6	0.7	1.9***	0.3	<.001
Ages 16-17	191	0.7	0.3	0.4**	0.2	.026
Difference				−1.4***	0.3	<.001
By pathway:						
IT	366	2.3	0.4	1.9***	0.3	<.001
Healthcare	246	1.5	0.8	0.8***	0.3	.007
Difference				−1.1***	0.4	.003
By reported gender:						
Male	381	2.2	0.5	1.7***	0.2	<.001

Outcome/Subgroup	Sample Size	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value
Female	231	1.7	0.8	0.9***	0.3	.003
Difference				−0.8**	0.4	.041

SOURCE AND FOLLOW-UP PERIOD: National Student Clearinghouse; through the end of the sixth quarter after random assignment (counting the quarter of random assignment as Quarter 0).
NOTES: All outcomes in this table are exploratory. Table reports impacts estimated on the Survey Cohort only.
Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.2-6 provides detailed results corresponding to Exhibit 4-7 in the *Final Report*.

Exhibit H.2-6 Participation in Work-Based Training (from survey)

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size
Any work-based training (%)	36.7	51.8	−15.1***	5.4	.006	−29	204	170
Types of work-based training:								
Internship, practicum, clinical experience, or similar (%)	15.9	24.5	−8.5*	4.5	.056	−35	207	171
Work-study job (%)	4.7	13.7	−9.0***	3.1	.004	−65	202	172
Employer-provided training (%)	19.8	22.2	−2.4	4.5	.594	−11	204	170
Apprenticeship (%)	3.1	5.7	−2.5	2.2	.255	−45	206	172
Other work-related training (%)	6.0	24.6	−18.7***	4.0	<.001	−76	206	171

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.
NOTES: All outcomes in this table are exploratory. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.
Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

H.3 Receipt of Other Services

Exhibit H.3-1 provides detailed results corresponding to Exhibit 4-8 in the *Final Report*.

Exhibit H.3-1 Receipt of Support Services (from survey)

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size
Academic advising:								
Any (%)	75.2	47.1	28.1***	5.1	<.001	60	205	170
Number of times	6.7	4.7	2.0***	0.8	.008	43	205	169
Tutoring:								
Any (%)	19.6	23.7	−4.1	4.4	.346	−17	202	172
Number of times	3.4	4.2	−0.8	1.3	.514	−20	202	171
Career counseling:								
Any (%)	44.5	41.2	3.3	5.2	.525	8	200	174
Number of times	2.4	2.5	−0.1	0.5	.803	−5	200	174
Job search assistance:								
Any (%)	47.4	48.7	−1.4	5.4	.803	−3	202	173
Number of times	2.2	3.0	−0.8	0.6	.152	−26	202	172

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.
NOTES: All outcomes in this table are exploratory. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.
Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.3-2 provides detailed results corresponding to Exhibit 4-9 in the *Final Report*.

Exhibit H.3-2 Receipt of Instruction in Academic/Workplace Success Skills (from survey)

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size
Respondent received information on the following topics:								
Study skills (%)	68.8	46.5	22.4***	5.3	<.001	48	201	171
Help with problems at school, work, or at home (%)	62.0	51.6	10.4*	5.4	.057	20	200	167
Time management (%)	66.8	62.5	4.3	5.1	.394	7	204	172
Working in groups (%)	72.2	62.7	9.5*	5.0	.061	15	207	171
Communicating well (%)	73.4	72.1	1.4	4.9	.782	2	207	172
Managing stress, anger, and frustration (%)	51.4	47.4	4.0	5.5	.468	8	204	167
Behaving professionally (%)	85.2	78.1	7.2*	4.1	.082	9	207	174
Managing money and personal finances (%)	34.1	47.8	−13.7***	5.2	.009	−29	208	172
Handling parenting and other family responsibilities (%)	13.9	20.7	−6.8	4.2	.102	−33	205	169

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.
NOTES: All outcomes in this table are exploratory. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.
Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

H.4 Educational Attainment

Exhibit H.4-1 provides detailed results corresponding to Exhibit 4-10 in the *Final Report.*

Exhibit H.4-1 Educational Attainment (from survey)

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size
Received any degree, certificate, credential, or license (%)	76.2	66.0	10.2**	4.9	.038	15	206	172
Degrees, Certificates, and Credentials								
Received a high school diploma (%)	**40.5**	**37.6**	**2.9**	**4.5**	**.513**	**8**	**208**	**175**
Received any post-secondary degree or occupational certificate (%)	**51.9**	**41.1**	**10.7****	**5.2**	**.039**	**26**	**206**	**175**

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size
College Credits								
Number of college credits earned	0.2	1.0	−0.8*	0.5	.088	−84	199	161
Professional Certification, Credential, or License								
Received any industry-recognized certification, credential, or license (%)	38.5	37.7	0.8	5.1	.868	2	198	169

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; college credits as of 18 months after random assignment, all other outcomes as of survey interview.
NOTES: **Secondary outcomes are bolded**; exploratory outcomes are not bolded. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.
Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.4-2 provides information discussed but not shown in Section 4.4 of the *Final Report*.

Exhibit H.4-2 College Degrees or Other Certificates, for Survey Cohort (from NSC)

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size
Received a college degree (Associates or higher) between random assignment and the given quarter:								
Quarter 0 (%)	0.4	0.0	0.4	0.4	.316		306	306
Quarter 1 (%)	0.4	0.3	0.0	0.5	.944	11	306	306
Quarter 2 (%)	0.4	0.3	0.0	0.5	.944	11	306	306
Quarter 3 (%)	0.4	0.3	0.0	0.5	.944	11	306	306
Quarter 4 (%)	0.4	0.3	0.0	0.5	.944	11	306	306
Quarter 5 (%)	0.3	0.7	−0.4	0.6	.569	−54	306	306
Quarter 6 (%)	0.3	0.7	−0.4	0.6	.569	−54	306	306
Quarter 7 (%)	0.3	1.3	−1.0	0.8	.191	−78	306	306
Quarter 8 (%)	0.3	1.3	−1.0	0.8	.191	−78	306	306
Received any college credential or degree between random assignment and the given quarter:								
Quarter 0 (%)	0.3	0.3	0.0	0.5	.994	1	306	306
Quarter 1 (%)	0.3	0.7	−0.3	0.6	.593	−50	306	306
Quarter 2 (%)	0.3	0.7	−0.3	0.6	.593	−50	306	306
Quarter 3 (%)	0.4	1.0	−0.6	0.7	.359	−63	306	306
Quarter 4 (%)	0.4	1.0	−0.6	0.7	.359	−63	306	306
Quarter 5 (%)	0.9	1.3	−0.4	0.9	.689	−28	306	306
Quarter 6 (%)	1.0	1.6	−0.6	0.9	.501	−39	306	306
Quarter 7 (%)	1.3	2.3	−1.0	1.1	.347	−44	306	306
Quarter 8 (%)	1.8	2.6	−0.8	1.2	.508	−31	306	306

SOURCE AND FOLLOW-UP PERIOD: National Student Clearinghouse; through the end of the eighth quarter after random assignment, counting the quarter of random assignment as Quarter 0.
NOTES: All outcomes in this table are exploratory. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero. Table reports impacts estimated on the Survey Cohort only.
Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

H.5 Labor Market Outcomes

Exhibit H.5-1 provides detailed results corresponding to Exhibit 4-11 in the *Final Report*.

Exhibit H.5-1 Employment (from survey)

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size
Employment								
Employed or in the military 18 months after random assignment (%)	41.8	48.9	−7.1	5.4	.191	−15	205	173
Ever employed or in the military since random assignment (%)	57.6	75.1	−17.5***	4.9	<.001	−23	207	174
Ever employed since random assignment (%)	57.6	74.7	−17.0***	4.9	<.001	−23	207	174
Ever in the military since random assignment (%)	0.7	1.6	−0.9	1.1	.448	−54	207	174
Intensity of Employment								
Total hours worked per week 18 months after random assignment	9.8	17.0	−7.2***	2.0	<.001	−42	202	174
Hours worked per week, if employed	*24.0*	*34.8*	*−10.8****	*2.3*	*<.001*	*−31*	*81*	*80*
Total months of employment or military service since random assignment	4.2	6.2	−2.0***	0.6	.002	−32	205	172
Total hours of employment or military service since random assignment	438.7	947.5	−508.8***	95.6	<.001	−54	204	172

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.
NOTES: All outcomes in this table are exploratory. *Outcomes in italics* apply to the subset of survey respondents who are employed 18 months after random assignment, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.
Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.5-2 provides detailed results corresponding to Exhibits 4-12 and 4-13 in the *Final Report*.

Exhibit H.5-2 Employment and Earnings, for Survey Cohort (from NDNH)

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size
Employment								
Total quarters employed during Q1 through Q6	2.0	2.7	−0.8***	0.2	<.001	−28	294	295
Ever employed during Q1 through Q6 (%)	62.9	78.0	−15.1***	3.5	<.001	−19	294	295
Ever employed during Q4 before random assignment (%)	28.8	28.8	−0.1	3.5	.986	−0	294	295
Ever employed during Q3 before random assignment (%)	32.3	31.5	0.7	3.5	.835	2	294	295

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size
Ever employed during Q2 before random assignment (%)	39.9	38.0	2.0	3.7	.597	5	294	295
Ever employed during Q1 before random assignment (%)	38.0	42.7	−4.7	3.6	.192	−11	294	295
Ever employed during Q0 (%)	33.1	35.9	−2.8	3.7	.455	−8	294	295
Ever employed during Q1 (%)	21.2	36.3	−15.0***	3.5	<.001	−41	294	295
Ever employed during Q2 (%)	21.5	37.6	−16.2***	3.6	<.001	−43	294	295
Ever employed during Q3 (%)	29.7	43.1	−13.3***	3.8	<.001	−31	294	295
Ever employed during Q4 (%)	36.1	49.2	−13.0***	4.0	.001	−27	294	295
Ever employed during Q5 (%)	43.1	51.2	−8.1**	4.0	.044	−16	294	295
Ever employed during Q6 (%)	44.7	54.9	−10.2**	4.1	.013	−19	294	295
Ever employed during Q7 (%)	43.9	58.3	−14.4***	4.0	<.001	−25	294	295
Earnings								
Cumulative earnings in Q1 through Q6 ($)	4,732	8,805	−4,073***	701	<.001	−46	294	295
Cumulative earnings, if ever employed, in Q1-Q6	*7,435*	*11,294*	*−3,859****	*881*	*<.001*	*−34*	*187*	*230*
Earnings in Q4 before random assignment ($)	704	637	67	117	.565	11	294	295
Earnings in Q3 before random assignment ($)	780	754	27	129	.836	4	294	295
Earnings in Q2 before random assignment ($)	905	904	1	131	.993	0	294	295
Earnings in Q1 before random assignment ($)	803	847	−44	120	.713	−5	294	295
Earnings in Q0 ($)	675	750	−75	121	.536	−10	294	295
Earnings in Q1 ($)	348	897	−549***	120	<.001	−61	294	295
Earnings in Q2 ($)	348	1,046	−698***	128	<.001	−67	294	295
Earnings in Q3 ($)	476	1,313	−837***	141	<.001	−64	294	295
Earnings in Q4 ($)	817	1,659	−841***	174	<.001	−51	294	295
Earnings in Q5 ($)	1,148	1,789	−641***	181	<.001	−36	294	295
Earnings in Q6 ($)	1,594	2,102	−508**	204	.013	−24	294	295
Earnings in Q7 ($)	1,701	2,296	−594***	223	.008	−26	294	295

SOURCE AND FOLLOW-UP PERIOD: National Directory of New Hires, through seven quarters after random assignment.
NOTES: All outcomes in this table are exploratory. *Outcomes in italics* apply to the subset of sample members who were ever employed during Q1 through Q7, and are thus non-experimental. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]). Table reports impacts estimated on the Survey Cohort only.
Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.5-3 provides detailed results corresponding to Exhibit 4-14 in the *Final Report*.

Exhibit H.5-3 Months of Productive Activity (from survey)

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size
Total Training/Education, Employment, or Military Service								
Total months	**13.7**	**12.9**	**0.8**	**0.8**	**.282**	**7**	**208**	**175**
Total months, if any	*13.9*	*13.4*	*0.5*	*0.8*	*.501*	*4*	*206*	*167*
Total hours	1,766.3	1,871.5	−105.2	117.7	.372	−6	207	175
Total hours, if any	*1,793.2*	*1,946.6*	*−153.4*	*116.4*	*.188*	*−8*	*205*	*167*
Hours per week, if any	30.3	34.1	−3.8***	1.1	<.001	−11	205	167

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.
NOTES: **Secondary outcomes are bolded**; exploratory outcomes are not bolded. *Outcomes in italics* apply to the subset of survey respondents who attended any training or were ever employed or in military service, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.
Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

H.6 Broader Measures of Well-Being

Exhibit H.6-1 provides results discussed but not shown in Section 4-6 of the *Final Report*.

Exhibit H.6-1 Risky Behaviors (from survey)

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size
Any arrest since random assignment (%)	7.7	6.8	0.9	2.9	.756	13	204	174
Any illegal drugs in last week (%)	22.2	16.9	5.2	4.3	.220	31	206	173
Any property offense in last week (%)	1.3	1.0	0.3	1.4	.840	29	205	174

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.
NOTES: All outcomes in this table are exploratory. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.
Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.6-2 provides results discussed but not shown in Section 4-6 of the *Final Report*.

Exhibit H.6-2 Participation in Public Assistance Programs (from survey)

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size
Received SNAP in last 3 months (%)	36.4	31.7	4.6	5.0	.357	15	200	170
Received TANF in last 3 months (%)	6.0	6.1	−0.1	2.9	.971	−2	200	164
Received Medicaid in last 3 months (%)	24.2	28.6	−4.5	5.1	.379	−16	178	153

KEY: SNAP is Supplemental Nutrition Assistance Program; TANF is Temporary Assistance for Needy Families.
SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.
NOTES: All outcomes in this table are exploratory. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.
Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

H.7 Supplemental Results for Full Study Sample

This section provides supplemental results estimated for the full experimental study sample measured in the CIS, NSC, or NDNH databases. Exhibit H.7-1 provides results for the full study sample corresponding to results presented in Exhibit H.1-1 for the Survey Cohort only.

Exhibit H.7-1 Enrollment in Job Corps by Month, for Full Study Sample (from NOJC administrative data)

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size
Cumulative Job Corps Enrollment								
Ever enrolled in Job Corps through end of given month, measured from random assignment:								
Month 1 (%)	26.1	1.9	24.2***	2.1	<.001	1273	568	445
Month 2 (%)	66.0	16.0	49.9***	2.7	<.001	312	568	445
Month 3 (%)	78.8	32.3	46.5***	2.8	<.001	144	568	445
Month 4 (%)	82.4	39.7	42.6***	2.9	<.001	107	568	445
Month 5 (%)	84.4	44.8	39.6***	2.9	<.001	88	568	445
Month 6 (%)	85.4	49.1	36.3***	2.8	<.001	74	568	445
Month 7 (%)	86.1	51.3	34.8***	2.8	<.001	68	568	445
Month 8 (%)	86.4	52.5	33.9***	2.8	<.001	65	568	445
Month 9 (%)	87.0	53.5	33.5***	2.8	<.001	62	568	445
Month 10 (%)	87.1	54.5	32.6***	2.8	<.001	60	568	445
Month 11 (%)	87.3	54.7	32.6***	2.8	<.001	60	568	445
Month 12 (%)	87.8	55.0	32.9***	2.8	<.001	60	568	445
Month 13 (%)	88.0	55.0	33.1***	2.8	<.001	60	568	445
Month 14 (%)	88.0	55.0	33.1***	2.8	<.001	60	568	445
Month 15 (%)	88.1	55.2	32.9***	2.8	<.001	60	568	445
Month 16 (%)	88.1	55.2	32.9***	2.8	<.001	60	568	445
Month 17 (%)	88.1	55.4	32.6***	2.8	<.001	59	568	445
Month 18 (%)	88.1	55.4	32.6***	2.8	<.001	59	568	445
Month 19 (%)	88.1	55.4	32.6***	2.8	<.001	59	568	445
Month 20 (%)	88.1	55.4	32.6***	2.8	<.001	59	568	445
Month 21 (%)	88.1	55.7	32.4***	2.8	<.001	58	568	445
Month 22 (%)	88.1	55.7	32.4***	2.8	<.001	58	568	445
Month 23 (%)	88.1	55.7	32.4***	2.8	<.001	58	568	445
Month 24 (%)	88.1	55.7	32.4***	2.8	<.001	58	568	445
Month 25 (%)	88.1	55.7	32.4***	2.8	<.001	58	568	445
Month 26 (%)	87.9	56.6	31.4***	2.8	<.001	55	520	422
Month 27 (%)	88.1	56.7	31.4***	2.9	<.001	55	485	403
Days Enrolled in Job Corps								
Total days enrolled in Job Corps through end of given month, measured from random assignment:								
Month 1	2.3	0.1	2.2***	0.2	<.001	2511	568	445
If any, days enrolled to date	*NR*	*NR*	*NR*	*NR*	*NR*	*NR*	*136*	*8*
Month 2	15.9	2.3	13.6***	0.8	<.001	596	568	445
If any, days enrolled to date	*24.7*	*14.7*	*9.9****	*1.4*	*<.001*	*67*	*364*	*70*
Month 3	36.3	9.1	27.2***	1.4	<.001	299	568	445
If any, days enrolled to date	*46.6*	*28.5*	*18.1****	*1.7*	*<.001*	*64*	*441*	*142*
Month 4	57.0	18.6	38.4***	2.0	<.001	207	568	445
If any, days enrolled to date	*69.7*	*47.1*	*22.7****	*2.2*	*<.001*	*48*	*467*	*176*
Month 5	77.2	29.2	47.9***	2.7	<.001	164	568	445
If any, days enrolled to date	*91.5*	*65.2*	*26.3****	*2.9*	*<.001*	*40*	*479*	*199*
Month 6	96.7	40.3	56.4***	3.5	<.001	140	568	445
If any, days enrolled to date	*113.3*	*82.0*	*31.2****	*3.5*	*<.001*	*38*	*483*	*218*
Month 7	115.5	51.2	64.3***	4.2	<.001	126	568	445
If any, days enrolled to date	*134.0*	*99.7*	*34.3****	*4.3*	*<.001*	*34*	*488*	*228*
Month 8	133.1	61.3	71.8***	4.9	<.001	117	568	445
If any, days enrolled to date	*154.1*	*116.8*	*37.3****	*5.0*	*<.001*	*32*	*490*	*233*
Month 9	149.8	70.8	79.0***	5.6	<.001	112	568	445
If any, days enrolled to date	*172.2*	*132.7*	*39.5****	*5.8*	*<.001*	*30*	*494*	*237*
Month 10	165.1	80.0	85.0***	6.3	<.001	106	568	445
If any, days enrolled to date	*189.9*	*146.9*	*43.0****	*6.6*	*<.001*	*29*	*494*	*242*

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size
Month 11	179.1	88.9	90.3***	7.0	<.001	102	568	445
If any, days enrolled to date	*205.6*	*162.4*	*43.1****	*7.4*	*<.001*	*27*	*495*	*243*
Month 12	192.2	97.2	94.9***	7.7	<.001	98	568	445
If any, days enrolled to date	*218.9*	*176.9*	*42.0****	*8.2*	*<.001*	*24*	*497*	*244*
Month 13	204.2	105.3	98.9***	8.4	<.001	94	568	445
If any, days enrolled to date	*232.1*	*191.6*	*40.5****	*9.0*	*<.001*	*21*	*498*	*244*
Month 14	215.7	112.5	103.1***	9.0	<.001	92	568	445
If any, days enrolled to date	*245.1*	*204.8*	*40.3****	*9.8*	*<.001*	*20*	*498*	*244*
Month 15	226.9	119.2	107.8***	9.7	<.001	90	568	445
If any, days enrolled to date	*257.9*	*215.9*	*42.0****	*10.6*	*<.001*	*19*	*498*	*245*
Month 16	237.7	125.2	112.4***	10.3	<.001	90	568	445
If any, days enrolled to date	*270.1*	*226.9*	*43.2****	*11.5*	*<.001*	*19*	*498*	*245*
Month 17	247.7	130.7	117.0***	11.0	<.001	90	568	445
If any, days enrolled to date	*281.3*	*235.8*	*45.4****	*12.2*	*<.001*	*19*	*498*	*246*
Month 18	257.4	135.7	121.7***	11.5	<.001	90	568	445
If any, days enrolled to date	*292.3*	*244.9*	*47.5****	*13.0*	*<.001*	*19*	*498*	*246*
Month 19	266.9	140.3	126.5***	12.1	<.001	90	568	445
If any, days enrolled to date	*303.0*	*253.2*	*49.8****	*13.8*	*<.001*	*20*	*498*	*246*
Month 20	275.7	144.6	131.1***	12.7	<.001	91	568	445
If any, days enrolled to date	*313.1*	*260.9*	*52.2****	*14.5*	*<.001*	*20*	*498*	*246*
Month 21	283.9	148.7	135.2***	13.3	<.001	91	568	445
If any, days enrolled to date	*322.4*	*267.1*	*55.3****	*15.3*	*<.001*	*21*	*498*	*247*
Month 22	291.6	152.3	139.4***	13.8	<.001	92	568	445
If any, days enrolled to date	*331.3*	*273.6*	*57.7****	*16.0*	*<.001*	*21*	*498*	*247*
Month 23	299.2	155.6	143.6***	14.3	<.001	92	568	445
If any, days enrolled to date	*339.9*	*279.5*	*60.4****	*16.7*	*<.001*	*22*	*498*	*247*
Month 24	306.3	158.5	147.8***	14.8	<.001	93	568	445
If any, days enrolled to date	*348.1*	*284.7*	*63.4****	*17.4*	*<.001*	*22*	*498*	*247*
Month 25	312.9	161.3	151.6***	15.3	<.001	94	568	445
If any, days enrolled to date	*355.6*	*289.8*	*65.8****	*18.0*	*<.001*	*23*	*498*	*247*
Month 26	318.4	167.8	150.7***	16.3	<.001	90	520	422
If any, days enrolled to date	*363.6*	*296.7*	*66.9****	*19.1*	*<.001*	*23*	*457*	*239*
Month 27	327.7	168.3	159.5***	17.2	<.001	95	485	403
If any, days enrolled to date	*374.6*	*296.8*	*77.8****	*20.3*	*<.001*	*26*	*428*	*229*
Job Corps Enrollment								
Enrolled in Job Corps in given month, measured from random assignment:								
Month 1 (%)	26.1	1.9	24.2***	2.1	<.001	1273	568	445
Month 2 (%)	65.4	15.8	49.6***	2.7	<.001	315	568	445
Month 3 (%)	75.7	31.7	44.0***	2.9	<.001	139	568	445
Month 4 (%)	74.3	36.1	38.3***	3.0	<.001	106	568	445
Month 5 (%)	70.6	39.2	31.4***	3.1	<.001	80	568	445
Month 6 (%)	68.0	41.2	26.8***	3.1	<.001	65	568	445
Month 7 (%)	65.4	39.8	25.7***	3.1	<.001	65	568	445
Month 8 (%)	61.5	37.1	24.5***	3.1	<.001	66	568	445
Month 9 (%)	57.8	34.1	23.7***	3.1	<.001	70	568	445
Month 10 (%)	53.7	32.9	20.8***	3.1	<.001	63	568	445
Month 11 (%)	48.5	31.8	16.7***	3.1	<.001	52	568	445
Month 12 (%)	45.7	29.0	16.7***	3.1	<.001	58	568	445
Month 13 (%)	42.1	28.3	13.8***	3.0	<.001	49	568	445
Month 14 (%)	39.1	26.4	12.8***	3.0	<.001	48	568	445
Month 15 (%)	37.9	23.6	14.3***	2.9	<.001	61	568	445
Month 16 (%)	36.7	21.4	15.3***	2.9	<.001	71	568	445
Month 17 (%)	35.1	19.0	16.1***	2.8	<.001	85	568	445

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size
Month 18 (%)	32.7	17.9	14.9***	2.7	<.001	83	568	445
Month 19 (%)	32.3	15.7	16.5***	2.7	<.001	105	568	445
Month 20 (%)	31.1	14.6	16.5***	2.6	<.001	113	568	445
Month 21 (%)	28.7	14.0	14.7***	2.6	<.001	105	568	445
Month 22 (%)	27.2	12.7	14.5***	2.5	<.001	114	568	445
Month 23 (%)	25.9	11.8	14.1***	2.5	<.001	120	568	445
Month 24 (%)	24.6	10.1	14.5***	2.4	<.001	143	568	445
Month 25 (%)	22.9	9.7	13.2***	2.3	<.001	136	568	445
Month 26 (%)	21.3	9.7	11.6***	2.4	<.001	120	520	422
Month 27 (%)	19.8	8.7	11.1***	2.4	<.001	128	485	403

SOURCE AND FOLLOW-UP PERIOD: Center Information System, from random assignment to 27 months after random assignment.
NOTES: All outcomes in this table are exploratory. *Outcomes in italics* apply to the subset of sample members who attended any training through the given month, and thus are non-experimental. Non-experimental results are not reported (NR) when 15 or fewer survey respondents of either the program or control group attended any training. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero. Table reports impacts estimated on the full study sample.
Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.7-2 provides results for the full study sample corresponding to results presented in Exhibit H.2-3 for the Survey Cohort only.

Exhibit H.7-2 College Enrollment, for Full Study Sample (from NSC)

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size
Months Enrolled in College between Random Assignment and Quarter 6								
Full-time-equivalent (FTE) months	**1.9**	**0.6**	**1.4*** **	**0.2**	**<.001**	**237**	**568**	**445**
Total months	2.9	0.7	2.2***	0.2	<.001	305	568	445
Full-time months	1.0	0.4	0.6***	0.1	<.001	138	568	445
Part-time months	1.9	0.3	1.6***	0.1	<.001	537	568	445

SOURCE AND FOLLOW-UP PERIOD: National Student Clearinghouse; through the end of the sixth quarter after random assignment (counting the quarter of random assignment as Quarter 0).
NOTES: **Secondary outcomes are bolded**; exploratory outcomes are not bolded. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero. Table reports impacts estimated on the full study sample.
Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.7-3 provides results for the full study sample corresponding to results presented in Exhibit H.2-4 for the Survey Cohort only.

Exhibit H.7-3 College Enrollment by Month Since Random Assignment, for Full Study Sample (from NSC)

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size
College Enrollment between Random Assignment and Month 24								
Enrolled in college in the given month:								
Month 0 (%)	1.7	2.7	−1.0	1.0	.313	−37	568	445
Month 1 (%)	1.8	2.2	−0.3	0.9	.726	−15	568	445
Month 2 (%)	1.7	2.2	−0.5	0.9	.592	−22	568	445
Month 3 (%)	3.5	2.6	0.9	1.1	.373	37	568	445
Month 4 (%)	8.5	3.0	5.5***	1.4	<.001	181	568	445
Month 5 (%)	12.0	3.2	8.8***	1.6	<.001	275	568	445
Month 6 (%)	17.2	3.7	13.4***	1.8	<.001	359	568	445
Month 7 (%)	22.1	4.0	18.0***	2.0	<.001	447	568	445
Month 8 (%)	27.4	3.8	23.6***	2.1	<.001	622	568	445
Month 9 (%)	28.7	4.1	24.5***	2.2	<.001	597	568	445
Month 10 (%)	29.4	4.9	24.5***	2.2	<.001	501	568	445
Month 11 (%)	28.1	5.0	23.1***	2.2	<.001	459	568	445
Month 12 (%)	27.3	5.2	22.1***	2.2	<.001	425	568	445
Month 13 (%)	26.2	5.4	20.8***	2.2	<.001	385	568	445
Month 14 (%)	25.3	6.4	19.0***	2.2	<.001	299	568	445
Month 15 (%)	24.5	7.0	17.5***	2.3	<.001	248	568	445
Month 16 (%)	23.0	7.5	15.5***	2.2	<.001	206	568	445
Month 17 (%)	22.2	7.7	14.5***	2.2	<.001	188	568	445
Month 18 (%)	20.9	7.6	13.3***	2.2	<.001	174	568	445
Month 19 (%)	19.7	7.6	12.1***	2.2	<.001	158	568	445
Month 20 (%)	17.3	7.9	9.4***	2.1	<.001	120	568	445
Month 21 (%)	15.6	6.8	8.8***	2.1	<.001	130	522	424
Month 22 (%)	14.9	7.1	7.9***	2.1	<.001	111	492	405
Month 23 (%)	13.9	7.6	6.4***	2.2	.004	84	445	383
Month 24 (%)	13.9	7.6	6.4***	2.2	.004	84	435	370

SOURCE AND FOLLOW-UP PERIOD: National Student Clearinghouse; through the end of the eighth quarter after random assignment (counting the quarter of random assignment as Quarter 0).

NOTES: All outcomes in this table are exploratory. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero. Table reports impacts estimated on the full study sample.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.7-4 provides results for the full study sample corresponding to results presented in Exhibit H.4-2 for the Survey Cohort only.

Exhibit H.7-4 College Degrees or Other Certificates, for Full Study Sample (from NSC)

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size
Received a college degree (Associates or higher) between random assignment and the given quarter:								
Quarter 0 (%)	0.3	0.0	0.3	0.3	.316		568	445
Quarter 1 (%)	0.3	0.2	0.0	0.3	.951	9	568	445
Quarter 2 (%)	0.3	0.2	0.0	0.3	.951	9	568	445
Quarter 3 (%)	0.3	0.2	0.0	0.3	.951	9	568	445
Quarter 4 (%)	0.3	0.2	0.0	0.3	.951	9	568	445
Quarter 5 (%)	0.2	0.5	−0.2	0.4	.583	−50	568	445
Quarter 6 (%)	0.2	0.5	−0.2	0.4	.583	−50	568	445
Quarter 7 (%)	0.3	1.2	−0.9	0.6	.117	−77	568	445
Quarter 8 (%)	0.3	1.3	−1.0	0.7	.122	−78	456	387
Received any college credential or degree between random assignment and the given quarter:								
Quarter 0 (%)	0.3	0.2	0.0	0.3	.939	11	568	445
Quarter 1 (%)	0.3	0.5	−0.2	0.4	.617	−44	568	445
Quarter 2 (%)	0.3	0.5	−0.2	0.4	.617	−44	568	445
Quarter 3 (%)	0.3	0.7	−0.4	0.5	.372	−58	568	445
Quarter 4 (%)	0.4	0.7	−0.3	0.5	.532	−42	568	445
Quarter 5 (%)	0.9	1.0	−0.1	0.6	.892	−9	568	445
Quarter 6 (%)	0.9	1.2	−0.3	0.7	.671	−24	568	445
Quarter 7 (%)	1.2	1.9	−0.7	0.8	.403	−35	568	445
Quarter 8 (%)	1.9	2.4	−0.5	1.0	.649	−19	456	387

SOURCE AND FOLLOW-UP PERIOD: National Student Clearinghouse; through the end of the eighth quarter after random assignment (counting the quarter of random assignment as Quarter 0).
NOTES: All outcomes in this table are exploratory. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero. Table reports impacts estimated on the full study sample.
Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.7-5 provides results for the full study sample corresponding to results presented in Exhibit H.5-2 for the Survey Cohort only.

Exhibit H.7-5 Employment and Earnings, for Full Study Sample (from NDNH)

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size
Employment								
Total quarters employed during Q1 through Q6	2.1	2.6	−0.6***	0.1	<.001	−22	548	430
Ever employed during Q1 through Q6 (%)	65.3	76.1	−10.8***	2.9	<.001	−14	548	430
Ever employed during Q4 before random assignment (%)	30.0	27.8	2.2	2.7	.420	8	548	430
Ever employed during Q3 before random assignment (%)	34.0	31.4	2.6	2.8	.351	8	548	430

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	*p*-Value	Relative Impact (%)	Treatment Sample Size	Control Sample Size
Ever employed during Q2 before random assignment (%)	40.7	36.5	4.2	2.9	.152	12	548	430
Ever employed during Q1 before random assignment (%)	38.8	40.7	−1.9	2.9	.506	−5	548	430
Ever employed during Q0 (%)	35.2	35.9	−0.7	3.0	.810	−2	548	430
Ever employed during Q1 (%)	23.0	36.1	−13.1***	2.8	<.001	−36	548	430
Ever employed during Q2 (%)	23.8	35.9	−12.1***	2.9	<.001	−34	548	430
Ever employed during Q3 (%)	31.5	42.3	−10.8***	3.1	<.001	−25	548	430
Ever employed during Q4 (%)	37.6	46.3	−8.6***	3.2	.007	−19	548	430
Ever employed during Q5 (%)	44.0	49.4	−5.4*	3.2	.093	−11	548	430
Ever employed during Q6 (%)	46.4	54.9	−8.6***	3.3	.009	−16	548	430
Earnings								
Cumulative earnings in Q1 through Q6 ($)	5,038	8,446	−3,408***	586	<.001	−40	548	430
Cumulative earnings, if ever employed, in Q1-Q6	*7,815*	*11,101*	*−3,286****	*747*	*<.001*	*−30*	*362*	*325*
Earnings in Q4 before random assignment ($)	711	630	81	90	.368	13	548	430
Earnings in Q3 before random assignment ($)	829	719	109	100	.274	15	548	430
Earnings in Q2 before random assignment ($)	963	847	116	103	.264	14	548	430
Earnings in Q1 before random assignment ($)	855	830	26	97	.792	3	548	430
Earnings in Q0 ($)	689	711	−22	92	.813	−3	548	430
Earnings in Q1 ($)	369	875	−506***	91	<.001	−58	548	430
Earnings in Q2 ($)	453	998	−545***	108	<.001	−55	548	430
Earnings in Q3 ($)	625	1,254	−629***	121	<.001	−50	548	430
Earnings in Q4 ($)	886	1,570	−684***	140	<.001	−44	548	430
Earnings in Q5 ($)	1,172	1,713	−541***	150	<.001	−32	548	430
Earnings in Q6 ($)	1,533	2,036	−503***	165	.002	−25	548	430

SOURCE AND FOLLOW-UP PERIOD: National Directory of New Hires, through six quarters after random assignment.
NOTES: All outcomes in this table are exploratory. *Outcomes in italics* apply to the subset of sample members who were ever employed during Q1 through Q6, and are thus non-experimental. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]). Table reports impacts estimated on the full study sample.
Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Appendix I. Survey Materials

This appendix provides materials used for tracking, implementing, and monitoring the 18-Month Follow-up Survey described in Appendix C. Section I.1. includes tracking communication materials. Section I.2. includes the tracking schedule and response rates. Section I.3. includes data collection materials. Section I.4. includes the survey release schedule, response rates, and scheduled blocks at Cascades Job Corps Center. Section I.5. includes the 18-Month Follow-up Survey instrument.

I.1. Tracking Communication Materials

I.1.1. Welcome Email

Thank you for agreeing to participate in the

Cascades Job Corps College and Career Academy Pilot Evaluation

Dear [NAME]

When you applied to the Cascades Job Corps program you agreed to participate in a study funded by the U.S. Department of Labor (DOL). The study is about your experiences after applying to the program. A research company called Abt Associates, along with its partners at MDRC, is conducting the study on behalf of DOL. Your participation in this research is very important and will help DOL improve the Job Corps program. I am part of the research team at Abt Associates who will be asking you about your experiences. I would like to tell you a little more about what to expect.

When you applied to the Cascades Job Corps program, you were told the research team would follow up with you in the future. Every few months over the next year and a half, we will send you a request to update your contact information. About a year and a half from now, you may also be asked to complete a survey about your experiences since applying to Job Corps. **In appreciation for your time spent completing that survey you will receive a $25 gift card.**

To make sure we can reach you when it's time to complete the survey, please go to https://www.jobcorpevalstudy.com. Once at the website, you will be asked for your Participant ID and to confirm your date of birth. Your Participant ID to access the site is [ABT ID] – this ID is unique to you. After you have logged on, please fill in or update any missing or incorrect information. It would also be very helpful if you could provide contact information for three people who will know how to reach you about a year and a half from now. *We would only contact these individuals if we could not reach you for the survey.*

In consideration of your time, we will send you $2 as a thank you for responding to this request. Please take just a few minutes to review and update the information included on the website.

Any information you provide to us for the study is kept private. Your answers will never be shared with the Cascades Job Corps program, and your personal information will not be

published in a report. Your participation is completely voluntary. You can choose not to answer any question for any reason.

The success of our research depends upon the participation of people like you. We greatly appreciate your willingness to be a part of this important study! If you have questions, please do not hesitate to contact us during regular business hours at our toll-free number, 1-888-812-9285. If you contact us, please be sure to clearly give your first and last name and refer to the **Cascades Job Corps Study.** Thank you!

Sincerely yours,

I.1.2. Tracking Mailed Letter

«First_Name» «Last_Name»
«Street»
«APT»
«City», «State_Name»

Dear «First_Name» «Last_Name»,

As you may recall, last year when you applied to the Cascades Job Corps College and Career Academy Pilot program, you learned that there was a study being conducted to understand how applicants are doing since the time they applied for the program. This study is funded by the Chief Evaluation Office at the U.S. Department of Labor. We are writing today about a very important part of the study and we hope that you will participate! So that we can reach you when it comes time for the follow-up survey, we need to make sure we have the most current contact information for you.

We have included a contact update form for you here. Please complete this form and return it to us in the postage paid envelope. In consideration of your time, we will mail you $2 for completing this form. You may also wish to go online to complete this form.

https://www.jobcorpevalstudy.com

Please enter your PIN. We provided a PIN for you in your Welcome Email. The PIN is a number unique to you that will help our research team locate your information and survey.

Any information you provide to us for the study is kept private. Your answers will never be shared with the Cascades Job Corps program, and your personal information will never be published in a report. Your participation is completely voluntary. You can choose not to answer any question for any reason.

We hope to hear from you soon! Thank you in advance for your help with our study.

Sincerely yours,

I.1.3. Participant Tracking Form

Form Approved
OMB Control No. 1290-0012
Expiration Date 2/29/2020

Cascades Job Corps College and Career Academy Pilot Evaluation, Participant Tracking Form
«ABT_ID»

(PLEASE PRINT)

1. Is this the correct spelling of your name?

«First_Name» «Last_Name»

Please check appropriate box. ☐ Yes ☐ No, the correct spelling is:

First Name	Last Name

2. Is this your correct address?

«Street» «APT», «City», «State_Name» «Zip_Code»

Please check appropriate box. ☐ Yes ☐ No, my correct address is:

Street		Apartment #
City	State	Zip Code

3. Is this your correct phone number? «Phone_Number_1»

Please check appropriate box. ☐ Yes ☐ No, my correct phone number is:

Home Phone		Cell Phone	
Area Code	Telephone Number	Area Code	Telephone Number

4. **Please list the name, address, and relationship to you of three people who will <u>always</u> know how to reach you.**

(PLEASE PRINT)

1. Name:		Relation to you :
Address	Apartment #	City
State	Zip Code	Phone ( ) —
2. Name:		Relation to you:
Address	Apartment #	City
State	Zip Code	Phone

		( ) —
3. Name:		Relation to you:
Address	Apartment #	City
State	Zip Code	Phone ( ) —

Abt Associates IRB Approval No. 0917

Public Burden Statement. Persons are not required to respond to this collection of information unless it displays a currently valid OMB Control Number. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Labor, Office of Policy Development and Research, Room N-5641, Washington, D.C. 20210 (Paperwork Reduction Project Control No.1290-0012).

I.1.4. Tracking Text Message

FIRSTNAME, update your contact info for the Job Corps Study and get $2! Visit https://www.jobcorpevalstudy.com and enter your ID: [ABT ID] Text STOP to opt-out.

I.1.5. Tracking Email

Dear [NAME],

As you may recall, last year when you applied to the Cascades Job Corps College and Career Academy Pilot program, you learned that there was a study being conducted to understand how applicants are doing since the time they applied for the program. This study is funded by the Chief Evaluation Office at the U.S. Department of Labor. We are writing today about a very important part of the study and we hope that you will participate! So that we can reach you when it comes time for the follow-up survey, we need to make sure we have the most current contact information for you.

Please update your contact information by clicking here to access your form: www.jobcorpevalstudy.com. In consideration of your time, we will mail you $2 as a thank you for responding to this request.

Any information you provide to us for the study is kept private. Your answers will never be shared with the Cascades Job Corps program, and your personal information will never be published in a report. Your participation is completely voluntary. You can choose not to answer any question for any reason.

We hope to hear from you soon! Thank you in advance for your help with our study.

Sincerely yours,

I.1.6. Postcard

JOB CORPS PILOT EVALUATION

STAY IN TOUCH!

GO ONLINE

www.jobcorpevalstudy.com/

Enter Your PIN

CALL US

1-888-812-9285

Have Your PIN Handy

OMB 1290-0012
EXPIRES 02/29/2020

HOW CAN YOU STAY IN TOUCH?

Abt Associates and the Department of Labor thank you for participating in the Job Corps Pilot Evaluation. When you enrolled, the research team explained that we hope to survey you in 18 months about your experiences since enrolling in the study. If any of your contact information changes, please let us know. Here's how:

Online
Log on to www.jobcorpevalstudy.com, enter your PIN and update your information. This site will be available to you for the duration of this research.

By phone
Please feel free to call us at 1-888-812-9285 to update your information with a member of the research team. You can also call this number if you have any questions about the study.

Where is my PIN?
We provided a PIN for you in your welcome email. The PIN is a number unique to you that will help our research team locate your information and survey. Having your PIN handy when you correspond with our researchers will speed up your access to the study page.

Will I be paid for my time?
Yes! We will pay you **$2 as a thank you for responding to this request**. You will also receive an incentive for completing the survey, when the time comes.

Abt ASSOCIATES

I.1.7. Monthly Incentive Letter

Dear «First_Name» «Last_Name»,

Thank you for confirming your contact information for the Study of Cascades Job Corps! Enclosed please find $«Amount», a token of our appreciation of your time responding to our request. High quality research depends upon the participation of people like you. We greatly appreciate your willingness to be a part of this important study. If you have any questions, please do not hesitate to contact us at our toll-free number 1-888-812-9285 during regular business hours or by email at jobcorpsstudy@abtassoc.com. Thank you!

Sincerely yours,

I.1.8. Advance Letter

Dear «First_Name_» «Last_Name_»,

Thank you for agreeing to participate in the Cascades Job Corps College and Career Academy research study. When you applied to the program in «RA_Month» «RA_Year» you agreed to be part of a voluntary research study. Abt Associates, along with its partners at MDRC, are conducting the study on behalf of the U.S. Department of Labor (DOL).

When you applied to the program, you signed a consent form. That consent form explained that researchers will want to conduct a follow-up survey with you. This survey will help Abt Associates and DOL see how well programs like Job Corps help people complete their education and find jobs.

We are writing to let you know that we are getting ready to start outreach for the follow-up survey. In the next couple of weeks, an interviewer from Abt Associates will contact you to explain the survey. If you want to do the survey, you can complete it over the phone or ask to set up a time to complete it later. We know this is a difficult time due to the coronavirus pandemic. We apologize if our attempts to reach you have inconvenienced you. This study is still important and your input is critical to the success of our study.

- The survey will help researchers and DOL learn more about your experiences since you applied to Job Corps.
- The survey will ask about your education and training experiences, the jobs you have had, and how things are going for you.
- We are interested in the experiences of everyone who applied to a Job Corps program. Even if you did not attend a Job Corps program, your experiences are important to this study!

You can choose whether or not to participate in this survey.

- Your experiences are unique. Your participation is important.
- You can help us understand how different types of training and services can help people complete their education and find jobs.

Whether you choose to participate in the survey or not will not affect any assistance that you may receive now or in the future. If you choose to participate, the information you provide will be kept private to the extent allowed by law. Only the researchers involved in this study will see your responses.

The interview will last about 30 minutes. After you complete the survey, you will receive a VISA gift card valued at $25 to thank you for your time spent completing the survey.

High quality research depends upon the participation of people like you! We greatly appreciate your willingness to be a part of this important study. Please do not hesitate to contact us with any questions at our toll-free number, 1-888-812-9285. We can be reached during regular business hours. If you contact us, please refer to your PIN. Your **Personal Identification Number (PIN) is: «ABTID_».** Thank you!

Sincerely yours,

I.2. Tracking Schedule and Response rates

Exhibit I.2-1 Tracking Schedule by Sample Group

Sample Group	RAD Month	Welcome Email	Text	Mailed Letter	Mailed Letter	Postcard	Email	Adv. Letter
1	Feb-17 – Aug-17	Oct-17	Jan-18	Apr-18	Jul-18	Oct-18	Jan-19	N/A
2	Sep-17	Nov-17	Feb-18	Jun-18	Aug-18	Nov-18	Feb-19	N/A
3	Oct-17	Dec-17	Mar-18	Jun-18	Sep-18	Dec-18	Mar-19	N/A
4	Nov-17	Jan-18	Apr-18	Jul-18	Oct-18	Jan-19	Mar-19	Aug-19
5	Dec-17	Feb-18	Jun-18	Aug-18	Nov-18	Feb-19	Apr-19	Aug-19
6	Jan-18	Mar-18	Jun-18	Sep-18	Dec-18	Mar-19	May-19	Aug-19
7	Feb-18	Apr-18	Jul-18	Oct-18	Jan-19	Apr-19	Jul-19	Aug-19
8	Mar-18	Jun-18	Aug-18	Nov-18	Feb-19	May-19	Aug-19	Sep-19
9	Apr-18	Jun-18	Sep-18	Dec-18	Mar-19	Jun-19	Sep-19	Oct-19
10	May-18	Jul-18	Oct-18	Jan-19	Apr-19	Jul-19	Oct-19	Nov-19
11	Jun-18	Aug-18	Nov-18	Feb-19	May-19	Aug-19	Nov-19	Dec-19
12	Jul-18	Sep-18	Dec-18	Mar-19	Jun-19	Sep-19	Dec-19	Jan-20
13	Aug-18	Oct-18	Jan-19	Apr-19	Jul-19	Oct-19	Jan-20	Feb-20
14	Sep-18	Nov-18	Feb-19	May-19	Aug-19	Nov-19	Feb-20	Mar-20
15	Oct-18	Dec-18	Mar-19	Jun-19	Sep-19	Dec-19	Mar-20	Mar-20
16	Nov-18	Jan-19	Apr-19	Jul-19	Oct-19	Jan-20	Mar-20	Apr-20
17	Dec-18	Feb-19	May-19	Aug-19	Nov-19	Feb-20	Mar-20	Apr-20

Notes: For Sample Group 2, the third tracking communication was an e-mail and the fourth tracking communication was a mailed letter. For Sample Groups 1–6, the fourth tracking communication was an e-mail and the sixth tracking communication was a mailed letter. Finally, for Sample Groups 4–6, the sixth tracking communication was sent two months prior to fielding the 18-month survey.

Exhibit I.2-2 Tracking Response Rates by Sample Group

% Completed Tracking at Least Once		
Sample Group	**Month and Year of Random Assignment (RAD)**	**Tracking Response Rate**
1	February 2017 – August 2017	17.0%
2	September 2017	26.8%
3	October 2017	12.5%
4	November 2017	24.5%
5	December 2017	29.0%
6	January 2018	27.1%
7	February 2018	24.4%
8	March 2018	21.3%
9	April 2018	11.1%
10	May 2018	16.9%
11	June 2018	24.4%
12	July 2018	13.2%
13	August 2018	14.5%
14	September 2018	15.4%
15	October 2018	17.6%
16	November 2018	22.2%
17	December 2018	26.1%
	Total	**19.7%**

I.3. Data Collection Materials

I.3.1. "Trying to Reach You" Email

SUBJECT: Please complete the Cascades Job Corps research study follow-up interview

Dear «firstname»,

Over the past few [days/weeks] we've been trying to reach you by telephone to request your participation in a survey as part of the Cascades Job Corps College and Career Academy research study. We know this is a difficult time due to the coronavirus pandemic. We apologize if our attempts to reach you have inconvenienced you. When you applied to Job Corps in «RA Month Year», you agreed to be part of a voluntary research study. Your input is very important, and we'd like to schedule an appointment to talk. We realize your time is valuable, so as a token of our appreciation, you will receive a $25 Visa gift card. The interview should last about 30 minutes.

Abt Associates, along with its partners at MDRC, are conducting the study on behalf of the U.S. Department of Labor (DOL).

- The interview will help researchers and DOL learn more about your experiences since you applied to Job Corps.
- The interview will ask about your education and training experiences, the jobs you have had, and how things are going for you.
- We are interested in the experiences of everyone who applied to a Job Corps program. Even if you did not attend a Job Corps program, your experiences are important to this study!
- The survey is voluntary. Whether you choose to participate in the survey or not will not affect any assistance that you may receive now or in the future.
- The information you provide will be kept private to the extent allowed by law. Only the researchers involved in this study will see your responses.

I would like to schedule an appointment to complete the interview at a time that is convenient for you. Please respond to this email or call our toll-free number 1-888-812-9285, during regular business hours to set up your interview. When you call, please refer to your **Personal Identification Number (PIN): «userid».**

Thank you,

I.3.2. Text Message Templates

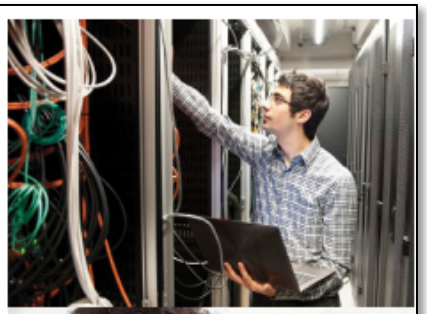
- **Template 1: 'Trying to Reach You' Text:** for those who agreed to receive text messages and you have been unable to reach:
  [FIRSTNAME], get $25 for completing your Cascades Job Corps Study follow-up interview! Call [INSERT ABT NUM] to set up your interview. To stop messages, reply STOP
- **Template 2: Confirming appointments**
  A reminder text can be sent for pre-scheduled appointments at least 24 hours in advance. Same day appointments reminders should be sent 1 - 4 hours in advance.
  "Hi (First name), this is (FI FIRST Name). I'm looking forward to our interview on DATE at TIME. Please reply to confirm."
- **Template 3: Appointment delay**
  "Hi (First name), this is (FI FIRST Name). I apologize, but I am running XX minutes behind schedule for our appointment."
- **Template 4: Arrived**
  "Hi (First name), this is (FI Name). I have arrived for our scheduled appointment."

I.3.3. "Sorry I Missed You" Card

I.3.4. Study Flyer

Job Corps CAREERS BEGIN HERE

Abt ASSOCIATES



We have been trying to reach you!

We're calling about the **Cascades Job Corps College and Career Academy study.** You agreed to be in this study about 18 months ago. At that time you applied to receive training and services through your local Job Corps office.

This is a very important research study. It is being conducted by Abt Associates, a research firm, on behalf of the U.S. Department of Labor.

We would like to speak with you to learn about your experiences since applying to Job Corps.

After you complete the survey, you will receive a Visa gift card worth $25 to thank you for your help with this important study.

To schedule your interview or to get more information about the study, please call:

_____

And mention this number:

_____

THANK YOU! HIGH QUALITY RESEARCH DEPENDS UPON THE PARTICIPATION OF PEOPLE LIKE YOU!

Public Burden Statement. Persons are not required to respond to this collection of information unless it displays a currently valid OMB Control Number. The OMB control number for this collection is 1290-0023 and it expires 06/30/2022. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Labor, Office of Policy Development and Research, Room N-5641, Washington, D.C. 20210 (Paperwork Reduction Project Control No. 1290-0023).

I.3.5. Study Poster

I.4. Survey Schedule and Response Rates

Exhibit I.4-1 Sample Group Release Schedule

Group	Randomization Month and Year	18-Mo Survey Release Date	Cascades Job Corps (#)	Other Job Corps Site (#)	No Site (#)	Total Sample (#)
4	Nov 2017	8/26/2019	21	14	18	53
5	Dec 2017	8/26/2019	14	8	9	31
6	Jan 2018	8/26/2019	23	15	10	48
7	Feb 2018	8/26/2019	19	12	14	45
8	Mar 2018	9/16/2019	21	14	12	47
9	Apr 2018	10/16/2019	19	9	16	44
10	May 2018	11/15/2019	26	14	19	59
11	Jun 2018	12/17/2019	10	6	28	44
12	Jul 2018	1/15/2020	14	10	14	38
13	Aug 2018	2/18/2020	30	11	21	62
14	Sep 2018	3/17/2020	15	2	22	39
15	Oct 2018	4/1/2020	13	10	11	34
16	Nov 2018	5/1/2020	17	15	13	45
17	Dec 2018	5/1/2020	9	5	9	23
		Total	**251**	**145**	**216**	**612**

Exhibit I.4-2 Completion Rates by Sample Group

Sample Group	Randomization Month and Year	18-Mo Survey Release Month	Total Sample (#)	Complete (#)	Phone Complete (#)	In-Person Complete (#)	Percentage Complete (#)	Weeks in Field
4	Nov 2017	Aug 2019	53	24	22	2	45.3%	23.6
5	Dec 2017	Aug 2019	31	18	17	1	58.1%	23.6
6	Jan 2018	Aug 2019	48	20	18	2	41.7%	23.6
7	Feb 2018	Aug 2019	45	32	27	5	71.1%	23.6
8	Mar 2018	Sep 2019	47	25	24	1	53.2%	20.6
9	Apr 2018	Oct 2019	44	26	24	2	59.1%	27.7
10	May 2018	Nov 2019	59	43	36	7	72.9%	27.6
11	Jun 2018	Dec 2019	44	29	27	2	65.9%	25.0
12	Jul 2018	Jan 2020	38	27	25	2	71.1%	23.3
13	Aug 2018	Feb 2020	62	44	41	3	71.0%	18.4
14	Sep 2018	Mar 2020	39	25	25	0	64.1%	19.4
15	Oct 2018	Apr 2020	34	23	23	0	67.6%	17.3
16	Nov 2018	May 2020	45	34	34	0	75.6%	13.0
17	Dec 2018	May 2020	23	11	11	0	47.8%	13.0
Total			**612**	**381**	**354**	**27**	**62.3%**	

Exhibit I.4-3 Completion Rates by Assignment Group

Sample Group	Treatment % Complete	Control % Complete	Differential Percentage	Total Percentage Complete
4	38.5%	51.9%	-13.4%	45.3%
5	75.0%	40.0%	35.0%	58.1%
6	52.2%	32.0%	20.2%	41.7%
7	82.6%	59.1%	23.5%	71.1%
8	60.0%	45.5%	14.5%	53.2%
9	60.0%	58.3%	1.7%	59.1%
10	79.3%	66.7%	12.6%	72.9%
11	60.9%	71.4%	-10.6%	65.9%
12	66.7%	75.0%	-8.3%	71.1%
13	82.9%	55.6%	27.3%	71.0%
14	84.2%	45.0%	39.2%	64.1%
15	56.3%	77.8%	-21.5%	67.6%
16	78.3%	72.7%	5.5%	75.6%
17	60.0%	38.5%	21.5%	47.8%
Average	**67.6%**	**56.9%**	**10.8%**	**62.3%**

Exhibit I.4-4 Completion Rates by Site

Sample Group	Cascades Job Corps % Complete	Other Job Corps Site % Complete	No Site % Complete	All Sites % Complete
4	42.9%	64.3%	33.3%	45.3%
5	71.4%	62.5%	33.3%	58.1%
6	52.2%	33.3%	30.0%	41.7%
7	84.2%	66.7%	57.1%	71.1%
8	66.7%	50.0%	33.3%	53.2%
9	57.9%	55.6%	62.5%	59.1%
10	80.8%	64.3%	68.4%	72.9%
11	60.0%	66.7%	67.9%	65.9%
12	57.1%	80.0%	78.6%	71.1%
13	80.0%	54.5%	66.7%	71.0%
14	86.7%	0.0%	54.5%	64.1%
15	53.8%	80.0%	72.7%	67.6%
16	82.4%	73.3%	69.2%	75.6%
17	55.6%	20.0%	55.6%	47.8%
Average	**67.7%**	**59.3%**	**57.9%**	**62.3%**

Exhibit I.4-5 Hierarchical Final Survey Disposition

Minimum Response Rate = 62.3%		
Disposition	**Total**	**Percentage**
Interview		
Complete	381	62.3%
Total Interview	**381**	**62.3%**
Eligible, Non-interview		
Refusals	83	13.6%
Deceased	1	0.2%
Other	148	24.0%
Total Eligible, Non-interview	**232**	**37.7%**
Grand Total	**612**	**100%**

Note: The hierarchy of disposition types follows the American Association of for Public Opinion Research Standard Definitions, 8th edition (revised April 2015), available online: https://www.aapor.org/AAPOR_Main/media/MainSiteFiles/Standard-Definitions2015_8thEd.pdf. Minimum response rate is calculated as is the number of complete interviews divided by the number of interviews (complete plus partial) plus the number of non-interviews (refusal and break-off plus non-contacts plus others) plus all cases of unknown eligibility (unknown if housing unit, plus unknown, other).

Exhibit I.4-6 Scheduled Blocks at Cascades Job Corps

Month and Year	Date	Time
October 2019	10/30/2019	1:00pm to 4:00pm
November 2019	11/13/2019	3:00pm to 6:00pm
	11/20/2019	1:00pm to 4:00pm
December 2019	12/4/2019	3:00pm to 6:00pm
	12/11/2019	1:00pm to 4:00pm
January 2020	1/22/2020	3:00pm to 6:00pm
	1/29/2020	1:00pm to 4:00pm
February 2020	2/19/2020	3:00pm to 6:00pm
	2/26/2020	1:00pm to 4:00pm
March 2020	3/4/2020	3:00pm to 6:00pm

I.5. 18-Month Follow-up Survey Instrument

Introduction

Hello, my name is [ ]. May I please speak with _____?

IF RESPONDENT COMES TO THE PHONE: *I'm calling on behalf of the Job Corps Cascades College and Career Academy Pilot Evaluation.*

IF PHONE OR IN-PERSON: *I work for Abt Associates, or Abt, an independent research company. Abt is helping the U.S. Department of Labor (DOL) with its evaluation of the Job Corps Cascades College and Career Academy program. We are conducting interviews with people like you who agreed to be in a study. Thank you for taking the time to talk with me today.*

This interview will include questions on your employment and education activities, your use of services, and your overall well-being, including questions about your participation in some risky or illegal behaviors. This interview will take about 30 minutes to complete. When we are done, we will send you a $25 gift card as a token of appreciation. You agreed to be part of the study around [RAD] when you signed a consent form to let researchers collect information from you. We need to talk with people who got into the program and those who did not. Your participation in this study will help policymakers and program operators better understand how to help people attain educational credentials and find and keep jobs.

Before we begin the survey, I would like to assure you that all of your responses on this survey will be kept private; your name will not appear in any written reports we produce. As a reminder, we have a Certificate of Confidentiality to protect your data from subpoena. Your responses to these questions are completely voluntary. That means you may choose not to answer any question, or you may stop the interview if you wish, but we hope you don't. Your responses to these questions will in no way affect your participation in any programs or your receipt of any kinds of public benefits or services. The information you provide will be kept private and only used for this study. By participating in this study, you will help the government learn if and how programs like Job Corps Cascades College and Career Academy make a difference in people's lives and how to improve programs in the future.

According to the Paperwork Reduction Act (PRA), an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control number for this collection is 1290-0023 and it expires 06/30/2022. If you have comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, please send them to U.S. Department of Labor, Office of Policy Development and Research, Room N-5641, Washington, D.C. 20210. Attn: OMB-PRA 1290-0023.

Do you have any questions before we begin?

Let's begin now.

A. Screener/Verification

First I just need to verify that I am speaking with the correct person.

Read the following text and ask Q1 of everyone.

A1. What is your date of birth? _____ (MM/DD/YYYY)

INTERVIEWER: ENTER DATE USING FORMAT BELOW.

Respondent's Birthday: _____ / _____ / _____
<SC1_MM>, <SC1_DD>, <SC1_YY> MM DD YYYY
<**SC1_REF**> REFUSED..... ❑ 7
<**SC1_DK**> DON'T KNOW..... ❑ 8

Ask Q2 only if the DOB in Q1 does not match what is in our records.

CAPI: IF DOB AGREES WITH THE BIRTH DATE ON THE FILE, SKIP TO B1. ELSE, CONTINUE.

A2. What are the last 4 digits of your Social Security Number?

INTERVIEWER – ENTER LAST 4 DIGITS OF SSN

<**SC2_4SSN**> RECORD LAST 4 DIGITS: ___ ___ ___ ___
<**SC2_REF**> REFUSED..... ❑ 7
<**SC2_DK**> DON'T KNOW..... ❑ 8

CAPI: IF THE 4 DIGITS GIVEN BY RESPONDENT AGREE WITH THE NUMBER ON THE FILE, SKIP TO B1.

IF SSN IS MISSING IN THE SAMPLE OR IS A MISMATCH WITH WHAT IS ENTERED AND THERE IS A MISMATCH IN DOB, DISPLAY DISCONTINUED TEXT:

DISCONTINUED TEXT: *I'm sorry. I was unable to pull up the correct questionnaire. I will need to check with my supervisor to look into the problem. I will re-contact you when the problem is resolved. Thank you for your time.*

B. Training and Education

OK, let's begin with the questions I have for you.

*To start, I would like to discuss the types of classes, courses, or training you have participated in since [**RAD**], either through Job Corps or from schools and other training providers you found on your own.*

B1a. To begin, since [**RAD**], have you attended any high school diploma classes, GED classes, or similar education classes for improving reading and math skills?

Yes	❑1
No	❑2
REFUSED	❑97
DON'T KNOW	❑98

B1b. What about courses for credit towards a certificate, credential, or degree, or vocational courses or training programs for a specific job, trade, or occupation? This can include enrollment in a community college, a 2-year college, or a 4-year college, either on campus or online. This can also include programs where you are trained for a specific occupation or job, usually leading to a certificate, license, or credential. Please do not include on-the-job training programs, or recreational courses.

Since [**RAD**], have you attended any "for credit" college courses or vocational courses or training programs for a specific job, trade, or occupation?

SELECT ALL THAT APPLY:

Yes – "For credit" college courses	❑1
Yes – Vocational courses or training programs	❑2
No	❑3
REFUSED	❑97
DON'T KNOW	❑98

CAPI: IF CONTROL: IF B1a = 2, DK, or REF AND B1b = 3, DK, or REF SKIP TO B15

B2a. **[*Ask if* RESPONDENT WAS ASSIGNED TO TREATMENT GROUP, AND B1a = 2, REF, OR DK AND B1b = 3, REF, OR DK]:**
Our records indicate that approximately 18 months ago, you may have enrolled in the Cascades College and Career Academy program offered by Job Corps. Do you remember participating in that program?

Yes	❑1
No	❑2
REFUSED	❑97
DON'T KNOW	❑98

CAPI: IF TREATMENT: IF B1a = 2, DK, or REF AND B1b = 3, DK, or REF AND B2a = 2, DK, or REF SKIP TO B15

B2b. **[*Ask if* B2a = 1]:** What types of classes did you take as part of the Cascades College and Career Academy at Job Corps? Were they…

SELECT ALL THAT APPLY:

High school diploma classes, GED classes, or similar education classes for improving reading and math skills	❑1
Courses for credit towards a college degree,	❑2
A vocational or training program for a specific job, trade, or occupation	❑3
NO - NONE OF THE TYPES LISTED	❑4 **(SKIP TO B15)**
REFUSED	❑97 **(SKIP TO B15)**
DON'T KNOW	❑98 **(SKIP TO B15)**

I am now going to ask you a few questions about the program/programs you attended. Please tell us only about the programs you attended, not each class. For example, if classes were held over multiple sessions or at different locations or schools as part of a program you attended, please count that as one program. Please include all programs that you started, even if you did not complete them. If you don't know the exact information, your best guess is fine.

NOTE: Questions B3a through B14 will be asked for each of the following types of programs attended, where providers differ; see note before Q5 for loop instructions:

1. High school diploma programs, GED programs, or similar education programs for improving reading and math skills, and
2. For-credit college programs and vocational training programs.

For the sake of brevity, in this document we do not repeat the questions for each type of program, but instances where questions vary by program type are noted. The set of questions will only be asked of those respondents who reported that they participated in at least one ABE/GED program, college courses for credit, or vocational training program.

B3A, B3B, AND B4 UPDATED 10/8/2019 5:00 PM

CAPI: IF B1a =1 or B2b = 1 PULL IN "high school diploma program, GED program, or education program for improving reading and math skills" for [TYPE OF PROGRAM]; ASK B3a-B13b; CHECK FOR NEXT PROGRAM TYPE.

CAPI: IF B1b = 1 or 2 or B2b = 2 or 3 PULL IN "For-credit college or vocational training program" for [TYPE OF PROGRAM]; ASK B3a-B14; CHECK FOR NEXT PROGRAM TYPE.

B3a. For the [TYPE OF PROGRAM] that you attended, please tell me the name of the place, school, or organization that offered or oversaw your *entire* program, even if you took classes at different locations, schools, or places as part of that program. If you enrolled in more than one [TYPE OF PROGRAM], please tell me the names of those places, schools, or organizations as well.

If you attended Job Corps and through Job Corps you took [TYPE OF PROGRAM] at a community college or another school or organization, please only list your Job Corps center as the provider, not the other organization you attended through your enrollment at Job Corps.

IF PROVIDER UNKNOWN, PROBE: Where did you attend these courses/classes? If you don't know the name of the provider we can refer to it as something else. How would you like to refer to the provider going forward?

AFTER PROVIDERS EXHAUSTED BY R, ASK: Are there any other places, schools, or organizations that offered or oversaw another [INSERT TYPE OF PROGRAM] you attended

ONE: _____

TWO: _____

THREE: _____

FOUR: _____

FIVE: _____

REFUSED ❑97

DON'T KNOW ❑98

CAPI: IF B3a=DK, IWER MUST PROBE WHAT THEY WOULD LIKE THE PROVIDER TO BE REFERRED TO GOING FORWARD. IF B3a=REF SKIP TO NEXT TYPE, DO NOT COLLECT PROGRAMS IF PROVIDER = REF. OTHERWISE SKIP TO B15

B3b. Please tell me the name(s) of the program or programs you took at [FILL NAME OF PROVIDER IN B3a ONE/TWO/THREE/FOUR/FIVE]. Please note, I am asking about the name of the overall program you were enrolled in, not the name of the individual classes you may have taken as part of the program.

If your enrollment at [PROVIDER] is through Job Corps, please only list the overall program, not the individual courses you attended through your enrollment. For example, if you enrolled at Cascades Job Corps Center and attended [TYPE OF PROGRAM] as part of your program at Job Corps, please list this experience as 'Job Corps'.

PROBE: If you don't know the name of the program we can refer to it as something else. How would you like to refer to the program going forward?

AFTER PROGRAMS EXHAUSTED BY R, ASK: Are there any other programs you took at [INSERT PROVIDER]? Note we are only interested in the overall program, not individual classes.

ONE: _____

TWO: _____

THREE: _____

FOUR: _____

FIVE: _____

REFUSED	❑97
DON'T KNOW	❑98

NOTE: PROGRAM NAME used to guide interview flow.

CAPI: IF B3B=DK, IWER MUST PROBE WHAT THEY WOULD LIKE THE PROGRAM TO BE REFERRED TO GOING FORWARD. IF B3B=REF, SKIP TO NEXT TYPE, OTHERWISE SKIP TO B15

PROGRAMMER NOTE: **AFTER HS/GED/READING MATH PROVIDERS AND PROGRAMS ARE COLLECTED, DISPLAY SCREEN BELOW PRIOR TO RUNNING THROUGH TYPE 2, IF R DID NOT RUN THROUGH HS/GED/READING MATH LOOP DO NOT DISPLAY SCREEN AND START AT B3A TYPE 2**

IF B1a = 1 or B2B = 1 (WENT THROUGH TYPE 1 LOOP)
I am now going to collect the names of providers and programs you attended for *for-credit college programs and vocational training programs. If you attended a provider you've already mentioned for high school diploma programs, GED programs, or similar education programs for improving reading and math skills, please list the provider again*.

If you attended a Job Corps program and through that program attended training through a community college or another provider, please only list your Job Corps center as the provider, not the community college or other provider you attended through your enrollment in Job Corps.

IF [**PROVIDER ONE/TWO/THREE/FOUR/FIVE]** repeats in B3a for HIGH SCHOOL DIPLOMA CLASSES, GED CLASSES, OR SIMILAR EDUCATION CLASSES and FOR-CREDIT COLLEGE PROGRAMS AND VOCATIONAL TRAINING PROGRAMS, ask B4: OTHERWISE, GO THROUGH LOOP FOR EACH PROVIDER/PROGRAM COMBO STARTING AT B5.

B4. You mentioned that you attended high school diploma classes, GED classes, or similar education classes for improving reading and math skills at [PROVIDER], and that you also attended college courses for credit, or vocational courses, or a training program at [PROVIDER]. Were these programs a part of the same enrollment offered by [PROVIDER] or separate enrollments?

IF UNKNOWN, PROBE: Was this one experience at this provider, or did you attend this provider at two different time periods?

Yes – one experience	❑1 **(ASK B4a_1, THEN ASK LOOP FOR EACH PROGRAM)**
No – multiple enrollments	❑2 **(ASK LOOP FOR EACH PROGRAM)**
REFUSED	❑97 **(ASK LOOP FOR EACH PROGRAM)**
DON'T KNOW	❑98 **(ASK LOOP FOR EACH PROGRAM)**

B4a_1. **[IF B4 = 1] Select programs that make up single experience**

LIST PROGRAMS [MUST SELECT MORE THAN ONE PROGRAM, GO TO B4a]

REFUSED ❑97 **[GO TO B4_1]**
DON'T KNOW ❑98 **[GO TO B4_1]**

B4_1. Are any of these remaining programs a single experience?

LIST PROGRAMS PER PROVIDER

Yes – one experience	❑1	**(GO TO B4a_1)**
No – multiple enrollments	❑2	**(ASK LOOP FOR EACH PROGRAM)**
REFUSED	❑97	**(ASK LOOP FOR EACH PROGRAM)**
DON'T KNOW	❑98	**(ASK LOOP FOR EACH PROGRAM)**

B4a. **[*Ask if* B4 = 1]** How would you like to refer to this one experience for the remainder of this survey? That is, what program name should we use? Please remember that when asked about this experience in future questions, the questions will be referring to the entire program experience (to the high school diploma classes, GED classes, or similar education classes for improving reading and math skills, as well as to the courses for credit, or vocational courses, or a training program).

REVISED PROGRAM NAME: _____

CAPI: REPLACE RELEVANT HIGH SCHOOL DIPLOMA CLASSES, GED CLASSES, OR SIMILAR EDUCATION CLASSES **PROGRAM NAME AND** FOR-CREDIT COLLEGE PROGRAMS AND VOCATIONAL TRAINING PROGRAMS **PROGRAM NAME WITH** REVISED PROGRAM NAME. ASK LOOP ONLY ONCE FOR THIS PROGRAM. RUN THROUGH B5 – 14 FOR PROGRAM.

NOTE: Questions B5 through B12_2 will be asked for each high school diploma/GED provider/program combo listed in Question B3a/b. Questions B5-B14 will be asked for each for-credit college courses/classes or vocational training provider/program combo listed in Question B3a/b and/or B4a [if B4=1, ask the loop one time for the revised program name (B5 – B15; ask the loop additional times for each additional provider/program combo listed in Question B3a/b].

B5. When did you start the [PROGRAM NAME] program offered by [PROVIDER]?

INTERVIEWER NOTE: IF EXACT DAY IN DATE IS UNKNOWN PROBE WITH BEGINNING, MIDDLE, OR END OF THE MONTH. IF RESPONSE IS BEGINNING OF THE MONTH ENTER '01', IF MIDDLE OF THE MONTH ENTER'15', IF END OF THE MONTH ENTER '28 /30'. OTHERWISE, ENTER '01' FOR DAY

IF RESPONDENT STILL DOESN'T KNOW DATE PROBE: Do you remember the season? What about a life event that occurred around the same time? Your best guess is fine.

|__|__| / |__|__| / |__|__|__|__|

MONTH DAY YEAR

REFUSED ❑97
DON'T KNOW ❑98

B6. Did you complete the [PROGRAM NAME] program offered by [PROVIDER] by finishing all of the coursework or program /class requirements, or are you still taking the program, or did you stop the program before completing it?

Completed the program, ❑1
Still in the program, ❑2
Stopped the program early/dropped out, ❑3 **(SKIP TO B8)**
REFUSED ❑97
DON'T KNOW ❑98

B7. When (IF B6= 1 did; IF B6 = 2 will) the [PROGRAM NAME] program at [PROVIDER NAME] end?
INTERVIEWER NOTE: IF EXACT DAY IN DATE IS UNKNOWN PROBE WITH BEGINNING, MIDDLE, OR END OF THE MONTH. IF RESPONSE IS BEGINNING OF THE MONTH ENTER '01', IF MIDDLE OF THE MONTH ENTER'15', IF END OF THE MONTH ENTER '28 /30'. OTHERWISE, ENTER '01' FOR DAY

IF RESPONDENT STILL DOESN'T KNOW DATE PROBE: Do you remember the season? What about a life event that occurred around the same time? Your best guess is fine

|__|__| / |__|__| / |__|__|__|__| **(SKIP TO B9)**
MONTH DAY YEAR

REFUSED ❑97
DON'T KNOW ❑98

B8. **[*Ask if* B6 = 3]:** When did you stop taking [PROGRAM NAME] program at [PROVIDER NAME]?

INTERVIEWER NOTE: IF EXACT DAY IN DATE IS UNKNOWN PROBE WITH BEGINNING, MIDDLE, OR END OF THE MONTH. IF RESPONSE IS BEGINNING OF THE MONTH ENTER '01', IF MIDDLE OF THE MONTH ENTER'15', IF END OF THE MONTH ENTER '28 /30'. OTHERWISE, ENTER '01' FOR DAY

IF RESPONDENT STILL DOESN'T KNOW DATE PROBE: Do you remember the season? What about a life event that occurred around the same time? Your best guess is fine

|__|__| / |__|__| / |__|__|__|__|
MONTH DAY YEAR

REFUSED	❑97
DON'T KNOW	❑98

B9. Were there any periods of a month or more during the time you attended the [PROGRAM NAME] program at [PROVIDER NAME] when you were not attending classes? Please do **not** include time when you were on school planned breaks such as spring, summer, or holiday breaks.

Yes	❑1 **(ASK B9a)**
No	❑2 **(SKIP TO B10)**
REFUSED	❑97 **(SKIP TO B10)**
DON'T KNOW	❑98 **(SKIP TO B10)**

B9a. ***[Ask if* B9 = 1]** How many weeks did this last? If you took more than one break from the program, please add all the breaks together.

RANGE 4 120 WEEKS

_____ WEEKS

REFUSED	❑97
DON'T KNOW	❑98

B10. How many hours per week (IF B6= 1 or 3 'did'; IF B6 = 2 'do'; IF B6 = DK/REF 'did/do') you attend classes or training experiences in the [PROGRAM NAME] program *in a typical week*? Do not include time spent outside of class studying or doing homework. Only time spent attending class should be counted.

IF RESPONDENT SAYS THEY TOOK ONLINE CLASSES, PROBE: Only include the time you spent online actually taking classes. Do not include time spent studying or doing homework.

RANGE: 1 - 60 HOURS

_____ (HOURS) **(SKIP TO B12)**

REFUSED	❑997
DON'T KNOW	❑998

B11. ***[Ask if B10 = DK, REF]*** Would you say you (IF B6= 1 or 3 'attended; 'IF B6 = 2 'attend'; IF B6 = DK/REF 'attended/attend') class for the [PROGRAM NAME] program/course/class...?

More than 1 but less than 5 hours per week,	❑1
Between 5 and less than 12 hours per week,	❑2
Between 12 and less than 15 hours per week,	❑3
15 or more hours per week?	❑4
REFUSED	❑97
DON'T KNOW	❑98

B12. In the next set of questions, we are interested in the types of services and assistance you may have received during the [PROGRAM NAME] program from [PROVIDER NAME]. Did you receive any of the following **support services**?

B12_1. [**FOR EACH SERVICE, IF YES**]: How many times did you receive [FILL IN TYPE OF SUPPORT SERVICE] during the [PROGRAM NAME] program from [PROVIDER NAME]?

RANGE:
B12_1 (all but Tutoring) = 1 – 20 TIMES
B12_1 (Tutoring) = 1 – 80 TIMES

B12_2. **[IF NUMBER TIMES REF OR DK]** (IF B12_1 = DK DISPLAY: "If you don't remember a specific number, please provide a range." (If B12_1 = REF "Can you provide a range?") Would you say that the number of times was between…

Did you receive any...	B12				B12_1			B12_2					
	Yes	No	REF	DK	How many times?	REF	DK	1-2 times?	3-4 times?	5-6 times?	7 or more times?	REF	DK
a. **Academic advising**, such as one-on-one meetings with counselors to discuss course selection and progress toward meeting academic goals.	1□	2□	97□	98□	____	997□	998□	1□	2□	3□	4□	97□	98□
b. **Financial aid advising**, such as one-on-one meetings with your counselor to help you determine if you had the financial resources to attend training and support yourself or your family while in training.	1□	2□	97□	98□	____	997□	998□	1□	2□	3□	4□	97□	98□
c. **Tutoring**.	1□	2□	97□	98□	____	997□	998□	1□	2□	3□	4□	97□	98□
d. **Career counseling**, for example tests to see what jobs you were suited for, information about education or training programs, or information about what jobs are available in your local area.	1□	2□	97□	98□	____	997□	998□	1□	2□	3□	4□	97□	98□
e. **Job search assistance**, for example help with your resume or interviewing skills, networking skills, assistance in searching for work, or referrals to jobs.	1□	2□	97□	98□	____	997□	998□	1□	2□	3□	4□	97□	98□

COMPLETE B5 – B12_2 FOR ALL HIGH SCHOOL DIPLOMA, GED , OR SIMILAR EDUCATION CLASSES PROVIDERS AND PROGRAMS LISTED IN B3a-b (NEXT IS PROVIDER 1 PROGRAM 2 - 5; PROVIDER 2 PROGRAMS 1 – 5); ETC. AFTER EXHAUSTED, MOVE ON TO FOR-CREDIT COLLEGE PROGRAMS AND VOCATIONAL TRAINING PROGRAMS AND COMPLETE B5-14 FOR EACH PROVIDER AND PROGRAM COMBINATION IN B3a-b. IF NO PROGRAMS LISTED UNDER 'FOR-CREDIT COLLEGE COURSES/CLASSES OR VOCATIONAL TRAINING PROGRAMS' GO TO B15

B13a. ***[Ask if B6 = 1 or 2]*** (IF B6= 1 'Did you'; IF B6 = 2 'Will you') receive any college credits for completing the courses in the [PROGRAM NAME] program?

Yes	❑1
No	❑2 **(SKIP TO B14)**
REFUSED	❑97
DON'T KNOW	❑98

B13b. How many credits did you earn?

PROBE: Only count credits that count toward a college degree such as an Associate or Bachelor's degree. Your best guess is fine.

_____ (CREDITS) (range 1 – 100)

REFUSED	❑997
DON'T KNOW	❑998

B14. What (IF B6= 1 or 3 'Was'; IF B6 = 2 'Is'; IF B6 = DK/REF 'Was/Is') your major field of study in the [PROGRAM NAME] program?

INTERVIEWER NOTE; ONLY ALLOW A SINGLE RESPONSE. IF RESPONDENTS PROVIDES TWO FIELDS OF STUDY SAY: If you (IF B6= 1 or 3 'had'; IF B6 = 2 'have'; IF B6 = DK/REF 'had/have') two fields of study, tell us the one you consider your primary field, or the one of greatest interest to you.

Healthcare	❑1
IT	❑2
Construction/Manufacturing	❑3
Finance & Business Services/Office Administration	❑4
Culinary Arts	❑5
Forestry	❑6
Automotive Technology	❑7
Truck Driving/CDL	❑8
Landscaping	❑9
Facilities Maintenance	❑10
Other (SPECIFY_____)	❑95
REFUSED	❑97
DON'T KNOW	❑98

END OF LOOP.

I am now going to ask you to think back about all the education and training programs you've taken part in since [RAD].

B15. Since [**RAD**], did you take and pass a test for the GED, a high school equivalency diploma, a High School Certificate of Completion, or receive a high school diploma?

Yes	❑1
No	❑2
REFUSED	❑97
DON'T KNOW	❑98

CONTROL:
IF B1A = 2 AND B1B = 3 SKIP TO B21

TREATMENT:
IF B1A = 2 AND B1B = 3 AND B2A = 2 SKIP TO B21
IF B1A = 2 AND B1B = 3 AND B2A = 1 AND B2B = 4 SKIP TO B21

B16a. Since [**RAD**], have you been awarded any diploma(s), academic degree(s), or vocational credential(s) or certificate(s) (please do not include a GED, high school equivalency diploma, High School Certificate of Completion, or high school diploma) ?

PROBE: If response is "no," probe if working toward completion.

Yes	❑1
No –working toward completion of a diploma, degree, credential, or certificate	❑2
No	❑3 **(SKIP TO B17)**
REFUSED	❑97 **(SKIP TO B17)**
DON'T KNOW	❑98 **(SKIP TO B17)**

B16b. **[*Ask if* B16a=1 or 2]:** What is the name of the **diploma(s), certificate(s), academic degree(s), or credential(s)** you earned, and what subject or field was the award in?

PROBE If unsure: Your best recollection of the name is fine, or just tell me the subject/field the award was in.

(1) NAME: _____ FIELD/SUBJECT: _____

(2) NAME: _____ FIELD/SUBJECT: _____

(3) NAME: _____ FIELD/SUBJECT: _____

(4) NAME: _____ FIELD/SUBJECT: _____

(5) NAME: _____ FIELD/SUBJECT: _____

REFUSED	❑97
DON'T KNOW	❑98

RECODE OPEN ENDED RESPONSE FROM 'FIELD/SUBJECT' INTO A FOLLOWING CATEGORY, CONFIRM RESPONDENT AGREES WITH CATEGORIZATION.

[ASK FOR EACH CREDENTIAL LISTED IN 1-5 ABOVE]"Would you say [INSERT FIELD] is in the field of ...

Healthcare	❑1
IT	❑2
Construction/Manufacturing	❑3
Finance & Business Services/Office Administration	❑4
Culinary Arts	❑5
Forestry	❑6
Automotive Technology	❑7
Truck Driving/CDL	❑8
Landscaping	❑9
Facilities Maintenance	❑10
Other (SPECIFY_____)	❑95
REFUSED	❑97
DON'T KNOW	❑98

B17. Since [**RAD**], what is the highest **industry-recognized certification** awarded by the state, or by an industry or professional association that you have received? **IF NECESSARY**: By highest industry-recognized certification, we mean the certification that required the most pre-requisites/took the most coursework to complete.

PROBE: These tend to be professional certifications or a license showing that you are qualified to perform a specific job, like Certified Medical Assistant, Licensed Realtor, or an IT certification.

[B17A_1]: (1) NAME: _____
[B17B_1]: (2) FIELD/SUBJECT: _____

Var B17DKRF:

NO INDUSTRY-RECOGNIZED CERTIFICATION	❑0
REFUSED	❑97
DON'T KNOW	❑98

INTERVIEWER TO RECORD OPEN-ENDED REPSONSE AND CODE INTO THE FOLLOWING CATEGORIES. INTERVIEWER CONFIRM RESPONDENT AGREEMENT WITH CATEGORIZATION: [B17ACODE]

Would you say [NAME] is a …?

Certified Medical Assistant certification	❑1
Certified Nursing Assistant certification	❑2
Pharmacy Technician certification	❑3
Microsoft Office Specialist certification	❑4
ATA Game and Web Development Certificate	❑5
CompTIA (Computing Technology Industry Association) certification	❑6
Microsoft Technical Assistant certification	❑7
A+ Certification	❑8
ATA Network+ Certificate	❑9
Certified Professional Coder certification	❑10
Other (SPECIFY_ [var: B17ACODE_95_OTHER]_)	❑95
REFUSED	❑97
DON'T KNOW	❑98

(2) FIELD: **INTERVIEWER TO RECORD OPEN-ENDED REPSONSE AND CODE INTO THE FOLLOWING CATEGORIES. INTERVIEWER CONFIRM RESPONDENT AGREEMENT WITH CATEGORIZATION:** [B17BCODE] Would you say [INSERT FIELD] is in the field of…

Healthcare	❑1
IT	❑2
Construction/Manufacturing	❑3
Finance & Business Services/Office Administration	❑4
Culinary Arts	❑5
Forestry	❑6
Automotive Technology	❑7
Truck Driving/CDL	❑8
Landscaping	❑9
Facilities Maintenance	❑10
Other (SPECIFY [var: B17BCODE_95_OTHER])	❑95
REFUSED	❑97
DON'T KNOW	❑98

Belonging

B18. Think about the education and training programs you have attended since [**RAD**]. For each of the following statements, please tell me whether you feel/felt this way: never, rarely, sometimes, most of the time, or always…

While in the education or training program…	NEVER	RARELY	SOMETIMES	MOST OF THE TIME	ALWAYS	REFUSED	DON'T KNOW
a. I feel/felt like I belong(ed).	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	97 ☐	98 ☐
b. Staff really listen(ed) to me.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	97 ☐	98 ☐
c. I feel/felt like my ideas count(ed).	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	97 ☐	98 ☐
d. I feel/felt like I matter(ed).	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	97 ☐	98 ☐

Individual Rapport

B19. Think about the education or training programs you have attended since [RAD]. For each of the following statements please tell me whether you strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree, with the statement.

I attended a program where the…	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	REFUSED	DON'T KNOW
staff and instructors treated students with respect. Do you…	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	97 ☐	98 ☐
staff and instructors were easily accessible to students outside of class. Do you…	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	97 ☐	98 ☐
staff or instructors helped with my individual learning needs when I asked for help. Do you…	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	97 ☐	98 ☐

Learning

B20. Think about the education or training programs you have attended since [**RAD**]. For each of the following statements please tell me whether you strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree, with the statement.

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	REFUSED	DON'T KNOW
a. I have gained knowledge/skills that reflect the goals of the program. Do you…	**1** ☐	**2** ☐	**3** ☐	**4** ☐	**5** ☐	**97** ☐	**98** ☐
b. My interest in the subject has increased as a result of these experiences. Do you…	**1** ☐	**2** ☐	**3** ☐	**4** ☐	**5** ☐	**97** ☐	**98** ☐
c. I have found the courses intellectually challenging. Do you…	**1** ☐	**2** ☐	**3** ☐	**4** ☐	**5** ☐	**97** ☐	**98** ☐

General Skills

B21. Now I'm going to read a list of "general skills" topics that are sometimes covered in education, training, or other types of programs. Since [**RAD**], did you receive any information on the following topics, from any organization, including but not limited to the education or training providers we already talked about.

Did you receive information on:	**Yes**	**No**	**REF**	**DK**
a. Study skills, such as locating information, taking notes, and preparing for classes and exams.	1□	2□	97□	98□
b. Finding help with problems you had at school, work, or home.	1□	2□	97□	98□
c. Managing time effectively.	1□	2□	97□	98□
d. Working in groups.	1□	2□	97□	98□
e. Communicating well (for example, good listening and speaking skills).	1□	2□	97□	98□
f. Managing stress, anger, and frustration.	1□	2□	97□	98□
g. Acting professionally (for example, how to dress, show good attendance habits, be respectful).	1□	2□	97□	98□
h. Managing money and personal finances.	1□	2□	97□	98□
i. Handling parenting and other family responsibilities.	1□	2□	97□	98□

B22. Since [**RAD**], have you participated in any of the following opportunities for **direct experiences with occupations** related to your career goals ([**IF B1a=1 or B1b=1, 2 or B2=1]** or studies)? If you participated in one of the following activities, but it was not related to an occupation you have or are preparing for, then please answer "no."

Did you participate in….	Yes	No	REF	DK
a. An internship, practicum, externship, clinical experience, job shadowing, or similar program	1□	2□	97□	98□
b. Work-study job	1□	2□	97□	98□
c. Class(es) taught by instructors from a local employer or class(es) offered on-site at a local employer	1□	2□	97□	98□
d. An apprenticeship	1□	2□	97□	98□
e. Other work-related training experience (Specify: _____)	1□	2□	97□	98□

C. Employment

This next set of questions are about your employment experiences.

C1. Since [**RAD**], have you worked a job for pay or been in the military?

Please include any full- or part-time jobs, self-employment, temporary positions, odd jobs, side jobs such as babysitting, gardening, or housekeeping, under-the-table jobs, business ventures, or other types of paid jobs that you have had.

PROBE: Please remember to include any type of job that you have for pay.

Yes – Worked for pay	❑$_1$
Yes – Been in the military	❑$_2$
No	❑$_3$ **(SKIP TO D1)**
REFUSED	❑$_{97}$**(SKIP TO D1)**
DON'T KNOW	❑$_{98}$**(SKIP TO D1)**

CAPI: ALLOW FOR RESPONDETS TO SELECT BOTH 1 AND 2.

C2. What are the names of the employers you have had since [**RAD**], starting with your most recent? If you worked or are working two or more jobs at the same time, please tell them to me one at a time, starting with the one you consider your main job.

IF EMPLOYER REFUSED OR DON'T KNOW, PROBE: What would you like me to call this employer when I refer back to it later?

ONE: _____

TWO: _____

THREE: _____

FOUR: _____

FIVE: _____

REFUSED	❑97
DON'T KNOW	❑98

NOTE: [EMPLOYER NAME] used to guide interview flow.

INTERVIEWER CHECK: IF C1 = 'YES - BEEN IN MILITARY', MAKE SURE THE MILITARY OR A MILITARY BRANCH IS LISTED AS AN EMPLOYER IN C2.

C3. What kind of work do/did you do in your current or most recent job – that is, for [EMPLOYER ONE]; that is, what [is/was] your occupation? (For example: registered nurse, IT technician, personnel manager, supervisor or order department, secretary, accountant.) If you [have/had] more than one job at the same time, please answer for your main job.

Healthcare job	❑1
IT job	❑2
Construction/Manufacturing job	❑3
Finance & Business Services/Office Administration job	❑4
Culinary Arts job	❑5
Forestry job	❑6
Automotive Technology job	❑7
Truck Driving/CDL job	❑8
Other job (SPECIFY_____)	❑9
REFUSED	❑97
DON'T KNOW	❑98

NOTE: Questions C4 through C7 will be asked for each employer listed in Question C2.

IF C1 = 1 OR 2 AND C2 = REF/DK, RUN THROUGH LOOP ONCE, AND DISPLAY ALTERNATIVE TEXT

Now, I'm going to ask for a few details on each of the jobs you mentioned.

C4. What month, day, and year did you start working at [IF EMPLOYER LISTED DISPLAY: [EMPLOYER NAME]? IF C2=REF/DK DISPLAY: your most recent job? If worked or are working more than one job, please tell about the job you consider your main job.]

PROBE: If you cannot remember the exact day, can you remember if it was in the beginning, middle, or end of the month?

|__|__| / |__|__| / |__|__|__|__|
MONTH DAY YEAR

INTERVIEWER NOTE: IF EXACT DAY IN DATE IS UNKNOWN PROBE WITH BEGINNING, MIDDLE, OR END OF THE MONTH. IF RESPONSE IS BEGINNING OF THE MONTH ENTER '01', IF MIDDLE OF THE MONTH ENTER '15', IF END OF THE MONTH ENTER '28/30/31'. OTHERWISE, ENTER '01' FOR DAY

IF RESPONDENT STILL DOESN'T KNOW DATE PROBE: Do you remember the season? What about a life event that occurred around the same time? Your best guess is fine

REFUSED ❑97
DON'T KNOW ❑98

C5. What month, day, and year did you stop working at [IF EMPLOYER LISTED DISPLAY: [EMPLOYER NAME]? IF C2=REF/DK DISPLAY: your most recent job? If worked or are working more than one job, please tell about the job you consider your main job.]

|__|__| / |__|__| / |__|__|__|__|
MONTH DAY YEAR

INTERVIEWER NOTE: IF EXACT DAY IN DATE IS UNKNOWN PROBE WITH BEGINNING, MIDDLE, OR END OF THE MONTH. IF RESPONSE IS BEGINNING OF THE MONTH ENTER '01', IF MIDDLE OF THE MONTH ENTERS'15', IF END OF THE MONTH ENTER '28/30/31'. OTHERWISE, ENTER '01' FOR DAY

IF RESPONDENT STILL DOESN'T KNOW DATE PROBE: Do you remember the season? What about a life event that occurred around the same time? Your best guess is fine

Still employed ❑1
REFUSED ❑97
DON'T KNOW ❑98

C6. How many hours (IF C5 =1 'do' ELSE, 'did') you usually work in a typical week at [IF EMPLOYER LISTED DISPLAY: [EMPLOYER NAME]? Please include any regular overtime hours. IF C2=REF/DK DISPLAY: your most recent job? If worked or are working more than one job, please tell about the job you consider your main job.]

RANGE: 1 - 99 HOURS

|__|__| HOURS PER WEEK **(SKIP TO Section D)**

REFUSED ❑997
DON'T KNOW ❑998

C7. Would you say you (IF C5 =1 'work' ELSE, 'worked')...?

Up to 9 hours per week, ❑1
10 to 19 hours per week, ❑2
20 to 29 hours per week, ❑3
30 to 39 hours per week, ❑4
40 or more hours per week, ❑5
REFUSED ❑97
DON'T KNOW ❑98

END OF LOOP. GO TO NEXT EMPLOYER LISTED AT C2 AND ASK C4 – C7 UNTIL LIST IS EXHAUSTED.

D. Social Skills and Other Life Circumstances

Career Progress

D1. Please tell me whether you would say you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with the following statement:

	STRONGLY DISAGREE	SOMEWHAT DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE	REFUSED	DON'T KNOW
a. I see myself on a career path. Would you say you:	1 ☐	2 ☐	3 ☐	4 ☐	97 ☐	98 ☐

Self-Efficacy

D2. In general, some people have an easier or harder time with problems or difficulties. How true do you think are the following statements?

	Not at all true	Somewhat true	Mostly true	Entirely true	Refused	Don't Know
a. I can always manage to solve difficult problems if I try hard enough.	1 ☐	2 ☐	3 ☐	4 ☐	97 ☐	98 ☐
b. It is easy for me to stick to my aims and accomplish my goals.	1 ☐	2 ☐	3 ☐	4 ☐	97 ☐	98 ☐
c. I am confident that I can deal well with unexpected events.	1 ☐	2 ☐	3 ☐	4 ☐	97 ☐	98 ☐
d. Thanks to my wits, I know how to handle unexpected situations.	1 ☐	2 ☐	3 ☐	4 ☐	97 ☐	98 ☐
e. I can solve most problems if I invest the necessary effort.	1 ☐	2 ☐	3 ☐	4 ☐	97 ☐	98 ☐
f. I can remain calm when facing problems because I can rely on my ability to cope.	1 ☐	2 ☐	3 ☐	4 ☐	97 ☐	98 ☐
g. When I am faced with a problem, I can usually find several solutions.	1 ☐	2 ☐	3 ☐	4 ☐	97 ☐	98 ☐
h. If I am in trouble, I can usually think of a solution.	1 ☐	2 ☐	3 ☐	4 ☐	97 ☐	98 ☐
i. I can usually handle whatever comes my way.	1 ☐	2 ☐	3 ☐	4 ☐	97 ☐	98 ☐

Risky Behaviors

These next questions are about experiences you may have had with the police or courts. All of your answers will be kept private to the fullest extent of the law.

D3. Since [**RAD**], have you been arrested or taken into custody for a crime or illegal offense? Please include probation or parole violations, but do not include minor motor vehicle violations.

Yes	❑1
No	❑2
REFUSED	❑97
DON'T KNOW	❑98

D4. In the last week, have you engaged in any of the following activities? [IF NEEDED: All of your answers will be kept private to the fullest extent of the law.]

	YES	NO	REFUSED	DON'T KNOW
a. Use of marijuana or any illegal drug, taken a prescription drug in a way that was not prescribed, or inhaled something to get high	1 ☐	2 ☐	97 ☐	98 ☐
b. Consumed one or more drinks of an alcoholic beverage	1 ☐	2 ☐	97 ☐	98 ☐
c. A property offense, such as shoplifting, burglary, larceny, theft, auto theft, bad checks, fraud, forgery, arson, vandalism, or possession of stolen goods	1 ☐	2 ☐	97 ☐	98 ☐

Public Benefit Receipt

I would now like to ask some questions about your participation in government-funded programs.

D5. Have you (or your family if you live with them) received food stamps (also called Supplemental Nutrition and Assistance Program, or SNAP) in the last 3 months?

Yes	❑1
No	❑2
REFUSED	❑97
DON'T KNOW	❑98

D6. Have you or your family (if you live with them) received welfare or cash assistance (also called Temporary Assistance for Needy Families, or TANF) in the last 3 months?

Yes	❑1
No	❑2
REFUSED	❑97
DON'T KNOW	❑98

D7. Have you or your family (if you live with them) received Medicaid in the last 3 months?

Yes	❑1
No	❑2
REFUSED	❑97
DON'T KNOW	❑98

E. Incentive Card Information

E1_INTRO

IF PHONE: As a thank you for your time, you will receive a $25 gift card in the mail. I would like to make sure I have your contact information recorded correctly so we can send that to you

IF IN PERSON : Finally, I need to confirm your name and address

E1. I have your name recorded as [FIRST LAST]. Is this still correct or have you changed your name?

YES, STILL CORRECT ❑1 **(SKIP TO E2)**

NO, NAME CHANGED ❑2

E1a. What is your first name now? _____

E1b. What is your last name now? _____

E2. I have your address recorded as [STREET, APT, CITY, STATE, ZIP]. Is this still correct or have you moved?

YES, STILL CORRECT ❑1 **(SKIP TO E3)**

NO, ADDRESS CHANGED ❑2

E2a. What your street address or PO box number? _____

E2b. Is there a complex or building name? _____

E2c. Is there an apartment number? _____

E2d. In what city? _____

_____

E2e. In what state? _____

E2f. What is the zip code? _____

E3. [IF PHONE COMPLETE CONTINUE, IF IN PERSON COMPLETE SELECT 'IN PERSON COMPLETE']:

What is your preferred phone number? We will call you to this number if your incentive comes back to us as undeliverable.

1. ____ - ____ -____
2. IN PERSON COMPLETE
7 REFUSED
8 DON'T KNOW

E3a. Is that a home, cell, work, or other number?

Home	❑1
Cell	❑2
Work	❑3
Other	❑4
REFUSED	❑7
DON'T KNOW	❑8

Thank you very much for your time today. If you have any questions about the study, you can e-mail or call the people who are doing the research at CascadesEval@abtassoc.com or (866)-587-4111. This is a free call.

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