

# REPORT

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## Economic Self-Sufficiency and Life Stability One Year after Starting a Social Enterprise Job

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## DISCLAIMER

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**LIST OF ACRONYMS**

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ABE	adult basic education
CalTrans	California Department of Transportation
CalWORKs	California Work Opportunity and Responsibility to Kids
CBA	cost benefit analysis
CDCR	California Department of Corrections and Rehabilitation
CEO	Center for Employment Opportunities
CHP	Community Housing Partnership
CNCS	Corporation for National and Community Service
CRC	Community Resource Center
DBL	double bottom line
GED	General Educational Development (tests)
MJS	Mathematica Jobs Study
MSA	Metropolitan statistical area
NA	not available
n.a.	not applicable
OLS	ordinary least squares
ROI	return on investment
SE	social enterprise
SIF	Social Innovation Fund
Taller	Taller San José
TANF	Temporary Assistance for Needy Families
VoA	Volunteers of America
Weingart	Weingart Center for the Homeless

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## GLOSSARY

Table A lists definitions for terms that we use multiple times throughout the report. Because the glossary is a centralized resource for readers to look up the definitions of terms we use, it precludes the need to define terms repeatedly and improves the exposition of the text. We generally list terms alphabetically within each (alphabetically ordered) section, although we first list terms that are used to define other terms in a section.

Table A. Definition of terms

Term	Definition
<b>General terms</b>	
Business mission	Goal of the business achieving financial viability.
Current employment	Worked for pay in the week prior to the survey.
Double bottom line	Goal of achieving both a business and social mission.
Homeless	Housing in an emergency shelter, emergency voucher housing, transitional housing, or permanent housing for people that were previously homeless or sleeping outside or in public in the past year.
Social enterprise (SE)	A mission-driven business focused on hiring and assisting people who face barriers to work.
Social mission	Goal of the business providing employment to people who might not otherwise have a job.
Stable housing	Housing included using their own owned or rented home in the past year.
<b>Populations and samples</b>	
<b>Outcomes study</b>	
Full sample	The group of people who responded to the follow-up survey or were in jail or prison at the time of surveying.
Noninstitutional sample	The group of people who responded to the follow-up survey.
<b>Impact study</b>	
Full propensity-score sample	Participants from Chrysalis who responded to the follow-up survey or were in jail or prison at the time of surveying and who had propensity scores below 0.90 and above 0.10 (see Appendix B). Includes both those who were hired by the SE and those who were not.
Noninstitutional propensity-score sample	Participants from Chrysalis who responded to the follow-up survey and who had propensity scores below 0.90 and above 0.10 (see Appendix B). Includes both those who were hired by the SE and those who were not.
Comparison group	Individuals who entered Chrysalis labor pool and consented to be in the study, but were not hired by the SE.
Treatment group	Individuals who entered Chrysalis labor pool, consented to be in the study, and were hired by the SE.
<b>Cost benefit analysis (CBA)</b>	
CBA population	Individuals who were hired into one of the six SEs participating in the CBA between April 1, 2012, and March 31, 2013.
Impact study CBA	The CBA study defining benefits as the impact of SE employment at Chrysalis, which is determined by comparing changes in outcomes for SE workers with changes in outcomes for individuals in its labor pool that did not work in an SE.
Outcomes study CBA	The CBA study defining benefits using the differences in outcomes for SE workers between the time they began SE employment and about one year later.
Society (as a whole)	All entities potentially affected by the SE, which provides an estimate of total costs and benefits. It includes the SE as a business, SE workers, the friends and families of SE workers, and taxpayers not directly affiliated with the SE.
Taxpayers	Entities that are not directly affected by the SE, that is government and the community.

Term	Definition
<b>Statistics and data</b>	
Ashenfelter dip	A graphic representation of how entrants to employment programs typically faced a recent negative event affecting their employment prospects, driving them to seek the program. Ashenfelter (1978) demonstrated how this phenomenon falsely enhances the effects of employment programs because individuals would have experienced improved outcomes even without a programmatic intervention.
Confirmatory analysis	Examining data to research hypotheses already in place. In this study, it is the analysis designed to address the primary research questions raised in the subgrantee evaluation plan to the Corporation for National and Community Service (CNCS).
Difference in difference	Comparing a treatment and a comparison group (first difference) before and after the intervention (second difference).
Exploratory analysis	Examining data for trends or characteristics that would allow for exploration of new hypotheses or relationships not previously considered or known to be of interest. In this study, it is the analysis that addresses questions or trends that are not the primary research questions raised in the subgrantee evaluation plan.
Internal validity	The extent to which the study's findings can approximate the truth about cause and effect relationships. Internal validity exists when observed changes can be attributed to an intervention and <b>not</b> to other causes.
External validity	How well the results from the study apply to different settings.
Fixed-effect models	A generalization of the difference-in-difference approach that holds constant the average effects of each individual by looking at deviations from the means within each time period.
Mathematica Jobs Study (MJS) data/MJS database	Information collected from the intake, baseline, exit, or follow-up surveys.
Moderate evidence	Evaluation designs with strong internal validity but weaker external validity (CNCS 2013). Moderate evidence comes from studies able to demonstrate that a program produces changes among participants (or groups or sites) but unable to demonstrate how well the program would work among groups other than those included in the study. CNCS considers that studies with moderate evidence might need to address a few minor threats to internal validity.
Multivariate regression analysis	A statistical technique that uses several explanatory variables to predict the outcome of a response variable.
Ordinary least squares	A method for estimating the unknown parameters in a linear regression model.
Propensity score	The probability of an individual receiving treatment. For this study, the treatment was defined as employment in the SE and estimated based on demographic characteristics, employment history, and barriers to employment.
Regression-adjusted mean (or percentage)	Means or percentages that account for differences in the characteristics and employment barriers of the treatment and comparison groups using a regression adjustment.
Statistical significance	The probability of a type I error (that is, that the estimated relationship is due to chance, also known as a false positive) is less than or equal to 5 percent. Also written as $p \leq 0.05$ . If the probability of a type I error is less than or equal to 10 percent ( $p < 0.10$ ), we say it is marginally statistically significant.
<b>Studies</b>	
Cost benefit analysis (CBA)	Compares the costs and benefits of SE employment for SE workers, the SE, and taxpayers (those who are not involved in the SE), and society as a whole (total benefit).
Impact study	Compares information collected at the time an individual entered the labor pool for SE employment at Chrysalis and one year later for those who were employed in the SE (treatment group) with those who were not (comparison group). Estimates the impact of SE employment on outcomes.
Outcomes study	Compares information collected before the SE job began and one year later to determine whether changes in outcomes over time are associated with SE employment.

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## EXECUTIVE SUMMARY

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In 2011, REDF placed social enterprise (SE) employment at the heart of its five-year strategy to transform how people with many employment barriers transition into the workforce. SEs are mission-driven businesses focused on hiring and assisting people who face barriers to work.<sup>1</sup> In support of its strategy to leverage these organizations, REDF launched a new portfolio, with funding from the Social Innovation Fund (SIF) of the Corporation for National and Community Service (CNCS) and support from corporations, foundations, and individuals. REDF also committed to conducting an evaluation to support the success of the SE approach and selected Mathematica Policy Research to design and implement the evaluation. The evaluation, which is called the Mathematica Jobs Study (MJS), is structured to address the general research question, *How do social enterprises serve individuals with multiple barriers to employment?* Its focus is economic self-sufficiency and life stability for SE workers hired from April 1, 2012, through March 31, 2013. The analysis looks at participants' employment as the primary indicator of self-sufficiency, although the study also examines participants' income and support from government. In addition, the study examines five outcomes related to life stability: (1) housing (most important), (2) recidivism, (3) physical health, (4) mental health, and (5) substance abuse.

The MJS contains four integrated components: (1) an implementation study of eight organizations that received REDF SIF funding in January 2012; (2) an outcomes study of the change in economic self-sufficiency and life stability for SE workers in seven organizations, from the period before they started the job until one year later; (3) a quasi-experimental impact study that complements the outcomes study by offering stronger internal validity (a more rigorous estimate of the effect of SE employment) at the expense of external validity (ability to generalize results); and (4) a cost benefit analysis (CBA) that assessed whether the net value of the SE to society as a whole—which includes the SE workers, the SE business enterprise, and taxpayers (those not directly involved in the SE)—outweighed its costs. This report provides results of the outcomes and impact studies and the CBA. It is a follow-up to the interim report (Maxwell et al. 2013), which provides results of the implementation study.

Section A of this executive summary provides a brief overview of the SEs and their workers; Section B describes the methods used to conduct the research and study limitations; Section C highlights the lessons learned from the research findings; and Section D describes the issues needing further research.

### A. Social enterprises and their workers

Substantial differences exist in the SEs in the seven host organizations included in the MJS outcomes study (Table 1). In 2013, these SEs contained seven business lines—(1) cafés, (2) street cleaning, (3) temporary staffing (including lobby services), (4) retail services, (5) construction/ maintenance services, (6) janitorial services, and (7) pest control. The businesses varied greatly in size and maturity. One employed nearly 500 people annually, and

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<sup>1</sup> In a previous report (Maxwell et al. 2013), we defined SEs as “businesses that sell goods and services that the marketplace demands in order to intentionally employ individuals who would otherwise face bleak prospects of ever getting a job.” The shift in wording reflects REDF’s ongoing evolution of thought on which aspects of SEs are most important to nurture.

two employed only 10 to 12; some were well established, and others used REDF money to start. Target populations differed, although all employed four types of economically disadvantaged individuals: (1) those with mental health disabilities, (2) those who are homeless, (3) parolees or those who were formerly incarcerated, and (4) young adults not enrolled in school or participating in the labor market.

Table 1. Description of social enterprises

Host organization	SE business line(s)	2013 workers	Year SE started	Target population
1. Buckelew	Cafés Janitorial services	18 23	1986 2009	Mental health disabilities
2. CEO	Street cleaning	108	2011	Parolees
3. Chrysalis	Temporary staffing Street cleaning	500	1991	Formerly incarcerated, homeless
4. CHP	Lobby services Maintenance services	55 30	2007	Homeless
5. CRC	Retail	36	2012	REDF-defined barrier
6. Taller	Construction	12	2007	Age 18–28 and not in school or the labor market
7. Weingart	Pest control	10	2012	Homeless

Source: Maxwell et al. (2013).

Note: A REDF-defined barrier includes low income, mental illness, homelessness, status as a parolee, and for youth, not being in school or the labor market. Number of workers is a 2013 estimate.

SE = social enterprise; CEO = Center for Employment Opportunities; CHP = Community Housing Partnership; CRC = Community Resource Center.

The SE workers in these organizations faced multiple employment barriers (Table 2). Indicators of economic self-sufficiency were low at the time the SE job began: one-quarter had never held a job before the SE job began, and only 23 percent of monthly income came from work, with the remainder coming from government programs (71 percent) or transfers from others (5 percent). Indicators of life stability were also low: about 85 percent did not have stable housing (own or rent their home for the entirety of a year), and nearly 70 percent had been convicted of a crime and sentenced to jail. Nearly 30 percent lacked a high school diploma. Although differences in barriers existed in populations served by each organization, barriers were high at each.

Table 2. Employee characteristics (raw percentages, except where noted)

	All	Buckelew	CEO	Chrysalis	CHP	CRC	Taller	Weingart
Average age (in years)*	41	37	33	44	41	46	25	49
Never employed*	25	46	16	25	29	26	23	0
No high school diploma*	29	10	51	27	17	6	38	0
Ever convicted*	69	25	100	71	61	20	62	20
Unstable housing (past year)	85	84	90	83	90	77	82	100
Income from wages	23	18	32	17	30	35	79	69

Source: Maxwell et al. (2013).

Note: An asterisk (\*) indicates a significant likelihood that values differ across organizations. *Unstable housing* is defined as not owning or renting a home throughout the past year. *Income from wages* is the percentage of monthly income from wages or salary.

CEO = Center for Employment Opportunities; CHP = Community Housing Partnership; CRC = Community Resource Center; Taller = Taller San Jose; Weingart = Weingart Center for the Homeless.

The SE intervention, in practice, consisted of the following components:

1. **Employment.** On average, SE employees reported working 24 hours per week for 24 weeks (576 hours), or about one-third of a year of work experience for someone working 35 hours per week. A great deal of variation existed in the level of SE work experience, however. Nearly 5 percent worked fewer than 8 hours, and about 27 percent worked more than 960 hours, or the equivalent of about half a year of full-time work experience.<sup>2</sup>
2. **Employment supports and services while employed.** Almost all (97 percent) reported receiving supports and services designed to help them sustain employment. More than 90 percent said they received job-readiness skills training (job search assistance and career counseling); more than 90 percent said they received training to build soft, vocational, or technical skills; and 80 percent said they received work supports (clothing, transportation, or housing assistance).
3. **Life stability supports while employed.** About two-thirds said they received life stability supports, including financial education; food security (for example, food pantries, reduced-price meals, nutritional education); help to avoid relapse of behaviors such as drug abuse or criminal activity; and access to public benefits, and tax preparation.
4. **Postemployment support.** About two-thirds said they continued to receive services after leaving the SE, including access to an employment counselor and access to a life counselor.

<sup>2</sup> As described in Appendix A, the SE workers examined in this study include everyone that was hired by the SE, to capture the population that the SE was intended to serve.

## B. Research methods

This research drew information mainly from a baseline survey of individuals shortly before they started their SE job or shortly after they were referred to the SE labor pool, and from a follow-up survey about one year later. The outcomes study drew information from 282 SE workers, and the impact study drew information from 154 SE workers at Chrysalis and 37 individuals who entered its labor pool but were not hired. Costs and benefits were estimated for workers from all organizations except Buckelew.

The outcomes analysis was designed to assess the extent to which SEs and host organizations improved workers' self-sufficiency and life stability, whereas the impact analysis allows us to assess the effect of SE employment on these measures. The outcomes analysis provides evidence of changes from the time an individual started the SE job until one year later. The impact analysis estimates the difference between the outcomes of SE workers at Chrysalis and those who entered the Chrysalis labor pool but did not work in the SE. Although results of the analyses suggest we might be cautiously optimistic about the SE experience, we must be careful interpreting the results. The outcomes study analysis is limited to individuals who worked in an SE, so it is difficult to discern what they would have experienced if they had not been offered this opportunity. Although the impact study analysis includes a comparison group, both the participants and the comparison group are small samples of individuals in the labor pool of one of the SE organizations. Furthermore, we captured benefits from the SE experience in only five domains and only as they occurred in the first year after the SE job began.

## C. Lessons learned

Taken together, results from the outcomes study, impact study, and CBA provide a comprehensive examination of how SEs might influence the employment and life stability of individuals they employ as well as their value to different stakeholders. We highlight four overarching themes that emerged from the research.

### *1. Workers gained economic self-sufficiency one year after the SE experience began.*

A central goal of the SE was to build economic self-sufficiency through employment by providing work experience in the SE and helping workers find employment when the SE job ended. Such work experience was considered critical because, prior to starting the SE job, 25 percent of SE workers reported they had never held a job, 37 percent reported not holding a job in the prior year, and 84 percent were not currently employed (Maxwell et al. 2013). As a result, economic self-sufficiency was low, with 71 percent of individuals' monthly income coming from government transfers.

Evidence suggests that the SE experience may have helped workers gain that experience. In the year following the start of the SE job, 93 percent of SE employees had worked for at least one month, 84 percent had worked continuously for at least 3 months, 67 percent worked continuously for at least 6 months, 51 percent worked continuously for at least 9 months, and 35 percent worked continuously for all 12 months. Because a review of transitional employment studies (Sattar 2010) suggests that 6 months of employment improved wages, long-term job retention, and labor force attachment for people with employment barriers, this distribution suggests that about two-thirds of SE workers might realize gains after leaving the SE.

Furthermore, the outcomes study indicates that about one year after their SE jobs began, 51 percent of SE workers were employed, representing a 33 percentage point increase in employment. Our impact study suggests that although some of the increase in employment may have occurred in the absence of SE work, the SE experience is likely responsible for part of the change. We estimated that SE employment led to a 19 percentage point increase in employment after one year. These estimated changes were significant in the outcomes study but only marginally statistically significant in the impact study. In addition, individuals who were not incarcerated about one year after the SE job began spent about two-thirds of that year working, with about 67 percent working for six or more continuous months. Evidence from the outcomes study suggests that the SE workers improved their income at one year after their SE jobs began. Total monthly income increased by 91 percent, from \$653 to \$1,246.

### *2. The SE helped workers stabilize their lives.*

Results from the outcomes study suggested that housing, the study's main measure of life stability, stabilized in the year after the SE job began. The percentage of SE workers renting or owning a home or apartment during any part of the past year increased from 49 to 81 percent, and the percentage who reported stable housing (living in a home or apartment that they rented or owned) throughout the year increased from 15 to 53 percent. Both increases for SE workers are statistically significant over time, but the percentage increase in stable housing was not significant in the impact study, perhaps because of small sample sizes. Despite these gains, more than one-third of SE workers who were not incarcerated about one year after the SE job began reported at least one period of homelessness (defined as living outside or in public, in an emergency shelter, or in housing designated for homeless individuals) in the past year, a rate that was relatively unchanged from the year before SE employment. Both the treatment and comparison groups reported that levels of physical health and mental health declined one year after the SE job began. However, when changes in physical health were compared with a comparable group of individuals who did not work in the SE in the impact study, declines were smaller for the treatment group. SE workers showed no difference in reported levels of mental health and higher levels of physical health.

### *3. Support after leaving the SE is associated with increased self-sufficiency and life stability.*

About two-thirds of workers reported postemployment supports. Sixty-four percent continued access to employment case management and job retention services, about 44 percent received non-employment case management or other types of services to help them with other barriers to work or life stability, and 11 percent reported receiving some other type of services.

Receiving postemployment support was associated with a 21 percentage point increase in the likelihood of housing stability, a \$428 increase in total monthly income, and a medium to large decrease in the depression index one year after the SE job began. Such relationships cannot be interpreted as being causally linked to SE employment in the scope of this research. Observed associations might be driven by unobserved characteristics (for example, motivation) that could not be controlled for in these studies and could affect both the receipt of services and outcomes.

#### *4. The SE experience adds value to society.*

SEs in REDF's portfolio provide a net benefit to society: for every dollar spent by the SE, the SE returned \$2.23 (outcomes study) or \$1.34 (impact study) in total benefits. Furthermore, taxpayers may have an incentive to support SEs, as each dollar spent by the SEs included in this research generated taxpayer savings of \$1.31 (outcomes study) to \$0.42 (impact study). Additionally, the gains to taxpayers from the SE experience are substantially larger than the subsidies provided to them by the government and other funders. Workers, however, actually experience small net monetary losses from SE employment: their gains in economic self-sufficiency and life stability are offset by reductions in government transfers and public subsidies for housing. The SEs, as business enterprises, roughly break even.

The returns on investment (ROIs) estimated for the SEs in this study tend to be at least as large—if not larger than—estimates from programs similar to the SE experience. Some programs oriented toward individuals with substantial barriers to employment actually find ROIs of less than one, implying that their benefits do not outweigh their costs (see, for example, Schochet et al. 2008 or Cave et al. 1993). The Ready, Willing, and Able job training program (Sirios and Western 2010), which provided employment opportunities to homeless individuals, produced an ROI of 21 percent, which is slightly lower than the ROI estimated in our impact study. A large-scale examination of the benefits of subsidized employment programs for individuals with high barriers to employment (Bell and Orr 1994) produced a range of ROI values (dependent on the program and assumptions); the ROI from our impact study fell within this range.

#### D. Looking forward: issues for further exploration

The MJS provides evidence that larger and more established SEs might produce value to society and a net benefit to taxpayers in the first year after SE jobs begin, although the smaller and newer SEs we studied do not appear to produce such benefits. Our impact study provides moderate evidence that the SE experiences increase economic self-sufficiency and life stability, and the associated CBA indicates that the benefits of the SE experience exceed its costs. Moreover, we can triangulate these findings based on similar results from our outcomes study and its associated CBA, as well as the implementation study (Maxwell et al. 2013).

This evidence suggests that further exploration of SE employment is warranted. A larger study incorporating more SEs and participants would help to more precisely estimate effects, and following study participants for a longer period would help determine if results continue over time. Such a study could also help identify which kinds of organizations are more successful in generating impacts and which populations benefit most. A randomized controlled trial in which individuals are randomly assigned to become SE workers could further increase the quality of causal evidence available on the SE experience, and an accompanying CBA could determine whether SEs are an efficient use of public and private resources.

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## I. INTRODUCTION

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In 2011, REDF, a San Francisco-based intermediary, initiated a five-year strategy to help at-risk youth and adults transition into the workforce. This strategy seeks to expand social enterprise (SE) employment in California and develop a national SE model to address the difficulties faced by people with serious employment barriers, including challenges related to homelessness, mental health, addiction, and incarceration.<sup>3</sup> For this report, we use REDF's current definition of an SE: a mission-driven business focused on hiring and assisting people who face barriers to work.<sup>4</sup> By developing participants' skills, the SE seeks to help workers achieve sustained employment and earnings gains (economic self-sufficiency) and improve the quality of their lives. These potential benefits often come with additional business expenses, because SEs may pay workers more than the value of what they produce, or provide employee supports to help workers overcome employment barriers and transition to unsubsidized employment. The Social Innovation Fund (SIF) of the Corporation for National and Community Service (CNCS) helps support REDF's effort, as do other philanthropic sources, including corporations, foundations, and individuals.

REDF committed to conducting an evaluation to support the success of its approach. It selected Mathematica Policy Research to design and implement an evaluation that provides a moderate level of evidence (CNCS 2013) on the impact of the SE experience in organizations receiving REDF SIF funding in January 2012.<sup>5</sup> Mathematica's evaluation, called the Mathematica Jobs Study (MJS), has four key components:

1. An **implementation study** of eight organizations that documents the implementation of the SE model.
2. An **outcomes study** of individuals hired to work in an SE in one of seven organizations, that analyzes outcomes about one year after the SE job began.
3. An **impact study** with a quasi-experimental design that studies individuals referred to an SE labor pool in a single organization and that estimates the impact of the SE experience on a worker's employment and housing about one year later.

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<sup>3</sup> The selection of the SE model was supported by a review of 27 rigorous research evaluations of paid work interventions (Sattar 2010) that suggested paid employment was effective at improving wages, long-term job retention, and educational attachment for people with employment barriers.

<sup>4</sup> A previous report (Maxwell et al. 2013) defined SEs as "businesses that sell goods and services that the marketplace demands in order to intentionally employ individuals who would otherwise face bleak prospects of ever getting a job." The shift in wording reflects REDF's ongoing evolution of defining an SE.

<sup>5</sup> CNCS defines as moderate evidence evaluation designs with strong internal validity but weaker external validity. It comes from "studies able to show that a program produces changes among participants (or groups or sites), but [unable to] demonstrate how well the program would work among . . . groups [other than] those included in the study, or [that] may have a very limited number of threats to internal validity unaddressed." It includes "cut-off score matched group designs" as an example of evaluation designs that may produce moderate evidence. As Appendix A shows, this study meets the criteria for moderate evidence by having "at least one well-designed and well-implemented experimental or quasi-experimental study supporting the effectiveness of the practice, strategy, or program, with a small sample size or other conditions of implementation or analysis that limit generalizability."

4. A **cost benefit analysis** (CBA) that estimates the value of the SE experience for society as a whole, which includes the SE workers, the SE as a business, and taxpayers not directly involved with the SE (the government and community).

This report provides results of the outcomes, impact, and cost benefit studies. Mathematica's interim report (Maxwell et al. 2013) provides findings from the implementation study and, in the process, provides a description of the characteristics of workers, operations, and outputs from the SEs that received some support from REDF's SIF grant. The rest of this chapter describes the SEs included in these three studies (Section A); presents an overview of the research designs of the outcomes, impact, and cost benefit studies, including their data, samples, and analytic methods (Section B); and provides a road map to this report (Section C).

#### A. Social enterprises in the study

REDF sees its SIF portfolio as a laboratory for identifying and understanding the components of successful SEs. It observed organizations developing or operating SEs in their own way, and funded many business models, hoping to draw the strongest components from each. REDF's funding came with an expectation that investments would support the SE to (a) help individuals gain one year of work experience, develop soft and hard skills, achieve stability in their lives, and transition to unsubsidized employment outside the SE; and (b) meet a double bottom line that achieves financial viability of the SE (business mission) while providing employment to and building the skills of people who might not otherwise have a job (social mission). Substantial differences existed across the SEs in the seven host organizations in REDF's SIF portfolio in January 2012 that became part of the MJS outcomes study (Table I.1).<sup>6</sup> In 2013, SEs in these organizations offered work in seven business lines (cafés, street cleaning, temporary staffing, retail services, construction/maintenance services, janitorial services, and pest control). The SEs varied greatly in size (one employed nearly 500 people annually, whereas two employed only 10 to 12) and maturity (some were well-established, and others used REDF money to start). Target populations also differed, although all SEs hired individuals from one or more of four populations of economically disadvantaged individuals: (1) those with mental health disabilities, (2) those who are homeless, (3) parolees or formerly incarcerated individuals, and (4) young adults who are neither enrolled in school nor participating in the labor market.

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<sup>6</sup> Each organization is described at <http://www.redf.org/what-do-we-do/invest>. The MJS does not include the SEs run by Goodwill of Silicon Valley, which entered the portfolio after January 2012, and Urban Strategies, which had limited capacity to participate. The Coalition for Responsible Community Development is not included in the outcomes and impact studies or CBA, because its SIF-supported SE began shortly before the end of the MJS study period. It was a full participant in the implementation study.

Table I.1. Description of SEs

Host organization	SE business line	2013 workers	Year SE started	Target population
1. Buckelew	Cafés	18	1986	
	Janitorial services	23	2009	Mental health disabilities
2. CEO	Street cleaning	108	2011	Parolees
3. Chrysalis	Temporary staffing			
	Street cleaning	500	1991	Formerly incarcerated, homeless
4. CHP	Lobby services	55		
	Maintenance services	30	2007	Homeless
5. CRC	Retail	36	2012	REDF-defined barrier
6. Taller	Construction	12	2007	Age 18–28 and not in school or the labor market
7. Weingart	Pest control	10	2012	Homeless

Source: Maxwell et al. (2013).

Note: A REDF-defined barrier includes low income, mental illness, homelessness, parolee status, and for youths, not being in school or the labor market. Number of workers is a 2013 estimate.

CEO = Center for Employment Opportunities; CHP = Community Housing Partnership; CRC = Community Resource Center; Taller = Taller San Jose; Weingart = Weingart Center for the Homeless.

## B. Research design

The MJS examined the outcomes, impacts, costs, and benefits associated with SE employment for workers hired between April 1, 2012, and March 31, 2013.<sup>7</sup> The outcomes study answers the following question: *How do economic self-sufficiency and life stability change for individuals after they begin work in a social enterprise?* It provides the foundation for understanding the social mission of the SEs by focusing on how an individual's life has changed about one year<sup>8</sup> after starting an SE job. Economic self-sufficiency is the focus of the outcomes study, with employment the key outcome, although income and income source (wage and salary or government) are also considered. The study also examines life stability, focusing on a measure of housing stability (using only housing owned or rented home by the individual in the past year). Other outcomes include recidivism, physical health, mental health, and substance abuse.

The impact study builds on the outcomes study by assessing how an individual's life might change because of the SE experience. It answers a second question: *How does working in a social enterprise change an individual's employment and life stability?* Although the outcomes study provides preliminary evidence on the impacts of the SE experience, it does not contain a group of individuals similar to SE employees for comparison with SE workers. The impact study uses a quasi-experimental design to compare outcomes of individuals that did and did not work in an SE and provides moderate evidence to CNCS on how the SE changed an individual's life

<sup>7</sup> Workers who applied before or after this time frame were not included in the study, and those entering during this time frame were included on a rolling basis.

<sup>8</sup> An average of 405 days elapsed between completion of the baseline and follow-up surveys, with the period ranging between 8 and 23 months. Because 80 percent of those in our sample completed the follow-up survey between 10 and 18 months after the baseline, we refer to this period as about one year after SE employment began for ease in exposition.

about one year after seeking employment there. It was designed to address impacts on two primary outcomes (confirmatory analysis): (1) whether the respondent was currently employed (defined as employed in the last week) and (2) whether he or she was in stable housing in the past year (defined as owning or renting a home throughout the year). The exploratory portion of the study focuses on four types of secondary outcomes: (1) alternative employment and housing measures, (2) income, (3) recidivism, and (4) health.

The CBA answers a third research question: *What is the value of spending an additional dollar on an SE?* It assesses value by dividing the present value of the benefits of the SE experience by the present value of its costs. It uses the results of the outcomes and impact studies to quantify benefits and information from the financial records of the organization and SE to quantify costs and estimate value from the perspectives of society as a whole, which includes SE workers, the SE as a business, and taxpayers not directly involved with the SE (the government and community).

### 1. Data collected

The MJS collected extensive information on individuals who started or were referred to SE employment from April 1, 2012, to March 31, 2013, for the outcomes and impact studies and the benefits portion of the CBA. Data were collected on individuals at as many as four points in time (Appendix A):

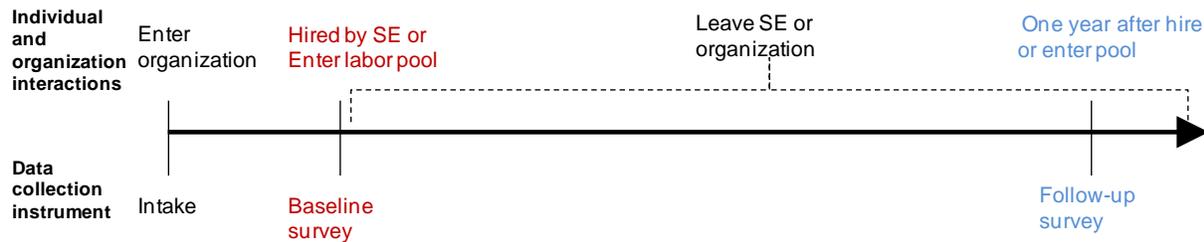
1. **Intake information** was collected from people who requested employment services at an SE's host organization. It includes demographic and background information.
2. A **baseline survey** was administered to individuals referred to or hired by an SE and obtained detailed information on individuals' work history and employment barriers.
3. An **exit survey** was conducted when workers left the SE or after six months, whichever came first. Information from this survey is used only to ground information from the follow-up survey in this report (for example, to determine the time since the last survey).
4. A **follow-up survey** followed MJS study participants about one year after they completed the baseline survey and had a 51 percent response rate.<sup>9</sup> It obtained information on outcomes that is used in both the confirmatory and exploratory analyses.

Data collection instruments were structured to capture changes in and measures of the economic self-sufficiency and life stability of respondents immediately before they started the SE job or entered the labor pool, and about one year later. Instruments were identical for all organizations included in the study. As Figure I.1 illustrates, the intake process and baseline survey captured information about the individual before the SE job began or at the time the individual entered the labor pool for an SE job; the follow-up survey captured outcomes one year later. About 23 percent of SE employees were still working at the SE at the time of the follow-up survey (the dotted line in the figure).

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<sup>9</sup> Appendix A provides details on the differences in response rates across organizations and in characteristics of respondents and nonrespondents. All analyses use weights to adjust for such differentials; Appendix A describes how these weights were constructed.

Figure I.1. Following individuals for one year



Note: The figure highlights how the evaluation timing is coordinated with data collection and services requested and received by study participants. Individuals who enter the organization and request employment services are asked a series of questions as part of the intake process, which is used to capture background information on participants. When individuals are hired into the SE or placed in the labor pool at Chrysalis, they complete a baseline survey, which establishes employment history, economic self-sufficiency, and life stability in the prior year. Not all participants had left the SE or had severed ties with the organization at the time of the follow-up survey, which occurred about one year after the SE job began or the individual entered the Chrysalis labor pool. This possibility is indicated in the figure by the extension of the dotted line after the follow-up survey/one-year marker.

REDF staff captured financial information on the costs SEs incurred to fulfill their business and social missions. These costs covered expenditures on supervision for employees or client services such as mental health support, transportation, shelter, or food assistance. Appendix B provides details.

## 2. Samples

SE workers at the seven organizations listed in Table I.1 form the sample for the outcomes study and provided the information that was used to describe the SE experience in Chapter II. Because REDF selected organizations that hosted SEs with a range of characteristics, the results from the outcomes analysis reflect those for workers with a variety of SE experiences. In contrast, the impact analysis uses information from individuals who entered the labor pool for an SE job at only Chrysalis. Although the external validity (generalizability or the ability to apply results to other SEs or transitional jobs programs) from such an analysis is limited, because it does not use information from individuals across the broad spectrum of organizations, the ability to make inferences with comparable treatment and comparison groups provides a higher degree of internal validity (the ability to draw a causal conclusion) and allows us to estimate the impact from the SE experience. The CBA draws information about benefits from both the outcomes and impact studies and cost information from six of the seven organizations.<sup>10</sup> Table I.2 summarizes the organizations that are part of each study.

<sup>10</sup> Cost information was not available from Buckelew.

Table I.2. Organizations included in each study

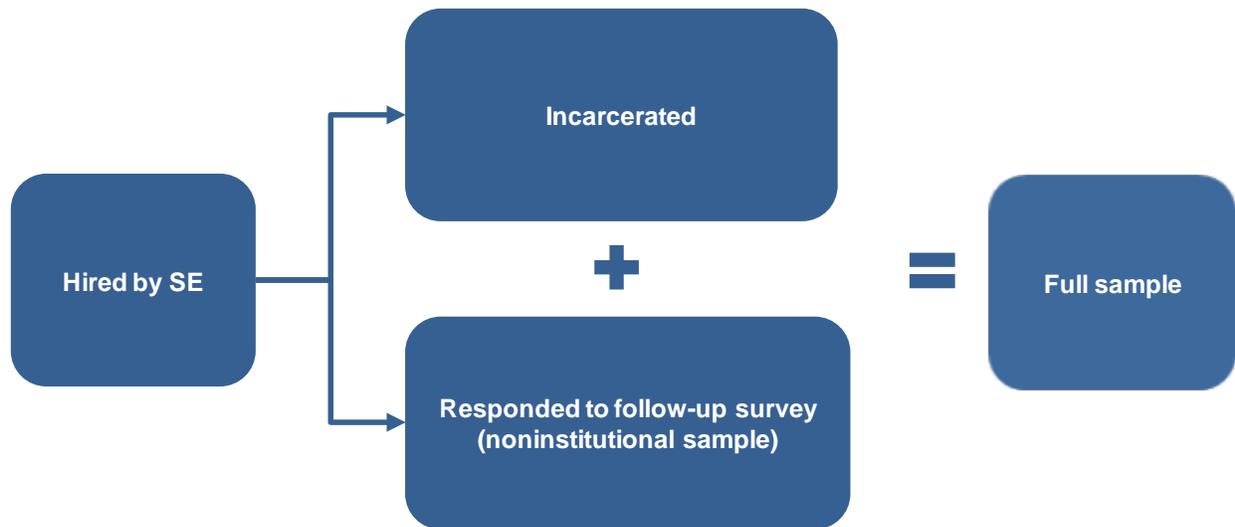
	Implementation study	Outcomes study	Impact study	CBA
Buckelew	X	X		
Center for Employment Opportunities	X	X		X
Chrysalis	X	X	X	X
Community Housing Partnership	X	X		X
Community Resource Center	X	X		X
Coalition for Responsible Community Development	X			
Taller San José	X	X		X
Weingart Center for the Homeless	X	X		X

We used two groups of individuals in the outcomes and impact studies: (1) individuals that either responded to a follow-up survey or were incarcerated at the time of the survey, and (2) survey respondents only. The distinction between the two groups arises because we can identify the work status, housing status, recidivism, and wage and salary income of those we could identify as being incarcerated but have more detailed information on individuals who responded to the survey. As a result, we can use both sets of individuals in analysis of the five aforementioned outcomes but must use the more restrictive set of survey respondents for other analyses.

Figure I.2 shows the path for how individuals entered the two samples used in the outcomes study. The 242 SE workers who responded to the follow-up survey make up the *noninstitutional sample*, so called because no one was incarcerated at the time of that survey.<sup>11</sup> The *full sample* includes individuals in the noninstitutional sample plus the 40 study participants who were incarcerated at the time of the follow-up survey. Both the full and noninstitutional samples were weighted to correct for differences in sampling probabilities and response rates across SEs. With the weighting, the distribution of the characteristics of individuals in the samples is more similar to the distribution of individuals hired by the SEs. Appendix A provides details of this process.

<sup>11</sup> We purposely did not attempt to survey any incarcerated individuals.

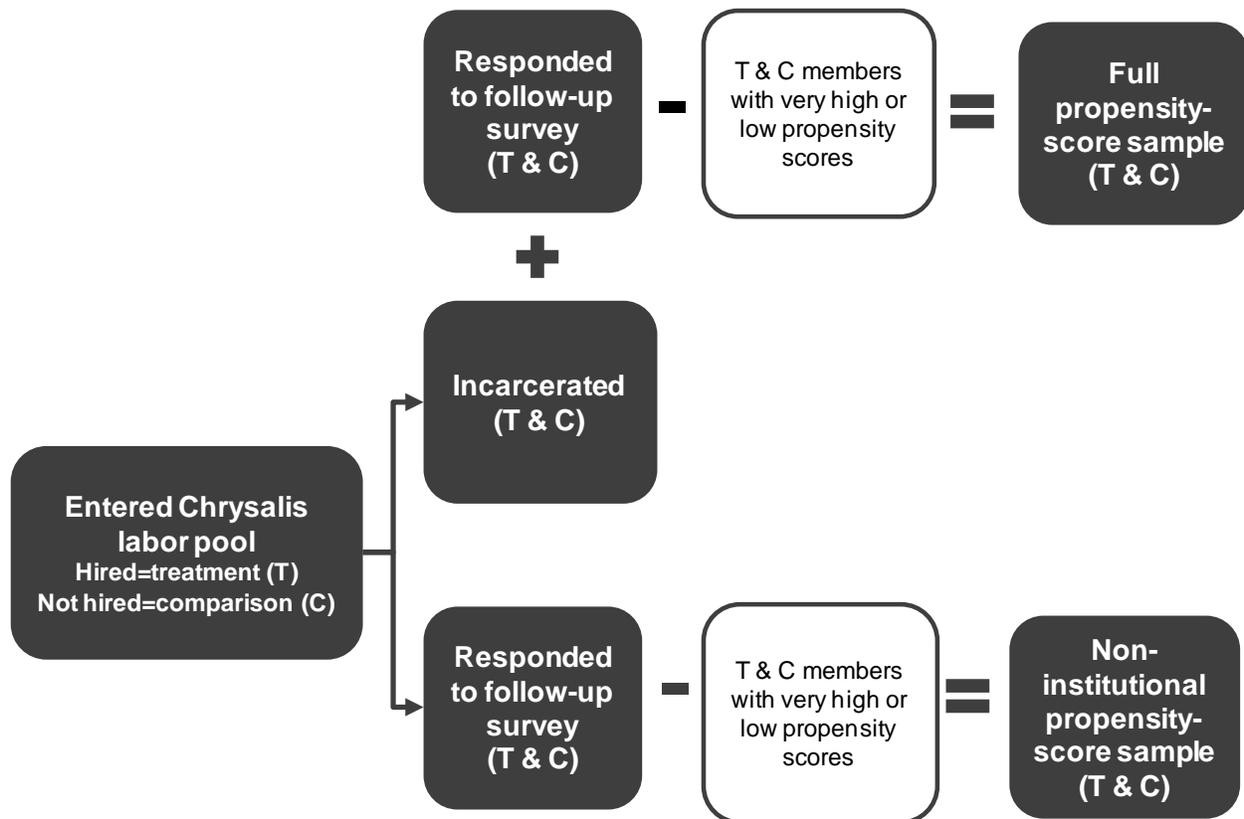
Figure I.2. Derivation of samples for the outcomes study



Note: The noninstitutional sample contains individuals who completed the follow-up survey, and the full sample includes those individuals as well as those found to be incarcerated at the time of follow-up survey.

Figure I.3 shows how individuals entered the samples used in the impact analysis. These samples contain individuals who completed a follow-up survey and were hired by the SEs at Chrysalis (the treatment group) and survey respondents who were not hired (the comparison group). The 138 people in the treatment group and 32 people in the comparison group who responded to the survey form the starting point for building the impact study sample. We used regression analysis to develop cutoff scores to identify individuals in the treatment and comparison groups most likely to be similar at the time they were placed into the Chrysalis labor pool and removed individuals from the samples whose cutoff scores were outside designated ranges. The resulting *noninstitutional propensity-score sample* contains 55 individuals in the treatment group and 28 individuals in the comparison group. We built a corresponding *full propensity-score sample* in a parallel fashion. We first added the group of incarcerated individuals to the survey respondents, providing a pool of 154 individuals in the treatment group and 37 individuals in the comparison group. A similar procedure then removed individuals who were notably different from the average individual outside of their (treatment/comparison) group. The procedure produced a full propensity-score sample of 59 individuals in the treatment group and 32 individuals in the comparison group. Both the full and noninstitutional propensity-score samples were weighted by the probability of being in the sample (the propensity score) in all analyses. With the weighting, baseline values of outcomes, demographics, and background variables demonstrate baseline equivalence across almost all variables considered. Appendix A provides further details of this process.

Figure I.3. Derivation of samples for the impact study



[Note: The noninstitutional propensity-score sample contains individuals who completed the follow-up survey, and the full propensity-score sample adds individuals found to be incarcerated at the time of follow-up survey. The analysis excludes some individuals (identified by the white boxes) because their propensity score was either very high or very low. Appendix A provides a detailed discussion of this process.

### 3. Analysis

We used both descriptive (means and percentage distributions) and multivariate analysis to assess how the SE experience might affect economic self-sufficiency and life stability. The former analysis describes changes for SE workers. In the outcomes study, it describes changes in economic self-sufficiency, life stability, and attitudes toward work between the time the SE job began and about one year later. In the impact study, it assesses whether changes between when individuals were placed in the SE labor pool and one year later were greater for SE workers than those who did not work in the SE. Analysis uses a two-tailed  $t$ -statistic to determine whether changes were statistically significant ( $p \leq 0.05$ ).

We used multivariate regression analysis to answer research questions posed in the outcomes and impact studies and to quantify the benefits for the CBA. In the outcomes study, we assessed whether the SE experience is associated with increases in economic self-sufficiency or life stability. We also explored which characteristics of the SE experience are associated with larger changes using multivariate analysis. In the impact study, we focused on whether the SE experience increased current employment and housing stability in confirmatory analyses; we assessed other measures of economic self-sufficiency and life stability in exploratory analysis.

We use regression-adjusted averages to show the results of these analyses, which provide the average value that would occur at one year, after accounting for variation in factors such as demographic characteristics and employment barriers.

Table I.3 shows the key outcome measures used in the outcomes and impact studies and, for the impact study, whether the analysis using the information was confirmatory (shown in red) or exploratory (in black). As this table shows, we use information from the full samples when it is available and information from the noninstitutional sample when it is not. Appendix A provides a detailed discussion of our multivariate methods.

Table I.3. Measures used to capture outcomes

Outcome	Information captured relative to follow-up survey date	Outcomes study		Impact study	
		Full	Non-institutional	Full	Non-institutional
<b>Economic self-sufficiency</b>					
Employment	Work for pay in the last week	X		X	
	Work for pay in the last month		X		X
	Work continuously for six months during the past year		X		X
	Share of time spent in work during the past year		X		X
Income	Total income in past month		X		X
	Wage and salary income in past month	X		X	
	Share of income from work in past month		X		X
	Share of income from government in past month		X		X
<b>Life stability</b>					
Housing	Stable housing in the last year	X		X	
	Homeless in past year		X		X
Recidivism	Arrested in past year	X		X	
Health	Depression index		X		X
	Physical health rated as excellent		X		X
	Substance abuse in the past year		X		X

Notes: Timing is relative to when the follow-up survey was completed or the individual was identified as being incarcerated. **Red** indicates outcomes in confirmatory analysis. *Stable housing* indicates the individual only owned or rented a home. *Homeless* indicates the individual used an emergency shelter, emergency voucher, transitional housing, or permanent housing for the previously homeless or slept outside or in public. The *depression index* is an inventory of feelings indicative of clinical depression in the past week.

Our CBA assigned dollar values to the benefits estimated from the multivariate analysis in the outcomes and impact studies and compared them with the dollar values of the costs of operating the SE as measured by information from SEs' financial records. Appendix B provides details of how we quantified both the benefits and the costs.

### C. Structure of report

The remainder of this report proceeds as follows. Chapter II provides an overview of the SE experience to provide context for interpreting our results. The next three chapters of the report each address findings from one of the studies. Chapter III presents findings from the outcomes study. It describes economic self-sufficiency and life stability of SE workers about one year after they began their jobs and identifies which components of the SE experience might be associated with improved outcomes. Chapter IV presents findings from the impact study and provides estimates of the impact of the SE experience on economic self-sufficiency and life stability about one year after individuals entered the Chrysalis labor pool. Chapter V presents findings from the CBA, describes the costs of operating an SE with both business and social missions, and estimates how these costs are associated with the benefits of SE employment.

The report also includes five appendices. The first two provide detailed information about data collection and analyses: Appendix A details the outcomes and impact studies, and Appendix B provides a technical discussion of the CBA. Appendix C defines the variables used in the analyses, and Appendix D provides the main data tables on which we base figures in the text. Appendix E presents a copy of the follow-up survey.

## II. THE SOCIAL ENTERPRISE EXPERIENCE

REDF's funding and technical assistance were expected to increase SE employment and to improve the ability of SEs to provide workers with a positive work experience and opportunities to build more stable lives.<sup>12</sup> Section A of this chapter summarizes the SE experience provided to workers and how the workers assessed that experience. The next two sections examine economic self-sufficiency (Section B) and life stability (Section C) in the year after the SE job started.

### Key chapter findings

- **The range in hours worked in the SE was large.** On average, employees worked 576 hours in the SE; however, nearly 5 percent worked fewer than 8 hours, and 27 percent worked more than 961 hours.
- **SE workers said they received a variety of services and supports.** While working, almost all received job readiness and skills training, close to 80 percent received work support services, and about two-thirds received supports that fostered life stability. About two-thirds continued receiving services after leaving the SE.

Between the time the SE worker was hired and one year later:

- **SE workers gained economic self-sufficiency.** Employment increased from 16 to 51 percent, and monthly wage and salary income increased from an average of \$216 to \$777. The share of monthly income from the government decreased from 77 to 24 percent (measured for nonincarcerated individuals only).
- **SE workers gained housing stability.** Only 15 percent of SE workers lived in stable housing prior to the SE job starting, whereas 53 percent lived in stable housing in the year after the SE job began.

### A. The SE experience

The SE workers hired from April 1, 2012, through March 31, 2013 faced multiple employment barriers (Table II.1). Indicators of economic self-sufficiency were low at the time the SE job began: one-quarter had never held a job before the SE job began, and only 23 percent of the average individual's monthly income came from work. Indicators of life stability were also low: about 85 percent did not have stable housing, and nearly 70 percent had been convicted of a crime and sentenced to jail. Nearly 30 percent lacked a high school diploma. Although differences in barriers existed in the populations targeted and served by each organization, barriers were high within each organization.

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<sup>12</sup> REDF defined employment as working 32 hours within four weeks.

Table II.1. Employee characteristics (raw percentages, except where noted)

	All workers	Buckelew	CEO	Chrysalis	CHP	CRC	Taller	Weingart
Average age (in years)*	41	37	33	44	41	46	25	49
Never-employed*	25	46	16	25	29	26	23	0
No high school diploma*	29	10	51	27	17	6	38	0
Ever convicted*	69	25	100	71	61	20	62	20
Unstable housing (past year)	85	84	90	83	90	77	82	100
Income from wages	23	18	32	17	30	35	79	69

Source: Maxwell et al. (2013).

Note: Analysis weighted to correct for survey nonresponse. An asterisk (\*) indicates a significant likelihood that values differ across organizations. *Unstable housing* is defined as not owning or renting a home during the year. *Income from wages* is the percentage of income in the past month from wages or salary.

CEO = Center for Employment Opportunities; CHP = Community Housing Partnership; CRC = Community Resource Center; Taller = Taller San Jose; Weingart = Weingart Center for the Homeless.

Survey results suggest that some variation existed in exposure to each of the four components of the SE experience: (1) employment, (2) employment supports, (3) life stability supports, and (4) postemployment services (Appendix D, Tables D.1–D.2). With respect to **employment**, SE workers reported they worked, on average, 24 hours per week for 24 weeks, which is equivalent to a little more than three months of full-time work. However,

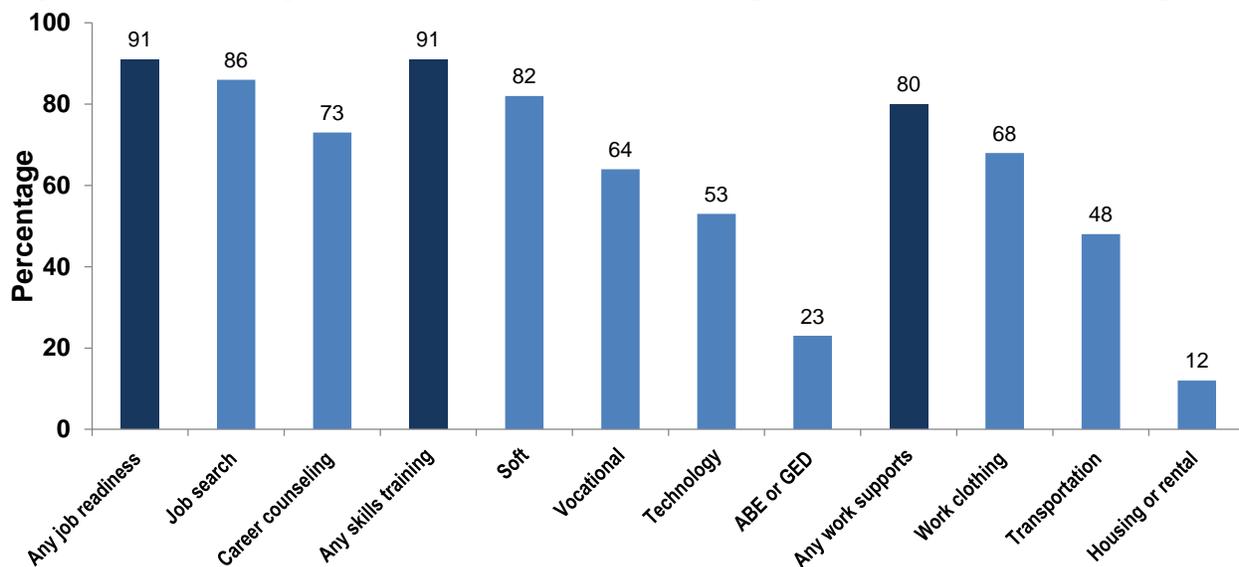
- About half worked more than 19 weeks, and half worked less,
- Nearly 5 percent worked fewer than 8 hours, which is virtually no exposure to the SE, and
- About 27 percent worked more than 961 hours, which is the equivalent of about half a year of full-time work experience.

Furthermore, about 28 percent said they had worked in the SE prior to the start of the MJS, which suggests that the amount of time spent in the SE is actually more than reported for these workers (our measures of time worked in the SE include only the most recent stint of SE employment).

In addition to work experience, almost all SE workers (97 percent) reported receiving, through the SE or host organization, **employment supports** while employed (Figure II.1). Specifically, they said they received the following:

- Job-readiness skills training (more than 90 percent), with 86 percent saying they received job search assistance and close to 70 percent reporting receiving career counseling
- Skills training (over 90 percent), with more than 80 percent reporting soft-skills and 64 percent reporting receiving vocational skills training
- Work supports (almost 80 percent) of clothing, transportation, or housing assistance

Figure II.1. Employment supports while working at the SE (raw percentages)



Source: MJS database, noninstitutional sample, Appendix D, Table D.2.

Note: Analysis weighted to correct for survey nonresponse. Percentages have not been regression adjusted.

Light blue bars reflect the percentage of SE workers saying they received a specific support or service.

Dark blue bars reflect the percentage who said they received any of the supports or services in the group that is designated by the light blue bars to its right.

ABE = adult basic education; GED = General Educational Development.

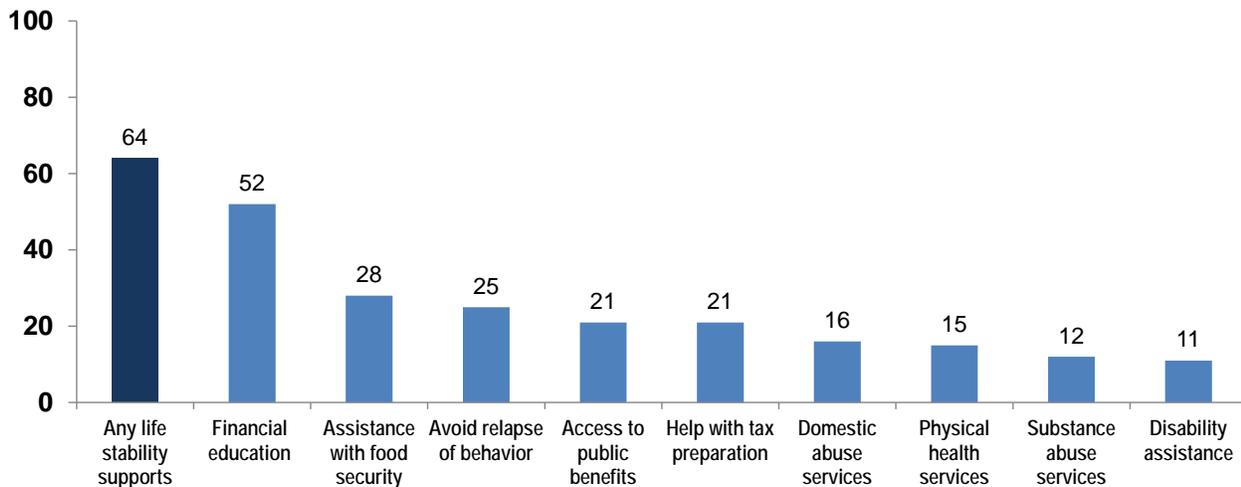
Most SE workers (64 percent) also said they received **life stability supports** through the SE or host organization while employed in the SE (Figure II.2), although the level of such supports was lower than the level of employment supports received:<sup>13</sup>

- About half reported receiving some type of financial education
- About 28 percent reported receiving help to gain food security (for example, through food pantries, reduced-price meals, or nutritional education)
- About 25 percent reported receiving help to avoid relapsing into behaviors such as drug abuse or criminal activity
- About 21 percent said they received help to access public benefits; about the same percentage that said they received help with tax preparation

Finally, about two-thirds said they received **postemployment services** after leaving the SE, with 64 percent having access to an employment counselor and 43 percent having access to a life counselor (not shown).

<sup>13</sup> The survey classified supports as related to life stability or employment based on the most likely targets of these supports. Alternative classifications may be feasible.

Figure II.2. Life stability supports while working at the SE (raw percentages)



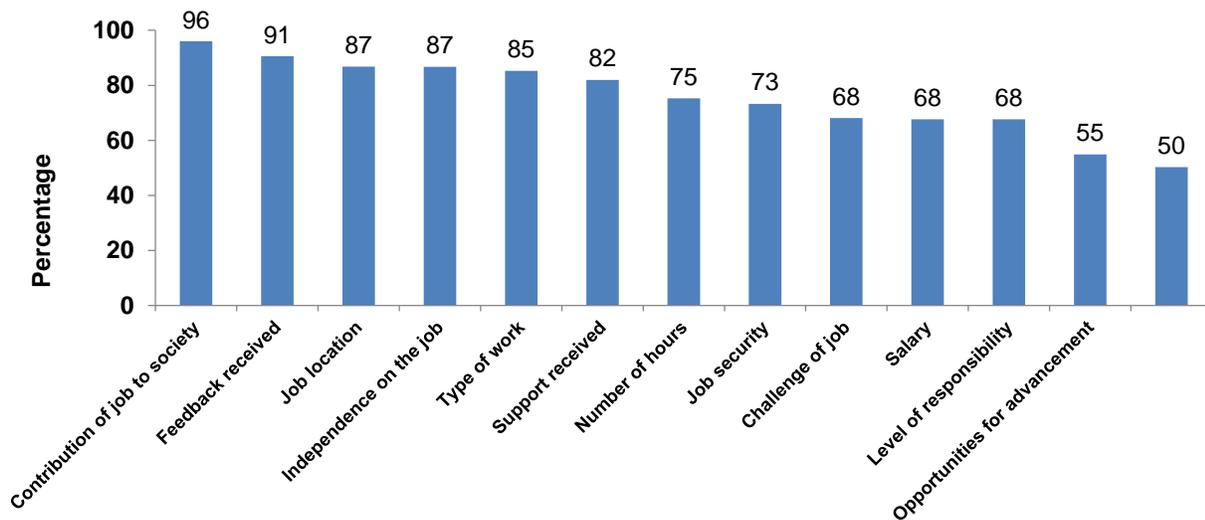
Source: MJS database, noninstitutional sample, Appendix D, Table D.2.

Note: Analysis weighted to correct for survey nonresponse. Percentages have not been regression adjusted. **Light blue bars** reflect the percentage saying they received a support or service, and **dark blue bars** reflect the percentage who said they received any of the supports or services in the group.

Two pieces of information suggest that workers held a positive view of their SE experience. First, they expressed high levels of satisfaction with their work experiences (Figure II.3):

- Almost all (about 96 percent) were satisfied with their job contributing to society
- More than 90 percent were satisfied with the feedback they received
- More than 85 percent were satisfied with their job location, independence, and type of work
- About three-quarters were satisfied with the support received, number of hours they worked, and job security
- About two-thirds were satisfied with the challenge of the job, salary, and level of responsibility
- More than half were satisfied with opportunities for advancement and benefits offered

Figure II.3. Satisfaction with SE experience (raw percentages)



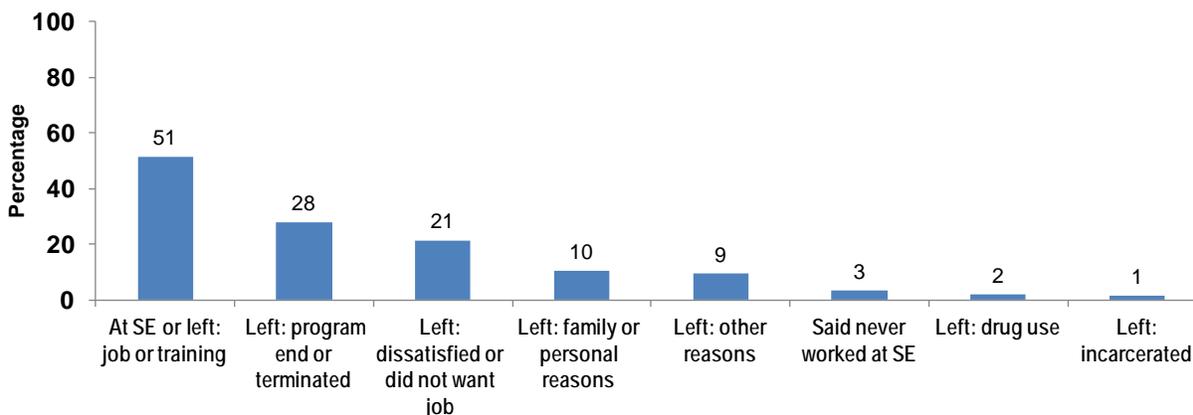
Source: MJS database, noninstitutional sample. Appendix D, Table D.1.

Note: Analysis weighted to correct for survey nonresponse. Percentages have not been regression adjusted. Satisfaction was measured on a four-point scale: satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied. Bars indicate the percentage of survey respondents that said they were satisfied or somewhat satisfied.

Second, workers who had left the SE generally reported positive reasons for leaving the SE (Figure II.4):

- About 51 percent left for another job or training opportunity or were still working at the SE
- About 28 percent left because the program ended or they were terminated (we cannot distinguish between groups)
- About 21 percent left because they were dissatisfied or did not want a job
- About 10 percent left for family or personal reasons
- Fewer than 3 percent said they left because of either incarceration or drug use, although this percentage might be understated, because the question was not asked of those who were incarcerated

Figure II.4. Reason for leaving the SE, reported one year after SE job began (raw percentages)



Source: MJS database, noninstitutional sample, Appendix D, Table D.1.

Note: Analysis weighted to correct for survey nonresponse. Multiple answers permitted. Bars show the percentage of participants who reported the reason for leaving the SE. The percentage reporting each reason for leaving the SE is about the same about one year after starting work (this table) and at the time the worker left the SE or six months of work, whichever was first (see Maxwell et al. 2013).

## B. Economic self-sufficiency after the SE job began

A central goal of the SE was to build economic self-sufficiency through employment by providing work experience in the SE and helping workers find employment when the SE job ended. This work experience was considered critical because, prior to starting the SE job, 25 percent of SE workers reported they had never held a job, 63 percent reported working sometime in the prior year, and 16 percent were currently employed (Maxwell et al. 2013).

Information collected in the follow-up survey enabled us to construct several measures of work experience one year after the SE job began for the noninstitutional sample: whether participants were working for pay the week before the survey, whether they worked continuously for a six-month period, and the share of that year they spent working (Table II.2). The first measure may also be constructed for all members of our full sample and shows that about 51 percent of all SE workers were employed about one year after starting the SE job. That percentage varied across organizations; however, 84 percent of SE workers at Weingart and 41 percent of SE workers Buckelew were employed about one year after they began their job.

Employment outcomes are stronger for SE workers who were not incarcerated. Consider the following outcomes for SE workers, about one year after starting:

- About 62 percent were employed, ranging from 86 percent of SE workers at Weingart to 45 percent at Buckelew.
- About 67 percent had worked continuously for six months during the year, ranging from about 92 percent at CHP to 28 percent at Buckelew.
- They had spent about 67 percent of their time working since they were hired by the SE, ranging from about 97 percent at Weingart to about 47 percent at Buckelew.

Table II.2. Work in the year after the SE job began (raw percentages)

	All	Buckelew	CEO	Chrysalis	CHP	CRC	Taller	Weingart
<b>Full sample</b>								
Currently employed	51	41	44	50	72	70	65	84
<b>Noninstitutional sample</b>								
Currently employed	62	45	73	56	78	71	75	86
Worked continuously for six months in last year	67	28	75	64	92	58	75	84
Share of time spent in work during past year	67	47	73	65	89	61	76	97

Source: MJS database.

Note: Analysis weighted to correct for survey nonresponse. Percentages have not been regression-adjusted. Currently employed means worked for pay in the last week.

CEO = Center for Employment Opportunities; CHP = Community Housing Partnership; CRC = Community Resource Center; Taller = Taller San Jose; Weingart = Weingart Center for the Homeless.

One should use caution in interpreting the employment measures after the SE job began, presented here and throughout the report, because the measures could capture both SE and unsubsidized employment. For example, someone who worked at the SE for the past eight months would be classified as currently employed and working more than half of the past year. Thus, our employment measures should be thought of as a mixture of the outputs of SE employment (which are directly influenced by the SE) and outcomes associated with SE employment (less proximal effects).<sup>14</sup>

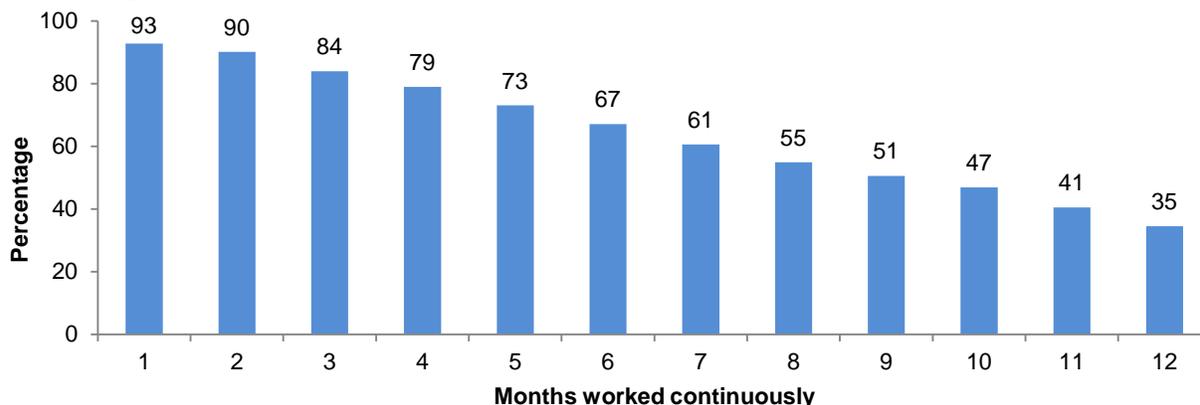
Our results suggest that the SEs succeeded in obtaining work experience for individuals. About one year after the SE job began, more than half of all SE workers were currently employed. When we examine the more complete set of information from those SE workers who were not incarcerated, about 62 percent reported current employment, about 67 percent had worked continuously for at least six months in the prior year, and about 67 percent of that year was spent working. The level of work experience, however, seems to vary by organization (Table II.2).

To clarify the extent of continuous work experience gained, we examined the percentage of SE workers who worked continuously for every monthly interval during the year after they were hired (Figure II.5). This analysis is available only for individuals who were not incarcerated. In the year after the SE job began, the results were as follows:

- 93 percent worked for at least one month
- 84 percent worked continuously for at least 3 months
- 67 percent worked continuously for at least 6 months
- 51 percent worked continuously for at least 9 months
- 35 percent worked continuously for all 12 months

<sup>14</sup> Daniel Bloom's testimony before the U.S. House Committee on Ways and Means, Human Resources Subcommittee, on July 30, 2014 ([http://www.mdrc.org/sites/default/files/Bloom\\_testimony.pdf](http://www.mdrc.org/sites/default/files/Bloom_testimony.pdf)), places this finding within the broader context of evaluation results on subsidized jobs.

Figure II.5. Months of continuous work in the year the SE job began (raw percentages)



Source: MJS database, noninstitutional sample.

Note: Analysis weighted to correct for survey nonresponse. Percentages have not been regression adjusted. Bars show the percentage who worked continuously for at least the number of months indicated.

One anticipated benefit of employment was increased economic self-sufficiency as income from wages and salary increases and income from the government decreases. The MJS data suggest that economic self-sufficiency might have increased in both ways. Within the full sample, monthly wage and salary income increased significantly, from an average of \$216 to \$777 (Table II.3). The more extensive information for the noninstitutional sample suggests that the share of monthly income from the government decreased significantly, from 71 to 24 percent.

### C. Life stability after the SE job began

Another key goal of the SE was to help workers stabilize their lives outside the workplace. Because SE workers frequently faced employment barriers stemming from issues in their personal lives (Table II.1), gaining stability in these areas could improve their chances of obtaining and retaining employment. The MJS data suggest that housing stability increased in the year after the SE job began. Only 15 percent of SE workers lived in stable housing in the year prior to their SE job: one year later, 53 percent did (Table II.3). Other indicators of life stability are less encouraging. Nearly one-quarter were arrested in the year after the SE job started, and no significant changes in substance abuse occurred.<sup>15</sup> A lower percentage of SE workers reported being in excellent physical health, and a higher percentage reported being depressed, although these results might be driven by time-related factors that would affect the individuals irrespective of SE employment, as Chapters III and IV will discuss.

<sup>15</sup> This arrest rate is substantially higher than that reported by Maxwell et al. (2013), who used data on individuals six months after beginning SE employment. This difference does not necessarily represent an increase in the arrest rate over time. Rather, the field locating efforts conducted for the follow-up surveying included searches of the incarceration status of individuals, which provided more-complete information on arrests in the analysis for this report than was available for the earlier report.

Table II.3. Economic self-sufficiency and life stability before and after the SE job began (raw percentages, except where noted)

	Before SE job began	One year after SE job began	Difference
<b>Full sample</b>			
Sample size	282	282	n.a.
<b>Economic self-sufficiency</b>			
Currently employed	17.9	51.2	33.3*
Average monthly wage and salary income	\$215.7	\$777.3	\$561.6*
<b>Life stability</b>			
Stable housing in past year	15.4	53.2	37.8*
Arrested since hired at SE	n.a.	24.9	n.a.
<b>Noninstitutional sample</b>			
Sample size	242	242	n.a.
<b>Economic self-sufficiency</b>			
Share of monthly income from:			
Work	22.5	69.0	46.5*
Government transfers	71.3	23.8	-47.5*
<b>Life stability</b>			
Health			
Self-reported excellent physical health	31.2	21.9	-9.3*
Depression index (standard deviation)	0.0	0.3	0.3*
Substance abuse			
Drank four or more drinks	22.5	26.9	4.4
Used marijuana	17.2	17.9	0.7
Used hard drugs	4.9	3.4	-1.5

Source: MJS database, full (all SE workers) and noninstitutional samples (SE workers who were not incarcerated), Appendix D, Tables D.9, D.10, D.11, and D.14.

Note: Analysis weighted to correct for survey nonresponse. Percentages have not been regression adjusted. *Stable housing* indicates that the individual used only his or her own home as housing in the past year. The *depression index* is an inventory of feelings indicative of clinical depression in the past week. It was normalized to have a mean of 0 and standard deviation of 1 at time of hire.

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### III. ECONOMIC SELF-SUFFICIENCY AND LIFE STABILITY FOLLOWING AN SE JOB

REDF allocated funds toward its portfolio organizations as a laboratory to identify the components of successful SEs. In the previous chapter, we described the SE experience, including employment, employment supports received while employed, life stability supports received while employed, and postemployment services. Each component was designed to increase workers' economic self-sufficiency and life stability, primarily by reducing barriers to work. These components might lead to a number of changes for workers: more-stable employment and housing, less reliance on government programs for support, less recidivism, and improved physical and mental health.

In this chapter, we present results of the outcomes study and answer the following research question: *How do economic self-sufficiency and life stability change after individuals begin work in a social enterprise?* We present a general picture of the changes in economic self-sufficiency and life stability of SE workers during the year after their SE job began. We focus on two main outcomes—current employment and housing stability—to present a clearer picture of individual outcomes and to decrease the possibility of reporting spurious associations, which could occur with additional primary outcomes. To broaden our analysis, we examine other aspects of workers' economic well-being (monthly income), life stability (recidivism and physical and mental health), workers' attitudes about work and optimism about the future, and associations between components of the SE experience and self-sufficiency and life stability.

#### Key chapter findings

In the year after the SE job began, SE workers experienced the following:

- **Greater economic self-sufficiency.** The percentage currently employed increased by 33 percentage points (from 18 to 51 percent), total monthly income increased by 91 percent, and the share of income from government transfers decreased.
- **Greater housing stability.** The percentage living in stable housing throughout the year increased by 28 percentage points (from 16 to 44 percent). In addition, a greater percentage of SE workers who were not incarcerated reported using more stable sources of housing.
- **A decline in self-reported health and optimism.** Fewer reported their physical health as excellent and more reported a higher level of depression symptoms. In addition, fewer reported feeling optimistic about the future.

Specific program components might be associated with economic self-sufficiency and life stability.

- **Supports after leaving the SE** were associated with increased housing stability and monthly income, and decreased depression.
- **Duration of SE employment** was associated with increased housing stability and decreased depression.

Properly accounting for the Ashenfelter dip is one of the main challenges of describing outcomes of an employment program using a strategy without a comparison group of similar individuals who did *not* participate in the program, as we do in this chapter. The Ashenfelter dip describes a graphic representation of how entrants to employment programs typically faced a recent negative event affecting their employment that drove them to seek the program. Ashenfelter (1978) demonstrated how this phenomenon falsely enhances the effects of employment programs because individuals would have experienced improved outcomes even

without the program.<sup>16</sup> Our impact analysis, presented in the next chapter, helps correct for the Ashenfelter dip and similar effects by using a comparison group of similarly situated individuals who did not have an SE job.

Although we cannot correct for the Ashenfelter dip in the outcomes analysis, we can control for other sources of bias to help improve the validity of our results. We use a fixed-effects model to estimate the relationship between SE employment and outcomes. The fixed-effects specification controls for worker characteristics that do not vary over time by analyzing deviations from the average level of an outcome for an individual.<sup>17</sup> It produces more-precise estimates than the average change in outcomes over time presented in Chapter II. Our regression also controls for the unemployment rate, allowing us to account for difference in general economic conditions between when an individual started his or her SE job and one year later.<sup>18</sup> This control may also mitigate the bias from the Ashenfelter dip, as some of the negative events leading to an individual taking an SE job may relate to the overall strength of the economy. We report results from these estimations using regression-adjusted means.

Section A reports results of this analysis for changes in economic self-sufficiency—employment and income—between when the SE job began and one year later. Section B reports results for changes in housing stability; and Section C reports results for changes in health, attitudes toward work, and optimism about the future. Appendix A provides more information about the statistical model and procedures. Section D describes how components of the SE experience are associated with economic self-sufficiency and life stability, based on an ordinary least squares analysis.

#### A. More economically self-sufficient after the SE job began

The fixed-effects analysis showed significant improvement in employment for SE workers, using a variety of measures of employment status (Figure III.1). Most importantly, using our full sample of individuals, 51 percent (regression adjusted) were currently employed roughly one year after their SE job commenced, compared with 18 percent who were employed before the SE job began, a 33 percentage point increase. Results are similar for the noninstitutional sample of individuals not incarcerated one year after beginning an SE job, with a 31 percentage point increase in those reporting having been employed at some point in the past month one year after the SE job began (from 32 to 63 percent) and a 28 percentage point (from 39 to 67 percent) increase in the percentage of those reporting continuous employment for at least six months in the past year.

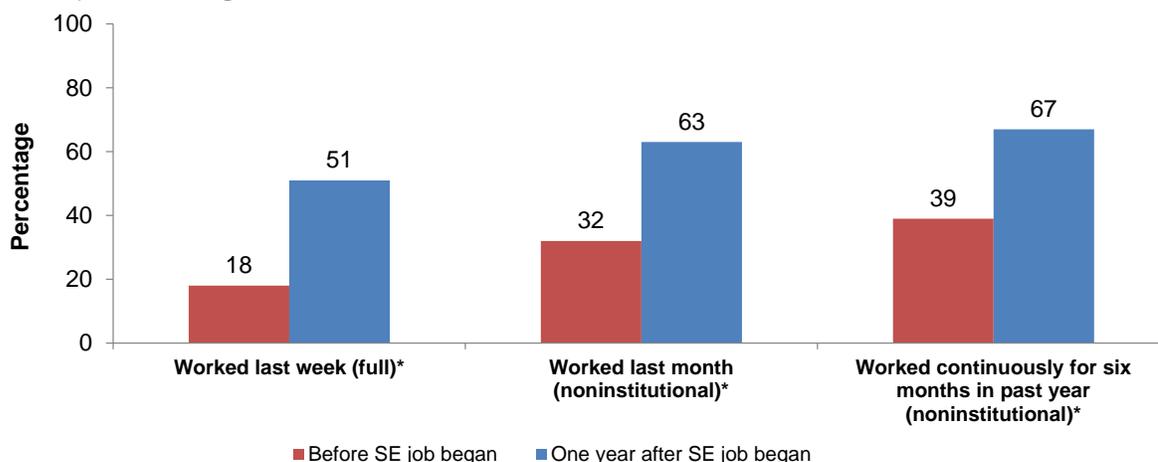
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<sup>16</sup> For a more recent discussion, see Andersson et al. (2013).

<sup>17</sup> Because the fixed-effects model allows us to control for all time-invariant individual characteristics, including those that are observed (for example, race) and unobserved (for example, determination), it is preferable to using ordinary least squares with a more limited set of observed controls.

<sup>18</sup> Because the unemployment rate generally decreased over the year examined, this adjustment decreased the magnitude of change associated with the program.

Figure III.1. Employment before and after the SE job began (regression-adjusted percentages)



Source: MJS database, full sample (full) and noninstitutional sample (noninstitutional).

Note: Analysis weighted to correct for survey nonresponse; regression-adjusted mean percentages estimated from the fixed-effects model.

\*At hire and one year differ at the  $p \leq 0.05$  level, as measured by a two-tailed  $t$ -test.

Increases in economic self-sufficiency one year after the SE job began are also reflected by changes in different measures of income—monthly wage and salary income, total monthly income, and the share of income from work versus the share from government programs (Table III.1). Monthly wage and salary income increased by \$570 (268 percent) for all SE workers, from \$213 before the SE job began to \$783 one year later. Information from the noninstitutional sample suggests that this increase helped increase total monthly income by \$593 (91 percent), from \$653 to \$1,246 and reduced reliance on government transfer payments by 46 percentage points, from 71 to 25 percent (all estimates at one year are regression adjusted).

Table III.1. Income in the year before and after the SE job began (regression-adjusted percentages, except where noted)

	Before SE job began	One year after SE job began	Difference
<b>Full sample</b>			
Wage and salary income in last month	\$213	\$783	\$570*
<b>Noninstitutional sample</b>			
Total income in past month	\$653	\$1,246	\$593*
Percentage of income from . . .			
Work	22	67	45*
Government	71	25	-46*

Source: MJS database, full and noninstitutional samples.

Note: Analysis weighted to correct for survey nonresponse; regression-adjusted means and percentages estimated from the fixed-effects model. Arrested in past year was not measured at hire.

\*At hire and one year differ at the  $p \leq 0.05$  level, as measured by a two-tailed  $t$ -test.

## B. Greater housing stability after the SE job began

Our fixed-effects analysis also suggests that SE workers' lives stabilized in the year after the SE job began. On our second main outcome measure, housing stability, 44 percent of workers reported stable housing in the year after the SE job began, as compared to 16 percent in the year before (a regression-adjusted increase of 28 percentage points; not shown). Information available from the noninstitutional sample indicated that significantly more SE workers reported using stable sources of housing at some point in the year after the SE job began (Table III.2). A greater percentage used a stable home or apartment for housing (from 49 to 81 percent), and fewer used an emergency shelter or voucher (from 14 to 9 percent), a psychiatric hospital, or a substance abuse rehabilitation center (the combined measure decreases from 16 to 7 percent).<sup>19</sup> Despite these gains, more than one-third reported at least one period of homelessness in the past year—living outside or in public, in an emergency shelter, or in housing for the homeless; this rate was relatively unchanged from the year before hire (not shown).

Table III.2. Housing in the year before and after the SE job began (raw percentages)

	Year before SE job began	Year after SE job began
Stable home/apartment	49	81*
Home of family member/friend	40	36
Transitional housing	27	24
Jail/prison/juvenile detention	25	6*
Psychiatric hospital, rehabilitation center	16	7*
Emergency shelter/voucher	14	9
Outside or in public	10	13
Permanent housing for previous homeless	9	14
Hotel or motel	6	7
Halfway home	6	5

Source: MJS database, noninstitutional sample, Appendix D, Table D.6.

Note: Analysis weighted to correct for survey nonresponse. Percentages have not been regression-adjusted.

\*At hire and one year differ at the  $p \leq 0.05$  level, as measured by a two-tailed  $t$ -test.

## C. Worker health and optimism declined

Information from the follow-up survey allows us to examine additional life stability outcomes, such as changes in health following SE employment, for the noninstitutional sample. Results from the fixed-effects analysis indicate the following (Table III.3):

- **A lower percentage of SE workers reported excellent physical health.** The (regression-adjusted) percentage reporting excellent health declined by 9 percentage points, from 31 to 22 percent.

<sup>19</sup> Fewer reported using a jail or prison as housing, decreasing from 25 to 6 percent (regression adjusted) in the noninstitutional sample; however, we estimate that 25 percent of individuals were in jail or prison at some point during the last year if we include the 40 individuals who were incarcerated at the time of the follow-up survey and who did not provide information on the sources of housing in the year following SE employment.

- **More SE workers reported symptoms of depression one year after their SE job began.** Self-reported symptoms of depression increased significantly by 0.31 standard deviations on our depression index scale, indicating that SE workers, on average, exhibited more symptoms of depression at one year after hire than before the SE job began.<sup>20</sup>
- **Rates of alcohol or substance abuse counseling in SE workers did not change.** No statistically significant difference existed between the percentage who were in counseling for substance abuse treatment in the year before they started their SE job and the year following it. This finding is in itself not negative, as workers may be receiving maintenance counseling to prevent a reoccurrence of substance abuse.<sup>21</sup>

Table III.3. Physical and mental health (regression-adjusted percentages, except where noted)

	Before SE job began	One year after SE job began	Difference
Self-report that physical health is . . .			
Excellent	31	22	-9*
Very good or good	58	55	-3
Poor or fair	11	23	12*
Depression index (standard deviations)	-0.01	0.30	0.31*
Substance abuse			
In counseling for substance abuse in past year	22	17	-5
No prior counseling at hire (in past year)	n.a.	7	n.a.
Prior counseling at hire (in past year)	n.a.	50	n.a.

Source: MJS database, noninstitutional sample.

Note: Analysis weighted to correct for survey nonresponse; regression-adjusted percentages estimated from a fixed-effects (health, depression, substance abuse, and in counseling) or ordinary least squares estimation (no prior and prior counseling). The *depression index* is an inventory of feelings indicative of clinical depression in the past week. It was normalized to have a mean of zero and standard deviation of one at time of hire. Arrested in the past year was not available before the SE job began, which precluded its inclusion in this analysis.

\*At hire and one year differ at the  $p \leq 0.05$  level, as measured by a two-tailed  $t$ -test.

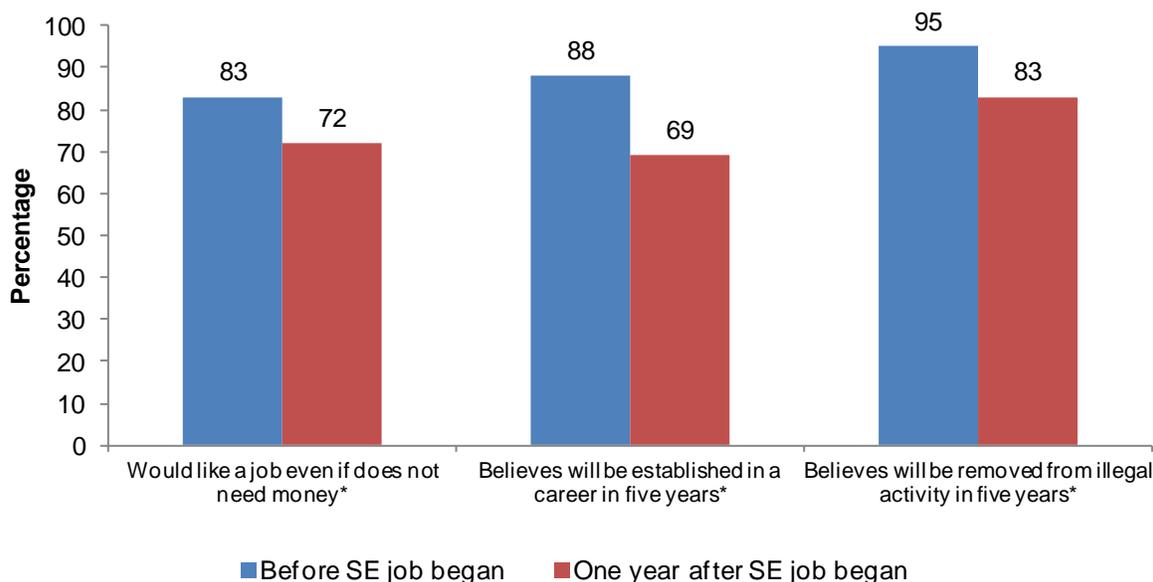
One goal for the SE experience was to create a work environment that would support positive attitudes toward work and optimism about the future. We are able to observe changes in these attitudes and optimism in the noninstitutional sample (those who completed a follow-up

<sup>20</sup> The scale is reported in units of standard deviation, which is equivalent to standard effect size. Typically, effects measured on this scale that fall in the range of 0.20 are described as *small*, whereas those in the range of 0.21 to 0.50 are described as *medium* (Cohen 1988). Reporting fewer symptoms of depression when the SE job began may be related to a greater level of optimism at that time (see Section C). We cannot distinguish between a unifying factor influencing both an increase in depression and a decrease in optimism, or whether a decrease in one may be driving a decrease in the other.

<sup>21</sup> This possibility is further supported by the characteristics of workers in counseling for substance abuse. Only 7 percent of SE workers who reported no counseling in the year before hire started to receive this counseling in the year after their SE job began (compared to half of those with prior counseling). This suggests that the overwhelming majority of those reporting substance abuse counseling after hire had substance abuse concerns in the recent period before SE hire.

survey). Although most SE workers remained positive about work and optimistic about their future one year after the SE job began, the positive outlook was slightly less evident one year after hire than at the time of hire (Figure III.2 shows the measures with significant changes).

Figure III.2. Attitudes and optimism before and after the SE job began (regression-adjusted percentages)



Source: MJS database, noninstitutional sample.

Note: Analysis weighted to correct for survey nonresponse; regression-adjusted mean percentages estimated from a fixed-effect model. Items shown with an asterisk (\*) all have significant differences ( $p \leq 0.05$  level), as measured by a two-tailed  $t$ -test between the period before the SE job began and one year later.

One potential explanation for the findings in this section—a decrease in self-reported physical health, an increase in depression, and a less optimistic outlook—may be a variant of the Ashenfelter dip: A person's optimism is temporarily high, so they enroll in an employment program. Later, optimism regresses to its usual level. In this case, the negative findings about optimism and depression at one year may be related to this fading of the heightened optimism from enrollment.<sup>22</sup> When we revisit these outcomes in the next chapter, we use a design that is able to remove this potential bias from the analysis by providing a comparison group.

#### D. Changes in economic self-sufficiency and life stability

We now turn our attention to whether specific components of the SE experience might be associated with economic self-sufficiency and life stability one year after the SE job began. We use the workers' description of SE employment (number of hours worked in a typical week and weeks worked), employment supports received, life stability supports received, and postemployment services received as independent variables in a multivariate analysis of outcomes about one year after the SE hire to make this assessment (Appendix D, Table D.15).

<sup>22</sup> There may be other competing explanations. For example, the stress on workers from greater exposure to the labor market may increase their depression at one year. Our research design does not allow us to sort out competing explanations or determine whether multiple factors are influential.

We focus our discussion on components of the SE experience that show statistically significant relationships with more than one outcome. Such relationships cannot be interpreted as causal, because they might be driven by unobserved characteristics (for example, motivation) that affect both the SE experience and outcomes. Nonetheless, examining these associations may suggest promising strategies that can be used to inform policy or practice. We see the following effects:

- **Duration of SE employment is associated with increased housing stability and incrementally less depression.** Each additional week worked in the SE was associated with a small increase in housing stability and a slight decrease in the depression index one year after the SE job began. Those working a total of six months had an 8 percentage point increase in the likelihood of having stable housing and a 0.18 standard deviation decrease in the depression index (a small effect) one year after the SE job began, as compared with those that worked for only one week.
- **Supports after leaving the SE are associated with increased housing stability, increased monthly income, and incrementally less depression.** Workers who reported receiving postemployment supports (of any kind) were associated with a 21 percentage point greater likelihood of housing stability, a \$428 increase in total monthly income, and a 0.68 standard deviation decrease in the depression index (a medium to large effect) one year after the SE job began.

Although overall depression increased among workers (as noted in Section C), those working for a longer duration or receiving supports after leaving the SE were able to buffer this increase to some extent. The findings in this section highlight certain aspects of the SE experience that may be related to larger improvements in the positive findings identified for SE employment (income and housing stability) and to reductions in the negative findings identified, specifically those related to depression. In light of our finding that workers, on average, reported incrementally more depression at about one year after the SE job began, offering supports to workers after leaving the SE seems to be an especially promising strategy to cushion the transition of SE workers in to the wider labor market.

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#### IV. IMPACT OF THE SE ON ECONOMIC SELF-SUFFICIENCY AND LIFE STABILITY

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The strength of the evidence on the impact of SE employment provided by our outcomes study is limited because it lacks a comparison group. Without information on a group of individuals who are similar to SE employees but who did not work in an SE, it is hard to say what changes in outcomes are due to the SE experience and what changes would have occurred even if individuals did not have an SE job. A comparison group is needed to provide stronger evidence of the impact of the SE. The hiring process at Chrysalis provided us with both a group of SE workers and a comparison group that did not work in the SE. At Chrysalis, individuals seeking employment assistance with the most significant barriers to employment can enter the SE labor pool. Because about one in five of these individuals were never hired, we can use them as a comparison group, generating stronger causal evidence on the impact of the SE experience. Because the comparison group was eligible to receive some of the same services as the treatment group, comparisons between these two groups allows us to understand the impact of adding **SE employment** to the set of services individuals receive from Chrysalis. In contrast, our outcomes study looked at changes over time associated with the receipt of services and SE employment.

#### Key chapter findings

The SE experience at Chrysalis may increase economic self-sufficiency and life stability:

- The confirmatory analysis suggests that employment increased by 51 percent within our most inclusive sample. This impact is somewhat smaller than the pre-post change in outcomes, but it is marginally statistically significant.
- The exploratory analysis suggests that the SE experience increased by 24 percentage points the likelihood of working continuously for six months at some point in the year after entering the SE labor pool.
- The exploratory analysis suggests that self-reported physical health increased, with a statistically significant impact.

This quasi-experimental design impact study complements the outcomes study by offering stronger internal validity at the cost of decreased external validity and sample size. It provides a more plausibly causal estimate of the impact of the SE experience than the outcomes study does, because it uses a comparison group to account for factors that influenced both treatment and comparison group members over time. For example, we would expect employment before an SE job to be especially low because of the Ashenfelter dip. But if similar dips occurred in both the treatment and comparison groups before they entered the labor pool, our comparison-group design would correct for these issues. The drawback of this approach is that the impact study estimates are relevant to a smaller group of individuals: SE employees at Chrysalis instead of SE employees at the seven organizations in the MJS outcomes study. The impact study also uses a much smaller sample size than the outcomes study. As a result, many of our estimates are imprecise. Thus, the analysis presented in this chapter must consider both the size and statistical precision of estimated effects. To achieve this objective, we use an estimate's p-value, which

tells us the likelihood that the true impact is different from zero.<sup>23</sup> If  $p < 0.05$ , we say the result is statistically significant; if  $p < 0.10$ , the result is said to be marginally statistically significant.<sup>24</sup>

Our confirmatory analysis captures the impact of the SE experience on current employment and housing stability in the year after individuals enter the Chrysalis labor pool. Our exploratory analysis captures the impact of the SE experience and several other measures of economic self-sufficiency and life stability, including total monthly income, monthly wage and salary income, the share of income from work, the share of income from government transfers, arrests, and health (physical, mental, and substance abuse). All analyses combine propensity-score methods with ordinary least squares to estimate impacts (see Appendix A for details).<sup>25</sup> As in Chapter III, we present results using regression-adjusted means, which account for differences in the characteristics and employment barriers of the treatment and comparison groups when they entered the pool. All estimates of impacts are captured roughly one year after entering the Chrysalis labor pool.

The rest of this chapter describes our impact study population and our estimated impacts of the SE experience. Section A provides greater detail on how individuals enter the labor pool at Chrysalis and become SE employees, individuals' characteristics, and services received from Chrysalis. Section B provides findings relating to the confirmatory analysis, and Section C provides results related to the exploratory analysis.

#### A. Chrysalis employment services

Chrysalis provides many services to individuals who request employment assistance. One such service is SE employment. Individuals who request employment services proceed through the organization in a predetermined manner, as depicted in Figure IV.1. They first receive an initial assessment and then move into a variety of training and counseling programs. Individuals with the highest employment barriers (as determined by a set referral and hiring process and guided by quantitative data) enter the Chrysalis labor pool (Maxwell et al. 2013).

As SE work shifts become available, members of the labor pool are offered work at the discretion of SE management. Those hired out of the labor pool form our treatment group, and those who never work at a Chrysalis SE form our comparison group. Typically, individuals not hired from the labor pool were either deemed ineligible for employment because they violated Chrysalis' sobriety requirement or left the labor pool voluntarily for another activity (including other employment). The implementation evaluation (Maxwell et al. 2013) suggests that individuals who were not hired out of the labor pool by the SE may be more ready for work, on average, than those who were hired. This is consistent with staff-reported perceptions of the process and the mission of the SE, to give employment experience to those facing the highest barriers. This likely selection of the hardest-to-employ individuals for SE employment could lead us to underestimate the effects of the SE experience.

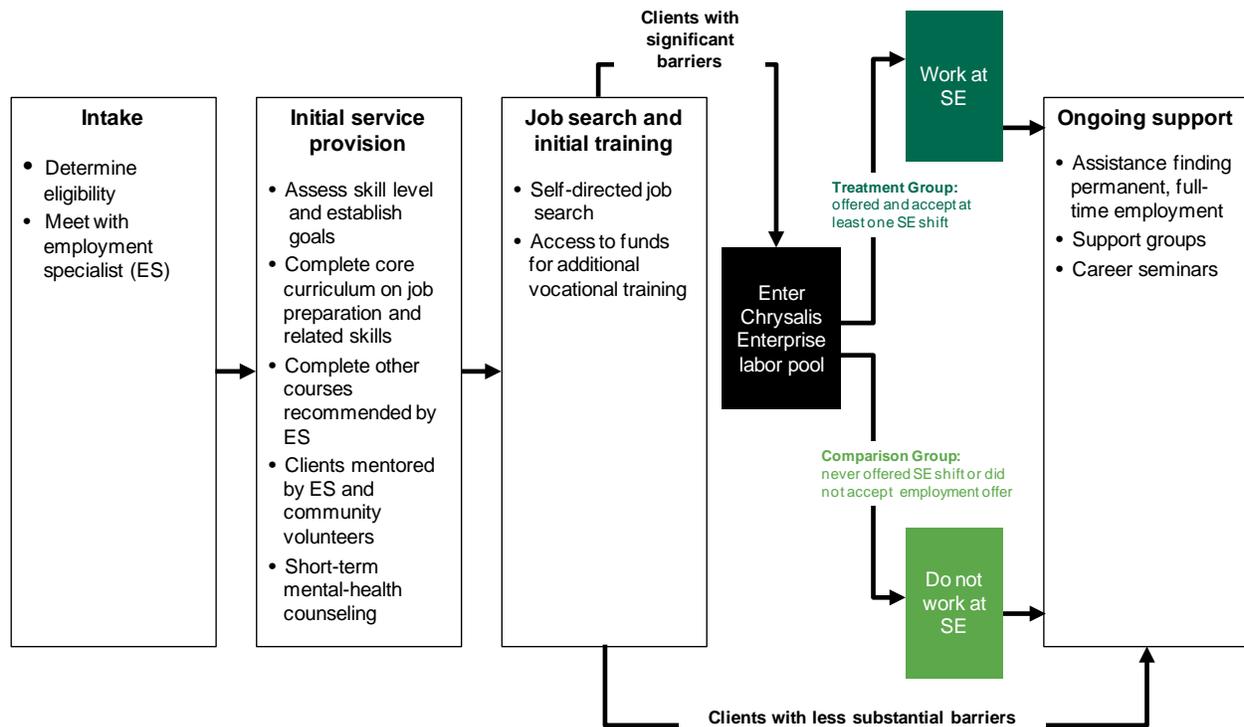
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<sup>23</sup> A p-value is based on the estimated impact and its precision (its standard error).

<sup>24</sup> Note that  $p < 0.05$  implies 95 percent confidence that the true impact estimate is not zero. Although these cutoffs provide a way to categorize the available evidence, estimates with  $p > 0.10$  should not be completely ignored, as they can still provide interesting and suggestive results.

<sup>25</sup> Ordinary least squares is more appropriate for the impact study, because we are comparing outcomes between treatment and comparison group members; we are not comparing outcomes for one individual over time.

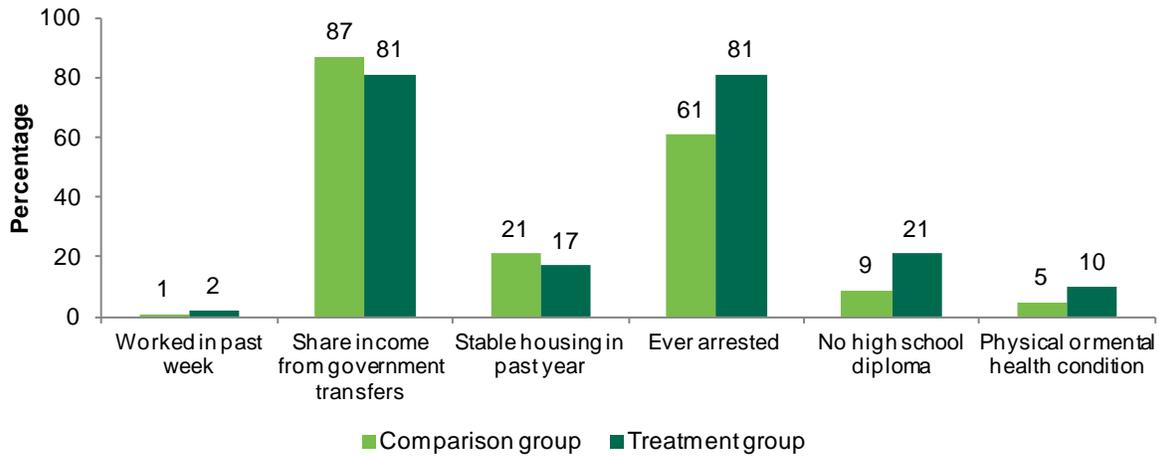
Figure IV.1. Receiving employment services at Chrysalis



Source: Maxwell et al. (2013).

Both SE workers and those in the comparison group appear to have substantial employment barriers (Figure IV.2), with no significant differences existing between the groups. This highlights the fact that individuals in the labor pool face substantial barriers to employment, with the treatment group containing even more hard-to-serve individuals than the comparison group. When they entered the Chrysalis SE labor pool, relatively few workers appeared to be economically self-sufficient. Among the treatment group, only 2 percent were employed, and 81 percent of the average individual's income came from the government. Few members of the labor pool appeared to be meeting life stability objectives. Among the treatment group, 17 percent had stable housing throughout the prior year, 81 percent had arrest records, 21 percent lacked a high school diploma, and 10 percent had a health condition impeding their ability to work. The barriers faced by those in the Chrysalis labor pool were similar to those faced by individuals served by other organizations in REDF's SIF portfolio; although they tended to have lower earnings, were more likely to be black and less likely to be white, and were older (Maxwell et al. 2013).

Figure IV.2. Profile of individuals entering the Chrysalis labor pool (propensity-score weighted percentages)

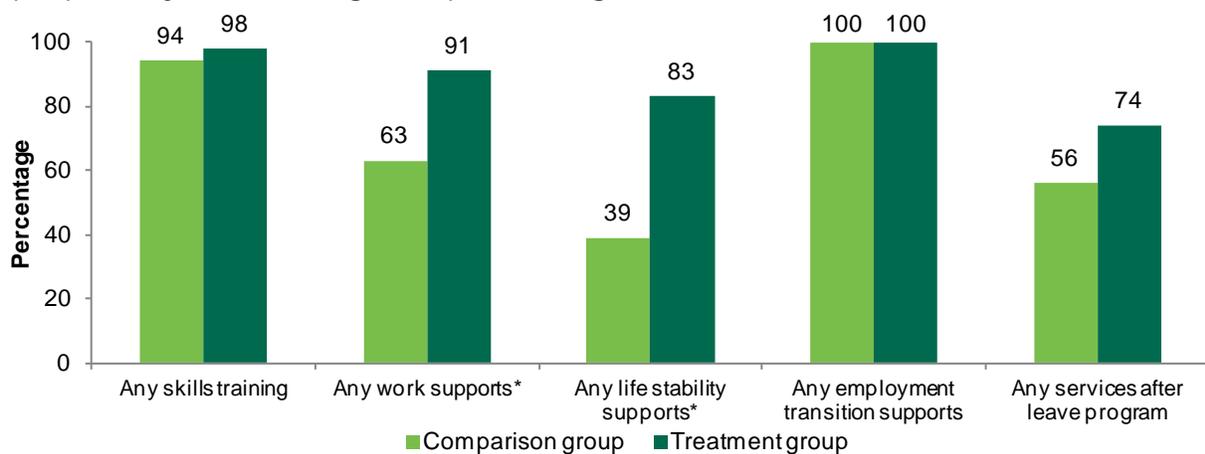


Source: MJS database, full propensity-score sample.

Note: Propensity-score-weighted percentages. *Stable housing* in past year is defined as an individual using only his or her own owned or rented home as housing in the year before entering the labor pool. None of the above differences is statistically significant at the  $p = 0.05$  level.

Because Chrysalis provides employment and life stability supports to all clients, members of the treatment and comparison groups received many of the same services (Figure IV.3).<sup>26</sup> Almost all individuals in both groups received skills training and employment transition supports; a statistically significant greater percentage of the treatment than the comparison group received work supports (91 versus 63 percent) and help in stabilizing their lives (83 versus 39 percent).

Figure IV.3. Services provided to treatment and control group members (propensity-score weighted percentages)



Source: MJS database, noninstitutional propensity-score sample

Note: Propensity-score-weighted percentages.

<sup>26</sup> We did not distinguish in our survey between services received from the host organization or the SE.

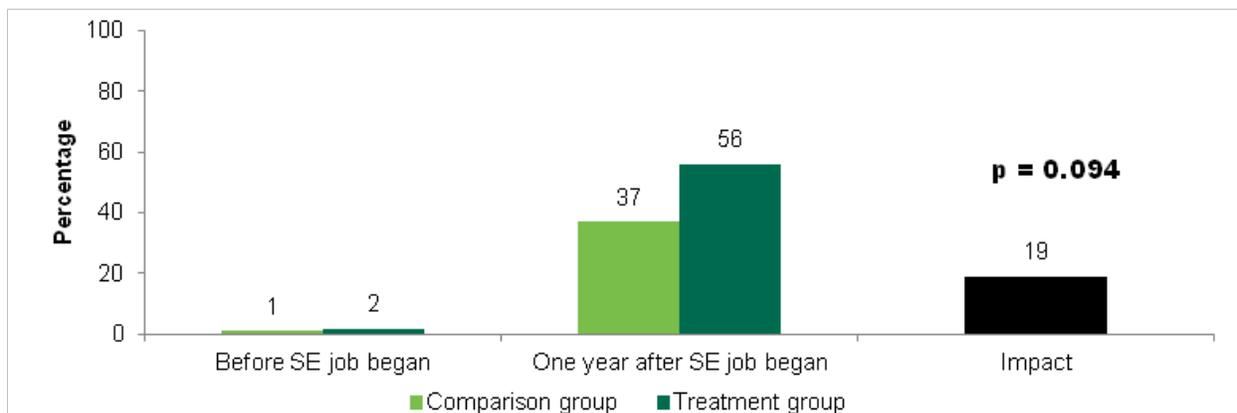
\* Treatment and comparison group significantly different at the  $p \leq 0.05$  level, two-tailed test.

## B. Impact of SE on employment and housing: confirmatory analysis

The confirmatory analysis, around which the quasi-experimental design was designed, focuses on whether the SE experience increased current employment or housing stability in the past year as previously noted in the outcomes study. Because of the small sample size and examination of a single SE, we should view the results of the impact study in conjunction with results from the outcomes study. The analyses complement each other, allowing us to be more confident in our overall conclusions.

Indeed, our impact analysis supports the conclusion in the outcomes study that SE employment can improve economic self-sufficiency, as SE employees are more likely to be employed one year after entering the Chrysalis labor pool than those who were not hired by Chrysalis (Figure IV.4). Both the treatment and the comparison group had large increases in employment between the time individuals entered the labor pool and one year later: fewer than 2 percent of individuals in both groups worked the week prior to entering the labor pool and the regression-adjusted employment rates stood at 56 percent for the treatment and 37 percent for the comparison group one year later. The 19 percentage point increase in employment one year after hire for SE workers as compared to the comparison group is large and substantively significant; however, the p-value is only 0.094, implying that the difference is only marginally statistically significant, likely because of our small sample.

Figure IV.4. Impact of the SE experience on current employment (propensity-weighted percentages)



Source: MJS database, full propensity-score sample. Appendix D, Table D.16 for multivariate analysis.

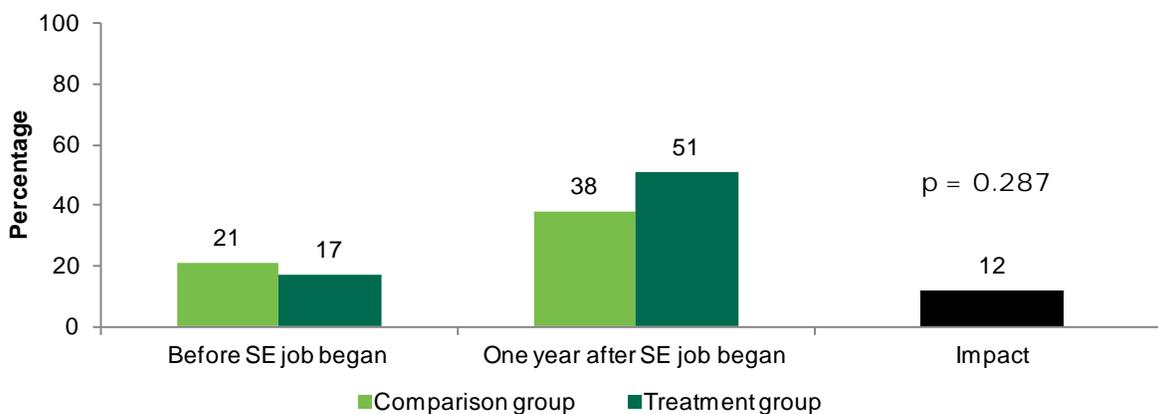
Note: Propensity-score-weighted percentages reported at entry into the labor pool; propensity-score-weighted, regression-adjusted percentages reported one year later. Impact shows the estimated coefficient from regression analysis.

Impacts were smaller and not significant for increases in housing stability (Figure IV.5).<sup>27</sup> We find that housing becomes more stable for individuals in both the treatment and comparison

<sup>27</sup> The results of the outcomes and impact studies may differ for at least three reasons. First, the outcomes study may be subject to biases not present in the impact study. Second, employment at Chrysalis may impact individuals' lives differently than employment at the average SE in REDF's portfolio. Finally, our outcomes study compares

groups and that the SE experience did not lead to significantly larger gains. The percentage in stable housing increased from 17 to 51 percent for the treatment group and from 21 to 38 percent for the comparison group (estimates at one year are regression-adjusted means). Although we estimate that the SE experience led to a 12 percentage point (32 percent) increase in stable housing, the difference is not statistically significant.

Figure IV.5. Impact of the SE experience on stable housing (propensity-weighted percentages)



Source: MJS database, full propensity-score sample. Appendix D, Table D.17 for multivariate analysis.

Note: Propensity-score-weighted percentages reported at entry into the labor pool; propensity-score-weighted, regression-adjusted percentages reported one year later. Impact shows the estimated coefficient from regression analysis.

### C. Impact of SE on self-sufficiency and life stability: exploratory analysis

The MJS database contains a plethora of measures that allow us to explore in greater depth whether the SE experience impacts economic self-sufficiency and life stability. For this analysis, we use the same measures of self-sufficiency and life stability as we did in the outcomes study (Chapter III) and typically use the noninstitutional propensity-score sample, because the follow-up survey provided the additional measures to assess differences between treatment and comparison groups about one year after they entered the Chrysalis SE labor pool.

#### 1. Economic self-sufficiency

We use two gauges of economic self-sufficiency: employment and income. The measures of employment suggest positive impacts of the SE experience (Table IV.1). SE employees were 24 percentage points (59 percent) more likely to have worked continuously for six months at some point in the year after entering the SE labor pool, with the difference being statistically significant ( $p = 0.045$ ). They also spent a greater proportion of the time after labor pool entry working: an SE worker spent 66 percent of the year after entering the SE labor pool working,

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individuals before and after they entered SE employment and received a range of services, whereas our impact study isolates the changes in outcomes associated with SE employment alone.

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compared with 47 percent for those not employed in the SE ( $p = 0.079$  for the difference). The SE experience did not have a statistically significant impact on any measure of income.<sup>28</sup>

Table IV.1. The SE experience and self-sufficiency (propensity-score weighted percentages, except where noted)

Outcome	Outcomes one year after entering labor pool		Estimated impact of the SE experience	
	Comparison	Treatment	Impact	p-value
<b>Employment</b>				
Worked continuously for six months in past year	41	66	24	0.045
Share of past year spent employed	47	66	19	0.079
<b>Income</b>				
Total monthly income	\$1,173	\$1,032	-\$141	0.500
Share of income from work	61	67	5	0.704
Share of income from government	40	24	-16	0.151

Source: MJS database, noninstitutional propensity-score sample, Appendix D, Table D.16 for estimated impact.

Note: Numbers show the propensity-score-weighted, regression-adjusted percentages for outcomes about one year after entering the labor pool, the impact estimated from the regression analysis, and the p-value associated with the impact estimate.

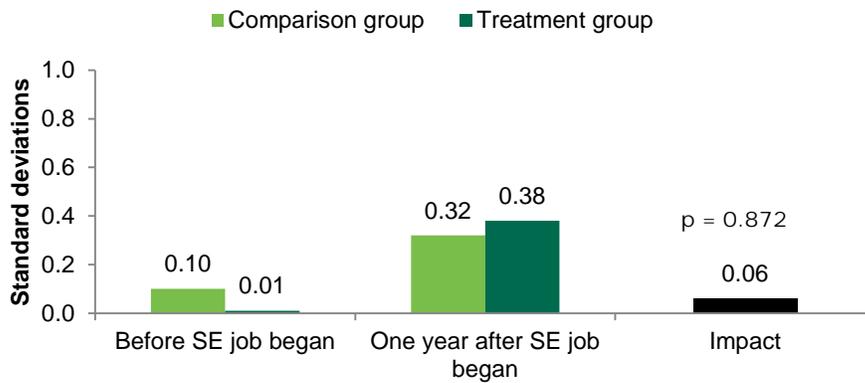
## 2. Life stability

We also examined the impact of the SE experience on life stability using the same five gauges of life stability as in the outcomes study: (1) housing, (2) recidivism (full sample only), (3) physical health, (4) mental health, and (5) substance abuse (Figure IV.6). We found that the SE experience did not impact homelessness, arrest rates, participation in substance abuse counseling, or mental health. However, we did find that the SE experience was associated with increases in self-reported physical health. Adjusting for characteristics at labor pool entry, 29 percent of the treatment and 11 percent of the comparison group reported excellent physical health one year after entering the SE labor pool, a difference that is statistically significant ( $p = 0.024$ ).

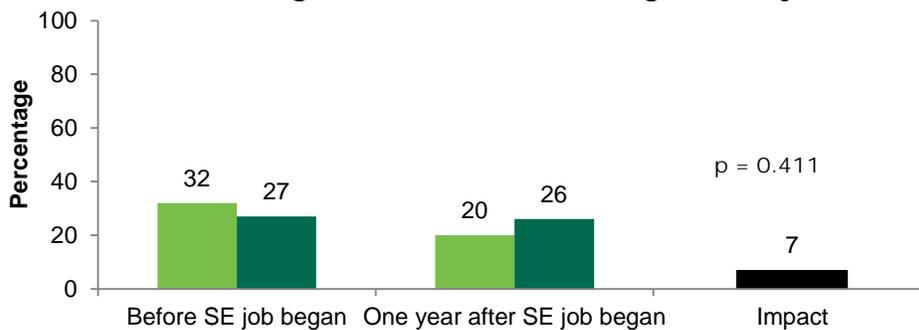
<sup>28</sup> It is standard in the literature to take the natural log of income in regressions, where this value is the dependent variable of interest. As income can be zero, and  $\ln(0)$  is undefined, we explored several transformations of our income measure. Our results were sensitive to the specification of the income regression (that is, whether we used income,  $\ln(\text{income})$ ,  $\ln(\text{income} + 1)$ , or  $\ln(\text{income} + 0.01)$  as our dependent variable of interest). However, results were similarly insignificant and imprecise across a variety of specifications.

Figure IV.6. The SE experience and health (propensity-scored percentages, except where noted)

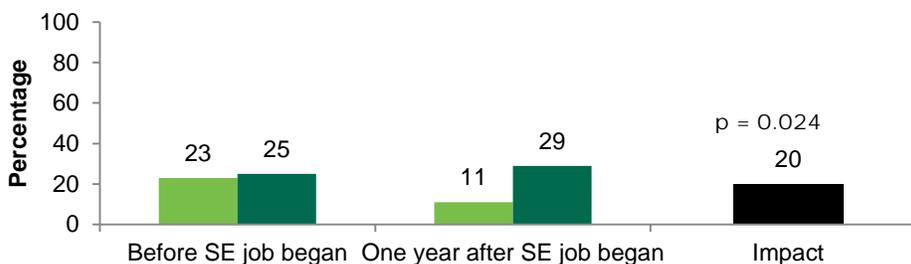
A. Depression index



B. Percent in drug or alcohol counseling in last year



C. Percent reporting excellent health



Source: MJS database, noninstitutional propensity-score sample, Appendix D, Table D.19 for impact estimates.

Note: Propensity-score-weighted percentages reported at entry into the labor pool; propensity-score-weighted, regression-adjusted percentages reported one year later. Impact shows the estimated coefficient from regression analysis. The *depression index* is an inventory of feelings indicative of clinical depression in the past week. It was normalized to have a mean of zero and standard deviation of one at time of hire. Scale reported in units of standard deviation.

## V. COSTS AND BENEFITS OF THE SE EXPERIENCE

Our CBA provides additional context for interpreting the results from the outcomes and impacts studies. Although both of these studies help us understand how individuals' lives changed during and after SE employment, the CBA examines the relative efficiency of SEs by comparing the outcomes and impacts of SE employment (found in Chapters III and IV) with the costs of operating an SE. This chapter presents two measures of the ROIs of SEs. The main analysis compares the business and social costs of operating an SE to its business and social benefits and builds an understanding of the overall returns of operating an SE. A secondary analysis focuses on estimating the ROI to converting a preexisting business into an SE by analyzing the social element of SE operations while ignoring the business element of the SE.<sup>29</sup>

By allowing us to assess whether the benefits of SE employment outweigh its costs, we can examine whether SEs are an efficient way to improve the lives of individuals, rather than simply assessing whether they do improve lives. We conducted two CBAs to assess this efficiency: (1) an outcomes study CBA and (2) an impact study CBA. Because the impact study CBA is based on stronger causal evidence, it provides a more plausible estimate of the benefits of SE jobs per dollar spent by these programs. Because the outcomes study CBA is based on data from a larger number of SEs, it provides estimates of benefits per dollar spent for a larger group of SEs.

### Key chapter findings

- **SEs in REDF's portfolio have benefits that outweigh their costs.** ROIs of 123 percent (outcomes study) or 34 percent (impact study) are as large as or larger than those associated with a number of similar programs.
- **Public funders have an incentive to support the SE.** The average dollar spent by an SE generated \$1.31 (implied by the outcomes study) or \$0.42 (implied by the impact study) in benefits to taxpayers. The nonbusiness benefits of SE employment far outweigh nonbusiness costs.
- **SE workers incur small financial losses from SE employment.** After SE employment, they earn more and have enhanced life stability, but these gains do not exceed losses from reduced government transfers and increased expenditures on housing in the year after starting the SE job.
- **The SEs as enterprises roughly break even.** For each dollar it spends, the SE receives, on average, \$0.97 in revenues.

The CBA explores the value of the average dollar spent by the SEs over the period analyzed from four perspectives: (1) society as a whole (the total benefits of the SE's expenditures), (2) SE workers (benefits to individuals served by the SE's social mission), (3) the SE itself (as a business venture), and (4) taxpayers not directly involved with SE (benefits to the community, excluding those directly benefiting from the SE).<sup>30</sup> SE workers may benefit from the SE experience as their lives stabilize and they gain economic self-sufficiency. The SE itself benefits based on the revenues it makes from selling goods and services in the market and the subsidies it receives in support of its social mission. Taxpayers (excluding SE workers, their friends, and their families) can also benefit from the SE: as individuals become more economically self-

<sup>29</sup> All details on the CBA calculations can be found in Appendix B.

<sup>30</sup> We do not explicitly discuss benefits of SE employment to the friends and relatives of SE employees; however, we account for these changes when calculating the total benefit of SE employment to society as a whole.

sufficient, they pay more in taxes and receive fewer government transfers, implying cost savings for the government, which are in turn passed on to citizens (either in the form of lower taxes or increases in other services provided). Our measure of benefits to society as a whole combines the benefits accruing to all three parties, as well as those enjoyed by the friends and relatives of SE workers (included to capture any changes in income received by SE workers from these individuals).

The benefits and costs that accrue to each of these parties differ. Indeed, a benefit to one party often comes at a cost to another. Table V.1 shows, for each benefit measure, whether we expect the SE to increase (+), reduce (−), or have no impact (0) on benefits to a particular party. For each cost measure, it shows whether we expect a specific party to bear a cost (+) or not (0) for providing the SE experience. A question mark (?) indicates that we cannot anticipate how the SE will affect the benefit or cost. These directions of the anticipated benefits and costs are based on the assumption that the SE increases self-sufficiency and helps stabilize the lives of its workers. These outcomes would lead us to expect, in the income domain, workers' earnings to increase, the money (including housing) they receive from the government to decrease, and the transfers they get from friends and relatives to decrease. The total net benefit to workers is ambiguous because their earnings gains could be offset by reductions in government benefits and decreased monetary or other support from friends and relatives. That is, improved self-sufficiency requires an individuals to spend their own earned money instead of receiving monies from the government, which could produce net monetary losses. Similarly, for taxpayers not directly involved with the SE, the net benefit is ambiguous. Although we anticipate that taxpayers will gain because SE workers pay higher taxes and receive fewer benefits after SE employment, taxpayers also provide subsidies to the SE, thus decreasing the net benefit of SEs to taxpayers. Net benefits to the SE itself will be positive if total revenues exceed total costs; otherwise, they will be negative. Finally, if the sum of all benefits exceeds the total costs of operating an SE, society as a whole gains from SE employment.

The CBA also considers whether providing funds to SEs is efficient from the perspective of a policymaker focused only on the social benefits and costs of the SE experience. This additional analysis ignores the costs that SEs incur and the revenues they accrue that are related to providing goods or services. The exercise allows us to assess whether the benefits of adding a social mission to a business outweigh the associated costs.

Table V.1. Anticipated costs and benefits associated with the SE

Variable	Society as a whole	SE worker	SE as an enterprise	Taxpayers not directly involved with SE	Friends and relatives of SE workers
<b>Total benefits</b>	?	?	+	?	+
+: Benefits will increase as a result of changes in variable					
-: Benefits will decrease as a result of changes in variable					
?: Benefits may increase or decrease as a result of changes in variable					
<b>Income</b>					
Work	+	+	0	0	0
Taxes and government transfers	0	-	0	+	0
Other income	0	-	0	0	+
<b>Housing</b>					
Amount paid for housing	?	-	0	+	0
Quality of life	+	+	0	0	0
Criminal activity	+	0	0	+	0
<b>Health</b>					
Overall health	+	+	0	0	0
Substance abuse	+	+	0	0	0
<b>SE revenues</b>					
Business revenues	+	0	+	0	0
Grant money	0	0	+	-	0
<b>Total costs</b>	<b>+</b>	<b>0</b>	<b>+</b>	<b>0</b>	<b>0</b>
+: Costs are positive for these entities					
Costs associated with business mission	+	0	+	0	0
Costs associated with social mission	+	0	+	0	0
<b>Net present value</b>	?	?	?	?	+
+: Positive net present value					
?: Net present value cannot be predicted					

Notes: Table shows the anticipated benefits and costs of the SE experience assuming it builds self-sufficiency and stabilizes lives. See Appendix B for details on the assumed beneficiaries within each domain.

The CBA uses the estimates discussed in Chapters III and IV to measure the benefits of the SE. For the outcomes study, we use our fixed-effects specifications to quantify changes in outcomes over time with the average, regression-adjusted change from these specifications serving as our measures of benefits. For the impact study, we use the estimated effect of the SE experience as our measure of benefits. Where available, we use estimates from the full sample; otherwise, we use estimates based on the noninstitutional sample. We capture benefits in five domains: (1) income (changes in wage and salary income, government taxes and transfers, and other income), (2) housing (the cost of housing and a quality of life index based on an individual's housing status), (3) criminal activity (arrest rate), (4) health (self-assessed health status and participation in substance abuse counseling), and (5) revenue (financial information provided by REDF).

Our measures of costs reflect the perspective of the SE as an organization and include measures of both parts of its double bottom line: the costs associated with providing goods and services in the market (business mission) and with helping the target population (social mission).

We define its costs as those faced by the SE and treat subsidies to it as a benefit for the SE and an offsetting negative benefit for taxpayers. Note that the differences between a cost and a benefit are somewhat arbitrary, and many negative benefits could be reframed as costs. For this study, costs are outlays by the SE or host organization on behalf of the SE. Benefits include all other changes associated with the SE job, which isolates costs as those occurring from the perspective of the SE. We systematically transformed both benefits and costs into present value dollars per employee served, taking into account time preferences and standardizing both into per employee units.<sup>31</sup> Appendix B provides a full description of this process.

Although the CBA results shed light on the costs and benefits of the SE experience, they should be interpreted cautiously. Many assumptions were required to generate the measures of benefits per dollar spent. Additionally, our measures of benefits are limited in several ways. We use only five domains and a subset of the possible constructs within those domains to measure benefits. Furthermore, our benefits are based on our outcomes and impact studies, which have their own limitations (see Appendix A). Our measures of costs also suffer from potential biases. Cost measures that vary based on the phase of SE development may omit important elements not recorded on balance sheets and may be subject to reporting errors, misclassification errors, or other accounting issues (see Appendix B for a more detailed discussion). Because our estimates of benefits and costs required many assumptions, we explored how our estimates changed when we varied our assumptions regarding how we translated outcomes and impacts to benefits, how we discounted different values to account for time preference, and how benefits evolved from the start of our study onward. These analyses are detailed in Appendix B and suggest that our broad findings hold under a variety of modeling choices.

The rest of this chapter provides details on the results of each component of the CBA and an assessment of the benefits generated by the SE per dollar spent on these programs. Section A provides an overview of our benefit estimates, and Section B describes the costs per worker of providing the SE experience. In Section C, we combine these elements to estimate the ROI in the SE and the benefits to various parties per dollar spent.

#### A. Benefits of the SE experience

Results from both the outcomes and impact CBAs suggest that SEs (particularly those that are large and developed) generate benefits for society as a whole, although SE workers themselves actually incur small losses (Figure V.1). The outcomes study CBA suggests that every employee hired by the SE creates a benefit worth, on average, \$22,632 to society as a whole, \$13,250 to taxpayers not directly involved with the SE, and \$9,822 to the SE itself.<sup>32</sup> Benefits are negative (-\$165) for SE workers. The negative benefit occurs even though, as Chapters III and IV show, SE employees gain in many ways from their experience. It is simply the case that monetary losses associated with decreased government transfers and increased outlays on housing (the costs of improved self-sufficiency) are not fully offset by increases in wage and salary income and other benefits. Also note that we exclude from this analysis any

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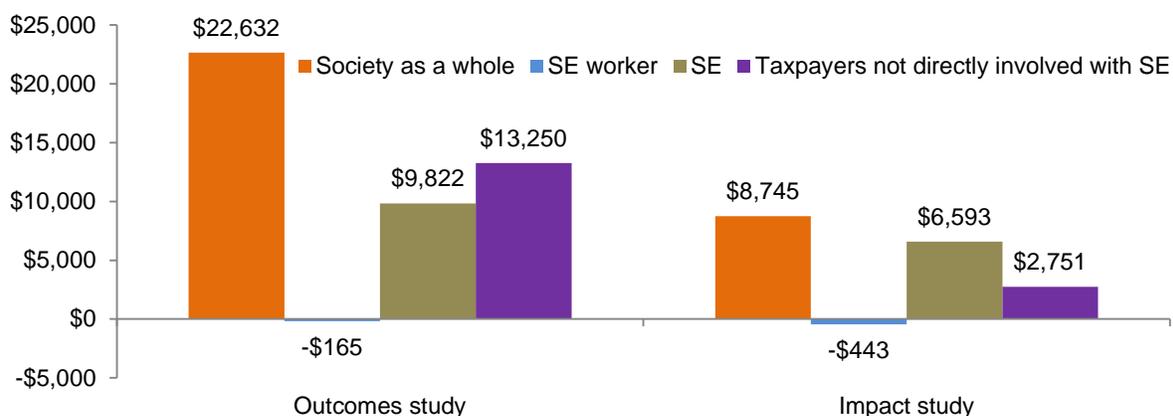
<sup>31</sup> Benefits reaped in subsequent years were discounted using an 8 percent interest rate, so they could be compared with costs incurred earlier to derive net present values.

<sup>32</sup> We assume that all benefits of SE employment have been realized by one year after individuals began their SE job or entered the Chrysalis labor pool. See Appendix B for details.

benefits of the SE experience that we cannot convert into monetary quantities. For example, although we include income changes, we cannot include in our analysis other benefits related to the increases in employment in the year after the SE job began. If employment leads individuals to assess themselves as happier (or less happy), it will lead us to underestimate (or overestimate) the benefits of SE employment.

The impact study CBA suggests that the benefits of the SE employment are somewhat smaller than estimated in the outcomes study (because the estimated impacts of SE employment reported in Chapter IV are smaller than those implied by the pre-post changes in outcomes reported in Chapter III). When the benefits and costs are monetized and summed, employment for one SE worker at Chrysalis produces, on average, \$8,745 in benefits to society as a whole, \$6,593 in benefits to SEs, \$2,751 in benefits to taxpayers not directly involved with the SE, and losses of \$443 for workers. Three factors might cause differences in benefits across the outcomes and impact studies. First, benefits in the outcomes study might be overestimated, perhaps because of the Ashenfelter dip (discussed in Chapter III), or because of another factor that would have led outcomes to improve in the absence of SE employment. Second, Chrysalis, the only SE in the impact study, could produce smaller benefits than other SEs. This difference might relate to differences in the population served by the SE or differences in the program itself.<sup>33</sup> Finally, note that benefit calculations for the outcomes study are based on changes associated with the full set of services provided by the SE and host organization, whereas our impact study CBA estimates benefits are based on changes derived from only the SE employment experience.

Figure V.1. Monetary value of benefits per SE employee served (dollars)



Source: MJS database and cost capture project, Appendix B, Table B.4.

Note: For the outcomes study, estimated benefits use the full sample (stable housing, work income) or noninstitutional sample (all other benefits), excluding Buckelew. For the impact study, estimated benefits use the full propensity-score sample (stable housing, work income) or noninstitutional propensity-score sample (all other benefits). Benefits of SE employment to the friends and relatives of SE workers are excluded from this graph but are included in benefits to society as a whole.

<sup>33</sup> Both of the first two factors may be at play. The pre-post change in employment at Chrysalis is larger than the effect estimated in the impact study, and pre-post estimates for Chrysalis tend to be slightly smaller than those for all SEs combined. Appendix B provides SE-specific measures of costs and benefits from the outcomes study.

To explore the source of the losses incurred by SE workers, Table V.2 tabulates the costs and benefits of the SE experience by domain. In both the outcomes and impact studies, housing is the force that drives losses for SE workers. Both the outcomes and impact studies imply housing stability increases with SE employment. Although our calculation of benefits accounts for the improved quality of life associated with this change, it also accounts for the associated increase in the amount individuals pay for housing, which drives the net losses they incur (see Appendix B for details). That is, improved self-sufficiency requires an individual to spend more of his or her money on housing, which is largely responsible for the net losses.

Table V.2. Benefits associated with the SE experience by domain (dollars)

Variable	Benefit to society as a whole	Benefit to SE worker	Benefit to SE	Benefit to taxpayers not directly involved with SE
<b>Outcomes study</b>				
Income	\$6,254	\$3,774	\$0	\$2,755
Work	6,254	6,254	0	0
Government transfers	0	-2,755	0	2,755
Transfers from others	0	275	0	0
Stable housing	612	-3,070	0	3,682
Criminal activity	10,126	0	0	10,126
Health	-869	-869	0	0
SE revenues	6,509	0	9,822	-3,313
<b>Impact study</b>				
Income	\$1,257	-\$235	\$0	\$1,647
Work	1,257	1,257	0	0
Government transfers	0	-1,647	0	1,647
Transfers from others	0	155	0	0
Stable housing	75	-1,332	0	1,407
Criminal activity	503	0	0	503
Health	1,125	1,125	0	0
SE revenues	5,786	0	6,593	-807

Source: MJS database and cost capture project, Appendix B, Table B.4.

Note: For the outcomes study, estimated benefits use the full sample (stable housing, work income) or non-institutional sample (all other benefits), excluding Buckelew. For the impact study, estimated benefits use the full propensity-score sample (stable housing, work income) or noninstitutional propensity-score sample (all other benefits). Benefits of SE employment to the friends and relatives of SE workers are excluded.

Notable variation in benefits across SEs (Table V.3) suggests the enterprises' values may vary across all organizations. Because some organizations contributed very few individuals to our samples (in particular, Taller and Weingart), SE-specific estimates should be interpreted with caution, as they are estimated less precisely. Nevertheless, this variation may reveal important differences in benefits across SE models. The largest benefits accrue from the SEs run by Taller and Weingart, each of which generates more than \$45,000 in benefits per employee hired. But even ignoring the smallest SEs, we see substantial variation. CHP generates the largest benefit among the larger SEs, creating benefits worth \$36,378 per employee served. The benefits to society as a whole produced by the SE at CEO are the smallest, at \$18,195 per employee.

Table V.3. Total benefits per employee at each SE (outcomes study, dollars)

Social enterprise	Benefit to society as a whole	Benefit to SE worker	Benefit to SE	Benefit to taxpayers not directly involved with SE
CEO	\$18,195	\$1,684	\$8,052	\$9,171
Chrysalis	21,871	-206	6,593	15,473
CHP	36,378	11,449	7,465	17,577
CRC	20,883	-4,823	18,801	7,111
Taller	65,780	6,994	73,947	-15,578
Weingart	46,042	27,293	41,245	-10,751

Source: MJS database and cost capture project, Appendix B, Table B.4.

Note: For the outcomes study, estimated benefits use the full sample (stable housing, work income) or non-institutional sample (all other benefits), excluding Buckelew. For the impact study, estimated benefits use the full propensity-score sample (stable housing, work income) or noninstitutional propensity-score sample (all other benefits). Benefits of SE employment to the friends and relatives of SE workers are excluded.

CEO = Center for Employment Opportunities; CHP = Community Housing Partnership; CRC = Community Resource Center; Taller = Taller San Jose; Weingart = Weingart Center for the Homeless.

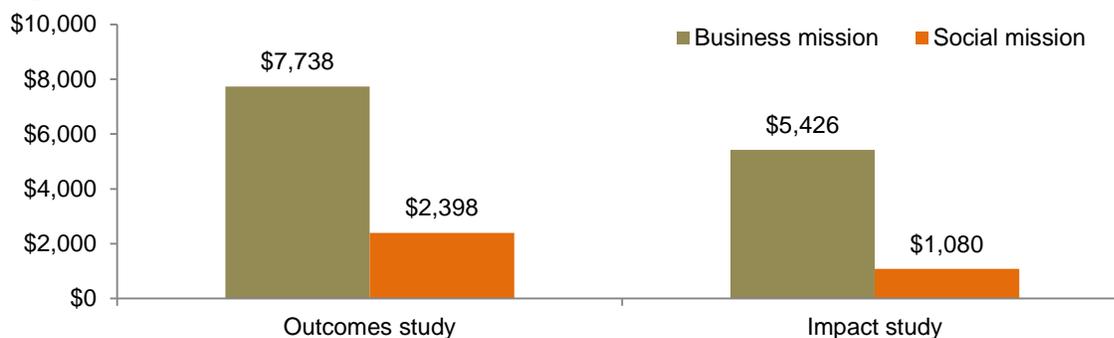
The benefits of the SE experience accruing to SE workers, the SE, and taxpayers not directly involved with the SE also vary substantially by SE. For example, whereas CHP produced an \$11,449 benefit to workers, employees at CRC lost \$4,823 when they worked in that SE. Taxpayers gained the most per employee from the SEs hosted by Chrysalis and CHP, each generating more than \$10,000 in benefits per employee. The smaller SEs (at Taller and Weingart) generated losses for taxpayers (that is, the benefits produced exceeded grant money paid to the organizations), possibly because they are less mature than other SEs. Some SEs appear to produce proportionally more benefits for SE workers, and others tend to produce larger benefits for the SE itself. The SE experience will benefit different groups based on the associated changes across domains. For example, SEs leading to larger changes in housing and smaller changes in work income will produce larger gains for taxpayers but smaller gains for employees.

## B. Costs of the SE experience

SEs face costs in fulfilling both their business and the social missions. Across all SEs in the outcomes study CBA, the total cost of running an SE was approximately \$10,136 per employee hired (Figure V.2). These costs were primarily directed toward business activities, with \$7,738 per employee funding business expenses, such as capital and materials. SEs spent an additional \$2,398 per employee fulfilling their social missions, including money spent on work and life supports provided to employees, and other costs SEs would not face if they did not try to employ individuals with substantial barriers (for example, training).<sup>34</sup> Costs were somewhat lower for Chrysalis, the impact study site. Chrysalis spent \$6,506 per employee in total, with \$1,080 per employee funding the SE's social mission. This difference is likely due, at least in part, to the fact that Chrysalis' SEs are relatively well established. These businesses, established in the 1990s, did not have to pay many of the start-up costs faced by the newer SEs.

<sup>34</sup> Although SEs may pay their workers more than what they would have been paid by other firms, we categorize wages as expenses associated with SEs' business mission, rather than their social mission, unless a firm specifically imputed in its income statements the extra cost paid to workers associated with an SE's social mission.

Figure V.2. SE costs (dollars)



Source: MJS database, cost capture project data and employee counts. Appendix B, Table B.1.

Per-employee costs vary substantially across the organizations in our study (Table V.4). Total costs ranged from \$7,477 to \$81,624 per employee, with CEO, Chrysalis, and CHP having relatively low costs, and CRC, Taller, and Weingart having higher costs. Business costs accounted for most of the dispersion, ranging from \$74,446 per employee at Taller to \$4,631 at CEO. Social costs varied less widely in an absolute sense. CHP spent the least on its social mission (\$621 per employee), and Weingart spent the most (\$13,726). The share of costs attributable to the SE's social mission also varied greatly, from 9 percent at Taller to 50 percent at CRC. This variation is due to the services received by SE employees provided both by the SE and the host organization that are unavailable to those who are not SE workers. If host organizations provide many services to all of their clients (SE workers and non-SE workers alike), it may drive down the social costs of the SE.

Several other factors might explain why costs vary across SEs. First, we captured costs over a limited period of time (18 months), which could imply differences in the types of costs captured. For example, costs in some organizations may contain development or one-time expenses (such as opening or closing a business line or moving to a transitional employment model) accruing during our time frame. Second, costs will differ with different business and service delivery models. For example, the average length of SE employment ranged from 3.2 months at CEO to 7.6 months at Weingart (Appendix B, Table B.1), and per-employee costs may vary with program length. Further, because business models and industries differ, some SEs bear higher training costs as they train workers for more highly skilled occupations or bear higher business expenses from higher operating costs (Maxwell et al. 2013).

Table V.4. Per-employee SE costs (outcomes study, dollars)

Organization	Per-employee costs		
	Total	Business mission	Social mission
CEO	\$8,049	\$4,631	\$3,417
Chrysalis	6,506	5,426	1,080
CHP	7,477	6,855	621
CRC	19,913	9,923	9,990
Taller	81,624	74,446	7,177
Weingart	48,731	35,006	13,726

Source: MJS database, cost capture project data and employee counts, Appendix B, Table B.1.

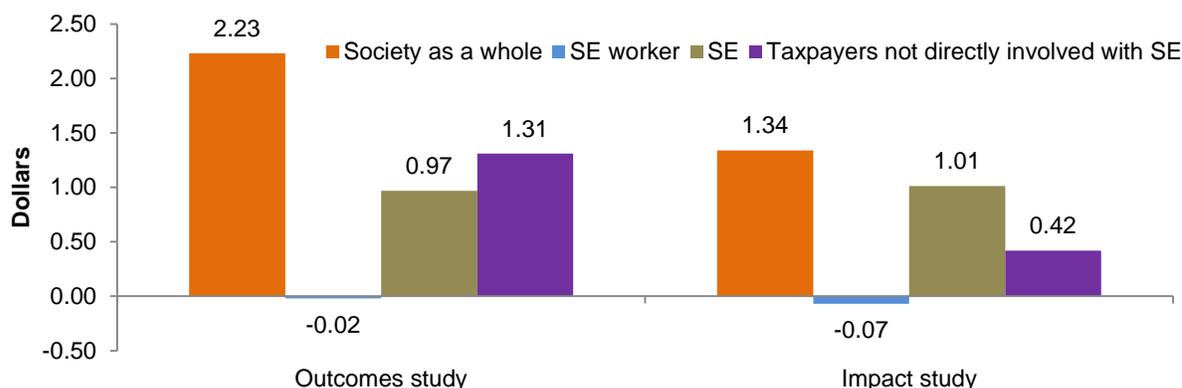
CEO = Center for Employment Opportunities; CHP = Community Housing Partnership; CRC = Community Resource Center; Taller = Taller San Jose; Weingart = Weingart Center for the Homeless.

### C. Putting the benefits and costs of the SE experience in context

Our measures of benefits per dollar spent by the SEs allow us to examine the value of SE investments to each party. These per-dollar benefits are calculated by dividing the total benefit of the SE experience to a specific party by the cost per employee (spent by the SE). We also estimate the ROI of the SE experience to society as a whole (the percentage return on investment in the SE). These transformations of benefits and costs lead to the following results from the outcomes study (Figure V.3):

- **Society as a whole sees a positive ROI.** Each dollar spent by the SE produces benefits worth \$2.23 for society as a whole. This production implies a return on investment of 123 percent, or that each dollar the SE spends produces benefits that offset the SE's initial expenditure, as well as an additional \$1.23 of gains.
- **Costs slightly exceed benefits to the average SE.** The typical SE in the outcomes study suffers a small monetary loss. For each dollar it spends, it receives \$0.97 in revenues, implying that revenues are 3 percent smaller than costs (or that profit is -3 percent).
- **Dollars spent on SE workers produce negative benefits.** Consistent with the negative estimated benefit, the average dollar spent by the SE does not create a monetary benefit for workers. Each dollar spent by the SE is associated with a loss to workers of \$0.02. This occurs because although the earned income of SE workers rises, the workers face cuts in government transfers and increased housing costs.
- **Taxpayers enjoy substantial gains from SE expenditures.** Taxpayers not directly involved with the SE gain benefits worth \$1.31 for every dollar spent by the SE, meaning that every dollar spent by the SE eases taxpayer burden by \$1.31. Taxpayer gains stem primarily from benefits associated with decreases in criminal activity and government transfers (Appendix Table B.5).

Figure V.3. Benefits per dollar spent (dollars)



Source: MJS database and cost capture project, Appendix B, Table B.4.

Note: For the outcomes study, estimated benefits use the full sample (stable housing, work income) or noninstitutional sample (all other benefits), excluding Buckelew. For the impact study, estimated benefits use the full propensity-score sample (stable housing, work income) or noninstitutional propensity-score sample (all other benefits). Benefits of SE employment to the friends and relatives of SE workers are excluded from this graph but are included in benefits to society as a whole.

These aggregated estimates mask the substantial heterogeneity in the overall ROI and benefits per dollar spent across SEs (Table V.4). Some SEs did not generate value for society as a whole, whereas others did. The lowest measure of benefits per dollar spent, for Taller, was only 0.81, suggesting each dollar spent only created \$0.81 in benefits. This value corresponds to an ROI of -19 percent, or a 19 percent loss to society on investments made by the SE. Even though Taller produced the highest total benefits per employee (\$65,780, see Table V.2), it had the highest costs (\$81,624, Table V.4), leading to its low ROI. Conversely, the highest ROI was 387 percent at CHP, implying each dollar spent created \$3.87 in benefits over the initial expenditure. This organization had both above-average benefits per employee (\$36,378, see Table V.2) and the second-lowest costs of all the SEs (\$7,477 per employee, see Table V.4).

The per-dollar benefits for the SE, workers, and taxpayers not directly involved with the SE also varied across SEs. Half of the SEs, in particular those that were older or larger, made a small financial profit or broke even, whereas others faced substantial losses despite hefty subsidies (Appendix B). Per-dollar benefits to workers and taxpayers varied far more than per-dollar benefits to SEs. Per-dollar benefits for SE workers ranged from -\$0.24 at CRC to \$1.53 at CHP (Table V.5). Similarly, taxpayers did not benefit on net from expenditures by Taller and Weingart but gained more than \$1.00 for every dollar spent by Chrysalis, CEO, and CHP. Although this variation is quite large, some of it likely stems from our small sample sizes. Estimates for all organizations are based on a small number of SE workers; this problem is particularly relevant for CRC, Taller, and Weingart. Therefore, measures of benefits per dollar spent by SE should be interpreted with particular caution.

Table V.5. Benefits per dollar spent by SE (outcomes study, dollars except where noted)

Organization	Benefits per dollar spent by group			
	Society as a whole (ROI)	SE workers	SE	Taxpayers not directly involved with SE
CEO	\$2.26 (126%)	\$0.21	\$1.00	\$1.14
Chrysalis	3.36 (236%)	-0.03	1.01	2.38
CHP	4.87 (387%)	1.53	1.00	2.35
CRC	1.05 (5%)	-0.24	0.94	0.36
Taller	0.81 (-19%)	0.09	0.91	-0.19
Weingart	0.94 (-6%)	0.56	0.85	-0.22

Source: MJS database and cost capture project, Appendix B, Table B.4.

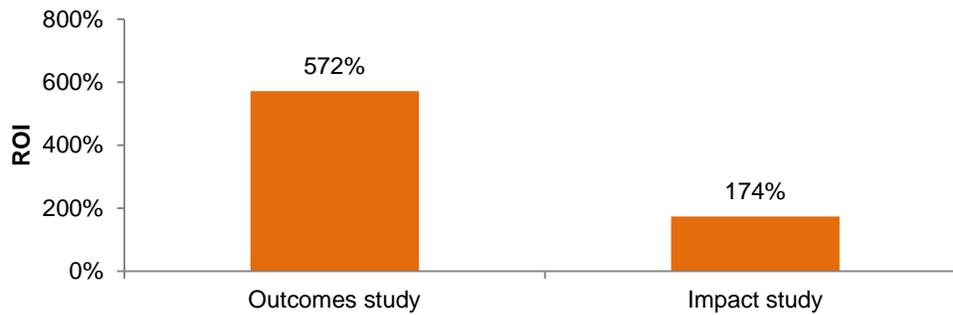
Note: Estimated benefits use the full sample (stable housing, work income) or noninstitutional sample (all other benefits), excluding Buckelew. Benefits of SE employment to the friends and relatives of SE workers are excluded from this table but are included in benefits to society as a whole.

CEO = Center for Employment Opportunities; CHP = Community Housing Partnership; CRC = Community Resource Center; Taller = Taller San Jose; Weingart = Weingart Center for the Homeless.

Estimates from our impact study CBA confirm the value of the SE experience. Although small sample size remains an issue, this CBA is based on more plausibly causal estimates of the benefits of the SE experience. Impact estimates suggest that each dollar spent by Chrysalis produces \$1.34 for society as a whole and \$1.01 of revenues for the SE. That dollar also eases taxpayer burden by \$0.42 but leads SE workers to lose \$0.07. Thus, the impact study CBA suggests that Chrysalis is a profitable business that saves taxpayers money and benefits society as a whole.

Finally, we considered the benefit of the SE experience from a purely social perspective, ignoring the SEs' business mission. Some decision makers may care little about the business aspect of the SE, preferring to focus only on the costs of assisting the SE population and the benefits accruing to SE workers, their friends and family, and taxpayers. We calculate a social ROI of the SE experience by defining costs as those that the SE faces from serving the target population, beyond the standard costs of operating the SE and defining benefits by excluding the business revenues received by the SE (those associated with providing goods and services in the market). This value provides a measure of the ROI from adding a social component to a preexisting business. From this perspective, ROIs in SEs are quite high (Figure V.4). The outcomes study implies that each dollar spent toward the SEs' social missions creates \$6.72 in benefits for society as a whole, for an ROI of 572 percent. The impact study implies smaller but still large gains. Each dollar spent toward the SEs' social mission generates \$2.74 of value, for an ROI of 174 percent.

Figure V.4. Social ROI: Comparing nonbusiness costs and benefits (percentages)



Source: MJS database and cost capture project, Appendix B, Table B.4.

Note: For the outcomes study, estimated benefits use the full sample (stable housing, work income) or noninstitutional sample (all other benefits), excluding Buckelew. For the impact study, estimated benefits use the full propensity-score sample (stable housing, work income) or noninstitutional propensity-score sample (all other benefits).

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**APPENDIX A**

**COLLECTING AND ANALYZING DATA ON OUTCOMES**

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This appendix describes the Mathematica Jobs Study (MJS) database and its use in the analysis presented in this report. The database contains information on individuals who requested employment services between April 1, 2012 and March 31, 2013 from one of the seven organizations hosting an REDF-supported social enterprise (SE): Buckelew, Center for Employment Opportunities (CEO), Chrysalis, Community Housing Partnership (CHP), Community Resources Center (CRC), Taller San José (Taller), and Weingart Center (Weingart). The database was first collated in 2013 for analysis presented in the interim report on REDF's SEs (Maxwell et al. 2013) and initially contained information collected by organization staff at three points in time (Table A.1) when a person: (1) entered the organization and requested employment services (**intake**); (2) was referred to or hired by the SE (**baseline survey**); and (3) left the SE or after six months of employment, whichever came first (**exit survey**). In fall 2013 and winter 2014 the database was expanded to include information from the MJS **follow-up survey**, which collected information on individuals about one year after the baseline survey was administered (Appendix E provides a copy of the survey instrument).

**Table A.1. MJS data collection points**

	Population of interest	Field dates	Period covered	Information
Intake	Individuals hired by and referred to SE	April 1, 2012 to March 31, 2013	Adult working life until survey date	Demographic and background characteristics
Baseline survey	Individuals hired by and referred to SE	April 1, 2012 to March 31, 2013	Adult working life until survey date	Work history and employment barriers
Exit survey	Individuals hired by SE	May 22, 2012 to August 29, 2013	Total time or first six months working at SE, whichever ever greater	SE work experience and changes in employment barriers
Follow-up survey	Individuals hired by and referred to SE	September 4, 2013 to March 21, 2014	Date of last survey (exit or baseline) to present	Employment, housing, income, criminal activity, health, substance abuse, education and training, attitudes toward work; future plans; demographics; and SE work

Notes: The follow-up survey was designed to be conducted about one year after the baseline survey; in practice, an average of 13 months elapsed between the baseline and follow-up surveys. Some follow-up survey questions assessed activities over the past 12 months instead of since the date of the last survey.

In this report, we drew on the MJS data in three ways. First, we used information collected at baseline and follow-up on individuals who worked at SEs to determine the changes in outcomes over time associated with SE employment (the *outcomes study*). Second, we used information from a single organization (Chrysalis) on individuals who were employed in the SE (treatment group) and those who were eligible to work at the SE but never hired (comparison group) (the *impact study*) to estimate the effects of SE employment on employment and life stability. Finally, we quantified the benefits estimated in the outcomes and impact study and linked those benefits to costs in *cost benefit analysis* (CBA), as explained in Appendix B.

In this appendix, we describe the processes used to conduct the follow-up survey and the methods used to analyze information from it for the outcomes and impact studies. The interim report (Maxwell et al. 2013) provides equivalent information for data collection for intake and baseline and exit surveys. Section A provides details on the population in the MJS; Section B explains our follow-up survey efforts; Section C discusses the analytic methods used for the outcomes and impact studies; and Section D discusses the limitations of our approaches.

## A. The MJS populations and samples

The MJS database contains information on individuals hired into an SE at Buckelew, CEO, Chrysalis, CHP, CRC, Taller, and Weingart between April 1, 2012 and March 30, 2013, the sample for the outcomes study. It also contains information on individuals who entered the Chrysalis labor pool during the same period, the sample for the impact study.<sup>1</sup> Figure A.1 illustrates our success in collecting data for both groups (Maxwell et al. 2013 provides details). The sample built for the outcomes study (panel A) was derived from all individuals hired into an SE and the sample built for the impact study (panel B) was derived from individuals at Chrysalis who were referred to the labor pool from which SE workers were hired. All of these individuals were taken through the informed consent process for enrolling in the MJS. All 609 who consented to be in the study (84 percent) completed a baseline survey. The 527 (84 percent) that were eventually hired into an SE all provided (or had staff provide) information on that experience through an exit survey. The remaining 82 individuals in the Chrysalis labor pool who were not hired into an SE serve as the comparison group for our impact study.

Only slight differences exist in the distributions of the target population and MJS study participants across organizations (Table A.2). No statistically significant differences ( $p \leq 0.05$ ) were found between the distributions of the target population and MJS samples across organizations in chi-squared tests of the overall distributions of employees across organizations or two-tailed  $t$ -tests of each organization's employment share. The majority of individuals in the target population and samples were hired by Chrysalis with no more than 5 percent coming from CRC, Taller, or Weingart.

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<sup>1</sup> The impact study is restricted to individuals from Chrysalis because it was the only organization that collected baseline data on individuals who were eligible to work at an SE but did not do so.

**Table A.2. Population and samples (percentages, except where noted)**

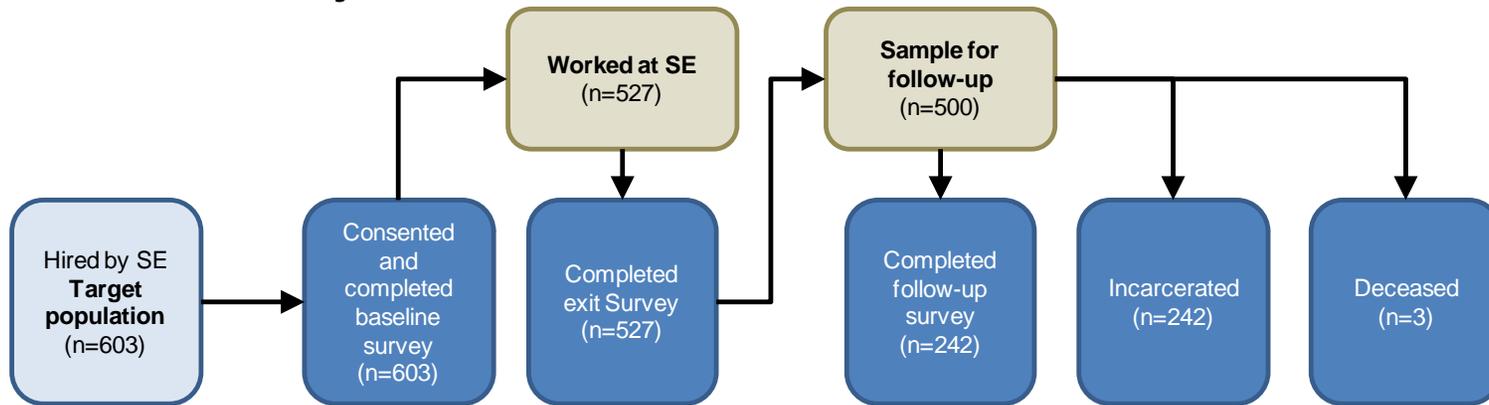
	Target population			MJS sample			Potential survey sample (eligible for follow-up)		
	Number	MJS inclusion	Outcomes study	Number	MJS inclusion	Outcomes study	Number	MJS inclusion	Outcomes study
Bucklew	52	7.2	8.6	41	6.7	7.8	41	7.0	8.2
CEO	119	16.5	19.7	94	15.4	17.8	94	16.2	18.8
Chrysalis	452	62.6	55.2	383	62.9	57.1	356	61.2	54.8
Treatment	333	46.1	55.2	301	49.4	57.1	274	47.1	54.8
Comparison	119	16.5	0.0	82	13.5	0.0	82	14.1	0.0
CHP	46	6.4	7.6	42	6.9	8.0	42	7.2	8.4
CRC	31	4.3	5.1	31	5.1	5.9	31	5.3	6.2
Taller	13	1.8	2.2	13	2.1	2.5	13	2.2	2.6
Weingart	9	1.2	1.5	5	0.8	0.9	5	0.9	1.0
<b>Total</b>	<b>722</b>	<b>100.0</b>	<b>100.0</b>	<b>609</b>	<b>100.0</b>	<b>100.0</b>	<b>582</b>	<b>100.0</b>	<b>100.0</b>

Source: MJS database.

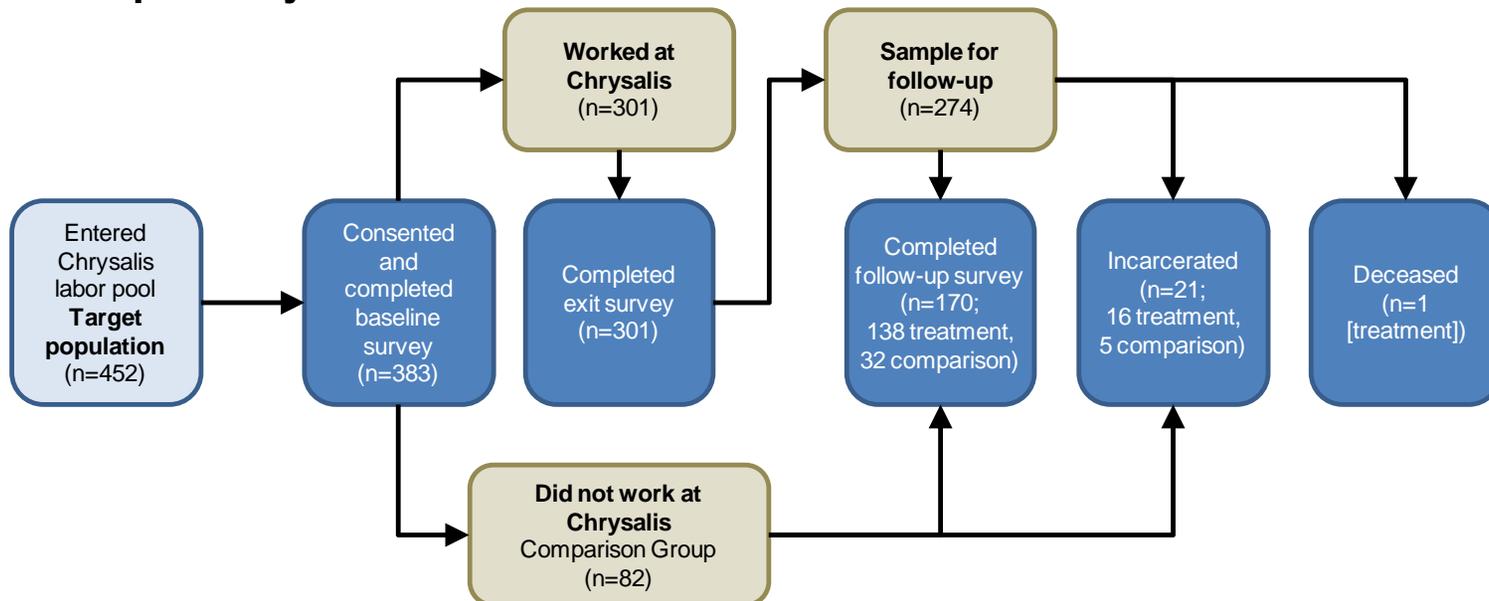
Notes: Unweighted analysis. Neither two-tailed  $t$  nor chi-squared tests found statistically significant ( $p \leq 0.05$ ) differences between the target and MJS samples. Both Chrysalis and Weingart numbers changed from the interim report (Maxwell et al. 2013). Of the 106 MJS participants Chrysalis identified as in their labor pool and not hired into an SE, 24 were found to have worked at the SE in the past and ineligible to be in the comparison group and 48 individuals did not consent to be in the MJS. We computed the Chrysalis comparison target population based on the assumption that 22.6 percent had worked in an SE in the past (same rate as those who consented). Weingart follow-up surveying included two additional MJS participants who completed a baseline survey and for whom staff completed an exit survey but did not include the four additional participants that did not complete the baseline survey despite being employed by Weingart's SE during the study period.

**Figure A.1. MJS target population and samples**

**Panel A: Outcomes study**



**Panel B: Impact study**



Source: MJS database.  
SE = Social Enterprise.

## B. Follow-up survey

Individuals in both the outcomes and impact studies were potentially eligible for the follow-up survey, with one notable exception: we randomly sampled 91 percent of individuals who worked at Chrysalis for the follow-up survey for budgetary reasons. We omitted individuals served by this organization instead of randomly sampling SE workers across organizations because Chrysalis workers comprised about half of all SE workers in the target population (Table A.2). Removing 9 percent of its workers thus maximized our average within-organization statistical power, subject to our constraint to survey only 500 individuals hired by SEs. In total, we attempted to survey 582 individuals, 500 of whom could inform the outcomes study (as they were hired into an SE), 354 of whom could inform the impact study (as they were members of the Chrysalis labor pool),<sup>2</sup> and 274 who could be included in both studies. This section of the appendix provides details on our follow-up survey efforts and the resulting samples, including how we located respondents, our response rates, missing data, the characteristics of our sample, and the weights we developed to increase the representativeness of our samples.

### 1. Locating potential respondents

We used a hard copy of the survey (administered by telephone) and a program developed for data entry to record information from the 582 MJS participants selected for the follow-up survey. All respondents received a \$20 gift card as a token of appreciation upon survey completion. To capture information about one year after participants completed the baseline survey, we initiated calls at three different time periods (Table A.3). Individuals who completed the baseline survey toward the beginning of the MJS period were called first.

**Table A.3. Timing of follow-up survey calls**

Group	Dates of baseline survey	Advanced letter sent	Calling started	Calling ended
I	April 1, 2012 to September 30, 2012	August 30, 2013	September 4, 2013	March 14, 2014
II	October 1, 2013 to December 31, 2012	September 27, 2013	October 1, 2013	March 14, 2014
III	January 1, 2013 to March 31, 2012	October 29, 2013	November 2, 2013	March 14, 2014

Calling potential respondents with valid contact information continued until March 14, 2014, and surveys were taken for individuals who initiated contact through March 21, 2014. An average of 405 days elapsed between completion of the baseline and follow-up surveys, with the period ranging between 8 and 23 months (Table A.4). Individuals completing the baseline survey early in our study period (that is, group I) were typically contacted to complete the follow-up survey more than one year after they began work at an SE; individuals administered the baseline later in the study period (group III) typically provided follow-up survey information less than one year after the baseline survey.

<sup>2</sup> We attempted to survey individuals for the outcomes study based on their hire by an SE. A small number of these individuals (less than one percent), reported never working at the SE in the follow-up survey. Despite this, we refer to the group of individuals hired by the SEs as “SE employees” throughout this report.

The time elapsed between surveys is of interest because some of the questions on the follow-up survey asked respondents about activities “since the last survey.” Given that 64 percent of SE workers (individuals in the outcomes study) completed an exit survey (36 percent had an SE or host-organization staff member complete this survey), the average individual had previously provided information for the MJS only about 8 months prior to completion of the follow-up survey. Because individuals in the impact study’s comparison group did not complete an exit survey, our last formal contact with individuals in that population (the baseline survey) was about 14 months prior to the follow-up survey.

**Table A.4. Follow-up survey timing (percentages, except where noted)**

	Outcomes study respondents	Impact study respondents	
		Treatment group	Comparison group
<b>Number of respondents</b>	242	138	32
Last interviewed at baseline	36.4	27.2	100.0
Last interviewed at exit	63.6	72.8	0.0
Average number of months since last survey	8.3	7.6	13.8
0-5 months	29.8	32.6	0.0
6-11 months	50.0	52.2	37.5
12-17 months	17.8	13.0	43.8
18-23 months	2.5	2.2	18.8
More than 23 months	0.0	0.0	0.0
Average time since left social enterprise (months)	4.3	3.6	n.a.
Still employed	21.6	27.9	n.a.
0-5 months	33.9	33.1	n.a.
6-11 months	27.5	23.4	n.a.
12-17 months	8.3	5.6	n.a.
18-23 months	2.3	3.2	n.a.
More than 23 months	0.0	0.0	n.a.
Average time since baseline interview (months)	13.2	13.1	13.8
0-5 months	0.0	0.0	0.0
6-11 months	41.3	41.3	37.5
12-17 months	50.8	52.2	43.8
18-23 months	7.9	6.5	18.8
More than 23 months	0.0	0.0	0.0

Source: MJS database.

Note: Analysis is unweighted.

Because our target population was difficult to track—people with histories of homelessness, unstable housing, or incarceration—we developed and used three different levels of tools to reach, locate, and survey study participants. Each level used an increasing amount of resources to locate and survey an increasingly difficult portion of the sample and complete the number of surveys needed to achieve a 55 percent response rate in each organization. We used only level I tools in some organizations, started with level II tools in organizations in which we believed it would be difficult to achieve response targets, and deployed level III tools in organizations that did not have a 55 percent response rate when two weeks remained in the survey period. Once we

completed the number of surveys needed at an organization, we moved telephone and locating resources from that organization to those without the desired completion rate but we continued to administer surveys if a respondent called in. The tools are described below and in Table A.5.

**Level I tools.** The tools in the first level were developed to reach and interview participants who were expected not to require a high level of effort, although the tools did include both extensive in-house and field locating efforts (Table A.5). Such efforts included:

- Structuring the baseline survey to obtain information which would help locate participants (for example, the baseline survey obtained information on up to three different ways to contact the respondent, as well as friend and relative contact information, and places the respondent liked to frequent)
- Asking for updates on contact information in the exit survey
- Sending holiday cards in December 2012 and “happy summer” cards in August 2013 to remind participants about the study, maintain contact, and identify those with outdated address information
- Verifying and updating all contact information by processing it through a database of public records (a subscription-based product called Accurant)
- Sending a pre-survey notification letter to inform participants of our plan to reach them via telephone to complete a survey
- Removing cases from the active sample when we uncovered a deceased or incarcerated participant<sup>3</sup>

Cases in which incorrect contact information could not be updated were sent to trained web locators to conduct web searches using customized search strings that provide optimal results. We used this information, in conjunction with information from the baseline and exit surveys, to create a profile on an individual without current contact information. Field locators used these profiles to locate participants.

**Level II tools.** The second level of tools involved partnering with the SE host organizations to reach participants in an attempt to capitalize on the SEs’ relationships with participants built prior to follow-up. These tools were developed in conjunction with SE host organizations, although REDF greatly facilitated their development by encouraging organizations to work with us. Level II tools were created and applied at the outset for participants from Chrysalis, which hired about half of the participants. They were also applied at other organizations when responses to level I tools dropped. Examples of level II tools include hiring staff from the organizations as field locators to find participants and encourage survey completion; obtaining updated contact information from the organizations; reaching out to participants during contacts with the organization (for example, post-SE employment support); and providing organization staff with monetary incentives to reach out to participants (for example, through email blasts) about survey completion.

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<sup>3</sup> If the release date from prison or jail was during the fielding period, participants were suspended from locating efforts until their release date. Our primary means of identifying an incarceration was through the Victim Information and Notification Everyday database ([www.vinelink.com](http://www.vinelink.com)).

**Level III tools.** We developed and applied our third level of tools, which involved using Facebook, during the final push for survey respondents (two weeks prior to the end of the survey period). Because we did not gain consent from participants to directly engage them in survey efforts using social media (for example, to “friend” them on Facebook), we used social media only to help locate participants. Facebook profiles allowed us to identify additional information about nonrespondents<sup>4</sup> and send personalized emails to nonrespondents with privacy settings that allowed us to access contact information. In addition, some organizations posted a message on their Facebook page that asked nonrespondents to complete the survey.

**Table A.5. Activities undertaken at each level of survey effort**

<b>Level I. Used traditional survey methods</b>
Obtained extensive contact information on baseline and exit surveys
Identified and updated contact information with "holiday cards" for address updates
Updated all contact information before advance letters were sent and periodically during survey period
Developed profiles of nonrespondents using web searches and information from baseline and exit surveys
Used profiles to help field locators find respondents
Used mapping software (zip stream) to assign cases to appropriate field staff
Identified incarcerated individuals weekly and monitored release dates to remove temporarily or permanently from survey efforts
Sent email blasts and letters to nonrespondents
Provided a \$20 incentive for respondents
Heavily monitored staff productivity and locating efforts using administrative data on success rates
Monitored response rates weekly by organization and moved resources mid-way through surveying to ensure each organization achieved a minimum response rate
<b>Level II. Obtained assistance from SE host organization</b>
Hired organization staff who knew program and population as field locators
Had organizations provide updated contact information for nonrespondents, including current work status in the SE
Provided staff at organizations with incentives (\$20 gift card per completed survey) linked to their activities (for example, email blasts, phone calls)
Integrated information about the follow-up survey into organization's support services (for example, retention staff reminded participants about the study; provided phone numbers, provided phones or on-site gift cards to respondents completing a survey)
Had funder impress to the organization the importance of the follow-up survey and efforts to help reach and survey participants
<b>Level III. Used Facebook for locating</b>
Asked organizations to post reminder messages about follow-up surveying on their Facebook page
Used Facebook to find additional information that might facilitate locating
Sent personalized email to nonrespondents who had Facebook access

<sup>4</sup> Anyone not successfully surveyed—except for those located who refused to be surveyed, the incarcerated, and the deceased—was referred to Facebook locating. Locators confirmed two to four points of contact (for example, name, location, date of birth, or family member) before adding information from Facebook to the locating profile or sending an email through Facebook.

## 2. Response to the follow-up survey

We describe the results of the follow-up survey in two ways: results of the effort and rates of response (Table A.6). Results include completed interviews, partially completed interviews, and so forth. Our efforts yielded 274 completed questionnaires, which form the basis of what we call the *noninstitutional sample*. Of the 274 completed questionnaires, 32 were from the comparison group, leaving information from 242 respondents for the outcomes study. The 32 surveys from the comparison group and 138 surveys from Chrysalis SE workers (the treatment group) are available for the impact study. Rates of response can be used to describe the success of the operational aspects of the survey and the representativeness of our sample. The 274 completed surveys represent a 51 percent response rate.<sup>5</sup> Response rates varied by organization (Table A.6), and this variation was statistically significant (not shown in table). The smallest organizations (Taller and Weingart) had response rates over 70 percent; larger organizations had rates that ranged from 58 (CRC) to 44 (CEO) percent.

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<sup>5</sup> The response rate is calculated using the Council of American Survey Research Organizations definition: the number of completed (C) or partially completed (P) surveys divided by the number of eligible respondents in the sample (R): Survey Response Rate =  $[(C+P)/R] \times 100$ . Eligible individuals were those who were not deceased nor incarcerated. We also computed weighted response rates, with weights estimated as  $w_j = \frac{N_j}{R_j}$ , where an MJS participant from organization  $j$  with a target population of  $N_j$  and number of eligible respondents  $R_j$  receives a weight of  $w$ . The weighted response rates revealed similar patterns.

**Table A.6. Survey efforts (percentages unless otherwise reported)**

Survey results (numbers of cases)				
	Attempted	Completed surveys	Incarcerated	Dead
Buckelew	41	21	1	0
CEO	94	32	20	1
Chrysalis	356	170	21	1
Treatment	274	138	16	1
Comparison	82	32	5	0
CHP	42	21	2	0
CRC	31	18	0	0
Taller	13	8	1	1
Weingart	5	4	0	0
<b>Totals</b>	<b>582</b>	<b>274</b>	<b>45</b>	<b>3</b>
Outcomes study	500	242	40	3
Impact study	356	170	21	1
Survey response/information rates				
	Noninstitutional sample (responded to survey)	Full sample (responded to survey + incarcerated)		
Buckelew	52.5	53.7		
CEO	43.8	55.9		
Chrysalis	50.9	53.8		
Treatment	53.7	56.4		
Comparison	41.6	45.1		
CHP	52.5	54.8		
CRC	58.1	58.1		
Taller	72.7	75.0		
Weingart	80.0	80.0		
<b>Totals</b>	<b>51.3</b>	<b>55.1</b>		
Outcomes study	53.0	56.7		
Impact study	50.9	53.8		
<b>Total possible respondents</b>	<b>534</b>	<b>579</b>		
Outcomes study	457	497		
Impact study	334	355		

Source: MJS database.

Note: Unweighted analysis.

Our survey efforts also identified 45 participants who were incarcerated and 3 participants who were deceased. Although we did not attempt to collect information from individuals that we discovered were incarcerated, knowing a person was in jail or prison at follow-up provides valuable information. In particular, our confirmatory analysis for the impact study requires information for two key outcomes (as discussed in Chapter III): whether the participant was employed in the week before the survey and whether they were in stable housing since the baseline survey. As we can posit that incarcerated individuals spent some time living in non-

stable housing since baseline (that is, jail or prison) and did not work in the past week for pay, these individuals can be included in some analyses. Together with the noninstitutional sample, we have a *full sample* of 319 individuals, 282 of whom are in the outcomes study and 191 of whom are in the impact study. Our full sample information rate (response rate accounting for incarcerated individuals) was 55 percent ( $319/[582 - 3]$ ) and varies by organization, with the smallest SEs having the highest rates. Of note, a 10 percentage point differential exists between CEO's response rate and full sample information rate, due to its relatively high incidence of incarcerated participants. Differences in the information rates across the organizations mean that the distribution of the full sample among the organizations significantly differs from the distribution of the target population (Table A.2), which we correct for with weighting (see Section A.5 of this appendix). For the impact study, we also must consider differences in information rates by treatment status. That is, differences arise because our treatment group had higher information rates than the comparison group (56 versus 45 percent, a statistically significant difference). This difference largely appears to be driven by demographic differences between the samples, which we explore in detail in Section B.4 of this Appendix.<sup>6</sup>

### 3. Approach to missing data

Nonresponse can also be item-specific; that is, respondents may fail to provide information on all questions. As Table A.7 shows, rates of missing data for key variables were generally low. Almost all respondents reported employment and about 90 percent completed the housing module of our survey, allowing us to estimate if they were stably housed in the year before follow-up. Less than 8 percent of the noninstitutional sample was missing information related to health, substance abuse, criminal activity, and receipt of transfer payments. Some variables had relatively high rates of missing data, notably total income (nearly 20 percent in the noninstitutional sample for the outcomes study). This variable drew information from several different questions, leading to the high rate of missing data (that is, missing information on any source of income makes the total income variable missing).<sup>7</sup>

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<sup>6</sup> We further demonstrate in Section B.4 that differences in final sample characteristics between the treatment and comparison groups can be controlled for in a regression framework.

<sup>7</sup> Within our impact study, we saw only one statistically significant difference in rates of missing data by treatment-comparison group status. Given the large number of variables tested, we would anticipate one such significant difference to occur simply by chance (1 in 20 tests of significance at the 5 percent level will be statistically significant by chance even if no differences actually exist between two groups).

**Table A.7. Missing data (percentages, except where noted)**

Data element	Outcomes study		Impact study	
	Non-institutional sample	Full sample	Non-institutional sample	Full sample
<b>Key outcomes</b>				
Employed last week	0.4	0.4	0.0	0.0
Stable housing in past year	10.3	8.9	12.4	11.0
<b>Other outcomes of interest</b>				
Employment duration and continuity	4.1	17.7	4.7	15.2
Total Income	19.4	30.9	21.8	30.4
Wage and salary income	7.0	6.0	10.6	9.4
Percentage of income from work	22.7	33.7	25.9	34.0
Percentage of income from government	22.7	33.7	25.9	34.0
Arrested in past year	0.0	0.0	0.0	0.0
Depression index	0.0	14.2	0.0	0.0
Physical health	0.0	14.2	0.0	11.0
Substance abuse counseling in past year	0.4	14.5	0.0	11.0
Attitudes toward work	0.4	14.5	0.0	11.0
<b>Facilitating factors</b>				
Education and training				
Enrollment status	0.4	14.5	0.6	11.5
Training completed	0.8	14.9	1.2	12.0
Attitude toward work	0.4	14.5	0.6	11.5
Counselor assessed needs	1.2	1.1	0.0	0.0
Lagged indicators				
Worked in week before intake	0.4	0.8	0.6	0.5
Stable housing in year before baseline	3.7	3.2	2.9	2.6
Total income	7.4	6.7	2.9	2.6
Wage and salary income	0.4	0.4	0.0	0.0
Percentage of income from work	16.5	17.0	14.1	13.6
Percentage of income from government	16.5	17.0	14.1	13.6
Arrest record	4.5	4.6	4.7	5.2
Depression index	0.4	0.4	0.6	0.5
Physical health	0.0	0.0	0.0	0.0
Substance abuse counseling past year	0.0	0.0	0.0	0.0
<b>Demographics (from intake)</b>				
Age	0.4	0.4	0.0	0.0
Veteran status	3.7	3.2	3.5	3.1
Hispanic	1.7	1.8	2.9	3.1
Marital status	0.4	0.4	0.6	0.5
Number dependents	1.2	1.4	0.6	0.5
English fluency	1.2	1.1	0.0	0.0

Source: MJS database.

Note: Analysis is unweighted. Elements without missing data are not reported.

#### 4. Sample characteristics

The noninstitutional and full samples are non-random subsamples of the target population because (1) not all individuals consented to be in the MJS, (2) we randomly dropped 27 SE workers from Chrysalis out of the follow-up noninstitutional sample,<sup>8</sup> (3) we were not able to locate all participants, and (4) when located, not all participants agreed to answer survey questions. We compared our samples and the target population to understand differences between them in various measures of life stability, education, and attitudes, as well as differences in demographics from the intake data,<sup>9</sup> using both descriptive and multivariate analyses. The descriptive analyses used two-tailed *t*-tests to test for statistically significant differences in averages and chi-squared tests to determine statistically significant differences in distributions. If significant differences in the distributions existed, we used two-tailed *t*-tests to test for statistically significant differences between categories in the distribution.

Some notable differences emerge in the descriptive analysis (Table A.8). As compared to the target population, individuals in the noninstitutional and full samples for the outcomes study were more likely to meet REDF's definition of SE employment (working 32 hours within a four-week period), to have been employed prior to the baseline survey, to have higher levels of education, and to be less likely to have used temporary housing prior to baseline. Individuals in the noninstitutional sample were under-represented at CEO and less likely to have been arrested or convicted of a crime. Differences also exist between those in the MJS from Chrysalis and those included in the impact study. Individuals in the noninstitutional and full samples had more stable housing before requesting employment services, and individuals in the noninstitutional sample are less likely than those in the MJS to have been arrested in the past.

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<sup>8</sup> Although individuals were randomly selected from Chrysalis to be dropped, this selection resulted in a change in the composition of individuals across SEs and thus must be accounted for.

<sup>9</sup> Maxwell et al. (2013) demonstrated that MJS participants were similar to the target population.

**Table A.8. Target population and sample differences (percentages, except where noted)**

	Outcomes study			Impact study		
	Target population	Non-institutional sample	Full sample	MJS	Non-institutional sample	Full sample
<b>Number of people</b>	603	242	282	383	170	191
<b>SE work experience</b>						
Hired by SE	100.0	100.0	100.0	80.2	81.1	80.5
Met REDF hours requirement	83.8	87.9*	88.1*	61.8	65.7	65.8
<b>Life stability at baseline</b>						
Worked for pay in the ... before intake						
Week	16.7	18.1	17.4	17.8	17.3	15.9
Month	28.8	33.6*	33.0*	30.1	32.1	31.2
6 months	49.3	53.8	53.6*	53.8	52.4	53.4
Year	61.1	66.0*	65.5*	66.8	65.5	66.5
Worked continuously in the past...						
Year	40.8	45.3	43.0	49.1	49.1	49.5
More than 1 year but fewer than 2 years	10.5	11.2	10.0	13.2	13.8	13.3
Two years or more but fewer than 5 years	15.9	16.4	15.6	13.2	14.4	14.9
More than 5 years	20.8	18.1	20.7	16.4	16.2	16.0
Never	11.9	9.1	10.7	8.1	6.6	6.4
Housing was temporary in the past...						
Week	38.2	36.3	38.0	45.7	38.8*	41.6*
Month	41.2	37.6	39.5	48.1	39.4*	42.7*
6 months	50.8	45.7*	48.3	54.1	44.8*	48.6*
Year	58.3	52.6*	54.6	60.5	50.9*	54.1*
Criminal activity						
Arrested	80.9	75.1*	77.9	80.8	76.2*	78.8
Convicted and sentenced to jail or prison	69.4	62.9*	67.8	70.7	67.3	70.4
If ever convicted, most recent conviction						
In past year	6.8	5.6	6.7	4.6	2.8	4.0
More than 1 year but fewer than 2 years ago	13.9	10.6	11.2	14.6	12.1	11.9
More than 2 years but fewer than 5 years ago	38.3	34.5	36.3	33.5	27.1	28.6
More than 5 years ago	41.1	49.3	45.8	47.3	57.9*	55.6*
English language ability						
Percentage native English speaker	96.4	97.1	96.8	95.9	97.6	97.4
Percentage good English (if not native)	47.1	20.0	42.9	46.7	0.0	20.0
Percentage fair English (if not native)	41.2	60.0	42.9	40.0	75.0	60.0
Percentage poor English (if not native)	11.8	20.0	14.3	13.3	25.0	20.0
General support						
Needs a lot of support	58.7	62.3	63.6*	80.0	81.7	83.7
Needs some support	30.5	28.0	26.5	18.8	17.2	15.3
Needs no support	10.8	9.7	9.8	1.2	1.2	1.1
Income below 200 percent of federal poverty level						
Don't know income	1.8	2.1	2.2	0.0	0.0	0.0

Table A.8 (continued)

	Outcomes study			Impact study		
	Target population	Non-institutional sample	Full sample	MJS	Non-institutional sample	Full sample
<b>Education and training at intake</b>						
No high school diploma	26.9	21.2*	23.6	24.6	22.8	21.8
High school diploma/graduate/GED	44.4	41.1	42.2	47.0	45.5	47.9
At least some college	28.7	37.7*	34.2*	28.5	31.7	30.3
<b>Demographic characteristics at intake</b>						
Male	80.9	73.6*	76.6*	78.3	74.0	76.3
Average age (years)	40.6	41.7	40.9	43.5	44.3	43.9
Hispanic	16.3	17.0	17.6	19.9	20.7	21.2
Race						
Black	59.7	55.6	56.8	66.4	65.7	65.3
White	24.4	27.2	24.8	20.8	20.1	19.5
Other race or refused	15.9	17.2	18.3	12.8	14.2	15.3
Marital status						
Single	74.9	71.8	72.9	73.8	70.8	70.9
Married or in a domestic partnership	11.2	13.9	13.0	11.2	14.9	14.3
Divorced or widowed	8.3	8.0	7.6	10.0	8.9	9.0
Separated	5.6	6.3	6.5	4.9	5.4	5.8
Dependents						
Average number of dependents	0.89	0.85	0.89	0.73	0.79	0.78
No dependents	55.3	55.9	54.0	63.5	63.1	63.0
Military						
Veteran	5.7	5.2	4.8	7.7	8.0	7.6
If veteran, percentage served (all that apply)						
Gulf War period (8/90 to 3/95) or later	12.1	16.7	15.4	12.9	15.4	14.3
5/75 to 7/90	54.5	50.0	53.8	58.1	61.5	64.3
Before 5/75 (Vietnam era or earlier)	18.2	25.0	23.1	22.6	23.1	21.4
Missing	15.2	8.3	7.7	6.5	0.0	0.0
<b>Organization</b>						
Buckelew	8.7	8.8	7.9	0.0	0.0	0.0
CEO	19.2	12.6*	17.6	0.0	0.0	0.0
CHP	7.7	8.8	8.3	0.0	0.0	0.0
CRC	5.2	7.5	6.5	0.0	0.0	0.0
Chrysalis	55.5	57.3	55.0	100.0	100.0	100.0
Taller	2.2	3.3	3.2	0.0	0.0	0.0
Weingart	1.5	1.7	1.4	0.0	0.0	0.0

Source: MJS database.

Note: Unweighted estimates. An asterisk (\*) indicates a significant ( $p < 0.05$ ) difference between the target population (outcomes study) or MJS (impact study) and other samples as measured by a two-tailed t-test or a chi-squared statistic test for significant differences in distributions (for example, race) and a two-tailed t-test to test for significant differences between each category in distributions with significant differences.

The descriptive analysis provides a broad view of how samples differ but does not show which variables might predict sample inclusion or parse out what drives differences in response rates across and within grantees. We used a probit analysis to assess which characteristics are most strongly associated with an individual from the target population or MJS also being in our samples (indicated by  $Y_{ijs} = 1$  if participant  $i$  attached to an SE at organization  $j$  is in sample  $s$ ).<sup>10</sup> This multivariate analysis controls for the characteristics collected at intake ( $X_i$ , including indicators for key variables being missing for individual  $i$ ) and either organization fixed effects ( $\gamma_{isj}$ , for the outcomes study) or treatment status (indicated by  $Hired_i=1$  for the impact study). The specifications for the outcomes (equation 1) and impact (equation 2) studies are:

$$(1) \quad \Pr(Y_{ijs} = 1 | X_i) = \Phi(\alpha_s + \theta_s X_i + \gamma_{ijs})$$

$$(2) \quad \Pr(Y_{is} = 1 | X_i, Hired) = \Phi(\alpha_s + \theta_s X_i + \beta Hired_i)$$

where  $\Phi$  represents the standard normal cumulative distribution function. Statistically significant probit coefficients on the group indicators suggest differences in the characteristics of the group from the target population. We report results as marginal effects evaluated at the mean values of the independent variables.

Our multivariate analyses for the outcomes study show that, compared to the target population (Table A.9):

- Individuals who met REDF's definition of employment are 11 percentage points more likely to be in the noninstitutional sample and 12 percentage points more likely to be in the full sample.
- Men, individuals who are not married or in a domestic partnership, and those that used temporary housing are less likely to be in both samples.
- More educated individuals and individuals assessed by organization staff to need more support are more likely to be in both the noninstitutional and full samples.
- Individuals employed by Taller and Weingart are more likely to be in the noninstitutional sample than those from Chrysalis. Individuals employed by CEO, CRC, CHP, and Taller are more likely to be in the full sample.

Fewer factors predict inclusion in the samples used for the impact study. Most importantly, *treatment status does not significantly predict sample inclusion*, suggesting that the treatment-comparison group differences in response rates are not large or problematic once we account for observable differences. Additionally, some of the differences in the samples will be mitigated by our weighting scheme, developed in the next section, which is designed so that the demographic characteristics of individuals in the samples more closely mimics those of individuals in the target population.

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<sup>10</sup> Using a logit model instead to predict the propensity score does not lead to changes in our overall conclusions.

**Table A.9. Probit estimation of sample membership**

	Outcomes study		Impact study	
	Non-institutional sample	Full sample	Non-institutional sample	Full sample
Sample	Target population	Target population	MJS	MJS
Sample size	603	603	383	383
<b>Work experience</b>				
Hired by SE	n.a.	n.a.	0.087 [0.067]	0.068 [0.068]
Met REDF definition of employment	0.111* [0.027]	0.120* [0.024]	n.a.	n.a.
<b>Life stability at baseline</b>				
Worked for pay in the week before intake	-0.036 [0.084]	-0.049 [0.059]	-0.004 [0.073]	-0.068 [0.075]
Worked for pay in the year before intake	0.087 [0.082]	0.108 [0.066]	-0.044 [0.062]	0.006 [0.062]
Temporary housing in the past week	0.028 [0.038]	0.076* [0.027]	0.030 [0.083]	0.045 [0.083]
Temporary housing in the past year	-0.122* [0.041]	-0.120* [0.049]	-0.191 [0.084]	-0.172 [0.085]
Ever arrested	-0.059 [0.035]	-0.134 [0.074]	-0.070 [0.107]	-0.077 [0.107]
Ever convicted of a crime	-0.003 [0.029]	0.088 [0.064]	0.028 [0.092]	0.089 [0.092]
Needs a lot of support	0.123* [0.062]	0.227* [0.037]	0.094 [0.073]	0.144 [0.074]
Needs little support	-0.026 [0.080]	-0.060 [0.076]	0.083 [0.277]	0.116 [0.265]
Income below 200 percent of federal poverty level	0.005 [0.141]	-0.133 [0.126]	n.a.	n.a.
High school diploma/graduate/GED	0.062 [0.041]	0.065* [0.014]	-0.120 [0.078]	-0.166 [0.079]
Some college or more education	0.182* [0.050]	0.183* [0.024]	-0.050 [0.065]	-0.045 [0.066]

Table A.9 (continued)

	Outcomes study		Impact study	
	Non-institutional sample	Full sample	Non-institutional sample	Full sample
<b>Demographics</b>				
Male	-0.159* [0.031]	-0.138* [0.034]	-0.127 [0.068]	-0.086 [0.068]
Age	0.001 [0.001]	0.001 [0.001]	0.003 [0.003]	0.002 [0.003]
Hispanic	-0.091 [0.068]	-0.076 [0.083]	-0.058 [0.093]	-0.045 [0.094]
Black	-0.076 [0.053]	-0.062 [0.049]	-0.068 [0.084]	-0.043 [0.083]
Other race or refused	0.043 [0.037]	0.074* [0.032]	0.021 [0.098]	0.096 [0.096]
Married or in a domestic partnership	0.142* [0.037]	0.105* [0.049]	0.139 [0.090]	0.135 [0.091]
No dependents	-0.007 [0.024]	-0.021 [0.028]	0.005 [0.058]	-0.003 [0.058]
Veteran	-0.007 [0.041]	-0.021 [0.035]	0.048 [0.108]	0.012 [0.110]
<b>Organization (Chrysalis is the comparison group)</b>				
Buckelew	-0.009 [0.047]	0.038 [0.054]	n.a.	n.a.
CEO	-0.025 [0.045]	0.166* [0.046]	n.a.	n.a.
CHP	-0.021 [0.040]	0.069* [0.032]	n.a.	n.a.
CRC	0.0372 [0.051]	0.085* [0.036]	n.a.	n.a.
Taller	0.327* [0.045]	0.393* [0.047]	n.a.	n.a.
Weingart	0.393* [0.119]	0.217 [0.165]	n.a.	n.a.

Source: MJS database.

Note: Unweighted estimates. Acronyms defined at beginning of report. Robust standard errors in brackets. Appendix C provides definitions of variables. An asterisk (\*) indicates a significant coefficient ( $p \leq 0.05$ ) as measured by a two-tailed  $t$ -test.

## 5. Nonresponse weights

We developed and applied nonresponse weights to reduce selection bias that could arise from differences in observed characteristics between the noninstitutional and full samples and the target population. For our outcomes study, in sample  $s$  ( $s$  = noninstitutional sample, full sample), observation  $i$  (associated with organization  $j$ ) receives weight

$$(3) w_{ijs}^{outcomes} = \frac{1}{\Pr(Y_{ijs} = 1 | X_i)}$$

where  $Y$  and  $X$  are defined as before and  $\Pr(Y_{ijs}=1/X_i)$  is estimated using equation (1). Likewise, we estimate weights for the impact study of

$$(4) w_{is}^{impact} = \frac{1}{\Pr(Y_{is} = 1 | X_i, \text{Hired})}$$

using equation (2) to estimate  $\Pr(Y_{ijs}=1/X_i)$ . All weights were further normalized to have an average value of one (within each study and sample), allowing their sum to reflect the number of observations in the data.

This weighting scheme gives observations more influence as their prominence in the sample becomes rarer. For example, Table A.9 indicates that individuals who lived in temporary housing in the year before intake were less likely to respond to the noninstitutional sample. Thus, we give the survey respondents that lived in temporary housing in the year before intake more weight than we give to respondents who did not use temporary housing; the response of the former is relatively rare and should be given greater weight, so that the overall prevalence of temporary-housing use in the noninstitutional sample is closer to that in the target population.

### C. Analytic methods

We use both descriptive and multivariate methods to understand the outcomes and impacts associated with SE employment. This section outlines the methods used for each study. Unless otherwise noted, all data used in analyses presented in our report and appendices are weighted to be representative of the target population, as described in Section A.5.

#### 1. Outcomes study

We used simple averages and frequency distributions to describe each outcome of interest and compared its value at follow-up with its value at baseline. This allows us to assess the change that occurred between the time an individual was hired into the SE and about one year later. This analysis describes the outcomes following SE employment and changes in them and provides a context for interpreting multivariate outcomes and impact analyses. We used two-tailed  $t$ -tests to test for statistically significant differences between baseline and follow-up measures in averages and chi-squared tests to determine statistically significant differences in distributions. If significant differences in the distributions existed, we used two-tailed  $t$ -tests to test for statistically significant differences between the individual categories in the distribution.

We used a regression framework to identify average changes in outcomes given the characteristics of individuals at baseline and the economic environment at baseline and follow-up. All regressions accounted for the correlation of individual outcomes within an organization by clustering the standard errors at that level. To control for unchanging measured and unmeasured characteristics that might be correlated with improved outcomes, we used a fixed-effects specification to estimate the average change in outcomes:

$$(5) Y_{it} = \alpha + \beta Post_{it} + \varphi_i + \theta u_{it} + \varepsilon_{it}$$

where  $Y_{it}$  is SE worker  $i$ 's outcome measure at baseline ( $t = b$ ) or follow-up ( $t = f$ ),  $Post$  takes a value of one if an observation occurred at follow-up and zero if at baseline, and  $\varphi$  is an individual-level fixed-effect.  $u_{it}$  is the unemployment rate prevailing in the area where the SE operates when an individual began SE employment ( $t = b$ ) or one year later ( $t = f$ ).<sup>11</sup>  $\beta$  is interpreted as the average change in an outcome from baseline to follow-up, holding factors that do not vary over time and the unemployment rate constant. We used ordinary least squares (OLS) for both continuous (for example, earnings) and binary (for example, employment) outcomes because non-linear models (such as a probit or logit) typically perform poorly when fixed-effects are included in the specification (see Nickell 1981).

We also used regression analysis to examine which organizations, program components, or types of workers are associated with larger improvements in outcomes following SE employment. The specification of interest is:

$$(6) \quad Y_{if} = \alpha + \lambda Y_{ib} + \delta E_i + \theta X_{ib}^{outcomes} + \eta_1 u_{ib} + \eta_1 u_{if} + \varepsilon_i$$

where  $E_i$  is a series of measures capturing the SE employment experience (such as services received or indicators for organization).<sup>12</sup> In these specifications, we omit the individual fixed-effects specified in equation (5) but control for the individual's characteristics ( $\tilde{X}_{ib}$ ) at baseline, including age, gender, race/ethnicity, indicators of baseline employment barriers, time between the baseline and follow-up surveys, and a cohort indicator (that is, an indicator quarter entered the SE).<sup>13</sup>

All regressions presented were estimated using OLS, but our findings are robust to alternative assumptions about functional form (for example, using a probit specification for binary variables). In the estimation, a statistically significant  $\delta$  indicates that a component of the SE experience predicts improved outcomes for SE workers and a significant  $\theta$  coefficient indicates the characteristics of workers most likely to see improvement after SE employment.

## 2. Impact study

We examined the impact of SE employment using propensity score methods. Prior to implementing these methods in a regression framework, we conducted three validation exercises. We first discussed the hiring process at Chrysalis with the organization and REDF staff to determine the **face validity** of using individuals in Chrysalis' labor pool who never become Chrysalis employees as a comparison group. We then estimated the propensity score and assessed the **overlap** in its distribution between the treatment and comparison groups. Finally, we examined whether the treatment and comparison groups demonstrated **baseline equivalence**.

<sup>11</sup> We normalize the unemployment rate to have a mean of zero and standard deviation one in this regression.

<sup>12</sup> Outcome variables may be more easily interpreted as a change outcome (for example, number of arrests since baseline) instead of the level of the outcome (number of times arrested). Because baseline levels of the outcome variable are included as a regressor, either interpretation is valid when interpreting all coefficients except  $\beta$ .

<sup>13</sup> We do not include controls for barriers or characteristics at one year in these regressions. These variables are potentially influenced by SE employment. Thus, including them in our regression could introduce additional biases.

Based on conversations with REDF and Chrysalis staff, we concluded that our comparison group of individuals who entered Chrysalis' labor pool but were never hired has face validity. Whether the SE hired individuals in the Chrysalis labor pool was determined by set referral and hiring processes. This starts with employment specialists referring individuals that they believe have the most significant employment barriers to the SE (Maxwell et al. 2013). Once referred, individuals participate in an orientation and assessment and become part of the labor pool. As SE work shifts become available, members of the labor pool are offered work. While in the labor pool, individuals can call or go to the SE office to ask if shifts are available, although this check-in is not required for employment consideration. Staff suggested that the individuals hired out of the labor pool were no less capable than those who were not hired. In fact, the implementation evaluation suggests that the individuals in our comparison group may be more work-ready than those in the treatment group, which could lead us to underestimate the effects of the SE experience.

Our second validation test used a propensity score regression, a probit estimation model, and individuals' baseline characteristics to predict whether an individual was hired into the SE at Chrysalis (that is, became part of the treatment group):

$$(8) \quad p = Pr(Hired_i | Y_{ib}, X_{ib}^p) = \Phi(\alpha + \lambda Y_{ib} + \theta X_{ib}^p)$$

Where  $Y$  is a vector of outcomes measured at baseline and  $p$  is the propensity score derived from this model. We used a set of baseline variables ( $X^p$ ) selected to maximize overlap and baseline equivalence of the sample implied by the propensity score regression. In particular, because it is important that the employment histories of those in the treatment and comparison groups are as similar as possible,  $X^p$  includes several measures of employment.

The results from this regression are presented as the anticipated changes in probabilities associated with a change in the variable of interest (evaluated at average covariate values) in Table A.10. Patterns on the work attitudes and education variables suggest that individuals in the treatment group (that is, hired into the SE) were less able than the comparison group in both the full and noninstitutional samples. That is, individuals with lower educational attainment and less positive attitudes toward work were significantly more likely to be in the treatment group. However, patterns of life stability suggest that individuals with a more stable life (working in the month before intake) might be more likely to be hired into SE employment for the full sample. Furthermore, when the coefficients on all life stability measures are tested jointly, they are statistically significant for both samples, suggesting that positive life-stability factors have joint predictive power for being in the treatment group.

**Table A.10. Propensity score regression: in treatment group**

	Noninstitutional sample	Full sample
Sample size	170	191
<b>Life stability before baseline survey</b>		
Employed in week before intake	0.080 [0.048]	0.068 [0.054]
Employed in month before intake	0.080* [0.038]	0.126* [0.043]
Employed in year before intake	-0.021 [0.026]	-0.033 [0.026]
Stable housing during year before baseline	0.012 [0.030]	0.015 [0.032]
Arrested (1-9 times) at baseline	0.042 [0.030]	0.040 [0.031]
Arrested (>9 times) at baseline	0.110* [0.044]	0.100* [0.044]
Excellent self-reported physical health at baseline	0.021 [0.023]	0.036 [0.022]
Depression index	-0.004 [0.014]	-0.010 [0.013]
Substance abuse counseling in past year	-0.089 [0.066]	-0.060 [0.052]
Monthly income/100	0.004 [0.004]	0.008 [0.004]
Health insurance	-0.006 [0.028]	-0.024 [0.030]
Participation in social assistance programs	0.095 [0.112]	0.055 [0.091]
Share of income from government transfers	0.039 [0.063]	0.083 [0.071]
Share of income from family or friends	-0.146 [0.001]	-0.090 [0.138]
<i>p</i> -value of joint test of all barriers	0.028	0.001
<b>Education and attitudes at baseline</b>		
High school diploma/graduate/GED	-0.087* [0.037]	-0.094* [0.037]
Some college or more education	-0.073* [0.035]	-0.087* [0.036]
Believe a job is just a way of earning money	0.061* [0.024]	0.065* [0.023]
Would like a job even if did not need money	-0.033* [0.017]	-0.039* [0.017]

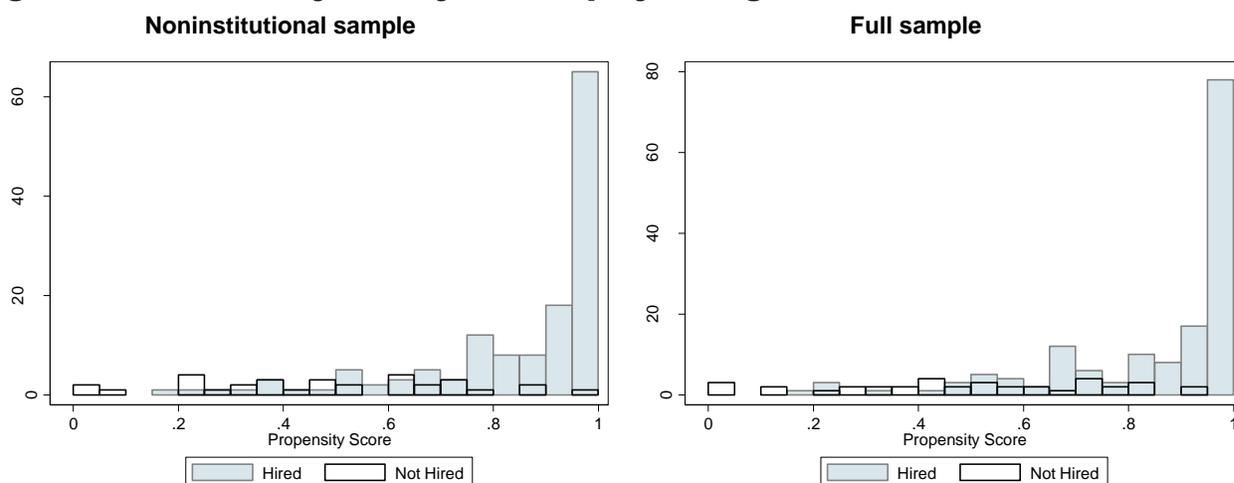
Table A.10 (continued)

	Noninstitutional sample	Full sample
<b>Demographic characteristics at baseline</b>		
Male	0.011 [0.030]	0.042 [0.043]
Age	-0.001 [0.001]	0.000 [0.001]
Hispanic	-0.065 [0.040]	-0.048 [0.036]
Black (white is reference)	0.006 [0.038]	0.004 [0.037]
Other race (white is reference)	-0.060 [0.072]	-0.032 [0.053]
Married or in a domestic partnership	0.013 [0.028]	0.008 [0.034]
No dependents	0.036 [0.024]	0.046 [0.025]
Native English speaker	-0.048* [0.017]	0.050 [0.115]

Source: MJS database.

Notes: Analysis is weighted to correct for survey nonresponse. Numbers represent the predicted change in probability associated with a characteristic when all other variables (marginal effects) are at their mean values with robust standard errors reported in brackets. Appendix C provides definitions of variables. An asterisk (\*) indicates a significant coefficient ( $p \leq 0.05$ ) as measured by a two-tailed  $t$ -test.

For propensity score regressions to yield reliable results, the distribution of the propensity score for treated and comparison individuals must overlap. This implies some underlying randomness to who received the treatment and makes causal inference possible. We used the regression results presented in Table A.10 to estimate individual-specific propensity scores and plotted their distributions in Figure A.2 to assess overlap. Although not perfect, overlap is reasonable. For the noninstitutional sample, the propensity score ranges from 0.16 to 1.00 in the treatment group and from 0.00 to 0.95 in the comparison group. This suggests that the propensity score has a relatively similar range across the treatment and control groups (that is, the distributions overlap). Moreover, only four members of the comparison group have propensity scores outside of the [0.10, 0.90] range. A large number of treated individuals do have propensity scores above 0.90, which might be expected given the relative prominence of this group. Similar results hold for the full sample and the propensity score it implies.

**Figure A.2. Probability of Chrysalis employment given characteristics**

Despite the reasonable overlap between the groups, we omit observations with propensity scores above 0.90 or below 0.10. Crump et al. (2006) suggest that this omission can increase precision (particularly valuable given our small sample size). The resulting noninstitutional sample for the impact study contains 55 individuals hired by Chrysalis (treatment group) and 28 individuals who were not hired (comparison group). The full sample contains 59 and 32 members of these groups. We call these samples the *noninstitutional propensity score sample* and *full propensity score sample*, respectively.

In our final validation test, we consider the baseline equivalence of the treatment and comparison groups, using both the standard sampling weights developed in Section B.5 and the (inverse) propensity-score-weights implied by the regression in Table A.9.<sup>14</sup> This allows us to assess whether the study will provide moderate evidence of an impact of SE on employment and housing. Following the What Works Clearinghouse (WWC 2014), we suppose that if our treatment and comparison groups exhibit baseline equivalence, our study can provide moderate evidence on the impacts of SE employment as defined by CNCS (2013). We further use the WWC's definition of baseline equivalence: two groups exhibit baseline equivalence with respect to a variable ( $X$ ) if the normalized difference (the difference in the group-specific means of  $X$  divided by the pooled standard deviation of  $X$ , or  $g$ -value) between the groups is less than 0.25. In general,  $g$ -values less than 0.05 in absolute value are considered negligible, and  $g$ -values from 0.05 to 0.25 are considered moderate; variables demonstrating a difference of this size must serve as controls in a regression framework. Variables with  $g$ -values above 0.25 should be examined and could potentially lead a study to fail to provide moderate evidence (WWC 2014).

Within the whole of the impact study samples, baseline equivalence appears to be an issue (Panel A of Tables A.11 and A.12). Many normalized differences exceed 0.25, including those related to our confirmatory outcomes. But when we select our propensity-score samples, balance is reasonable. Both the noninstitutional propensity-score and full propensity-score samples demonstrate baseline equivalence based on all variables considered (Panel B of Tables A.11 and

<sup>14</sup> The propensity score weight corrects for both survey nonresponse and selection into the treatment group.

A.12):  $g$ -values are small, and those for the confirmatory outcomes are well within established bounds. When we weight by the propensity-score (Panel C), most differences shrink further. Only one normalized difference at baseline is over 0.25 in the propensity-score weighted data, the proportion of individuals arrested 10 or more times in the full propensity-score sample. This difference is 0.30 standard deviations, suggesting that care should be taken in drawing conclusions on outcomes related to criminal history. Overall, however, our findings suggest we can be confident that our propensity score method can provide CNCS-defined (CNCS 2013) moderate evidence on the impact of SE employment at Chrysalis in most domains. Furthermore, although demographic and other background variables are generally not required to be balanced across treatment and comparison groups at baseline, their balance lends further credibility to a study and we show reasonable balance among these variables. In the samples selected for overlap, all baseline differences for these are smaller than 0.25 and most are below 0.10.

These tests suggest we can confidently use the propensity-score-weighted data to analyze the impacts of SE employment. For all outcomes, we use OLS to estimate models of the form:

$$(9) \quad Y_{if} = \alpha + \beta \text{Hired}_i + \lambda Y_{ib} + \theta X_{ib}^{\text{impact}} + \varepsilon_i$$

where variables are defined as before.  $X^{\text{impact}}$  is a subset of the controls used in the outcomes analysis. They still account for demographic and baseline characteristics of individuals but were chosen to generate a slightly more parsimonious regression model because of the smaller impact study sample size. In this specification,  $\beta$  can be interpreted as the effect of SE employment (at Chrysalis) on outcome  $Y$  at follow-up, holding demographic characteristics and baseline levels of  $Y$  constant. Results are largely robust to using a probit specification for binary outcomes.

**Table A.11. Balance in the impact study: noninstitutional sample (percentages, except where noted)**

	Panel A: noninstitutional sample			Panel B: propensity-score noninstitutional sample			Panel C: propensity-score noninstitutional sample, weighted by propensity score		
	Hired	Not hired	Normalized difference (g-value)	Hired	Not hired	Normalized difference (g-value)	Hired	Not hired	Normalized difference (g-value)
<b>Sample size</b>	138	32	170	55	28	83	55	28	83
<b>Outcome variables available at baseline</b>									
<b>Confirmatory</b>									
Employed last week (intake)	19.3	2.7	0.43*	2.9	2.9	0.00	2.3	1.7	0.03
Stable housing during last year	18.4	16.5	0.05	17.8	15.9	0.04	18.7	13.0	0.10
<b>Exploratory</b>									
Arrested 1-9 times	58.8	60.7	-0.02	61.0	65.0	-0.05	59.6	62.4	-0.02
Arrested 10 or more times	25.1	12.4	0.27	18.6	9.8	0.15	20.7	6.9	0.23
Monthly income	547	491	0.10	485	484	0.00	448	473	-0.03
Monthly wage and salary income	167	110	0.15	142	100	0.08	122	86	0.09
Share of income from work	17.3	15.2	0.06	17.3	15.3	0.04	18.5	13.4	0.09
Share of income from government	80.1	76.1	0.11	80.0	80.8	0.00	79.2	81.1	-0.02
Excellent physical health	34.1	23.8	0.20	27.0	27.2	0.00	25.2	23.1	0.03
Depression index (standard deviations)	-0.03	0.08	-0.10	0.05	0.03	0.01	0.02	0.11	-0.05
Substance abuse counseling in past year	22.0	28.4	-0.12	28.3	32.5	-0.05	27.5	32.3	-0.05
<b>Facilitating factors at intake</b>									
<b>Education and training</b>									
High school diploma or GED	45.2	51.8	-0.11	54.1	47.5	0.08	53.6	46.6	0.08
Some college or more education	25.9	34.5	-0.18	24.9	36.8	0.08	25.9	43.1	-0.20
Training completed	53.4	57.6	-0.07	62.4	59.1	0.04	60.5	66.9	-0.07
<b>Attitudes</b>									
Believe a job is just a way of earning money	21.9	11.5	0.23	12.7	8.9	0.08	9.5	6.5	0.08
Would like a job even if did not need money	82.9	87.5	-0.10	83.5	85.8	-0.03	86.0	89.1	-0.05
<b>Demographics from intake</b>									
Male	77.9	77.5	0.01	81.0	74.3	0.11	79.3	73.4	0.08
Average age	43.2	43.7	-0.03	42.6	43.9	-0.07	44.2	44.4	0.00
Hispanic (of any race)	0.16	0.34	-0.40	27.1	36.1	-0.11	35.6	42.4	-0.07
Black	16.1	34.2	0.37	49.1	46.6	0.03	45.5	44.2	0.02
White	70.3	50.6	-0.18	27.9	27.3	0.01	28.5	22.3	0.08
Married or domestic partnership	18.0	26.5	-0.15	11.6	14.6	-0.05	14.3	14.8	0.00
Without dependents	11.2	16.5	0.02	65.2	57.5	0.10	62.9	57.0	0.07
Native English speaker	63.8	62.7	-0.18*	100.0	100.0	n.a.	100.0	100.0	n.a.

Source: MJS database.

Note: Appendix C provides definitions of variables. Item-specific nonresponse reduced the number of individuals in some cells. Estimates are weighted to represent target population (see Section A.5). An asterisk (\*) indicates a significant difference between the treatment and comparison group ( $p \leq 0.05$ ) as measured by a two-tailed *t*-test.

**Table A.12. Balance in the impact study: full sample (percentages, except where noted)**

	Panel A: noninstitutional sample			Panel B: propensity-score noninstitutional sample			Panel C: propensity-score noninstitutional sample, weighted by propensity score		
	Hired	Not hired	Normalized difference (g-value)	Hired	Not hired	Normalized difference (g-value)	Hired	Not hired	Normalized difference (g-value)
<b>Sample size</b>	154	37	191	59	32	91	59	32	91
<b>Outcome variables available at baseline</b>									
<b>Confirmatory</b>									
Employed last week (intake)	20.1	2.3	0.46*	3.1	2.6	0.02	2.4	1.3	0.07
Stable housing during last year	17.8	14.8	0.08	16.7	17.2	0.00	16.9	21.2	-0.05
<b>Exploratory</b>									
Arrested 1-9 times	55.3	59.7	0.05	57.3	62.1	-0.07	59.6	55.1	0.05
Arrested 10 or more times	28.2	14.7	0.30	22.8	10.8	0.22	20.9	6.4	0.30*
Monthly income	549	466	0.15	470	448	0.04	4,356	395	0.06
Monthly wage and salary income	167	99	0.19	98	75	0.06	91	58	0.11
Share of income from work	17.0	15.2	0.06	11.7	10.5	0.03	14.58	8.85	0.12
Share of income from government	79.9	76.1	0.11	83.6	85.6	-0.03	81.42	86.90	-0.10
Excellent physical health	34.1	22.6	0.24	19.5	26.2	-0.10	20.2	20.5	0.00
Depression index (standard deviations)	-0.06	0.13	-0.20	-0.01	0.06	-0.05	0.02	0.08	-0.03
Substance abuse counseling in past year	23.8	25.4	-0.02	30.1	26.6	0.05	25.9	22.3	0.06
<b>Facilitating factors at intake</b>									
<b>Education and training</b>									
High school diploma or GED	45.5	52.7	-0.14	51.0	47.7	0.11	51.3	54.3	-0.03
Some college or more education	26.7	34.2	-0.15	27.3	37.1	0.04	28.1	36.8	-0.10
Training completed	53.0	60.5	-0.14	56.5	59.0	-0.02	57.0	57.8	0.00
<b>Attitudes</b>									
Believe a job is just a way of earning money	21.6	9.9	0.28	8.0	7.5	0.01	6.0	5.2	0.03
Would like a job even if did not need money	80.6	86.8	-0.15	83.8	84.6	-0.01	85.3	89.6	-0.09
<b>Demographics from intake</b>									
Male	78.5	74.1	0.10	80.0	70.0	0.16	75.8	67.2	0.11
Average age	43.3	43.3	0.00	42.6	43.0	-0.02	43.8	43.7	0.01
Hispanic (of any race)	16.6	29.6	-0.33	27.2	31.6	-0.07	30.8	35.7	-0.05
Black	69.6	53.7	0.32	48.9	52.4	-0.05	49.9	49.3	0.01
White	18.7	24.4	-0.12	27.5	25.0	0.03	26.3	28.3	-0.01
Married or domestic partnership	10.6	17.3	-0.21	11.3	16.2	-0.10	15.3	15.4	0.00
Without dependents	65.0	61.9	0.06	66.5	55.8	0.15	61.3	57.7	0.04
Native English speaker	97.7	97.8	0.00	98.7	97.4	0.08	98.6	98.0	0.03

Source: MJS database.

Note: Weighted analysis. Appendix C provides definitions of variables. Item-specific nonresponse reduced the number of individuals in some cells. An asterisk (\*) indicates a significant difference between the treatment and comparison group ( $p < 0.05$ ) as measured by a two-tailed t-test.

## D. Key data limitations

Although the methods used to collect and analyze data for the outcomes and impact studies meet standards for rigor, our results still have limitations. In the outcomes study, we face limitations from at least four sources:

1. Findings are based only on a small set of SEs, all funded by REDF. About half of the SE employees worked for SEs hosted by a single organization (Chrysalis). Other SEs, or other transitional work programs, would have different funding structures, locations, and resources. As a result, the findings of our outcomes study cannot be used to describe SEs outside of REDF's portfolio.
2. Study results are based only on individuals in the target population whom we could locate and who chose to participate in our survey. Although our use of nonresponse weights mitigates this concern, it does not completely resolve it. For example, selection into participation in the evaluation or nonresponse at the follow-up survey might cause the analytic sample to differ in unobservable ways from the group of people who entered the organization for services, potentially resulting in biased estimates.
3. Causal inferences cannot be made based on results of the outcomes study. Even though the analyses of SE outcomes provide interesting insights into the experiences following SE employment, all analyses for the outcomes study are descriptive, because of the lack of a plausible comparison group for much of the sample. Results cannot be interpreted to make causal inferences about the impact of SE employment on post-program outcomes.
4. Interpreting the employment and earnings outcome measures must be done with caution because they could capture SE employment. They therefore should be thought of as a mixture of the outputs of SE employment (which are directly influenced by the SE) and outcomes associated with SE employment (less proximal effects).

The impact study faces similar limitations, although it gains internal validity at the expense of external validity. That is, limitation (1) is even more notable for the impact study, as this portion of our analysis includes only a single (albeit large) SE. But our impact study does provide moderate causal evidence, reducing limitation (3). As such, we believe the effects estimated by the impact study are due at least in part to SE employment; however, changes in outcomes may also be due in part to other factors. In addition, it must be noted that our sample for the impact study is quite small. Even in the full sample, inference is based on a comparison group comprised of only 37 individuals.

Finally, the accuracy and reliability of the information obtained cannot be verified for either the outcomes or impact studies. Responses to all questions are subject to individuals correctly recalling and truthfully reporting answers to survey questions. Truthful and accurate reporting can be particularly problematic for sensitive topics, such as those in our surveys (for example, arrest record, housing, income, and mental health). The survey questions were designed to minimize these types of bias, but without reliability tests we cannot rule out the possibility that individuals did not truthfully and correctly answer all questions.

**APPENDIX B**  
**COST-BENEFIT ANALYSIS**

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A social enterprise (SE) is a mission-driven businesses focused on hiring and assisting people who face barriers to work. It strives to meet a double bottom line (DBL): achieve financial viability (business mission) and provide employment to people who might not have a job otherwise (social mission). The social mission creates costs in addition to the standard business operating costs, as SEs often subsidize the employment of their workers (by paying them more than the value of what they produce) or provide them with services and supports to overcome employment barriers and transition to employment outside the SE (Maxwell et al. 2013). We use the experiences of individuals who were hired into one of the six SEs participating in the cost-benefit analysis (CBA) between April 1, 2012 and March 31, 2013 (the *CBA population*) to develop a CBA that links the costs of SE employment to its benefits and provides estimates of the return on investment (ROI) to SE employment. Six organizations participated in the CBA: Center for Employment Opportunities (CEO), Chrysalis, Community Housing Partnership (CHP), Community Resources Center (CRC), Taller San José (Taller), and Weingart Center (Weingart). Each organization housed and supported one or more SEs, received funding from REDF to develop or expand one or more SEs, and participated in the Mathematica Jobs Study (MJS) that is described in Appendix A.<sup>15</sup>

This appendix provides details on the CBA and ROI calculations. Section A describes the data used to estimate both costs and benefits and the overarching assumptions made in conducting the CBA. Section B describes how we estimated the per-employee costs associated with providing a worker SE employment and Section C describes how we converted the benefits of SE employment, described in Chapters III and IV of the report, into dollar amounts. Section D provides details on how we estimated the ROI associated with SE employment and explores the robustness of the ROI to alternative assumptions. The final section (Section E) discusses some of the limitations associated with our approach.

## **A. Structuring the cost-benefit analysis**

We focus the CBA on answering the question, *What is the value of spending an additional dollar on an SE?* We approached this question from four perspectives: society as a whole, SE workers, the SE, and taxpayers not directly involved with the SE (that is, the government and the community). Society encompasses not only workers, the SE, and taxpayers, but also other potential beneficiaries like friends and family. To answer the question posed by the CBA, we calculated the per-employee costs and benefits of SE employment and used them as the basis for computing the ROI of SE employment from each perspective. We structured our analysis from the point of view of an organization deciding whether to hire an additional SE worker on March 31, 2012, the day before the first members of the CBA population began SE employment.

We drew data from three sources: (1) the Cost-Capture Project undertaken by REDF provided information on costs, (2) the Mathematica Jobs Study (MJS) database described in Appendix A provided information on benefits, and (3) employee counts from the organizations provided a measure of employment and a way to develop a standard unit of analysis across databases.

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<sup>15</sup> Buckelew was omitted from the CBA because it left REDF's portfolio before cost data could be collected.

## 1. The Cost-Capture Project

The CBA drew information on costs from REDF's Cost-Capture Project. This initiative was launched by REDF in September 2013 to provide accurate information on the costs of running an SE. REDF asked each organization to provide information on costs that accrued between April 2012 and September 2013 using its balance sheets and other key data sources. Organizations provided monthly information for the period, unless otherwise noted (Section B.1 of this appendix). The period roughly corresponds to the period during which the CBA population worked in SEs: most SE employment spells lasted one to six months (Maxwell et al. 2013) and September 2013 falls six months after the last person in the CBA population began work. Costs were defined as expenditures needed both to run a business (business mission) and to provide employment to individuals with multiple employment barriers (social mission). Thus, the data collected allows us to capture both *business costs* (that would have been incurred even without hiring individuals with employment barriers) and *social costs* (incurred by intentionally employing such workers). We augmented this organization-provided information with information from REDF on major capital expenditures (tracked by REDF for other purposes). The Cost-Capture Project also included information on revenues the SE received for goods and services sold (business mission) and revenues received for its social mission (for example, grant money or other subsidies from the government, REDF, or other organizations).

## 2. The MJS database

Most of the benefits of SE employment included in the CBA were estimated using the MJS database, which contains information on workers hired into SE employment or requesting employment services between April 1, 2012 and March 31, 2013 (see Appendix A for details). Information on individuals was obtained shortly before they started SE employment (or as they requested employment services) and about one year later. Key outcomes from SE employment that we use to capture benefits include earnings, transfer payments received from the government, housing, criminal activity, and health. We assessed benefits in two different ways. First, we determined the differences in outcomes for SE workers between the time they began SE employment and about one year later. We call this our *outcomes study CBA*, and it builds an understanding of how individuals' lives changed during the SE employment experience. Second, we determined the impact of SE employment at Chrysalis by comparing changes in outcomes for SE workers to changes in outcomes for individuals that entered its labor pool but did not work in an SE. We call this our *impact study CBA*.

## 3. Employment counts

Information about benefits from the MJS database is available on a per-employee (that is, individual) basis, but information from the Cost-Capture Project is in aggregate terms. To calculate the ROI, we must translate numbers into the same units. We do this by translating costs and revenues from the Cost-Capture Project into measures of per-employee costs, which capture the average cost of hiring an SE worker, and per-employee measures of revenues (that is, the average revenue from hiring an SE worker). To translate total costs and total revenue into per-employee units, we need estimates of the total employment over the period. We estimated total employment by summing employment counts obtained from each organization for each month from April 2012 to September 2013 to estimate the number of person-months of employment (that is, the number of individuals employed each month). CEO provided 1,051 person-months

of employment, Chrysalis provided 5,083, CHP provided 1,069, CRC provided 292, Taller provided 67, and Weingart provided 115. We transformed person-months of employment to the number of people employed based on information from the MJS database on average employment duration (see Section B).

#### 4. Key assumptions

We used the following general assumptions to ground our CBA, although we test how changing some of these assumptions would affect our analysis (Section D). Assumptions specific to either calculation of costs or monetization of benefits are discussed in Sections B and C. Throughout, we make the general high-level assumptions, some of which have assumptions subsumed within them:

1. All costs of SE employment are internalized by the organization and reflected in the expenditures provided.
  - Workers face a zero opportunity cost of SE employment. Only 19 percent of SE workers were employed in the week prior to beginning work, rationalizing this choice.
2. Our measures of benefits fully capture the benefit of SE employment. For example, all benefits from reduced criminal activity are captured by our measure of decreased costs of incarceration.
  - Benefits outside those captured in this study are negligible.
  - All benefits of SE employment can be measured approximately one year after an individual begins work (that is, our baseline model assumes benefits stop accruing after the date of the follow-up survey).
3. Funds spent by SE(s) come from an organization's cash reserves and do not require additional resources (for example, fundraising expenses or interest payments).
4. An 8 percent<sup>16</sup> annual discount rate accurately converts costs and benefits into April 2012 terms.

#### B. Developing cost estimates

We used the following five-step process in our computations, although assumptions and steps were sometimes organization specific:

1. Depreciate capital costs and incorporate them as a flow (the cost of use) and not as a stock (the cost of acquisition).
2. Classify expenditures into costs associated with the organization's business or social missions using the descriptions provided in the Cost-Capture Project data. Expenditures

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<sup>16</sup> The 8 percent discount rate is higher than the rate typically used to evaluate government programs (for example, Schochet et al. 2006) for three reasons. First, such CBAs often take the perspective of the government funding a program and base discount rates on yields on long-term government bonds. Our CBA takes the perspective of a non-profit organization that faces much higher costs of borrowing, implying a higher discount rate. Second, SEs have both a business and a social mission and the discount rates used by businesses typically reflect the costs of both equity and debt financing, which increases the effective rate of time preference. Third, REDF's social ROI analysis (REDF 2013) suggests an 8 percent discount rate is warranted.

associated with providing goods and services in the marketplace are considered business costs and expenditures associated with serving the CBA population were considered social costs. If an SE classified costs as related to business or social missions, we use their delineation, making exceptions only as noted in Section B.1 of this appendix.

3. Adjust cost data in the Cost-Capture Project to accurately capture the costs of running an SE. To do this we:
  - Exclude (social) expenditures on services provided to the CBA population that were not contingent upon SE employment (for example, case management provided to all of the organization's clients).
  - Include costs of running the SE borne by the host organization (for example, administrator time spent on planning) even if they were not reported as line-item expenditures.
4. Estimate average *per-employee monthly costs* by (a) summing the discounted monthly expenditures across months to create a measure of total costs, and (b) dividing by the number of person-months of employment from April 2012 to September 2013 (see Section A.3 of this appendix).
5. Estimate average *per-employee costs* by multiplying the per-employee monthly cost (step 4) by the average number of months individuals worked at the SE (Maxwell et al. 2013).

### 1. Organizational nuances

The type and form of cost information in the Cost-Capture Project varied by organization: some organizations provided estimates that carefully delineated between social and business costs, while others did not. Such differences produced slight variations in our method to calculate the per-employee social and business costs for each organization.

**Center for Employment Opportunity.** Multiple partners worked with CEO's California-based SE, which was developed using REDF grant money in 2012. The SE was originally structured with the City of Oakland contracting with Volunteers of America (VoA) to provide services and supports and VoA contracting with CEO to provide employees. Rubicon, a local nonprofit, initially provided some supports for the employees, although that contract was discontinued in July 2012 and CEO directly provided those services thereafter. This complex structure of funding required that financial information be obtained from several sources.

- The City of Oakland provided information on funds from the California Department of Transportation (CalTrans) and the California Department of Corrections and Rehabilitation (CDCR) that were routed through VoA to the SE.
- Rubicon provided information on a grant from Tipping Point to support training for SE workers.
- REDF provided information on funds for the social mission to CEO for work supports and training to SE workers and two lump-sum disbursements to VoA to support SE workers.<sup>17</sup>

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<sup>17</sup> Funds were released on two dates but supported operations for one year. Because funding was based on the number of individuals who worked at least 32 hours in four weeks, we assumed funds were spent monthly in proportion to the number of individuals who met this requirement.

Because each set of financial data was available only from a single perspective (for example, we know the amount of money REDF provided to CEO but not CEO's expenditure), we assumed costs and revenues are equal (that is, no entity made a profit or loss). We also assumed that business costs are captured by the money that the City of Oakland received from CalTrans, and social costs are captured by the sum of Rubicon's Tipping Point expenditures, REDF's funding, and the funds received by Oakland from CDCR.

**Chrysalis.** Because Chrysalis started its SE in the early 1990s, our cost estimates capture those associated with running a mature SE. Chrysalis provided balance sheets with monthly information for line-item-level direct and indirect expenditures associated with running two SE business lines. It also provided expenditures associated with the SE's social mission, including an estimate of the subsidy paid to workers at the SE (that is, the extent to which wages exceed the value of the labor employed) and estimated costs borne by both Chrysalis and SE staff associated with supervising and working with the CBA population.

**Community Housing Partnership.** CHP provided monthly financial information on the costs associated with its two SEs (one closed and one expanded during the study period) and on the costs of the social services given to SE workers by the SEs, including imputed costs borne by CHP to support SE operations.<sup>18</sup> CHP staff estimated costs and included expenditures on both the SEs' business and social missions. We estimated the costs associated with the business and social missions by assuming half of the imputed host organization expenditures supported each line of business. Other costs were designated as business costs if they were associated with either line of business and social costs if they supported social services.<sup>19</sup> Because CHP staff estimated that the SEs provide some services directly to workers that they would have received from CHP had they not been SE workers, we adjusted the social-mission costs to reflect these cost savings.<sup>20</sup>

**Community Resources Center.** During April 2012 to September 2013, CRC developed and refined its SE and hired its first cohort of workers in May 2012. Our costs therefore capture those associated with developing and running the SE, but omit start-up and research-related expenditures borne prior to April 2012. CRC provided line-item financial data for all expenditures or revenues that accrued during the period, as opposed to monthly data. This aggregation of data presented a challenge because expenditures made at different points in time should be discounted at different rates. To account for temporal variation, we assumed that any fixed costs were distributed evenly across the period and that any variable costs were

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<sup>18</sup> We created aggregate measures when we found small inconsistencies between CHP line items and totals.

<sup>19</sup> We made one exception to the designation of costs as business or social: the line item for "tech training/out" was associated with one of the lines of business from February to June 2013. We assumed that these expenses related to training SE workers, which would not be necessary if the SE did not hire a population with large barriers to employment. We therefore classified these expenditures as associated with the SE's social mission.

<sup>20</sup> Specifically, staff estimated that 50 percent of employees in one business line were CHP clients and that the SE provided 30 percent of the social services that would have been provided by CHP and that 40 percent of employees in the other business line were CHP clients and the SE replaced about 40 percent of their services. This implies that the social costs were overestimated by about 15 percent ( $0.30 \times 0.50$ ) in one business line and 16 percent ( $0.40 \times 0.40$ ) in the other. We therefore reduced social costs each month by between 15 and 16 percent, with the precise reduction determined by the number of workers employed at each business line in the month.

proportional to the number of SE workers in a given month (see Section A).<sup>21</sup> We created cost measures using approximately 50 different line items on expenses categorized into business and social missions. CRC's SE had substantial losses, even though it estimated relatively low social costs and operated other very similar enterprises with high profit margins that did not hire individuals with employment barriers. We therefore assumed that if the SE did not purposefully hire these workers, the revenues generated by its SE (excluding any grant money or subsidies) would cover its variable business costs. We adjusted the total variable business costs downward and social costs upward, while holding total costs constant, to match this assumption.

**Taller San José.** During April 2012 to September 2013, Taller's SE changed from one providing permanent employment to one providing transitional jobs with social service supports. Costs therefore include expenditures associated with transforming the SE into a transitional employment program. Financial data included business costs, which we adjusted for increased costs due to the SE's social mission. Social costs allocated for the additional expenditures required to serve the CBA population were available beginning in July 2012 and were imputed for April to June 2012 as the average monthly cost from the remainder of 2012.

**Weingart Center.** Weingart's SE first booked business revenue in May 2012, which means cost estimates include running an SE during start up but exclude start-up and research-related expenditures incurred prior to April 2012. Financial data were delineated by line item and included SE outlays and revenues, including costs incurred by Weingart in support of the SE (in particular, wrap-around services provided as part of the SE).

## 2. Cost summary

Table B.1 provides summarizes the SE costs captured for each organization. The per-employee cost to provide an individual with SE employment averaged \$9,855 (\$7,539 for business mission and \$2,316 for social mission), with a range from \$6,506 at Chrysalis to \$81,624 at Taller. Variations in costs across organization could arise with differences in:

- The specific costs captured, described above and summarized in the second column of Table B.1.
- Average employment durations, which ranged from 3.2 months at CEO to 7.6 months at Weingart, as shown in the third column of Table B.1.
- Business costs (fourth column of Table B.1), which are largely determined by the nature of the products or services sold. These costs had greater variation than did social costs both on a per-employee and per-employee-month basis. Taller spent the most per employee month on business costs (\$21,896) while CEO (\$1,461) and Chrysalis (\$1,447) spent the least.
- Social costs (fifth column of Table B.1), which stem from differences in the social supports provided to employees.<sup>22</sup> CRC spent the most per employee-month on their social mission (\$2,220) while CHP spent the least (\$160).

<sup>21</sup> We used line-item descriptions to classify costs as fixed or variable with respect to the number of workers hired.

<sup>22</sup> These costs of social supports are consistent with a description of their provision (Maxwell et al. 2013). CRC, Weingart, and Taller provided wrap-around services and had higher social costs. Chrysalis and CHP provided a more limited set of services (other than those provided regardless of SE employment) and had lower social costs.

**Table B.1. Per-employee cost of SE employment (dollars, expect where noted)**

Organization	Costs captured	Components of per-employee costs					Total
		Average months of employment	Average per-employee monthly cost		Per-employee costs (monthly costs*average months of employment)		
			Business mission	Social mission	Business mission	Social mission	
<b>Total</b>	<b>Individual organization costs</b>	<b>3.7</b>	<b>2,054</b>	<b>625</b>	<b>7,738</b>	<b>2,398</b>	<b>10,136</b>
CEO	Running a new SE	3.2	1,461	1,078	4,631	3,417	8,049
Chrysalis	Running a mature SE	3.8	1,447	288	5,426	1,080	6,506
CHP	Running the SE, closing one business line and expanding another	3.9	1,776	161	6,855	621	7,477
CRC	Developing and running the SE	4.5	2,205	2,220	9,923	9,990	19,913
Taller	Running the SE, transitioning to a transitional employment program	3.4	21,896	2,111	74,446	7,177	81,624
Weingart	Developing and running the SE	7.6	4,606	1,806	35,006	13,726	48,731

Source: MJS database, cost-capture data, employee count data.

Note: We used a weight for each organization proportional to the size of its CBA population to compute average costs across organizations.

## C. Monetizing benefits

In this section, we describe how we translated each benefit into a monetary value, focusing on the assumptions required to transform outcomes and impacts into a dollar-denominated measure of benefits of SE employment. We then summarize the per-employee benefits included in the CBA.

### 1. Individual benefit calculations

We capture benefits for the CBA in five domains: income, housing stability, criminal activity, health, and revenue generated for the SE. All benefits except revenue are measured with information from the MJS database. Revenue is measured with information from the Cost Capture Project.

**Income.** We measure income along three dimensions: earnings, taxes paid and government transfers received by SE workers, and other income (mostly transfers received from friends and relatives). Because all income measures are captured in monetary terms and at the individual level, we need not convert them into per-employee dollar amounts. They are, however, provided on a monthly basis (for the month prior to the follow-up survey) and must therefore be aggregated to reflect the total change in income during the year following the start of SE employment.

1. **Earnings.** Monthly wage and salary income at the time of follow-up survey is our main measure of earnings. We assumed that changes in this measure occurred immediately after the individual began SE employment (with their SE earnings) and lasted one year, the approximate duration between our baseline and follow-up interviews.<sup>23</sup>
2. **Taxes and government transfers.** We assumed that earnings were taxed at a combined federal, state, and local rate of 15 percent, which means 85 cents of every dollar earned by workers goes to the individuals and 15 cents is a benefit to taxpayers not directly involved with the SE (see Emerson et al. 2000). Reductions that occurred in income received by the SE worker from the government (after SE employment) reflect a smaller transfer from the government to the SE worker that does not change the societal benefit of SE employment (assuming negligible changes in administrative costs associated with the transfers), but reduces the benefit to the worker and increases the benefit to the taxpayer. We assumed any changes occurred immediately after the individual began SE employment and lasted one year.
3. **Other income.** Other income received by the worker is mostly money given to them by friends and relatives. Changes in this measure do not affect the benefit of SE employment to society as a whole as they reflect a transfer from friends and relatives to the SE worker. We assumed that changes in income occurred immediately after the individual began SE employment and lasted one year.

**Housing.** We estimate the benefits from stable housing in two ways: (1) housing expenditures, that is, reduced government expenditures on emergency housing as a benefit to taxpayers not directly involved with the SE and corresponding increases in housing outlays paid by SE workers, and (2) increased quality of life for the SE worker from having stable housing.

1. **Housing expenditures.** We examined the types of shelter that individuals in unstable housing used in the week before SE employment to produce a snapshot of the housing used by those not owning or renting their home. Assuming each housing category reported was used equally over the period covered (for example, individuals spent half their time in a location if they reported staying in two different locations during the week), 19 percent of the nights were spent in transitional housing, 5 percent were spent in emergency housing, and 5 percent were spent in permanent housing, with 23 percent of nights spent in their own home.<sup>24</sup> We therefore estimated that moving the average unstably housed individual into their own home for 100 days left the individual with 77 additional days in their own home, 19 fewer days in transitional housing, 5 fewer days in emergency housing, and 5 fewer days in permanent supportive housing.

Spellmen et al. (2010) quantified the costs of emergency shelters, transitional housing, permanent supportive housing, and fair-market rents for families and individuals in Houston

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<sup>23</sup> We make this assumption because we can only observe changes for approximately one year after the baseline survey. See Section D of this appendix for a discussion of the robustness of our results to alternate assumptions on the persistence of benefits.

<sup>24</sup> Unstably housed individuals who did not spend time in their own home, emergency shelters, transitional housing, or permanent housing mostly spent time in homes of friends and relatives, which we assume has a zero housing cost.

Texas in 2006. We adjusted these costs for increases in housing costs over time (1 percent from 2006 to 2012–2013) and cost differences between Houston and the three California housing markets in which SEs operated.<sup>25</sup> Table B.2 shows the estimates from Spellman et al. (2010) and our transformed measures. For example, it costs \$2,616 to house an individual in emergency housing for one month in San Diego but would cost that individual only \$1,199 to rent a home themselves.

We used these estimates to calculate the costs of unstable housing. For example, an SE worker in San Diego who did not solely use stable housing spent 23 percent of their time in their own home. With rent of \$1,199 per month, this implies the average unstably housed individual spends \$276 per month on rent. They also spend about 19 percent of their time in transitional housing, costing the government about \$616 per month (19 percent times a monthly cost of \$3,241); 5 percent of their time in emergency shelters, costing \$131 per month (5 percent times a monthly cost of \$2,616); and 5 percent of their time in permanent supportive housing, costing the government \$119 (5 percent times a monthly cost of \$2,272). Having the individual use only their own housing each month therefore implies a benefit of \$865 to taxpayers not directly involved with the SE and a loss of \$923 to the individual (\$1,199 – \$276). This implies a net loss of \$58 per month to society as a whole. We performed similar calculations for each city and for individuals with and without families (Table B.2).

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<sup>25</sup> Relative costs of housing by location (CNN Money 2014) show an increase of 94 percent for individuals living in and around Los Angeles, 89 percent in the San Diego area, and 184 percent in the San Francisco area. Housing prices were inflated over time using the index for Dallas, Texas (S&P/ Case-Shiller Dallas Home Price Index 2014) and transforming the 2006 average to April 2012 to December 2013 averages.

**Table B.2. Monthly housing costs for the homeless and fair market rents (dollars)**

	Cost for Houston (Spellman et al. 2010)	2012–2013 costs by city		
		San Diego	Los Angeles	San Francisco
Individual				
Emergency shelter	1,335	2,616	2,548	3,829
Transitional housing	1,654	3,241	3,157	4,744
Permanent supportive housing	1,211	2,372	2,311	3,472
Family				
Emergency shelter	1,391	2,726	2,655	3,990
Transitional housing	3,211	6,292	6,129	9,210
Permanent supportive housing	799	1,566	1,525	2,292
Fair market rents				
Individual (one bedroom)	612	1,199	1,168	1,755
Family (two bedroom)	743	1,456	1,418	2,131
Monthly benefits of stable housing: taxpayers not directly involved with SE				
No family	442	865	843	1,266
Has family	720	1,410	1,374	2,064
Increased monthly costs for stable housing: SE worker				
No family	471	923	900	1,351
Family	572	1,121	1,092	1,641

Source: Spellman et al. (2010), CNN Money (2014), S&P/Case-Shiller Dallas Home Price Index (2014).

2. **Quality of life.** We adopted techniques typically applied to estimating the economic value of health conditions to capture changes in quality of life from gaining stable housing. As in Cutler and Richardson (1997, 1998), we used an ordered probit regression with controls for the types of housing used<sup>26</sup> and demographic characteristics to predict an individual's response to the question: "If you were to consider your life in general these days, how happy or unhappy would you say you are, on the whole? Please use a scale of 1 to 7 to rate your happiness with 1 being very happy and 7 being not at all happy." The regression took the form:

$$(1) \quad WB^* = bH + dX + e$$

where  $WB^*$  is an individual's true (unobserved) well-being,  $H$  is a series of indicators for using a given type of housing other than one's owned or rented unit,  $X$  is a set of demographic variables, and  $e$  is a normally distributed error term. Although we cannot observe  $WB^*$ , we can approximate it using  $WB$ , based on the answer to the question above. To avoid confusion which might occur if lower numbers were associated with higher well-being, we assign  $WB=7$  to responses of "very happy," 6 to responses of "happy," and so on.

<sup>26</sup> We captured housing between follow-up survey and the last preceding survey (Appendix A provides details).

The ordered probit model allows us to estimate two sets of coefficients. First, it produces estimates of  $b$  and  $d$ , or the relationships between our variables of interest and the unobservable index of well-being,  $WB^*$ . Second, it produces estimates of cut-off values that provide a map between  $WB^*$  (the unobservable well-being index) and  $WB$  (our observable measure of well-being). These cut-off values ( $c_1, c_2, c_3, c_4, c_5$ , and  $c_6$ ) tell us:

$$(2) \quad \begin{array}{llll} WB=1 \text{ if } WB^* \leq c_1 & WB=2 \text{ if } c_1 < WB^* \leq c_2 & WB=3 \text{ if } c_2 < WB^* \leq c_3 & WB=4 \text{ if } c_3 < WB^* \leq c_4 \\ WB=5 \text{ if } c_4 < WB^* \leq c_5 & WB=6 \text{ if } c_5 < WB^* \leq c_6 & WB=7 \text{ if } c_6 < WB^* & \end{array}$$

Thus,  $b$  tells us the relationship between the well-being index and housing,  $d$  tells us how other characteristics are associated with well-being, and  $c$  allows us to understand how this index relates to our survey question. Note that positive values of  $b$  and  $d$  imply that a variable is associated with increased well-being.

Table B.3 shows the estimates from this ordinal probit regression. Although few coefficients are statistically significant, some intuitive patterns emerge. Individuals who lived with family or friends, who slept outdoors or in public, or who lived in a mental hospital, substance abuse rehabilitation facility, jail, or prison are less happy than stably housed individuals. Results show no evidence that individuals who used transitional housing, permanent housing for previously homeless individuals, halfway houses, or hotels and motels as shelter are less happy than stably housed individuals.

We used the results presented in Table B.3 to build a quality-of-life index based on each individual's housing. Following the health economics literature (Cutler and Richardson 1997, 1998), we assigned a value of 1.00 to individuals who were stably housed, assumed that housing categories associated with increased happiness (Table B.3) increased the quality of life index, and valued a one percentage point increase in the index at \$1,000 per year. Indices range from 1.00 to 0.80, suggesting a maximum improvement in quality of life associated with housing of 20 percentage points (worth \$20,000 per year). An individual who lived with friends or family because they lacked their own home would improve their quality of life by 19 percentage points if they moved into their own home, for example.

**Table B.3. Well-being and housing (ordered probit coefficients)**

	Rating on happiness scale
<b>Sample size</b>	<b>273</b>
<b>Used...as housing since last survey</b>	
Home of family member or friend	-0.458* [0.148]
Jail, prison, or juvenile detention	-0.352 [0.244]
Transitional housing	0.054 [0.115]
Psychiatric hospital, substance abuse treatment facility, or other related facility	-0.495* [0.155]
Emergency shelter or voucher	0.175 [0.181]
Outside or in public	-0.388* [0.161]
Hotel or motel	0.411* [0.096]
Halfway home for those with criminal history or similar facility	-0.032 [0.423]
Permanent housing for previously homeless people	0.206 [0.226]
Other (group home, nonpsychiatric hospital, and write-in options)	-0.292 [0.181]
Any missing or refused responses	-0.221* [0.093]
Male	-0.182 [0.099]
Age	-0.002 [0.008]
Hispanic	0.142 [0.160]
Race	
Black	0.104 [0.169]
White	0.022 [0.162]
Married or in a domestic partnership	-0.066 [0.100]
Dependents	0.100 [0.098]
Native English speaker	0.085 [0.150]

Table B.3 (continued)

Rating on happiness scale	
Cutoff points	
C <sub>1</sub>	-2.043* [0.613]
C <sub>2</sub>	-1.615* [0.606]
C <sub>3</sub>	-1.077 [0.643]
C <sub>4</sub>	-0.641 [0.652]
C <sub>5</sub>	-0.184 [0.651]
C <sub>6</sub>	0.380 [0.690]

Source: MJS database, combined noninstitutional outcomes study and impact study samples.

Notes: Higher scores indicate greater well-being. Estimates are unweighted. Coefficients reflect the change in the ordered probit index for happiness that occurs with a given change in the variable (see equation [1]). The cutoff points reflect the relationship between the well-being index and responses to our question on well-being (see [2]). Regression models also include indicators for missing values, time since last survey, and the last survey being the baseline survey. (See Appendix A for details). Appendix C provides variable definitions. Robust standard errors are in brackets. An asterisk (\*) indicates a significant coefficient ( $p \leq 0.05$ ) as measured by a two-tailed  $t$ -test.

**Criminal activity.** Because arrests were the crime-related outcomes most likely observed in the MJS database and are the least likely to be subject to non-reporting biases, we used arrests to estimate benefits of a reduction in criminal activity. We converted estimates of arrests into a monetary benefit using the anticipated governmental savings from not having to house a prisoner. The costs of prison (Legislative Analyst's Office n.d.), relative costs of jail (Urban Strategy Council 2007), and numbers of California inmates housed in prisons and jails (California Department of Corrections and Rehabilitation 2013) suggest that the average person-year of imprisonment in California costs taxpayers approximately \$30,000. Maxwell et al. (2013) shows the average arrest is associated with 15.7 months sentenced to jail or prison for SE workers and the California Penal Code 2933 suggests that inmates serve half of their sentenced time. These facts imply that each averted arrest saves taxpayers \$19,566. Assuming a maximum of one averted arrest per SE worker, we thus estimate that a one percent decrease in the arrest rate between baseline and follow-up is associated with a gain of \$196 to taxpayers not directly involved with the SE (per SE employee). We further assume that arrests were averted six months after the average individual began SE employment for the purpose of discounting benefits. This time horizon corresponds to approximately the midpoint of the period in which we have data on the behavior of the average member of the survey sample.

**Health.** We estimate the benefits from health in two ways: (1) gains in overall quality of life from improved health, and (2) decreased substance abuse. We use a self-reported rating of health

(excellent, very good, good, fair, or poor) as our main measure of health.<sup>27</sup> We further used answers to questions about being in counseling for substance abuse to measure substance abuse.

1. **Quality of life.** CBAs of interventions that may improve health typically focus on changes in the quality of life index, which assumes a one percentage point increase in the index is valued at \$1,000 per year (Cutler and Richardson 1998). We use work by Nyman et al. (2007) to translate our self-reported health measure into the quality of life index, which ranges from 0.941 (excellent health status) to 0.498 (poor health status). We assume that any changes in health occurred six months after the average individual began SE employment.
2. **Substance abuse.** Work by Groot (2000), implies that substance abuse issues are associated with losses of approximately \$18,000 per person per year.<sup>28</sup> We therefore assume an additional \$18,000 annual benefit for every individual who stopped requiring counseling for substance abuse after SE employment. We assume that any changes in substance abuse occurred six months after the average individual began SE employment.

**Revenue.** We include two types of SE revenue from the Cost Capture Project in our CBA: revenues received by the SE for selling goods and services in the market (business mission) and grant money provided by the government and other foundations supporting the SEs' mission to employ individuals with substantial barriers (social mission). Estimates were discounted and calculated at the per-employee month level in the same manner as cost estimates (Section B). While business revenues represent the value of the goods and services produced by the SE and represent a benefit accruing to the SE, grant money must be treated differently because it represents a transfer to the SE from organizations classified in our CBA as taxpayers not directly involved with the SE. Because this CBA is conducted from the perspective of the SE, social revenues are added to our measure of benefits to the SE, subtracted from our measure of benefits to taxpayers not directly involved with the SE, and do not affect the benefits to society as a whole.

## 2. Benefits summary

Per-employee benefits were estimated using the sum of all dollar-denominated benefits of SE employment accruing to society as a whole, the SE worker, the SE, and taxpayers not directly involved with the SE. We calculated the benefits in three ways, using (1) changes in outcomes across all SEs contributing to the CBA population, estimated in the outcomes analysis (see Appendix A); (2) changes in outcomes specific to each organization, estimated in the outcomes analysis; and (3) impacts of SE employment, estimated in the impact analysis. Table B.4

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<sup>27</sup> There may be further benefits in this domains associated with increases in insurance coverage over the period of interest but we cannot capture these in our analysis. Although we asked about health insurance in both our baseline and follow-up surveys, individuals had some difficulty in reporting both their coverage and the source of their insurance. Thus, concerns about data quality led us to omit this variable from our analysis.

<sup>28</sup> Groot (2000) produced this estimate based the self-reported overall health of individuals with and without substance abuse problems, which may lead to a concern that changes in substance abuse are "double-counted" by our direct measure of substance abuse and our measure of overall health. To mitigate this concern, we omitted changes in substance abuse from our benefit estimates. Section D provides details.

provides an overview of estimated per-employee benefits for each organization.<sup>29</sup> On average, the outcomes study CBA suggests each worker generated a benefit of \$22,632 to society as a whole with each SE worker losing \$165 and the SE and taxpayers not directly involved with the SE gaining \$9,822 and \$13,250 per employee respectively. The impact study CBA suggests that each worker generated a benefit of \$8,745 to society as a whole with workers losing \$443 from SE employment and the SE and taxpayers gaining \$6,593 and \$2,751 per employee respectively.

**Table B.4. Per employee benefits of social enterprise employment (dollars)**

	To society as a whole	To SE worker	To SE	To taxpayers not directly involved with SE
<b>Aggregate</b>				
Outcomes analysis average	22,632	-165	9,822	13,250
Organization				
CEO	18,195	1,684	8,052	9,171
Chrysalis	21,871	-206	6,593	15,473
CHP	36,378	11,449	7,465	17,577
CRC	20,883	-4,823	18,801	7,111
Taller	65,780	6,994	73,947	-15,578
Weingart	46,042	27,293	41,245	-10,751
Impact analysis	8,745	-443	6,593	2,751
<b>Income</b>				
Outcomes analysis average	6,254	3,774	0	2,755
Organization				
CEO	3,806	2,120	0	2,399
Chrysalis	5,701	3,891	0	1,800
CHP	17,630	12,218	0	5,525
CRC	3,102	-5,095	0	8,403
Taller	9,748	6,646	0	2,685
Weingart	18,136	27,161	0	2,720
Impact analysis	1,257	-235	0	1,647
<b>Housing</b>				
Outcomes analysis average	612	-3,070	0	10,126
Organization				
CEO	746	-1,770	0	7,677
Chrysalis	513	-3,119	0	10,849
CHP	234	234	0	13,731
CRC	285	285	0	11,231
Taller	360	360	0	3,789
Weingart	111	111	0	12,421
Impact analysis	75	-1,332	0	1,407

<sup>29</sup> Table B.4 includes the estimates of quality of life associated with using each housing situation. These are created for housing status  $i$  as  $\max\{1, 1 + b_i / (c_6 - c_1)\}$ , where  $b$  and  $c$  are defined in Table B.3. For individuals using multiple housing categories, the coefficients are summed (for example, if  $i$  and  $j$  were used as housing, the estimated quality of life index would be  $\max\{1, 1 - (b_i + b_j) / (c_6 - c_1)\}$ ).

Table B.4 (continued)

	To society as a whole	To SE worker	To SE	To taxpayers not directly involved with SE
<b>Criminal activity</b>				
Outcomes analysis average	10,126	0	0	10,126
Organization				
CEO	7,677	0	0	7,677
Chrysalis	10,849	0	0	10,849
CHP	13,731	0	0	13,731
CRC	11,231	0	0	11,231
Taller	3,789	0	0	3,789
Weingart	12,421	0	0	12,421
Impact analysis	503	0	0	503
<b>Health</b>				
Outcomes analysis average	-869	-869	0	0
Organization				
CEO	1,334	1,334	0	0
Chrysalis	-978	-978	0	0
CHP	-1,003	-1,003	0	0
CRC	-13	-13	0	0
Taller	-12	-12	0	0
Weingart	22	22	0	0
Impact analysis	1,125	1,125	0	0
<b>Revenue</b>				
Outcomes analysis average	6,509	0	9,822	-3,313
Organization				
CEO	4,631	0	8,052	-3,421
Chrysalis	5,786	0	6,593	-807
CHP	5,786	0	7,465	-1,679
CRC	6,278	0	18,801	-12,523
Taller	51,894	0	73,947	-22,053
Weingart	15,352	0	41,245	-25,893
Impact analysis	5,786	0	6,593	-807

Source: MJS database.

Note: In the impact study, propensity-score weighted analysis is used for all benefits except revenues and unweighted analysis is used for revenues. Benefits of SE employment to the friends and relatives of SE workers are excluded from this table, but are included in benefits to society as a whole.

## D. Putting it together

Descriptions of costs faced by SEs bring us insight into how organizations fund their SEs and the resources it takes to provide employment opportunities to individuals with employment barriers. Monetized and aggregated benefits allow us to understand the benefits that SE employment provides to society as a whole, SE workers, the SE, and taxpayers not directly involved with the SE. We can use the discounted, monetized per-employee costs and benefits described in Sections B and C to create a measure of benefits per dollar spent by the SE to SE

workers, taxpayers, the SE, and society as a whole, as well as the ROI of SE employment to society:

$$(3) \text{ Benefits per dollar spent}_{SE \text{ worker}} = \left( \frac{\text{Per-employee benefit to worker}}{\text{Per-employee cost}} \right),$$

$$(4) \text{ Benefits per dollar spent}_{SE} = \left( \frac{\text{Per-employee benefit to taxpayer not directly involved with SE}}{\text{Per-employee cost}} \right),$$

$$(5) \text{ Benefits per dollar spent}_{taxpayer} = \left( \frac{\text{Per-employee benefit to taxpayer not directly involved with SE}}{\text{Per-employee cost}} \right),$$

$$(6) \text{ Benefits per dollar spent}_{society} = \left( \frac{\text{Per-employee benefit to society as a whole}}{\text{Per-employee cost}} \right),$$

$$(7) \text{ ROI} = \text{Benefits per dollar spent}_{society} - 1.$$

We calculated the benefits per dollar spent in three ways, consistent with the three different ways that we captured benefits: (1) changes in outcomes across all SEs contributing to the CBA population (outcomes study CBA); (2) changes in outcomes specific to each organization (outcomes study CBA); and (3) impacts of SE employment (impact study CBA). Table B.5 shows these estimates. The outcomes study CBA suggests that each dollar spent by the SE created \$2.23 in value for society as a whole. Positive returns accrued to both the SE and taxpayers not directly involved with the SE. Each dollar spent by the SE produced \$0.97 of revenue for SE itself and benefits worth \$1.31 to taxpayers not directly involved with the SE. SE workers lost \$0.02 for each dollar spent by the SE. In the impact study CBA, each dollar spent by the SE produced \$1.01 for the SE, \$0.42 for taxpayers not directly involved with the SE, and \$1.34 for society as a whole. SE employees also lost \$0.07 of value for each dollar spent by the SE.

**Table B.5. ROI and benefits per dollar spent**

	ROI (percent)	Benefits per dollar spent to society as a whole	Benefits per dollar spent to SE worker	Benefits per dollar spent to SE	Benefits per dollar spent to taxpayers not directly involved with SE
Average for outcomes analysis	123	2.23	-0.02	0.97	1.31
Organization					
CEO	126	2.26	0.21	1.00	1.14
Chrysalis	236	3.36	-0.03	1.01	2.38
CHP	387	4.87	1.53	1.00	2.35
CRC	5	1.05	-0.24	0.94	0.36
Taller	-19	0.81	0.09	0.91	-0.19
Weingart	-6	0.94	0.56	0.85	-0.22
Impact analysis	34	1.34	-0.07	1.01	0.42

Source: MJS database and cost-capture project, and employee counts. See Tables B.1 (costs) and B.4 (benefits).

Notes: See equations (2)-(5) for definitions. Benefits of SE employment to the friends and relatives of SE workers are excluded from this table, but are included in benefits to society as a whole.

We further explored an alternative measure of the ROI in SEs, based on a purely social perspective. This calculation ignores all costs the SE faces related to running their business (such as paying for labor and capital), as well as the revenues the SE receives from selling their goods and/or services. We refer to this measure as the social ROI and calculate:

$$(8) \quad ROI_{social} = \frac{\text{Per-employee benefit of SE social mission}}{\text{Per-employee costs associated with SE mission}} - 1.$$

We calculate the per-employee benefit of the SE's social mission as the total per-employee benefits of the SE to society as a whole minus business revenues received by the SE from the market. Costs include any outlays associated with training and employing the target population (over and above the standard costs an employer would face). Essentially, by dropping the costs and benefits associated with the SE as a business, this measure allows us to evaluate the ROI of adding a social mission to an existing business. Additionally, the measure allows us to understand the ratio of social benefits to social costs, which could be potentially useful for individuals most interested in the pro-social aspects of the SE.

Table B.6 examines the various quantities entering equation (8) and the implied government ROI. On average, SEs faced costs associated with their social mission of \$2,398 and produced a social benefit worth \$16,123. The outcomes study CBA suggests that each dollar invested in the SE's social mission produces a return of 572 percent of value to the government. The ROI from the impact study is lower but still large: Chrysalis spent \$1,080 per employee on their social mission and produced a non-business value of \$2,959 per worker. On net, each dollar given to the SE to fund the SE's social mission generates a social return of 174 percent.

**Table B.6. ROI from the government perspective**

Variable	Social costs (dollars)	Social benefits (dollars)	Social ROI (percentage)
Average for outcomes analysis	2,398	16,123	572
Organization			
CEO	3,417	13,564	297
Chrysalis	1,080	16,085	1,389
CHP	621	30,592	4,826
CRC	9,990	14,605	46
Taller	7,177	13,886	93
Weingart	13,726	30,690	124
Impact analysis	1,080	2,959	174

Source: MJS database and cost-capture project, and employee counts. See Tables B.1 (costs) and B.4 (benefits).

Note: In the impact study, propensity-score weighted analysis is used for all benefits except revenues in impact study and unweighted analysis is used for revenues and costs. Benefits of SE employment to the friends and relatives of SE workers are excluded from this table, but are included in benefits to society as a whole.

Our ROI calculations required many assumptions. To explore how sensitive our ROI estimates are to these assumptions, we performed the following sensitivity analyses:

1. **Discount rates.** Our analysis assumed a discount rate of eight percent per year and we assessed alternate ROIs assuming rates of 4 and 12 percent.
2. **Housing quality of life regression specification.** Our analysis of quality of life associated with housing (equation 1) used an ordinal probit regression and did not include controls for other determinants of happiness. We assessed alternate ROIs associated with two changes to this specification: (1) using an ordinal logit regression instead of the ordinal probit and (2) including controls for employment status and health at baseline.
3. **Persistence of gains.** We truncated the estimated benefits of SE employment about one year after SE employment started and implicitly assumed that all benefits ended after the follow-up year, which is very conservative. Therefore, we estimated an alternate ROI under the assumption that benefits persisted though shrunk by 10 percent each year after our last contact with the individual. For example, if monthly income rose by \$600, we assumed that SE workers had monthly income that was \$540 ( $600 \times 0.90$ ) higher the following year, \$486 ( $540 \times 0.90$ ) higher in the year after that, and so on.
4. **Path of earnings growth.** We assumed all estimated changes in earnings occurred immediately after an individual began SE employment. We calculated an alternate ROI assuming that earnings grew linearly over time between the beginning of SE employment and one year later.
5. **Accounting for substance abuse.** We were concerned about double-counting because our analysis considers both overall health and changes in substance abuse as benefits. If an individual ceases drug use and reports better health, accounting for both changes might overestimate the benefits of SE employment. We therefore assessed ROI excluding reduced substance abuse as a benefit.

6. **Alternative measure of housing costs.** In light of the availability of public and subsidized housing, we were concerned that assuming that all individuals in stable housing paid fair market rents would lead to an overestimation of housing outlays. We therefore alternatively assessed the ROI generated by assuming individuals are not asked to pay more than 30 percent of their income for housing (as suggested by HUD policies).<sup>30</sup>

Table B.7 shows the results of these analyses. Overall, it appears that our CBA is relatively robust to most of the assumptions assessed. Changing the discount rate did little to impact our qualitative results. Different specifications of the regression relating housing to quality of life yielded no discernible differences in benefits per dollar spent. Omitting benefits related to reduced substance abuse changed the benefits per dollar spent slightly but did not impact our qualitative conclusions. Some changes occurred in the ROI when we assumed gradual changes in income over time (the ROI shrinks to 95 percent in the outcomes study CBA and 18 percent in the impact study CBA). But still our main conclusions remain intact. Capping the costs that individuals pay for housing to 30 percent of their income does not impact the overall ROI; however, this change makes the benefits of SE employment per dollar spent positive for SE workers in both the impact and outcomes study CBAs. The change also results in a reduction in the benefits per dollar spent accruing to taxpayers.

Our results may be sensitive to our assumption that benefits stop accruing one year after SE employment begins. Assuming that benefits persist but shrink at a rate of 10 percent per year leads to highly inflated estimates of benefits per dollar spent. The overall ROI increases more than four-fold in the outcomes study CBA and more than double in the impact study CBA. Thus, it appears that our estimates of the ROI in SE employment would be higher if benefits persist for more than one year after individuals began an SE job.

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<sup>30</sup> See Schwartz and Wilson (2008) for details on this standard.

**Table B.7. Benefits per dollar spent sensitivity analyses**

	Benefits per dollar spent			
	Society as a whole	SE worker	SE	Taxpayers not directly involved with SE
<b>Outcomes study</b>				
Original analysis	2.23	-0.02	0.97	1.31
Discount rates (originally 8 percent)				
4 percent	2.30	-0.02	0.97	1.38
12 percent	2.17	-0.02	0.97	1.24
Housing quality of life specification				
Ordinal logit regression	2.23	-0.02	0.97	1.31
Additional controls for life stability	2.23	-0.02	0.97	1.31
Persistence of gains	10.19	-0.10	0.97	9.48
Path of earnings growth	1.95	-0.19	0.97	1.18
Exclude the benefit of reduced substance abuse (instead of combination)	2.31	0.07	0.97	1.31
Assume housing payments do not exceed 30 percent of income	2.23	0.21	0.97	1.08
<b>Impact study</b>				
Original analysis	1.34	-0.07	1.01	0.42
Discount rates (originally 8 percent)				
4 percent	1.36	-0.07	1.01	0.44
12 percent	1.33	-0.07	1.01	0.40
Housing quality of life specification				
Ordinal logit regression	1.34	-0.07	1.01	0.42
Additional controls for life stability	1.34	-0.07	1.01	0.42
Persistence of gains	3.62	-0.41	1.01	3.16
Path of earnings growth	1.25	-0.05	1.01	0.31
Exclude the benefit of reduced substance abuse (instead of combination)	1.18	-0.23	1.01	0.42
Assume housing payments do not exceed 30 percent of income	1.34	0.07	1.01	0.28

Source: MJS database and cost-capture project, and employee counts. See Tables B.1 (costs) and B.4 (benefits).

Note: In the impact study, propensity-score weighted analysis is used for all benefits except revenues in impact study and unweighted analysis is used for revenues and costs. Benefits of SE employment to the friends and relatives of SE workers are excluded from this table, but are included in benefits to society as a whole.

## **E. Limitations of CBA**

Although the methods used for the CBA met the highest possible standards for rigor given the limited sample size and design constraints, limitations from at least six sources should be recognized:

1. Our CBA includes the benefits of SE employment in only five domains. If SE employment produced positive changes in outcomes outside these areas, the study will underestimate the benefits of SE employment. For example, we do not capture benefits gained from SE employment associated with increased confidence, interpersonal skills, or engagement with families or communities (Maxwell et al. 2013).
2. Within each of the five domains, benefits might not be fully captured, which would understate the benefits of SE employment. For example, we capture the monetary benefit of an averted arrest as a reduction in the costs of incarceration but do not capture the benefits victims enjoy from not being victimized by a crime or those participants enjoy from not being arrested and imprisoned.
3. Because costs include only those incurred by SEs between April 2012 and September 2013, they likely omit important fixed costs of SE employment, including the time staff spend launching and developing the SE before the business began (for example, to recruit and hire workers or book revenue).
4. Cost data were retrieved from organizations and may be subject to reporting errors, misclassification, or other accounting issues. Maxwell et al. (2013) suggested that not all organizations use the most meticulous accounting practices, which implies our financial data may be imprecise.
5. Our CBA estimates are necessarily based on many assumptions, which we have detailed throughout this appendix. Where possible, we have tested the sensitivity of our results to assumptions made but it is impossible to explore all potential combinations of assertions. It is therefore feasible that some alternative combination of choices could lead to different results and conclusions.
6. Our CBA estimates benefits are based on analyses from the outcomes and impacts study, which subjects them to all the caveats associated with those studies (Appendix A, Section D).

## **APPENDIX C**

### **COLLECTING AND ANALYZING DATA ON OUTCOMES**

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This appendix provides a detailed description of variables used in the analysis presented in Chapters III to V. Each of the tables in the appendix provides the name of the variable, its definition and, for outcome variables, an indicator whether it was used in the outcomes study, impact study or CBA. Appendix A provides a description of how the MJS database, which provided data for the variable construction, was constructed.

We use three types of variables in the analyses.

1. **Outcome variables** capture employment, life stability, and self-sufficiency at one year and are taken from information provided in the follow-up survey. They are defined in Table C.1.
2. **Descriptor variables** describe the social enterprise experience, based on information provided in the follow-up and exit surveys. They are defined in Table C.2.
3. **Control variables** are used in regression analysis to hold individual characteristics and external context constant. They include outcome variables that are captured before being hired into the SE or entry into the Chrysalis labor pool; supportive factors like education; demographics; and environmental factors like unemployment rate. They are constructed from information obtained at intake and in the baseline survey and are defined in Table C.3.

Variables may be listed in multiple categories to make it easier for a reader to quickly reference needed information.

Variables in each category can be either continuous or binary. All binary variables are indicator variables with one indicating that the condition listed in the table is met, and zero otherwise. In the regression analyses, we imputed the values of variables for which information was not available in order to include survey respondents with missing information in our analysis.<sup>31</sup> In regression analyses using the full and noninstitutional samples, we used the host-organization specific mean for any independent variables with missing values. In regression analyses using the full propensity score and noninstitutional propensity score samples, we imputed any independent variables included in the regression as the host-organization specific mean by treatment status. That is, missing values for observations in the treatment group are set to the treatment group mean, and missing values for observations in the comparison group are set to the comparison group mean.

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<sup>31</sup> All regressions also include indicators for missing values.

**Table C.1. Outcome variables**

Variable	Definition	Outcomes	Impact	CBA
<b>Used in confirmatory analysis</b>				
Worked last week	Binary variable equal to one if worked in a job for pay, or was self-employed, in the week before the follow-up survey and equal to zero otherwise. In the full sample, this variable was set to zero for individuals who were incarcerated.	X	X	
Stable housing in past year	Binary variable equal to one if an individual reported using only their own owned or rented home as housing since baseline. For individuals who did not complete the exit survey, this variable used information from the follow-up survey on housing used since baseline. For individuals who completed the exit survey, this variable is equal to one if an individual reports only using their own housing since the exit survey, and used only their own housing in the week of the exit survey. In the full sample, this variable was set to zero for individuals who were incarcerated.	X	X	X
<b>Used in exploratory analysis</b>				
<b>Employment</b> (Constructed based on the detailed job history provided in the follow-up survey.)				
Worked last month	Binary variable equal to one if worked in a job for pay, or was self-employed, in the month before follow-up interview and equal to zero otherwise.	X	X	
Worked continuously for six months in past year	Binary variable equal to one if individual was employed for six consecutive months in the year before follow-up	X	X	
Share of past year employed	Continuous variable equal to the number of months recorded any employment in the past year divided by 12.	X	X	
<b>Housing</b>				
Homeless in past year	Binary variable equal to one if an individual reported using an emergency shelter, emergency voucher, transitional housing, or permanent housing for the previously homeless as housing or reported sleeping outside or in public since baseline. For individuals who did not provide exit survey information, this variable uses information from the follow-up survey on housing used since baseline. For individuals who completed the exit survey, this variable is equal to one if an individual reports using any of the above methods since the exit survey or in the week of the exit survey.	X	X	
Quality of life housing index	Continuous variable based on different housing method individuals reported. An individual is said to use a housing method if they used it since the last time surveyed. Each housing method (including missing housing) was assigned a quality of life index value based on an ordinal probit regression (detailed in Appendix B). Individuals using multiple forms of housing were assigned the average index value across all forms of housing reported.			X
<b>Income</b>				
Total income in past month	<b>Key measure of income.</b> Continuous variable equal to the sum of income from all sources in month before follow-up.	X	X	X
Wage and salary income in last month	Continuous variable equal to the sum of income from social enterprise and other employment in month before follow-up survey. In the full sample, this variable was set to zero for individuals who were incarcerated.	X	X	X
Government transfers in past month	Continuous variable equal to the sum of all government transfers received in the month before follow-up. Includes both cash and in-kind transfers.			X

Table C.1 (continued)

Variable	Definition	Outcomes	Impact	CBA
Transfers from others in past month	Continuous variable equal to the sum of all transfers from friends and family received in the month before follow-up. Includes both cash and in-kind transfers.			X
Share of income from work	Continuous variable equal to 100 * wage and salary income in past month / total income in past month. Set to missing for individuals with total income of zero.	X	X	
Share of income from government	Continuous variable equal to 100 * income from government in past month / total income in past month. Set to missing for individuals with total income of zero.	X	X	
<b>Criminal activity</b>				
Arrested in past year	<b>Key measure of criminal activity.</b> Binary variable equal to one if individual was arrested since baseline data collection. Arrests may be reported during the follow-up or exit surveys (if applicable). In the full sample, this variable has been set to one for individuals who were found to be incarcerated.	X	X	
Arrests averted	Based on the expected number of arrests since hire considering the employee's age, number of arrests prior to hire, and any sentences for jail or prison prior to hire (divided by two to consider types sentences served in California): = (years since hire * times arrested before hire) / (age at hire – 18 – total years of jail or prison sentences/2) – actual arrests since hire.	X		X
<b>Health</b>				
Depression index	<b>Key measure of mental health.</b> A continuous variable measuring the prevalence of symptoms of depression based on individuals' self-reports of having the following feelings in the past seven days: feeling no interest in things, feeling lonely, feeling blue, feeling worthless, feeling hopeless about the future, and thoughts of ending your life. Respondents indicated the prevalence of these emotions on a 1 to 5 scale: never, a little bit, moderately, quite a bit, and extremely often. The individual variables are combined into an index by subtracting the mean values at baseline and dividing by the standard deviation at baseline, summing the standardized scores, and again normalizing using the mean and standard deviation of the sum of standardized scores from the baseline data. As a result, the variable has mean zero and standard deviation one in the baseline data but may not have this distribution in the follow-up data.	X	X	
Excellent physical health	<b>Key measure of physical health.</b> A binary variable equal to one if an individual reports being in excellent physical health.	X	X	
At least good physical health	A binary variable equal to one if an individual reports being in excellent, very good, or good physical health.	X		
Poor or fair physical health	A binary variable equal to one if an individual reports being in either poor or fair physical health.	X		
Quality of life health index	A continuous variable created from self-reported health (rated as excellent, very good, good, fair, or poor). We use work by Nyman et al. (2007) to translate the self-reported health measure into this quality of life index, which ranges from 0.941 (excellent health status) to 0.498 (poor health status).			X
In substance abuse counseling in past year	Binary variable equal to one if an individual was in counseling for drug- or alcohol-related issues since baseline data collection. Counseling may be reported during the follow-up or exit surveys (if applicable).	X	X	X

Table C.1 (continued)

Variable	Definition	Outcomes	Impact	CBA
<b>Attitudes</b>				
Believe a job is just a way of earning money	A binary variable equal to one if an individual agrees or strongly agrees with: "A job is just a way of earning money – no more"	X		
Would like a job even if did not need money	A binary variable equal to one if an individual agrees or strongly agrees with: "I would enjoy having a paid job even if I did not need the money"	X		
Plan to be established in a career in 5 years	A binary variable equal to one if an individual reports that she thinks she will be established in a career in 5 years.	X		
Plan to have own home or apartment in 5 years	A binary variable equal to one if an individual reports that she thinks she will own or rent her own home in the 5years.	X		
Plan to be removed from illegal activity in 5 years	A binary variable equal to one if an individual reports that she thinks she will be removed from illegal activity in 5 years.	X		
Plan to be economically self-sufficient in 5 years	A binary variable equal to one if an individual reports that she thinks she will be economically self-sufficient in 5 years.	X		
Plan to rarely drink alcohol or use drugs in 5 years	A binary variable equal to one if an individual reports that she thinks she will rarely drink alcohol or use drugs in 5 years.	X		

CBA = cost benefit analysis.

**Table C.2. Descriptor variables**

Variable	Definition
Organization	A set of binary variables equal to one for an individual's SE work assignment organization. Categories are Buckelew, CEO, CHP, Chrysalis, CRC, Taller, and Weingart.
Hours worked per week	The number of hours the individual worked per week, on average, in the SE.
Length of employment	The number of weeks the individual worked in total in the SE.
Hired by SE	A binary variable equal to one for an individual that was hired in to an SE.
Reason left SE	A set of binary variables equal to one to capture the individual's status at SE exit. Categories are "Success" (started another job or training), "Termination" (including individuals who were fired or timed out of the program), "Problematic" (dissatisfied, incarcerated, or drug use), "Still Employed" (those still working at SE), or "Other" (including family and personal reasons). The still employed designation reflects the individual's status as of follow-up. All other statuses reflect the reason an individual gave for employment during the exit survey (if they completed this survey themselves) or follow-up survey (otherwise).
Soft skills training	A binary variable equal to one if an individual received soft skills training through their SE or host organization experience.
ABE/GED preparation	A binary variable equal to one if an individual received adult basic education or GED preparation through their SE or host organization.
Vocational training	A binary variable equal to one if an individual received vocational or job specific training through their SE or host organization.
Technical training	A binary variable equal to one if an individual received computer literacy or technology training through their SE or host organization experience.
Work supports	A binary variable equal to one if an individual received any work supports (housing assistance, work clothing, transportation) through their SE or the host organization.
Life-stability supports	A binary variable equal to one if an individual received any life-stability supports (health services, education, counseling, food security, and public benefits assistance) through their SE or host organization.
Transition supports	A binary variable equal to one if an individual received any employment transition supports (job readiness, career counseling, or job search assistance) through their SE or the host organization.
Any supports after transition	A binary variable equal to one if an individual received any supports after leaving the SE (continuing employment counseling, life-stability services, or other services) through their SE or host organization.

**Table C.3. Control variables**

Variable	Definition
<b>Lagged confirmatory outcome measures</b>	
Worked last week	Binary variable equal to one if worked in a job for pay, or was self-employed, in the week before intake and equal to zero otherwise.
Stable housing in past year	Binary variable equal to one if an individual reported using only their own owned or rented home as housing in the year before the baseline survey was administered.
<b>Other lagged outcome and related measures</b>	
<b>Alternative measures of employment</b>	
Worked last month	Binary variable equal to one if worked in a job for pay, or was self-employed, in the month before intake.
Worked continuously for six months in past year	Binary variable equal to one if the individual was employed for six consecutive months in the year before intake. Constructed based on the date of last continuous employment reported at intake.
<b>Alternative measures of housing</b>	
Homeless in past year (week)	Binary variable equal to one if an individual reported using an emergency shelter, emergency voucher, transitional housing, or permanent housing for the previously homeless as housing or reported sleeping outside or in public in the year (week) before the baseline survey.
Quality of life housing index	Continuous variable created based on housing individuals report using in the year before the baseline survey. Each housing method (including missing housing) was assigned a quality of life index value based on an ordinal probit regression (detailed in Appendix B). Individuals using multiple forms of housing were assigned the average index value across all forms of housing reported.
<b>Income</b>	
Total income in past month	Continuous variable equal to the sum of income from all sources in month before the baseline survey.
Wage and salary income in last month	Continuous variable equal to the sum of income from the social enterprise and other employment in month before baseline.
Government transfers received in past month	Continuous variable equal to the sum of all government transfers received in the month before baseline. Includes both cash and in-kind transfers.
Transfers from others received in past month	Continuous variable equal to the sum of all transfers from friends and family received in the month before baseline. Includes both cash and in-kind transfers.
Share of income from work	Continuous variable equal to $100 * \text{wage and salary income in past month} / \text{total income in past month}$ . Set to missing for individuals with total income of zero
Share of income from government	Continuous variable equal to $100 * \text{income from government in past month} / \text{total income in past month}$ . Set to missing for individuals with total income of zero
<b>Criminal activity</b>	
Ever arrested (at entry/hire)	Binary variable equal to one if an individual reported ever being arrested in the baseline survey.
Number of times arrested	Count variable equal to the number of times an individual reports having been arrested in the baseline survey.
Arrested 1-9 times	Binary variable equal to one if an individual reported having been arrested 1 to 9 times in the baseline survey. This variable is zero for individuals arrested either 0 or 10 or more times.
Arrested 10 or more times	Binary variable equal to one if an individual reported having been arrested 10 or more times in the baseline survey.
Ever convicted (at entry/hire)	Binary variable equal to one if an individual reports having ever been convicted of a crime and sentenced to time in jail or prison in the baseline survey.

Table C.3 (continued)

Variable	Definition
<b>Health</b>	
Depression index	A continuous variable indicating the prevalence of symptoms of depression based on individuals' self-reports of having the following feelings in the past seven days: feeling no interest in things, feeling lonely, feeling blue, feeling worthless, feeling hopeless about the future, and thoughts of ending your life. Respondents indicated the prevalence of these emotions on a 1 to 5 scale: never, a little bit, moderately, quite a bit, and extremely often. The individual variables are combined into an index by subtracting the mean values at baseline and dividing by the standard deviation, summing the standardized scores, and again normalizing using the mean and standard deviation of the sum. This index is designed to have mean zero and standard deviation one in the baseline data.
Excellent physical health	A binary variable equal to one if an individual reports being in excellent physical health.
Quality of life health index	A continuous variable created from self-reported health (rated as excellent, very good, good, fair, or poor). We use work by Nyman et al. (2007) to translate the self-reported health measure into this quality of life index, which ranges from 0.941 (excellent health status) to 0.498 (poor health status).
In substance abuse counseling in past year	Binary variable equal to one if an individual was in counseling for drug- or alcohol-related issues in the year before the baseline survey.
<b>Attitudes</b>	
Believe a job is just a way of earning money	A binary variable equal to one if an individual agrees or strongly agrees with the statement: "A job is just a way of earning money – no more"
Would like a job even if did not need money	A binary variable equal to one if an individual agrees or strongly agrees with the statement: "I would enjoy having a paid job even if I did not need the money"
Be established in a career in 5 years	A binary variable equal to one if an individual believes he will be established in a career in 5 years.
Have own home or apartment in 5 years	A binary variable equal to one if an individual believes he will own or rent own home in the 5 years.
Be removed from illegal activity in 5 years	A binary variable equal to one if an individual believes he will be removed from illegal activity in 5 years.
Be in good mental health in 5 years	A binary variable equal to one if an individual believes he will be in good mental health in 5 years.
Rarely drink alcohol or use drugs in 5 years	A binary variable equal to one if an individual believes he will rarely drink alcohol or use drugs in 5 years.
<b>Other supportive factors</b>	
Education	A set of binary variables equal to one if an individual reports educational attainment and zero otherwise. Categories are less than high school, high school diploma/graduate/GED, and any post-secondary education. Reported at intake.
Worked last year	Binary variable equal to one if worked in a job for pay or was self-employed in the year before intake.
Did not work last year	Binary variable equal to one if did not work in a job for pay or was self-employed in the year before intake.
Temporary housing in past (year) week	A binary variable equal to one if an individual reports using a temporary housing situation in the year (week) before intake.
Ever arrested (intake)	Binary variable equal to one if an individual reported having been ever arrested at intake. Note that the version of this variable collected at baseline is typically used for analysis unless the target population (and not full or survey sample) is being analyzed.

Table C.3 (continued)

Variable	Definition
Ever convicted (intake)	Binary variable equal to one if an individual reports having ever been convicted of a crime and sentenced to time in jail or prison at intake. Note that the version of this variable collected at baseline is typically used for analysis unless the target population (and not full or survey sample) is being analyzed.
Counselor-assessed level of support needed	A mutually exclusive set of binary variables for a counselor's assessment of support likely needed to succeed in the labor force at intake. 1 = needs a lot of support and 5 = needs no support. A lot of support is 1 or 2, needs some support is 3 or 4, and needs no support is 5.
Income under 200 percent of federal poverty level	A binary variable equal to one if a counselor determined at intake that an individual's income was below 200 percent of the federal poverty line (based on annual income and household size).
Health insurance	A binary variable equal to one if an individual had (public or private) health insurance at baseline.
Share of income from family and friends	Continuous variable equal to $100 * \text{income from family and friends in past month} / \text{total income in past month}$ . Set to missing for individuals with total income of zero
Demographic characteristics	
Male	A binary variable equal to one if the individual is male (or gender-identifies as male). From intake data.
Age	A continuous variable for age in years at intake.
Hispanic	A binary variable equal to one if an individual reports Hispanic origin. Independent of race. From intake data.
Race	A set of binary variables equal to one if an individual reports that race and zero otherwise, independent of Hispanic ethnicity. Categories are white, black, or other race/refused to disclose. From intake data.
Married or in a domestic partnership	A binary variable equal to one if an individual was married or in a domestic partnership at intake.
No dependents	A binary variable equal to one if an individual reported having no financial or physical dependents at intake.
Veteran	A binary variable equal to one if an individual served in active duty. From intake data.
Native English speaker	A binary variable equal to one if an individual spoke English natively. From intake data.
Other control variables	
Unemployment rate	A continuous variable for the prevailing unemployment rate at baseline or follow-up in the MSA in which the host organization is located.
Cohort	A set of binary variables equal to one if an individual was administered the baseline survey during a given calendar quarter.
Time between baseline and follow-up surveys	A continuous variable for the number of months elapsed between when the baseline and follow-up surveys were administered.
Completed exit survey	Binary variable equal to one if the individual completed the exit survey themselves.

MSA = metropolitan statistical area; SE = social enterprise.

## **APPENDIX D**

### **TABLES**

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This appendix contains the data tables that show the results of the study's main analyses. Appendix A describes the construction of the Mathematica Jobs Study (MJS) database and the analytic methods used to produce the results presented in these tables. Appendix C provides a description of the variables presented in these tables. All analysis presented is weighted with adjustments for differential nonresponse (Appendix A describes the weights used). The glossary and acronyms lists at the beginning of the report define terms and acronyms used in all tables.

We applied the following rules to the descriptive tables in this appendix (D.1 to D.14):

- Item-specific nonresponse reduces the number of customers in some cells. Appendix Table A.7 shows cells affected by missing data.
- Tables show percentages, except where noted.
- The following statistical tests compared differences between the analysis for treatment and comparison groups in descriptive tables:
  - A two-tailed *t*-test tests for difference in means in continuous variables (for example, female) or categories not part of a distribution (for example, females). An asterisk (\*) designates statistically significant ( $p \leq 0.05$ ) comparisons.
  - A chi-squared test tests for differences in distributions for categorical variables (for example, race). If the chi-squared test is significant, a two-tailed *t*-test tests for significant differences between each category in the distribution and an asterisk (\*) designates statistically significant differences.

We applied the following rules to the multivariate tables in this appendix (D.15 to D.19):

- We used ordinary least squares in all estimations because probit specifications with binary outcome variables did not converge or failed to provide standard errors. Numbers capture linear probabilities for binary variables and impacts measured in units of the dependent variable for continuous variables with robust standard errors reported in brackets.
- An asterisk (\*) designates a coefficient whose difference from zero is statistically significant ( $p \leq 0.05$ ).
- Numbers reported are coefficients with robust standard errors in brackets.
- Regressions include control variables beyond the coefficients shown in tables, including time between baseline and follow-up surveys, unemployment rate at follow-up, cohort, and whether the respondent completed the exit survey. We also include variables with missing values that take the value of the mean of the variable. Indicator variables (1 = missing for a given variable and 0 = not missing value) are constructed for variables that contained missing data and are included in the analysis. Appendix Table A.7 shows variables affected by missing data.
- Core measures of life stability, included in some models, include worked in last week, stable housing in last year, total monthly income, the depression index, excellent physical health, and in substance abuse treatment in past year.

**Table D.1. Satisfaction with and employment in SE**

	Response in exit surveying	Response in exit survey (if completed) or follow- up (if did not)	Response in follow-up surveying
Sample size	242	242	242
Employed at SE for more than one period of time	NA	NA	28.0
Average hours worked per week	23.6	23.7	24.1
Average length of employment in weeks	18.4	18.5	24.3
Median length of employment in weeks	21.4	21.4	19.0
Hours worked at SE			
Fewer than 8 hours	4.3	4.4	4.7
8 to 20 hours	5.2	5.3	5.5
21 to 32 hours	3.3	3.3	3.1
33 to 80 hours	6.1	5.9	6.7
81 to 160 hours	9.0	9.1	9.1
161 to 320 hours	9.0	9.1	9.6
321 to 640 hours	27.1	27.1	17.4
641 to 960 hours	27.8	26.5	16.7
961 or more hours	8.0	9.4	27.1
Status with SE			
Currently working at SE	40.5	40.8	23.4
Never worked at SE	n.a.	n.a.	3.2
Left SE: found outside employment or started other training	39.4	38.6	27.8
Left SE: terminated for any reason (including program ending)	28.3	23.5	28.0
Left SE: dissatisfied or decided did not want job	9.7	14.9	21.5
Left SE: incarcerated	4.2	5.8	1.4
Left SE: drug use	4.4	2.2	1.8
Left SE: family or personal reasons (including illness, disability, or logistical limitations)	14.0	12.0	10.4
Left SE: other reason (write-in)	NA	NA	9.1
Satisfied with ... at SE			
Salary	74.6	74.3	67.6
Benefits	45.7	51.2	50.3
Type of work	88.9	89.8	85.2
Number of hours	73.2	74.7	75.2
Job location	91.7	92.5	86.8
Opportunities for advancement	66.9	65.2	54.9
Challenge of job	79.6	77.8	68.2
Level of responsibility	74.6	74.3	67.6
Independence on the job	95.0	94.0	86.7
Contribution of job to society	97.1	97.0	96.0
Job security	82.0	81.5	73.3
Feedback received	90.8	92.3	90.6
Support received	94.2	93.6	81.5

Source: MJS database, noninstitutional sample.

**Table D.2. Services received at SE or host organization**

	Outcomes study	Impact study		
		Treatment group	Comparison group	Difference
Sample size	242	138	32	n.a.
Any skills training	91.4	93.1	91.0	2.1
Soft-skills training	82.2	86.9	84.0	2.9
ABE or GED preparation	23.3	26.5	10.5	16.0*
Vocational or job-specific skills training	64.0	57.7	49.5	8.1
Computer or technology skills training	53.2	67.2	54.2	13.0
Any work supports	80.4	81.1	65.2	15.8
Housing or rental assistance	12.4	7.1	5.3	1.8
Transportation assistance	47.9	58.9	58.9	0.1
Work clothing assistance	68.0	68.2	40.6	27.6*
Any life-stability supports	64.4	64.6	38.0	26.6*
Physical health services	15.2	14.6	2.3	12.3*
Assistance with physical or learning disability	11.3	9.3	5.3	4.0
Substance abuse counseling or treatment	11.7	8.7	2.2	6.5
Domestic abuse protection, counseling, or related services	15.8	13.5	2.2	11.3*
Financial education or asset building education, including help setting up a bank account	51.7	54.0	36.8	17.3
Assistance with food security	27.8	25.9	8.2	17.7*
Access to public benefits	21.0	16.8	11.3	5.5
Help with tax preparation	20.7	13.4	5.2	8.3
Help plan to avoid relapse of behavior	24.6	21.1	10.9	10.3
Any employment transition supports	96.8	98.3	100.0	-1.7
Job-readiness skills training	91.2	94.9	89.4	5.5
Career counseling or job coaching	72.6	70.1	60.3	9.7
Job search assistance	86.4	87.7	89.2	-1.4
Any services after leaving host organization	67.9	64.2	60.3	3.9
Access to employment counselor or associated services	64.2	63.3	60.3	3.0
Access to life support counselor or associated services	43.3	38.9	11.1	27.9*
Any other services	11.4	13.4	17.0	-3.6

Source: MJS database, noninstitutional sample.

Notes: Supports are omitted from this table if less than five percent of individuals in the outcomes study report receiving a given service.

**Table D.3. Employment status**

	Outcomes study			Impact study				
	Baseline	Follow-up	Difference	Treatment: baseline	Treatment: follow-up	Comparison: baseline	Comparison: follow-up	Difference-in-differences
Sample size	242	242	n.a.	138	138	32	32	n.a.
Worked in the past week for pay	18.8	61.5	42.7*	16.0	58.0	5.4	47.0	0.3
Worked at 2 or more jobs last week	2.4	5.4	3.0	1.7	6.5	0.0	0.0	4.8
Worked in past month for pay	31.0	62.4	31.4*	37.4	59.7	9.7	53.8	-21.8
Worked in past six months for pay	49.4	79.0	29.6*	57.6	76.0	41.3	67.5	-7.9
Worked continuously for six months in past year	39.2	65.5	26.3*	53.1	66.1	36.1	40.7	8.4
Share of time in past year spent employed	NA	67.2	NA	NA	66.1	NA	49.1	NA
<b>Not currently employed</b>								
Sample size	192	88	n.a.	115	54	31	17	n.a.
Reason not working (all that apply)								
Discouraged	45.4	61.2	15.7*	53.5	58.4	54.1	66.6	-7.6
Lack of qualifications	28.8	46.7	17.9*	27.7	40.5	30.8	25.2	18.4
Cannot find a desirable job	26.3	40.9	14.6*	27.1	37.4	29.2	29.9	9.6
Criminal history/record	22.7	1.5	-21.2*	28.5	1.4	11.1	5.8	-21.8*
Health limitations or substance abuse	11.8	32.6	20.8*	6.4	35.9	9.3	65.9	-27.1
Lack of transportation	10.2	26.9	16.7*	11.0	27.3	12.2	34.3	-5.8
Other (family responsibilities and write-in)	10.0	9.4	-0.6	8.8	8.9	2.8	0.0	2.8

Source: MJS database, noninstitutional sample.

**Table D.4. Characteristics of current or most recent job**

	Outcomes study			Impact study				
	Baseline	Follow-up	Difference	Treatment: baseline	Treatment: follow-up	Comparison: baseline	Comparison: follow-up	Difference-in-differences
Sample size	242	242	n.a.	138	138	32	32	n.a.
Current or most recent job at SE	n.a.	43.9	n.a.	n.a.	53.0	n.a.	2.5	n.a.
<b>Current or most recent job not at SE</b>								
<b>Sample size</b>	135	135	n.a.	67	67	31	31	n.a.
Know that job is subsidized	NA	14.6	NA	NA	9.6	NA	3.6	NA
Don't know if subsidized	NA	41.0	NA	NA	43.9	NA	18.9	NA
Job provided support services	NA	54.3	NA	NA	57.9	NA	17.4	NA
Average hours worked per week	NA	30.2	NA	NA	30.0	NA	40.5	NA
Worked part-time (<30 hours/week)	NA	41.8	NA	NA	38.5	NA	21.0	NA
Worked full-time (30+ hours/week)	NA	58.2	NA	NA	61.5	NA	79.0	NA
Know that job offered health insurance	NA	34.7	NA	NA	27.5	NA	39.7	NA
How found last or current job (all that apply)								
Former or current employer	0.7	27.2	26.5*	0.0	27.5	0.0	16.2	11.3
State or private employment agency	11.9	34.3	22.4*	17.6	30.9	47.6	10.2	50.7
Friends, relative, or colleagues	42.7	49.8	7.0	58.9	52.9	20.0	57.7	-43.6
Media	3.2	6.7	3.5	2.5	4.2	32.4	3.1	31.0
SE or host organization	n.a.	53.3	n.a.	n.a.	55.3	n.a.	12.7	n.a.
Other (union, self-employed, school or write-in)	45.3	5.7	-39.6*	28.6	5.2	0.0	12.3	-35.7*
Satisfied with (if job not SE)								
Salary	77.9	70.9	-7.0	78.8	65.9	100.0	66.5	20.6
Benefits	39.8	60.0	20.1*	35.4	49.1	67.6	61.3	20.0
Type of work	93.5	85.7	-7.8	90.3	84.9	67.6	88.8	-26.7
Number of hours worked	76.3	81.3	5.0	73.7	85.1	100.0	75.3	36.2*
Job location	86.9	90.8	3.9	83.8	94.2	100.0	85.0	25.4*
Job security	78.9	83.8	4.8	78.2	88.4	67.6	78.1	-0.3
Opportunities for advancement	55.0	59.3	4.3	50.6	59.7	20.0	66.0	-36.9
Intellectual challenge of job	74.5	77.2	2.7	76.4	79.5	100.0	79.3	23.8*
Responsibility on the job	92.1	91.8	-0.3	90.2	91.6	67.6	85.3	-16.3
Independence on the job	93.5	92.1	-1.4	97.9	94.4	100.0	83.1	13.3
Job's contribution to society	89.1	86.8	-2.2	86.8	92.7	67.6	100.0	-26.5
Feedback received	88.8	83.7	-5.1	91.5	83.9	67.6	91.7	-31.7
Support received	88.7	82.4	-6.3	89.5	84.4	100.0	86.3	8.6
Difficult to leave work to handle personal issues	23.5	36.3	12.8*	24.5	39.4	32.4	46.5	0.8

Source: MJS database, noninstitutional sample.

**Table D.5. Attitudes toward employment**

	Outcomes study			Impact study				
	Baseline	Follow-up	Difference	Treatment: baseline	Treatment: follow-up	Comparison: baseline	Comparison: follow-up	Difference-in-differences
Sample size	242	242	n.a.	138	138	32	32	n.a.
Believe that will be established in a career in five years	86.8	70.2	-16.6*	90.0	63.7	77.7	47.4	4.0
Believe job is only a way to earn money—nothing more	20.9	28.5	7.6	21.9	34.2	11.5	33.2	-9.4
Would enjoy having a job even if did not need money	83.1	71.9	-11.2*	82.9	68.5	87.5	61.4	11.7
Believe the following are important or very important for job quality								
Job security	98.7	99.7	0.9	99.5	99.5	92.2	95.6	-3.4
Opportunities for advancement	98.4	96.6	-1.7	98.4	95.6	92.6	92.5	-2.7
Interesting	98.0	97.6	-0.3	99.4	98.3	97.0	92.5	3.5
Useful to society	94.0	96.8	2.8	97.2	97.0	100.0	96.9	2.9
Allows worker to help others	96.9	94.3	-2.5	99.4	96.5	100.0	94.9	2.2
Independence on the job	82.7	87.4	4.7	86.6	90.3	82.7	94.8	-8.3
High income	81.0	89.6	8.6*	81.6	89.8	77.0	89.5	-4.3
Flexible work days or times	59.8	69.4	9.6*	68.3	70.6	64.0	61.4	4.9

Source: MJS database, noninstitutional sample.

**Table D.6. Housing**

	Outcomes study			Impact study				
	Baseline (estimate)	Follow-up	Difference	Treatment: baseline (estimate)	Treatment: follow-up	Comparison: baseline (estimate)	Comparison: follow-up	Difference- in- differences
Sample size	242	242	n.a.	138	138	32	32	n.a.
Believe that in five years will own or rent his/her own home or apartment	90.1	82.6	-7.4*	91.6	77.8	82.7	66.1	2.7
Used as housing since baseline								
Owned or rented room, apartment, or home	48.7	80.9	32.2*	45.1	82.3	39.5	76.7	0.1
Home of family member or friend	39.6	36.4	-3.2	35.3	38.4	26.5	28.7	0.8
Jail, prison, or juvenile detention	24.8	6.0	-18.7*	16.8	4.0	11.4	3.0	-4.4
Transitional housing	26.5	24.5	-2.0	32.7	29.1	29.3	18.8	6.8
Psychiatric hospital, substance abuse treatment facility, or other related facility	15.5	6.7	-8.8*	17.8	6.2	28.4	12.3	4.6
Emergency shelter or voucher	13.8	8.7	-5.1	15.7	9.4	22.1	9.8	5.9
Outside or in public	10.1	12.9	2.9	9.7	11.7	5.2	7.3	-0.2
Hotel or motel	6.2	6.8	0.6	4.1	9.3	10.3	3.3	12.2
Halfway home for those with criminal history or similar facility	6.0	4.9	-1.0	7.9	4.3	0.0	0.0	-3.6
Permanent housing for previously homeless people	9.4	14.3	4.9	8.6	15.8	0.0	10.7	-3.5
Other (group home, nonpsychiatric hospital, and write-in options)	5.1	13.7	8.7*	5.6	11.6	11.7	19.8	-2.0
Stable housing since baseline	16.1	50.1	34.0*	19.1	57.3	17.2	44.1	11.3
Homeless at any point since baseline	37.3	35.4	-2.0	40.6	36.3	39.6	29.9	5.5

Source: MJS database, noninstitutional sample.

Notes: Estimate from baseline data is use of housing method in past 12 months at baseline.

**Table D.7. Criminal activity**

	Outcomes study			Impact study				
	Baseline	Follow-up	Difference	Treatment: baseline	Treatment: follow-up	Comparison: baseline	Comparison: follow-up	Difference-in-differences
Sample size	242	242	n.a.	138	138	32	32	n.a.
Believe that in five years will be removed from illegal activity	94.1	80.6	-13.5*	97.0	77.5	97.1	74.3	3.3
Ever arrested	84.1	84.6	0.4	83.9	83.9	73.1	73.1	0.0
Number of times arrested	7.5	7.5	0.1	7.3	7.4	4.2	4.3	0.0
Number of arrests since baseline (at baseline, expected values based on arrest history)	0.0	0.2	0.2	0.3	0.1	0.2	0.1	-0.1
Ever convicted and sentenced to time in jail or prison	68.9	70.0	1.1	68.4	70.5	55.8	58.7	-0.8
Convicted and sentenced to time in jail or prison since baseline	n.a.	3.2	n.a.	n.a.	2.7	n.a.	2.9	n.a.
Average total time sentenced (months, if any)	103.2	102.9	-0.3	107.5	104.8	85.3	81.1	1.6
Sentenced to less than 1 year	11.7	11.8	0.1	11.7	12.5	23.6	27.5	-3.1
Sentenced to 1 to 2 years	17.9	17.4	-0.5	16.9	16.4	23.4	22.2	0.7
Sentenced to more than 2 years	70.4	70.8	0.3	71.4	71.1	53.0	50.3	2.5

Source: MJS database, noninstitutional sample.

**Table D.8. Benefit receipt**

	Outcomes study			Impact study				
	Baseline	Follow-up	Difference	Treatment: baseline	Treatment: follow-up	Comparison: baseline	Comparison: follow-up	Difference-in-differences
Sample size	242	242	n.a.	138	138	32	32	n.a.
Believe that in five years will be economically self-sufficient	95.8	86.0	-9.8*	97.5	83.5	100.0	84.1	1.9
Receiving any income from...last month								
Food stamps; Supplemental Nutrition Assistance Program; or Women, Infants and Children Program	63.0	31.7	-31.4*	69.5	34.2	64.9	43.5	-13.9
Welfare programs (for example, TANF or CalWORKs)	44.5	10.1	-34.4*	55.6	13.8	44.1	19.9	-17.7
Disability or worker's compensation	9.1	9.8	0.7	4.6	6.5	5.5	4.7	2.6
Unemployment insurance	7.4	2.6	-4.8*	4.1	2.5	2.5	6.3	-5.4
Other government transfers	0.9	4.2	3.3	0.8	3.3	0.0	8.8	-6.2
Transfers from others	14.1	20.4	6.3	9.5	14.3	8.3	2.0	11.1
Other sources	1.4	0.4	-1.0	0.9	1.3	7.0	0.0	7.4
Moved off of any form of public assistance since baseline	n.a.	47.5	n.a.	n.a.	52.8	n.a.	14.6	n.a.
Began receiving any form of public assistance since baseline	n.a.	6.5	n.a.	n.a.	4.0	n.a.	20.8	n.a.
Stopped receiving transfers from others since baseline	n.a.	13.6	n.a.	n.a.	10.9	n.a.	14.6	n.a.
Began receiving transfers from others since baseline	n.a.	22.7	n.a.	n.a.	16.9	n.a.	16.6	n.a.

Source: MJS database, noninstitutional sample.

**Table D.9. Income**

	Outcomes study			Impact study				
	Baseline	Follow-up	Difference	Treatment: baseline	Treatment: follow-up	Comparison: baseline	Comparison: follow-up	Difference-in-differences
Sample size	242	242	n.a.	138	138	32	32	n.a.
Any wage or salary income	31.0	75.4	44.4*	24.0	74.7	20.6	73.3	-2.0
Wage or salary income (dollars)	237.0	950.5	713.5*	167.2	812.2	110.1	853.6	-98.5
Any earned income	32.5	76.2	43.7*	25.0	75.9	22.0	73.3	-0.4
Earned income (dollars)	253.6	962.3	708.7*	176.6	824.9	150.9	809.8	-10.6
Total income below 200 percent of federal poverty level	96.4	90.8	-5.6*	98.8	94.9	100.0	91.4	4.7
Opened bank account since baseline	n.a.	69.8	n.a.	n.a.	62.6	n.a.	66.1	n.a.
Average monthly income from ... last month (dollars)								
All sources	677.0	1,240.3	563.3*	530.1	1,019.4	481.5	1,118.7	-147.9
Salary or wage income from work	237.0	950.5	713.5*	167.2	812.2	110.1	853.6	-98.5
Food stamps; Supplemental Nutritional Assistance Program; or Women, Infants and Children Program	128.3	67.0	-61.3*	144.3	74.8	127.0	137.9	-80.3
Welfare programs (for example, TANF or CalWORKs)	107.6	25.5	-82.1*	125.7	32.9	106.6	76.7	-62.9
Disability or worker's compensation	70.9	63.4	-7.6	31.6	48.4	47.8	20.1	44.5
Unemployment insurance	56.5	0.0	-56.5*	33.0	0.0	13.0	5.2	-25.2
Other government transfers	3.8	40.9	37.2	1.2	28.0	0.0	14.5	12.3
Transfers from others	58.0	56.7	-1.3	17.6	16.4	23.7	0.0	22.5
Other sources	14.1	4.1	-10.0	8.5	12.8	54.5	0.0	58.8
Share of Income from ... last month								
Work	22.5	69.0	46.5*	17.9	71.3	15.6	64.1	5.0
Government transfers	71.3	23.8	-47.5*	79.5	24.8	75.3	35.9	-15.3
Transfers from others	5.0	7.1	2.1	1.6	3.6	4.8	0.0	6.8
Other sources	1.2	0.1	-1.1	1.0	0.4	4.2	0.0	3.6

Source: MJS database, noninstitutional sample.

Notes: Baseline estimate for total monthly income has been adjusted downward by monthly income from the earned income tax credit.

**Table D.10. Health**

	Outcomes study			Impact study				
	Baseline	Follow-up	Difference	Treatment: baseline	Treatment: follow-up	Comparison: baseline	Comparison: follow-up	Difference-in-differences
Sample size	242	242	n.a.	138	138	32	32	n.a.
<b>Physical health</b>								
Believe will be in good physical health in 5 years	96.3	86.1	-10.3*	98.1	85.0	88.8	87.6	-11.9
Have physical health condition limiting work	6.6	8.7	2.1	5.3	10.8	0.0	18.5	-13.0
Self-reported physical health								
Excellent	31.2	21.9	-9.3*	34.1	25.0	23.8	10.2	4.5
Very good	34.6	31.0	-3.6	34.0	31.2	29.4	31.2	-4.6
Good	23.3	24.1	0.8	20.0	20.4	37.0	10.0	27.5*
Fair	9.8	16.0	6.2	11.0	16.1	9.8	27.0	-12.1
Poor	1.1	7.0	5.9*	0.8	7.2	0.0	21.6	-15.3*
Physical health improved since baseline	n.a.	17.0	n.a.	n.a.	18.3	n.a.	16.7	n.a.
Physical health worsened since baseline	n.a.	41.3	n.a.	n.a.	42.0	n.a.	61.7	n.a.
<b>Mental health</b>								
Believe will be in good mental health five years from now	96.0	89.2	-6.9*	99.4	86.8	86.5	93.2	-19.3*
Have mental health condition limiting work	5.3	7.4	2.2	4.4	6.8	12.0	14.1	0.4
Persistently bothered by ... in past week								
Lack of interest	11.0	24.9	13.9*	10.9	22.5	12.2	14.9	8.9
Loneliness	19.1	23.0	3.9	19.8	21.3	30.9	22.5	9.9
Feeling blue	17.1	22.6	5.5	16.1	21.7	23.1	29.1	-0.3
Feeling worthless	11.9	16.7	4.8	11.1	16.0	13.4	13.5	4.9
Feeling hopeless about future	13.5	17.1	3.6	11.3	19.2	17.4	16.7	8.6
Suicidal thoughts	1.0	3.8	2.8*	1.3	3.4	1.7	3.1	0.7
Depression index (standard deviations)	-0.0	0.3	0.3*	-0.0	0.3	0.1	0.4	0.0
Any suicidal thoughts	3.1	6.2	3.2	3.6	6.0	1.7	3.1	1.0
<b>Health insurance</b>								
Have health insurance	43.8	63.9	20.1*	34.8	59.8	41.9	75.7	-8.8
Public insurance	38.7	50.0	11.3*	31.1	51.3	35.6	66.7	-10.8
Private insurance	4.0	13.9	9.9*	3.3	8.5	6.2	7.1	4.3

Source: MJS database, noninstitutional sample.

**Table D.11. Substance abuse since baseline**

	Outcomes study			Impact study				
	Baseline (estimate)	Follow-up	Difference	Treatment: baseline (estimate)	Treatment: follow-up	Comparison: baseline (estimate)	Comparison: follow-up	Difference-in-differences
Sample size	242	242	n.a.	138	138	32	32	n.a.
Believe that in five years will rarely drink alcohol or use drugs (actual, not estimated, baseline value)	82.7	62.9	-19.8*	90.4	57.8	86.2	54.3	-0.7
Alcohol use								
Drank 4 or more drinks	22.5	26.9	4.4	14.7	27.3	17.8	20.2	10.2
Average times drank 4 or more drinks (if any)	20.3	20.1	-0.2	17.9	17.6	9.4	7.1	2.0
Average times drank 4 or more drinks (unconditional)	4.6	5.0	0.5	2.6	4.5	1.7	1.4	2.1
Had alcohol use interfere with life	2.6	3.5	0.9	1.3	2.0	2.9	2.8	0.8
Marijuana use								
Used marijuana	17.2	17.9	0.7	13.3	17.3	5.5	5.9	3.7
Average times used marijuana (if any)	98.5	79.0	-19.4	29.9	41.8	12.6	62.0	-37.6
Average times used marijuana (unconditional)	16.9	13.2	-3.7	4.0	6.7	0.7	3.6	-0.2
Hard drug use								
Used hard drugs	4.9	3.4	-1.5	4.5	2.7	8.3	8.9	-2.4
Average times used hard drugs (if any)	132.9	31.9	-101.1	98.9	61.2	18.1	3.7	-23.2
Average times used hard drugs (unconditional)	6.5	1.1	-5.4	4.5	1.6	1.5	0.3	-1.6
Entered counseling program for alcohol or drug dependency	20.8	16.2	-4.6	22.0	14.6	28.4	20.8	0.2

Source: MJS database, noninstitutional sample.

Notes: For indicator variables (for example, used hard drugs), baseline estimate is based on activity in the 12 months before baseline. For count variables (for example, times used hard drugs), baseline estimate is the number of times the event occurred in 12 months prior to baseline multiplied by the days since baseline (which has been divided by 365.25).

**Table D.12. Time-varying demographic characteristics**

	Outcomes study			Impact study				
	Baseline	Follow-up	Difference	Treatment: baseline	Treatment: follow-up	Comparison: baseline	Comparison: follow-up	Difference-in-differences
Sample size	242	242	n.a.	138	138	32	32	n.a.
Marital status								
Single	74.3	65.0	-9.3*	72.4	65.9	67.0	50.1	10.3
Married or in a domestic partnership	12.0	23.0	11.0*	11.6	20.3	6.2	22.5	-7.6
Divorced or widowed	13.7	12.0	-1.7	16.0	13.8	26.8	27.4	-2.8
Dependents								
Average number of financial and physical dependents	0.4	0.5	0.2	0.4	0.4	0.2	0.4	-0.1
No financial and physical dependents	81.8	77.0	-4.7	81.6	79.7	88.5	82.4	4.3
Average number of financial dependents	0.6	0.7	0.2	0.6	0.7	0.3	0.4	0.0
No financial dependents	70.4	68.7	-1.7	69.7	69.0	83.0	78.7	3.6
Average number of physical dependents	0.4	0.6	0.1	0.4	0.5	0.2	0.4	-0.1
No physical dependents	78.5	76.7	-1.9	80.6	79.0	86.0	77.4	7.1

Source: MJS database, noninstitutional sample.

**Table D.13. SE training provided**

	Outcomes study			Impact study				
	Baseline	Follow-up	Difference	Treatment: baseline	Treatment: follow-up	Comparison: baseline	Comparison: follow-up	Difference-in-differences
Sample size	242	242	n.a.	138	138	32	32	n.a.
Any training toward degree, certificate, or license	77.2	80.2	2.9	78.6	81.6	66.9	74.5	-4.5
Average number of training programs participated in	1.8	2.4	0.5*	1.8	2.3	1.8	2.3	-0.0
Participated in 3 or more training programs	28.1	39.6	11.6*	28.4	39.7	25.6	35.4	1.5
Completed any training program	52.1	59.0	6.8	53.4	59.2	57.6	63.8	-0.4
Average number of training programs completed	0.9	1.0	0.2	0.9	1.0	0.9	0.9	0.1
Completed 3 or more training programs	9.6	14.1	4.5	12.3	15.4	7.4	7.4	3.1
Currently in training program	11.5	9.6	-2.0	6.4	6.2	13.0	11.0	1.9
In 5 years, believe he or she will have continued education or undertaken additional job training	83.5	70.2	-13.3*	87.3	63.7	81.3	47.4	10.4

Source: MJS database, noninstitutional sample.

**Table D.14. Outcomes in full sample**

	Outcomes study			Impact study				
	Baseline	Follow-up	Difference	Treatment: baseline	Treatment: follow-up	Comparison: baseline	Comparison: follow-up	Difference-in-differences
Sample size	282	282	n.a.	154	154	37	37	n.a.
Employed last week	17.9	51.2	33.3*	15.9	53.1	6.3	41.0	2.5
Stable housing in past year	15.4	53.2	37.8*	18.5	58.1	15.3	46.2	8.7
Arrested since baseline	n.a.	24.9	n.a.	n.a.	16.6	n.a.	21.1	n.a.
Wage and salary income (dollars)	215.7	777.3	561.6*	166.9	733.3	98.6	704.7	-39.8

Source: MJS database, full sample.

**Table D.15. Outcomes one year after the SE job began: multivariate analysis**

<b>Outcome</b>	<b>Worked last week</b>	<b>Stable housing in past year</b>	<b>Total income in past month<sup>a</sup></b>	<b>Depression index</b>	<b>Arrested in past year</b>
Sample	full	full	noninstitutional	noninstitutional	full
Dependent variable	binary	binary	continuous	continuous	binary
Sample size	281	244	195	242	282
<b>Demographic characteristics before SE employment</b>					
High school diploma/GED <sup>b</sup>	0.126* [0.045]	0.014 [0.040]	95.08 [164.0]	0.094 [0.129]	-0.055 [0.028]
Any post-secondary education <sup>b</sup>	-0.034 [0.055]	0.146* [0.060]	-92.77 [283.5]	0.102 [0.215]	0.017 [0.047]
Male	0.011 [0.042]	-0.086 [0.065]	154.6 [340.8]	-0.574* [0.122]	-0.0139 [0.022]
Age	-0.001 [0.004]	-0.000 [0.001]	9.573 [6.008]	-0.004 [0.006]	-0.002* [0.001]
Hispanic	0.117 [0.138]	-0.022 [0.033]	275.5 [291.9]	-0.151 [0.338]	-0.122 [0.072]
Black	-0.017 [0.034]	-0.113 [0.062]	101.7 [373.4]	-0.097 [0.121]	-0.193 [0.103]
Other race	-0.061 [0.065]	0.024 [0.121]	-314.9 [243.5]	-0.207 [0.252]	-0.035 [0.033]
Native English speaker	0.371* [0.147]	0.050 [0.185]	-412.0 [423.9]	-0.139 [0.932]	-0.051 [0.055]
Veteran	-0.111 [0.086]	-0.062 [0.048]	707.0 [499.6]	0.438 [0.263]	0.330* [0.062]
Married/dom. partner.	0.048 [0.071]	0.279* [0.071]	-285.8 [197.7]	-0.252 [0.144]	-0.081 [0.046]
No dependents	-0.026 [0.037]	-0.055 [0.062]	-63.18 [35.67]	0.201 [0.162]	-0.028 [0.029]
<b>Barriers to work before SE employment</b>					
Did not work last year	-0.131 [0.085]	-0.117* [0.030]	-92.65 [195.5]	0.102 [0.157]	0.071 [0.030]
Stable housing in past year	0.089 [0.048]	0.352* [0.099]	264.9 [201.0]	0.082 [0.249]	-0.002 [0.049]
Excellent physical health	0.055 [0.023]	0.092* [0.028]	309.1 [147.7]	-0.097 [0.128]	-0.028 [0.029]
Depression index	0.021 [0.018]	-0.005 [0.028]	-47.30 [63.97]	0.642* [0.064]	0.027* [0.011]
Substance abuse counseling in past year	-0.129 [0.072]	-0.067 [0.104]	15.52 [138.6]	0.614* [0.121]	-0.003 [0.039]
Arrested 1-9 times	-0.001 [0.106]	0.149 [0.075]	-221.9 [243.1]	0.008 [0.182]	0.097 [0.048]
Arrested 10 or more times	0.128* [0.053]	0.168* [0.029]	153.9 [239.2]	0.011 [0.145]	0.059 [0.039]

Table D.15 (continued)

Outcome	Worked last week	Stable housing in past year	Total income in past month <sup>a</sup>	Depression index	Arrested in past year
<b>SE employment experience</b>					
Hours worked per week	0.005 [0.002]	0.001 [0.002]	22.93 [11.96]	-0.018* [0.004]	-0.003 [0.002]
Length of employment	0.001 [0.001]	0.003* [0.001]	5.013 [2.399]	-0.007* [0.002]	0.001 [0.001]
Soft skills training	-0.003 [0.093]	0.032 [0.034]	144.6 [187.8]	0.199 [0.256]	0.180* [0.047]
ABE/GED preparation	-0.199 [0.103]	0.035 [0.055]	-185.2 [226.1]	-0.267* [0.107]	0.062* [0.024]
Vocational training	0.191* [0.050]	-0.080 [0.040]	-79.06 [131.7]	-0.001 [0.277]	-0.053 [0.044]
Technical training	0.064 [0.071]	-0.212* [0.040]	64.97 [303.1]	0.052 [0.316]	-0.035 [0.035]
<b>SE employment supports</b>					
Work supports	-0.221* [0.046]	-0.142 [0.074]	-428.9 [296.8]	-0.043 [0.131]	0.021 [0.056]
Life supports	-0.029 [0.176]	-0.166* [0.063]	3.277 [192.6]	-0.158 [0.084]	0.003 [0.024]
Transition supports	-0.191 [0.294]	0.298 [0.176]	-399.7 [503.1]	0.309 [0.427]	-0.331 [0.239]
Any supports after transition	0.149 [0.067]	0.213* [0.050]	428.2* [89.97]	-0.683* [0.157]	-0.052 [0.075]
<b>Additional controls</b>					
Lagged dependent variable <sup>c</sup>	Yes	Yes	Yes	Yes	Yes
Organization	Yes	Yes	Yes	Yes	Yes
Constant	-1.192* [0.289]	1.830* [0.652]	65.31 [2,666]	6.556* [1.641]	1.119* [0.257]

Source: MJS database, full and noninstitutional samples.

<sup>a</sup>We use the level measure of income due to sensitivity to the treatment of zeros in the log transformation.

<sup>b</sup>As compared to those with no high school diploma or GED.

<sup>c</sup>All models include a lagged version of the dependent variable before SE employment began. For *worked last week*, the lagged dependent variable is worked last week (at intake). For *stable housing in past year*, stable housing in past year (before SE employment began) is included. For *depression index*, depression index (at hire) is included. For *arrested in past year*, ever convicted (at hire) is included.

**Table D.16. Employment outcomes one year after entering Chrysalis labor pool: multivariate analysis**

<b>Outcome</b>	<b>Worked last week</b>	<b>Worked last week</b>	<b>Worked continuously for six months in last year</b>	<b>Share of last year employed</b>
Propensity-score sample	full	full	noninstitutional	noninstitutional
Dependent variable	binary	binary	binary	binary
Sample size	91	91	81	81
<b>Treatment effect</b>				
Worked at an SE hosted by Chrysalis	0.220 [0.113]	0.194 [0.116]	0.244* [0.119]	0.192 [0.107]
<b>Demographic characteristics before labor pool entrance</b>				
High school diploma/GED	0.330* [0.149]	0.287 [0.173]	0.366 [0.185]	0.127 [0.176]
Any post-secondary education	0.279 [0.152]	0.190 [0.173]	0.183 [0.192]	0.090 [0.164]
Male	-0.262 [0.135]	-0.274* [0.124]	-0.238 [0.142]	-0.083 [0.106]
Age	0.001 [0.005]	0.001 [0.005]	-0.007 [0.006]	-0.006 [0.004]
Hispanic	0.114 [0.158]	0.122 [0.193]	0.068 [0.184]	0.003 [0.140]
Black	-0.171 [0.164]	-0.228 [0.171]	-0.118 [0.179]	-0.146 [0.126]
Other race	-0.003 [0.148]	-0.0697 [0.161]	-0.066 [0.173]	-0.054 [0.139]
Married/domestic partner	0.411* [0.139]	0.382* [0.165]	0.098 [0.196]	0.078 [0.154]
No dependents	-0.021 [0.118]	0.020 [0.132]	-0.0473 [0.138]	-0.036 [0.111]
<b>Employment measures before labor pool entrance</b>				
Worked last week	0.491* [0.236]	0.556 [0.348]	0.474 [0.262]	0.283 [0.242]
Worked last month	-0.194 [0.245]	-0.078 [0.308]	-0.050 [0.241]	0.135 [0.192]
Worked continuously for six months in last year	0.071 [0.116]	0.077 [0.129]	0.159 [0.128]	0.036 [0.110]
<b>Additional controls</b>				
Core measures of life stability at entry	No	Yes	Yes	Yes
Constant	0.451 [0.316]	0.372 [0.341]	0.750 [0.385]	0.798* [0.296]

Source: MJS database, full and noninstitutional propensity-score samples.

**Table D.17. Housing outcomes one year after entering Chrysalis labor pool: multivariate analysis**

<b>Outcome</b>	<b>Stable housing in last year</b>	<b>Stable housing in last year</b>	<b>Homeless in last year</b>
Propensity-score sample	full	full	noninstitutional
Dependent variable	binary	binary	binary
Sample size	83	83	76
<b>Treatment effect</b>			
Worked at an SE hosted by Chrysalis	0.138 [0.115]	0.124 [0.116]	0.160 [0.107]
<b>Demographic characteristics before labor pool entrance</b>			
High school diploma/GED	0.253* [0.122]	0.181 [0.141]	0.154 [0.149]
Any post-secondary education	0.190 [0.140]	0.126 [0.162]	0.110 [0.178]
Male	-0.137 [0.145]	-0.096 [0.157]	0.0455 [0.144]
Age	-0.001 [0.006]	-0.001 [0.006]	-0.000 [0.004]
Hispanic	0.039 [0.191]	0.079 [0.193]	-0.054 [0.142]
Black	-0.004 [0.189]	-0.004 [0.203]	0.0797 [0.178]
Other race	-0.117 [0.154]	-0.045 [0.174]	0.159 [0.124]
Married/domestic partner	0.298 [0.151]	0.269 [0.163]	-0.339* [0.151]
No dependents	-0.115 [0.130]	-0.131 [0.149]	-0.080 [0.130]
<b>Housing measures before labor pool entrance</b>			
Stable housing in last year	0.514* [0.118]	0.474* [0.147]	0.082 [0.143]
Homeless in last year	-0.022 [0.152]	0.013 [0.163]	0.425* [0.153]
<b>Additional controls</b>			
Core measures of life stability at entry	No	Yes	Yes
Constant	0.353 [0.328]	0.201 [0.405]	0.170 [0.369]

Source: MJS database, full and noninstitutional propensity-score samples.

**Table D.18. Monthly income outcomes one year after entering Chrysalis labor pool: multivariate analysis**

<b>Outcome</b>	<b>Wage and salary income</b>	<b>Total monthly income</b>	<b>Percent of income from work</b>	<b>Percent of income from government</b>
Propensity-score sample	full	noninstitutional	noninstitutional	noninstitutional
Dependent variable	continuous	continuous	continuous	continuous
Sample size	85	66	60	60
<b>Treatment effect</b>				
Worked at an SE hosted by Chrysalis	111.3 [187.1]	-140.7 [206.4]	5.050 [13.18]	-15.93 [10.84]
<b>Demographic characteristics before labor pool entrance</b>				
High school diploma/GED	513.9* [247.6]	242.0 [320.8]	26.33 [18.44]	-33.83* [13.99]
Any post-secondary education	324.6 [328.6]	466.4 [305.2]	6.652 [18.68]	1.066 [14.86]
Male	-286.1 [305.0]	-106.7 [317.3]	-0.557 [14.26]	-3.155 [14.46]
Age	6.936 [9.952]	-3.328 [12.33]	-1.284 [0.824]	0.460 [0.513]
Hispanic	146.1 [394.9]	-266.8 [358.5]	29.59 [18.56]	-33.35* [14.92]
Black	-176.9 [272.6]	-383.4 [322.8]	21.86 [17.45]	-14.77 [15.27]
Other race	121.8 [308.1]	-353.8 [282.9]	12.52 [20.72]	-27.89* [13.17]
Married/ Domestic partner	434.6 [366.4]	141.0 [427.4]	2.709 [17.71]	4.853 [15.87]
No dependents	-108.5 [245.4]	-538.1 [311.2]	3.429 [16.89]	-4.128 [14.11]
<b>Income measures before labor pool entrance</b>				
Total monthly income	-0.487 [0.514]	0.225 (0.600)	-0.021 (0.035)	0.020 (0.034)
Monthly wage and salary income	1.099 [0.934]	-0.017 [1.013]	-0.009 [0.063]	-0.0131 [0.059]
Share of income from work	-2.153 [9.232]	-2.935 [11.38]	1.638* [0.652]	-1.363* [0.597]
Share of income from government	-0.413 [5.162]	-11.33 [8.849]	0.842 [0.451]	-0.866* [0.417]
<b>Additional controls</b>				
Core measures of life stability at entry	Yes	Yes	Yes	Yes
Constant	1,621 [1,550]	858.4 [1,235]	173.0* [69.32]	1,621 [1,550]

Source: MJS database, full and noninstitutional propensity-score samples.

**Table D.19. Criminal activity and health outcomes one year after entering Chrysalis labor pool: multivariate analysis**

Outcome	Arrested since baseline	Depression index	Excellent physical health	Substance abuse counseling since baseline
Propensity-score sample	full	noninstitutional	noninstitutional	noninstitutional
Dependent variable	binary	continuous	Binary	binary
Sample size	91	83	83	83
Treatment effect				
Worked at an SE hosted by Chrysalis	-0.0296 [0.099]	0.055 [0.341]	0.201* [0.074]	0.067 [0.081]
Demographic characteristics before labor pool entrance				
High school diploma/GED	-0.184 [0.148]	-0.283 [0.355]	-0.107 [0.127]	0.076 [0.158]
Any post-secondary education	-0.142 [0.168]	0.327 [0.566]	-0.162 [0.129]	0.176 [0.162]
Male	0.0480 [0.119]	0.220 [0.584]	0.115 [0.089]	0.006 [0.081]
Age	-0.001 [0.004]	0.024 [0.020]	-0.010* [0.004]	0.000 [0.002]
Hispanic	-0.093 [0.140]	0.028 [0.368]	-0.023 [0.130]	0.123 [0.089]
Black	-0.098 [0.158]	0.598 [0.355]	-0.091 [0.108]	-0.037 [0.104]
Other race	0.164 [0.131]	0.100 [0.371]	-0.230 [0.120]	0.041 [0.077]
Married/ Domestic partner	-0.201 [0.126]	-1.047* [0.507]	-0.006 [0.137]	-0.230* [0.107]
No dependents	-0.007 [0.102]	-0.600 [0.576]	-0.242* [0.091]	-0.189* [0.092]
Domain-specific outcome measures before labor pool entrance				
Ever arrested	0.268* [0.112]	n.a.	n.a.	n.a.
Arrested 10 or more times	-0.178 [0.160]	n.a.	n.a.	n.a.
Depression index	n.a.	0.767* [0.262]	0.032 [0.036]	0.062* [0.031]
In excellent physical health	n.a.	-0.115 [0.355]	0.376* [0.086]	-0.065 [0.089]
Substance abuse counseling in past year	n.a.	0.549 [0.468]	0.144 [0.103]	0.636* [0.099]
Additional controls				
Core measures of life stability at entry	Yes	Yes	Yes	Yes
Constant	0.261 [0.255]	-1.033 [1.662]	0.581* [0.276]	-0.040 [0.192]

Source: MJS database, full and noninstitutional propensity-score samples.

**APPENDIX E**  
**FOLLOW-UP SURVEY**

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Reference No.: 40004

**MATHEMATICA**  
Policy Research

## **Mathematica Job Study**

### **Follow-Up Survey**

*September 20, 2013*

Prepared by:

Mathematica Policy Research

**PRELIMINARIES**

**Before we begin the survey, I have two questions for you.**

**P1. Are you currently working at [SOCIAL ENTERPRISE]?**

- YES..... 1
- NO..... 0
- DON'T KNOW ..... d
- REFUSED ..... r

**P2. Now, I'd like to ask you a general question. If you were to consider your life in general these days, how happy or unhappy would you say you are, on the whole? Please use a scale of 1 to 7 to rate your happiness with 1 being very happy and 7 being not at all happy.**

INTERVIEWER: CIRCLE ONLY ONE RESPONSE.

**Very Happy 1 2 3 4 5 6 7 Not At All Happy**

- CAN'T CHOOSE ..... d
- REFUSED ..... r

**SECTION 1. EMPLOYMENT**

The first set of questions asks about your current employment.

**A1. In the last week, did you work at a job for pay?**

INTERVIEWER: READ THIS ONLY

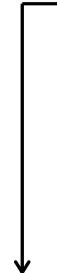
(1) FOR BLUE CONTACT SHEETS AND

(2) IF CURRENTLY WORKING AT SOCIAL ENTERPRISE:

“Please include your job at [SOCIAL ENTERPRISE].”

Include both part-time and full-time jobs, as well as any self-employment jobs held for pay or profit.

- YES..... 1 → GO TO A3
- NO..... 0
- DON'T KNOW ..... d
- REFUSED ..... r → GO TO A5



ASK A2 ONLY IF THE RESPONDENT DID NOT WORK DURING THE PAST WEEK

**A2. People say that they are not working for a number of reasons. The following are some of the reasons people sometimes give for not working. Please tell me all of the reasons why you are not currently working.**

INTERVIEWER: READ EACH POSSIBLE RESPONSE ALOUD AND ALLOW THEM TO INDICATE IF IT IS APPLICABLE TO THEIR SITUATION.

CIRCLE ALL THAT APPLY

- A physical or mental condition prevents you from working ..... 1
- You cannot find a job that you are qualified for ..... 2
- You do not have reliable transportation to and from work..... 3
- You are caring for someone else ..... 4
- You cannot find a job you want..... 5
- You are waiting to finish school or a training program ..... 6
- Workplaces are not accessible to people with your disability ..... 7
- You do not want to lose benefits such as disability, workers' compensation, or Medicaid ..... 8
- Previous attempts to work have been discouraging ..... 9
- Others do not think you can work..... 10
- Employers will not give you a chance to show you can work..... 11
- You lack skills..... 12
- DON'T KNOW ..... d
- REFUSED ..... r
- There are other reasons why you are not working ..... 13 → GO TO A2a

→ GO TO A5

**A2a. Please specify the other reasons why you are not currently working.**

RECORD VERBATIM

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---

---

DON'T KNOW ..... d

REFUSED ..... r

AFTER ANSWERING A2a SKIP TO A5

**A3. In the last week, did you have more than one job, including part-time, evening, or weekend work? Please count work for an employment agency or as a consultant as one job.**

YES ..... 1

NO ..... 0

DON'T KNOW ..... d

REFUSED ..... r



**A4. Altogether, how many jobs have you had IN THE LAST WEEK? Please count work for an employment agency or as a consultant as one job.**

|\_|\_| NUMBER OF JOBS

DON'T KNOW ..... d

REFUSED ..... r

A5. INTERVIEWER: ASK APPROPRIATE QUESTION:

IF WORKED LAST WEEK: **For the job at which you worked the most hours LAST WEEK, what was the name of the employer where you worked?**

IF NOT CURRENTLY EMPLOYED: **What was the name of the employer where you worked most recently?**

[SOCIAL ENTERPRISE]..... 1 → GO TO A7  
OR

---

NAME OF EMPLOYER

PARTICIPANT NEVER WORKED..... 99 → GO TO A23

DON'T KNOW ..... d

REFUSED ..... r

IF A CLIENT DOES NOT KNOW THE NAME OF THEIR PREVIOUS EMPLOYER OR REFUSES TO ANSWER A5, PLEASE CONTINUE ON TO A6. IF THE CLIENT REFUSES TO ANSWER THESE QUESTIONS, PLEASE WRITE IN "REFUSED"

A6. **What kind of business or industry is this company? What kinds of things do they make, do, or sell?**

---

BUSINESS OR INDUSTRY

A7. **What kind of work do (did) you do, that is what is or was your occupation?**

---

OCCUPATION

A8. **What are (were) your usual activities or duties at this job?**

---

ACTIVITIES OR DUTIES

**A9. How did you find this job? How did you hear about it?**

INTERVIEWER: READ EACH POSSIBLE RESPONSE ALOUD AND ALLOW THEM TO INDICATE IF IT IS APPLICABLE TO THEIR SITUATION.

CIRCLE ALL THAT APPLY

- You were recalled by a former employer ..... 1
  - You heard/found it through a state employer agency/state job service..... 2
  - You heard/found it through a private employment agency ..... 3
  - You heard/found it through friends/relatives/colleagues ..... 4
  - You found it through the want ads/newspaper/local paper..... 5
  - You heard/found it directly through your employer..... 6
  - You heard/found it through your union ..... 7
  - You are self-employed ..... 8
  - You heard/found it through school ..... 9
  - You heard/found it through the Internet/internet job service/TV/ Craig's list ..... 10
  - You heard/found it through [SOCIAL ENTERPRISE] or [ORGANIZATION] ..... 11
  - You heard/found it some other way (SPECIFY)..... 12
- 
- DON'T KNOW ..... d
- REFUSED ..... r

**A10. How difficult is (was) it for you to take an hour or two off during work hours to take care of personal or family matters?**

- Not difficult at all, ..... 1
- Not too difficult,..... 2
- Somewhat difficult, or ..... 3
- Very difficult? ..... 4
- DON'T KNOW ..... d
- REFUSED ..... r

INTERVIEWER CHECK: SKIP A11 IF JOB BEING DISCUSSED IS AT [SOCIAL ENTERPRISE].

**A11. I'm going to read you a list of characteristics about the job at [FILL A5]. Please rate how satisfied you are (were) with respect to each of the following. Are (were) you very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied?**

CIRCLE ONE FOR EACH ROW

	VERY SATISFIED	SOMEWHAT SATISFIED	SOMEWHAT DISSATISFIED	VERY DISSATISFIED	DON'T KNOW	REFUSED
a. Your salary (the amount of money you made) .....	1	2	3	4	d	r
b. The benefits you receive/received.....	1	2	3	4	d	r
c. The type of work you do/did .	1	2	3	4	d	r
d. The number of hours you work/worked.....	1	2	3	4	d	r
e. Where the job is/was located	1	2	3	4	d	r
f. The opportunities for you to move up in the company .....	1	2	3	4	d	r

**Now I'd like to talk to you about some more characteristics of this job. Please use the same scale and rate how satisfied you are (were) with respect to each of the following. Are (were) you very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied?**

CIRCLE ONE FOR EACH ROW

	VERY SATISFIED	SOMEWHAT SATISFIED	SOMEWHAT DISSATISFIED	VERY DISSATISFIED	DON'T KNOW	REFUSED
g. How much it challenges/challenged you intellectually ...	1	2	3	4	d	r
h. The level of responsibility you have/were given.....	1	2	3	4	d	r
i. How much independence you have/had in your work.....	1	2	3	4	d	r
j. How much the job contributes/contributed to society.....	1	2	3	4	d	r

Now I'd like to talk to you about the support you receive/received at this job. Please use the same scale and rate how satisfied you are (were) with respect to each of the following. Are (were) you very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied?

CIRCLE ONE FOR EACH ROW

	VERY SATISFIED	SOMEWHAT SATISFIED	SOMEWHAT DISSATISFIED	VERY DISSATISFIED	DON'T KNOW	REFUSED
k. How secure you feel/felt in keeping the job .....	1	2	3	4	d	r
l. Getting feedback about how well you are/were doing the job .....	1	2	3	4	d	r
m. Getting the support you need/needed.....	1	2	3	4	d	r

**A12. Other than the job you just told me about, how many other jobs did you have IN THE PAST TWELVE MONTHS? Please include other jobs in which you are currently working and count work for an employment agency like Manpower or as a consultant as one job.**

|\_\_|\_\_| NUMBER OF JOBS

IF 0..... 1 → GO TO A14

IF 1 OR MORE ..... 2 → GO TO A13

	CURRENT JOB/MOST RECENT	JOB 2
<p><b>A13. Including the job you have just told me about, where have you worked in the past year? Include work at [SOCIAL ENTERPRISE] if we have not already talked about it and any self-employment and any other current jobs. Please tell me the most recent job first.</b> .....</p> <p>INTERVIEWER: IF THE CLIENT HELD MORE THAN FIVE ADDITIONAL JOBS, ONLY ENTER THE FIVE MOST RECENT JOBS IN THIS GRID.</p>	<p><b>FIRST ANSWER A13 FOR ALL JOBS (UP TO 5)</b></p> <p><b>THEN ANSWER A14 - A19 FOR THE FIRST JOB, THEN ANSWER A14 – A19 FOR THE SECOND JOB AND CONTINUE UNTIL THERE ARE NO MORE.</b></p>	
<p><b>A14. How many hours per week, including regular overtime hours do/did you usually work on this job?</b> .....</p>	<p>____ ____ ____  HOURS PER WEEK</p> <p>DON'T KNOW ..... d</p> <p>REFUSED ..... r</p>	<p>____ ____ ____  HOURS PER WEEK</p> <p>DON'T KNOW ..... d</p> <p>REFUSED ..... r</p>
<p><b>A15. When do/did you start working at this job?</b> .....</p> <p><b>PROBE: Your best guess is fine.</b></p>	<p>START DATE:</p> <p>____ ____  / ____ ____ ____ </p> <p>MONTH YEAR</p> <p>DON'T KNOW ..... d</p> <p>REFUSED ..... r</p>	<p>START DATE:</p> <p>____ ____  / ____ ____ ____ </p> <p>MONTH YEAR</p> <p>DON'T KNOW ..... d</p> <p>REFUSED ..... r</p>
<p><b>A16. Does/Did your employer receive funding from an outside source (for example grant funding or federal, state, or local government funding) to help pay for your employment?</b> .....</p>	<p>YES ..... 1</p> <p>NO ..... 0</p> <p>DON'T KNOW ..... d</p> <p>REFUSED ..... r</p>	<p>YES ..... 1</p> <p>NO ..... 0</p> <p>DON'T KNOW ..... d</p> <p>REFUSED ..... r</p>
<p><b>A17. Does/Did this job provide you with support services like a case manager or employment counselor while you were working there?</b> .....</p>	<p>YES ..... 1</p> <p>NO ..... 0</p> <p>DON'T KNOW ..... d</p> <p>REFUSED ..... r</p>	<p>YES ..... 1</p> <p>NO ..... 0</p> <p>DON'T KNOW ..... d</p> <p>REFUSED ..... r</p>
<p><b>A18. Is/Was health care coverage available to you at this job? ....</b></p>	<p>YES ..... 1</p> <p>NO ..... 0</p> <p>DON'T KNOW ..... d</p> <p>REFUSED ..... r</p>	<p>YES ..... 1</p> <p>NO ..... 0</p> <p>DON'T KNOW ..... d</p> <p>REFUSED ..... r</p>

	CURRENT JOB/MOST RECENT	JOB 2
<p><b>A19. If you are not currently working at this job, when did you stop working at this job? .</b>  <b>PROBE: Your best guess is fine.</b></p>	<p><b>STOP DATE:</b>            STILL WORKING ..... 1              __ _  /  __ _ _ _ _             MONTH      YEAR             DON'T KNOW ..... d            REFUSED ..... r</p>	<p><b>STOP DATE:</b>            STILL WORKING ..... 1              __ _  /  __ _ _ _ _             MONTH      YEAR             DON'T KNOW .....d            REFUSED .....r</p>
<p>INTERVIEWER: IF THERE IS ANOTHER JOB GO BACK TO A13 AND LIST THE NEXT JOB            IF YOU ARE ON THE LAST JOB, GO TO A20.</p>	<p>NO MORE JOBS ..... 1</p>	<p>NO MORE JOBS.....1</p>

	JOB 3	JOB 4
<p><b>A13. Including the job you have just told me about, where have you worked in the past year? Include work at [SOCIAL ENTERPRISE] if we have not already talked about it and any self-employment and any other current jobs. Please tell me the most recent job first.</b> .....</p> <p>INTERVIEWER: IF THE CLIENT HELD MORE THAN FIVE ADDITIONAL JOBS, ONLY ENTER THE FIVE MOST RECENT JOBS IN THIS GRID.</p>		
<p><b>A14. How many hours per week, including regular overtime hours do/did you <u>usually</u> work on this job?</b> .....</p>	<p>____ ____  HOURS PER WEEK</p> <p>DON'T KNOW ..... d</p> <p>REFUSED ..... r</p>	<p>____ ____  HOURS PER WEEK</p> <p>DON'T KNOW ..... d</p> <p>REFUSED ..... r</p>
<p><b>A15. When do/did you <u>start</u> working at this job?</b> .....</p> <p><b>PROBE:</b> Your best guess is fine.</p>	<p>START DATE:</p> <p>____ ____  / ____ ____ ____ ____ </p> <p>MONTH YEAR</p> <p>DON'T KNOW ..... d</p> <p>REFUSED ..... r</p>	<p>START DATE:</p> <p>____ ____  / ____ ____ ____ ____ </p> <p>MONTH YEAR</p> <p>DON'T KNOW ..... d</p> <p>REFUSED ..... r</p>
<p><b>A16. Does/Did your employer receive funding from an outside source (for example grant funding or federal, state, or local government funding) to help pay for your employment?</b> .....</p>	<p>YES ..... 1</p> <p>NO ..... 0</p> <p>DON'T KNOW ..... d</p> <p>REFUSED ..... r</p>	<p>YES ..... 1</p> <p>NO ..... 0</p> <p>DON'T KNOW ..... d</p> <p>REFUSED ..... r</p>
<p><b>A17. Does/Did this job provide you with support services like a case manager or employment counselor while you were working there?</b> .....</p> <p>CHECK YES AND DO NOT ASK IF JOB WAS AT [SOCIAL ENTERPRISE].</p>	<p>YES ..... 1</p> <p>NO ..... 0</p> <p>DON'T KNOW ..... d</p> <p>REFUSED ..... r</p>	<p>YES ..... 1</p> <p>NO ..... 0</p> <p>DON'T KNOW ..... d</p> <p>REFUSED ..... r</p>
<p><b>A18. Is/Was health care coverage available to you at this job? ....</b></p>	<p>YES ..... 1</p> <p>NO ..... 0</p> <p>DON'T KNOW ..... d</p> <p>REFUSED ..... r</p>	<p>YES ..... 1</p> <p>NO ..... 0</p> <p>DON'T KNOW ..... d</p> <p>REFUSED ..... r</p>

	JOB 3	JOB 4
<b>A19. If you are not currently working at this job, when did you stop working at this job? .</b> <b>PROBE: Your best guess is fine.</b>	<b>STOP DATE:</b> STILL WORKING ..... 1          /                 MONTH      YEAR  DON'T KNOW ..... d REFUSED ..... r	<b>STOP DATE:</b> STILL WORKING ..... 1          /                 MONTH      YEAR  DON'T KNOW ..... d REFUSED ..... r
INTERVIEWER: IF THERE IS ANOTHER JOB GO BACK TO A13 AND LIST THE NEXT JOB  IF YOU ARE ON THE LAST JOB, GO TO A20.	NO MORE JOBS ..... 1	NO MORE JOBS ..... 1

**JOB 5**

**A13. Including the job you have just told me about, where have you worked in the past year? Include work at [SOCIAL ENTERPRISE] if we have not already talked about it and any self-employment and any other current jobs.....**

**Please tell me the most recent job first.**

INTERVIEWER: IF THE CLIENT HELD MORE THAN FIVE ADDITIONAL JOBS, ONLY ENTER THE FIVE MOST RECENT JOBS IN THIS GRID.

**A14. How many hours per week, including regular overtime hours do/did you usually work on this job? .....**

\_\_\_\_|\_\_\_\_|\_\_\_\_| HOURS PER WEEK  
 DON'T KNOW ..... d  
 REFUSED ..... r

**A15. When do/did you start working at this job? .....**

**PROBE: Your best guess is fine.**

START DATE:  
 \_\_\_\_|\_\_\_\_| / \_\_\_\_|\_\_\_\_|\_\_\_\_|\_\_\_\_|  
 MONTH            YEAR  
 DON'T KNOW ..... d  
 REFUSED ..... r

**A16. Does/Did your employer receive funding from an outside source (for example grant funding or federal, state, or local government funding) to help pay for your employment? .....**

YES ..... 1  
 NO ..... 0  
 DON'T KNOW ..... d  
 REFUSED ..... r

**A17. Does/Did this job provide you with support services like a case manager or employment counselor while you were working there? .....**

CHECK YES AND DO NOT ASK IF JOB WAS AT [SOCIAL ENTERPRISE].

YES ..... 1  
 NO ..... 0  
 DON'T KNOW ..... d  
 REFUSED ..... r

**A18. Is/Was health care coverage available to you at this job? ....**

YES ..... 1  
 NO ..... 0  
 DON'T KNOW ..... d  
 REFUSED ..... r

**JOB 5**

<p><b>A19. If you are not currently working at this job, when did you stop working at this job?..</b> <b>PROBE: Your best guess is fine.</b></p>	<p><b>STOP DATE:</b>                  STILL WORKING ..... 1                    _ _ _  /  _ _ _ _                   MONTH      YEAR                  DON'T KNOW ..... d                  REFUSED ..... r</p>
<p>INTERVIEWER: IF THERE IS ANOTHER JOB GO BACK TO A13 AND LIST THE NEXT JOB IF YOU ARE ON THE LAST JOB, GO TO A20.</p>	<p>NO MORE JOBS..... 1</p>

INTERVIEWER CHECK:

YELLOW CONTACT SHEET, DID NOT WORK AT SOCIAL ENTERPRISE. → DO NOT ASK A20, SELECT 20 AND GO TO A23

BLUE CONTACT SHEET, RESPONDENT WORKED AT [SOCIAL ENTERPRISE] IN THE PAST. → GO TO A20

BLUE CONTACT SHEET, RESPONDENT IS STILL WORKING AT [SOCIAL ENTERPRISE]. → DO NOT ASK A20, SELECT 19 AND GO TO A21

RESPONDENT REFUSED TO ANSWER IF THEY WORKED AT A SOCIAL ENTERPRISE (P1 = D OR R) READ:

**“I want to verify I have the correct answer to this question. Did you work at [SOCIAL ENTERPRISE]?”**

YES.....	1	→	GO TO A20
NO.....	0	→	DO NOT ASK A20, SELECT 20 AND GO TO A23
DON'T KNOW .....	d	→	GO TO A23
REFUSED .....	r	→	GO TO A23

Now I'd like to talk to you about your experience at [SOCIAL ENTERPRISE].

**A20. What was the main reason that you left [SOCIAL ENTERPRISE]?**

INTERVIEWER: ASK THE QUESTION AND CIRCLE THE APPROPRIATE RESPONSE. DO NOT READ ANSWERS.

CIRCLE ONE ONLY

- FOUND A JOB/EMPLOYED OUTSIDE OF [SOCIAL ENTERPRISE] ..... 1
- MOVED ..... 2
- STARTED OTHER SCHOOL/TRAINING ..... 3
- NOT INTERESTED ..... 4
- DIDN'T LIKE WORKING AT [SOCIAL ENTERPRISE]..... 5
- COULD NOT WORK AS MANY HOURS AS DESIRED ..... 6
- PAY WAS TOO LOW ..... 7
- ILLNESS ..... 8
- PREGNANCY OR CHILDCARE ISSUES ..... 9
- OTHER FAMILY REASONS..... 10
- TRANSPORTATION/LOGISTICAL PROBLEMS ..... 11
- PERSONAL PROBLEMS ..... 12
- [SOCIAL ENTERPRISE] POORLY RUN ..... 13
- DIDN'T THINK WORKING AT [SOCIAL ENTERPRISE] WOULD HELP ME FIND ANOTHER JOB ..... 14
- DECIDED I DIDN'T WANT A JOB ..... 15
- INCARCERATED/JAIL ..... 16
- DRUG USE ..... 17
- TERMINATED BY [SOCIAL ENTERPRISE] ..... 18
- STILL WORKING AT [SOCIAL ENTERPRISE] ..... 19      GO TO A21
- DID NOT WORK AT [SOCIAL ENTERPRISE]..... 20 →      GO TO A23
- LEFT FOR SOME OTHER REASON (SPECIFY) ..... 21 →
  
- \_\_\_\_\_
- DON'T KNOW ..... d
- REFUSED ..... r

Now I'd like to talk to you about your experience at the Social Enterprise.

**A21. Did you work at [SOCIAL ENTERPRISE] for more than one period of time? That is, was there a period of time in which you did not work at [SOCIAL ENTERPRISE] between the time you first started there and the time you stopped working there?**

- YES..... 1
- NO..... 0
- DON'T KNOW ..... d
- REFUSED ..... r

**A22. Please rate how satisfied you are/were with the job you held at [SOCIAL ENTERPRISE] with respect to each of the following. Were you very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied?**

CIRCLE ONE FOR EACH ROW

	VERY SATISFIED	SOMEWHAT SATISFIED	SOMEWHAT DISSATISFIED	VERY DISSATISFIED	DON'T KNOW	REFUSED
a. Your salary (the amount of money you make/made).....	1	2	3	4	d	r
b. The benefits you receive/received.....	1	2	3	4	d	r
c. The type of work you do/did.....	1	2	3	4	d	r
d. The number of hours you work/worked.....	1	2	3	4	d	r
e. Where the job is/was located.....	1	2	3	4	d	r
f. The opportunities for you to move up in the company.....	1	2	3	4	d	r

**Now I'd like to talk to you about some more characteristics of this job. Please use the same scale and rate how satisfied you are (were) with respect to each of the following. Are (were) you very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied?**

CIRCLE ONE FOR EACH ROW

	VERY SATISFIED	SOMEWHAT SATISFIED	SOMEWHAT DISSATISFIED	VERY DISSATISFIED	DON'T KNOW	REFUSED
g. How much it challenges/challenged you intellectually .....	1	2	3	4	d	r
h. The level of responsibility you are/were given .....	1	2	3	4	d	r
i. How much independence you have/had in your work ..	1	2	3	4	d	r
j. How much the job contributes/contributed to society.....	1	2	3	4	d	r

**Now I'd like to talk to you about the support you receive/received at this job. Please use the same scale and rate how satisfied you are (were) with respect to each of the following. Are (were) you very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied?**

CIRCLE ONE FOR EACH ROW

	VERY SATISFIED	SOMEWHAT SATISFIED	SOMEWHAT DISSATISFIED	VERY DISSATISFIED	DON'T KNOW	REFUSED
k. How secure you feel/felt in keeping the job.....	1	2	3	4	d	r
l. Getting feedback about how well you are/were doing the job .....	1	2	3	4	d	r
m. Getting the support you need/needed.....	1	2	3	4	d	r

**A23. Some organizations provide various services to clients. I'd like to ask you about services you may have received from [ORGANIZATION]. First, let's talk about education and training. Which of the following services did you receive from [ORGANIZATION]?**

INTERVIEWER: READ IF NECESSARY, "Did you receive . . ."

CIRCLE ONE FOR EACH ROW

	RECEIVED	DID NOT RECEIVE	DON'T KNOW	REFUSED
a. Soft skills training (for example time management, working in a team, conflict resolution, attitudes toward work, anger management, stress management).....	1	2	d	r
b. Adult Basic Education or GED preparation .....	1	2	d	r
c. Vocational or job specific skills training .....	1	2	d	r
d. Computer literacy or skills and technology training .....	1	2	d	r

**Next, let's talk about work supports. Which of the following services did you receive from [ORGANIZATION]?**

CIRCLE ONE FOR EACH ROW

	RECEIVED	DID NOT RECEIVE	DON'T KNOW	REFUSED
e. Housing or rental assistance .....	1	2	d	r
f. Transportation assistance .....	1	2	d	r
g. Work clothing assistance (for example, access to clothes closets, work uniforms, protective or supportive shoes).....	1	2	d	r

**Next, let's talk about life stability supports. Which of the following services did you receive from [ORGANIZATION]?**

CIRCLE ONE FOR EACH ROW

	RECEIVED	DID NOT RECEIVE	DON'T KNOW	REFUSED
h. Physical health services .....	1	2	d	r
i. Assistance with a physical or learning disability .....	1	2	d	r
j. Substance abuse counseling or treatment .....	1	2	d	r
k. Domestic abuse protection, counseling or other services .....	1	2	d	r
l. Financial education and asset building (for example, budgeting, EITC, savings assistance, financial literacy, IDAs, (re)building credit), including setting up a bank account .....	1	2	d	r
m. Assistance with food stability or food security (food pantries, reduced price meals, nutritional education) .....	1	2	d	r
n. Access to public benefits (for example, food stamps, Medicaid, SSI) .....	1	2	d	r
o. Help with tax preparation .....	1	2	d	r
p. Help plan to avoid relapse of behavior .....	1	2	d	r

**Next, let's talk about employment transition supports. Which of the following services did you receive from [ORGANIZATION]?**

**PROBE: Employment transition supports are any type of help an organization may give you to find a job or employment outside of the organization.**

CIRCLE ONE FOR EACH ROW

	RECEIVED	DID NOT RECEIVE	DON'T KNOW	REFUSED
q. Job readiness skills training (for example, resume preparation, interview skills, goal setting) .....	1	2	d	r
r. Career counseling or job coaching (for example, career pathways, advancement) .....	1	2	d	r
s. Job search assistance .....	1	2	d	r

INTERVIEWER:

IF RESPONDENT IS STILL WORKING AT SOCIAL ENTERPRISE → DO NOT ASK A23 items t –v  
GO TO SECTION 2

**Finally, let's talk about services you received after you left [ORGANIZATION]. Which of the following services did you receive from [ORGANIZATION]?**

CIRCLE ONE FOR EACH ROW

	RECEIVED	DID NOT RECEIVE	DON'T KNOW	REFUSED
t. Access to employment counselor or other services related to employment (for example, to address work-related challenges, support job retention and advancement, identify new job opportunities) .....	1	2	d	r
u. Access to staff or services that support life stability (for example, to address challenges with substance abuse, mental health, housing, childcare, financial stability, or other services) .....	1	2	d	r
v. Other (SPECIFY):..... _____	1	2	d	r

**SECTION 2. RECIDIVISM**

Now I have some questions about your interactions with the criminal justice system. Your answers will be kept strictly confidential.

**B1. Were you ever in jail or prison prior to [MONTH AND YEAR OF LAST SURVEY]?**

- YES..... 1
  - NO..... 0
  - DON'T KNOW ..... d
  - REFUSED ..... r
- } → GO TO B2

**B1a. Prior to [MONTH AND YEAR OF LAST SURVEY], when were you most recently released from jail or prison?**

**PROBE: Your best guess is fine.**

|\_|\_| / |\_|\_|\_|\_|  
MONTH      YEAR

- DON'T KNOW ..... d
- REFUSED ..... r

**B2. Have you been arrested since [MONTH AND YEAR OF LAST SURVEY]?**

- YES..... 1
  - NO..... 0
  - DON'T KNOW ..... d
  - REFUSED ..... r
- } → GO TO SECTION 3 C1

**B2a. How many times have you been arrested since [MONTH AND YEAR OF LAST SURVEY]?**

|\_| NUMBER OF ARRESTS

- DON'T KNOW ..... d
- REFUSED ..... r

**B3. Since [MONTH AND YEAR OF LAST SURVEY], have you been in jail or prison?**

- YES..... 1
  - NO..... 0
  - DON'T KNOW ..... d
  - REFUSED ..... r
- } → GO TO SECTION 3 C1

**B4. Since [MONTH AND YEAR OF LAST SURVEY], have you been convicted and sentenced to jail or prison?**

**Please include any sentence you received, even if you did not serve any time.**

- YES..... 1
- NO..... 0
- DON'T KNOW ..... d
- REFUSED ..... r

} → GO TO SECTION 3 C1

**B4a. When was your most recent conviction?**

**PROBE: Your best guess is fine.**

|\_|\_| / |\_|\_|\_|\_|  
MONTH YEAR

- DON'T KNOW ..... d
- REFUSED ..... r

**B5. Please think about all the sentences you've received since [MONTH AND YEAR OF LAST SURVEY]. Please tell me the total length of those prison sentences, even if you did not serve all of them.**

**PROBE: Your best guess is fine.**

|\_|\_|\_| NUMBER OF

- DAYS ..... 1
- WEEKS ..... 2
- MONTHS..... 3
- YEARS ..... 4
- DON'T KNOW ..... d
- REFUSED ..... r

**B6. When were you most recently released from prison?**

**PROBE: Your best guess is fine.**

|\_|\_| / |\_|\_|\_|\_|  
MONTH YEAR

- DON'T KNOW ..... d
- REFUSED ..... r

**B7. Since [MONTH AND YEAR OF LAST SURVEY], did you start a probation or parole?**

- YES..... 1
- NO..... 0
- DON'T KNOW ..... d
- REFUSED ..... r

**SECTION 3. LIFE STABILITY**

READ: Now I'd like to ask you some questions about how things are going in your life.

**C1. Did you open any bank accounts, including a checking account, since [MONTH AND YEAR OF LAST SURVEY]?**

- YES..... 1
- NO..... 0
- DON'T KNOW ..... d
- REFUSED ..... r

**C2. What is your best guess of your total earnings (money from work) in the past month? We would like to know how much you made before taxes and other deductions. Please include tips, commissions, and overtime pay.**

**If you held more than one job, include your total earnings from all your jobs during the past month.**

**PROBE: Your best estimate is fine.**

\$ |\_\_|\_| , |\_\_|\_|\_| . |\_\_|\_| TOTAL MONTHLY EARNINGS

- DON'T KNOW ..... d
- REFUSED ..... r

**C3. We are interested in learning about the benefits and income you received on [MONTH AND YEAR OF LAST SURVEY] and those that you received in the past month. Can you tell me if you received each of the following on [MONTH AND YEAR OF LAST SURVEY] and if you received them last month? If you received them last month, please tell me the amount you received per month.**

INTERVIEWER: ASK RESPONDENT IF THEY RECEIVED THE BENEFIT OR INCOME ON [MONTH AND YEAR OF LAST SURVEY]. THEN ASK IF THEY RECEIVED IT LAST MONTH. PLEASE CIRCLE 'RECEIVED IN EACH PERIOD. IF THEY RECEIVED THE BENEFIT OR INCOME IN THE LAST MONTH, ASK THEM HOW MUCH THEY RECEIVE PER MONTH.

	CIRCLE ONE FOR EACH ROW				COMPLETE ONE FOR EACH ROW				
	RECEIVED [MONTH AND YEAR OF LAST SURVEY]				LAST MONTH				
	YES	NO	DON'T KNOW	REFUSED	YES	NO	DON'T KNOW	REFUSED	TOTAL AMOUNT PER MONTH
a. Food Stamp or SNAP benefits? .....	1	0	d	r	1	0	d	r	\$ _____
b. Welfare programs such as TANF, General Assistance or GA, CAL Works, or Safety Net? .....	1	0	d	r	1	0	d	r	\$ _____
c. SSI, SSDI, or other disability benefits? .....	1	0	d	r	1	0	d	r	\$ _____
d. Social Security or pension benefits? .....	1	0	d	r	1	0	d	r	\$ _____
e. Unemployment insurance benefits or UI? .....	1	0	d	r	1	0	d	r	\$ _____
f. WIC benefits? .....	1	0	d	r	1	0	d	r	\$ _____
g. Workers' compensation benefits? .....	1	0	d	r	1	0	d	r	\$ _____
h. Alimony, child support, or rent payments? .....	1	0	d	r	1	0	d	r	\$ _____
i. Interest and/or dividends? ....	1	0	d	r	1	0	d	r	\$ _____
j. Money from friends or relatives? .....	1	0	d	r	1	0	d	r	\$ _____
k. Non-monetary support from friends or relatives (for example food, rent support, help paying bills)? .....	1	0	d	r	1	0	d	r	\$ _____
l. Any other income sources? (SPECIFY) .....	1	0	d	r	1	0	d	r	\$ _____

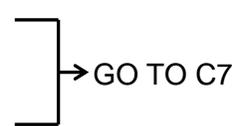
**C4. In general would you say your physical health is...**

CIRCLE ONE ONLY

- Excellent, ..... 1
- Very good, ..... 2
- Good, ..... 3
- Fair, or ..... 4
- Poor? ..... 5
- DON'T KNOW ..... d
- REFUSED ..... r

**C5. Has your physical health changed since [MONTH AND YEAR OF LAST SURVEY]?**

- YES ..... 1
- NO ..... 0
- DON'T KNOW ..... d
- REFUSED ..... r



**C6. Did your physical health...**

- Improve or ..... 1
- Get worse? ..... 0
- DON'T KNOW ..... d
- REFUSED ..... r

**C7. During the past 7 days, how often did you feel distressed or bothered by the following feelings: never, a little bit, moderately, quite a bit, or extremely often?**

CIRCLE ONE FOR EACH ROW

	NEVER	A LITTLE BIT	MODERATELY	QUITE A BIT	EXTREMELY OFTEN	DON'T KNOW	REFUSED
a. feeling no interest in things? .....	1	2	3	4	5	d	r
b. feeling lonely? .....	1	2	3	4	5	d	r
c. feeling blue? .....	1	2	3	4	5	d	r
d. feelings of worthlessness? .....	1	2	3	4	5	d	r
e. feeling hopeless about the future? .....	1	2	3	4	5	d	r
f. thoughts of ending your life? .....	1	2	3	4	5	d	r

INTERVIEWER: IF THE RESPONDENT ANSWERS 2-5 FOR C7F, PLEASE MAKE A NOTE OF THAT AND PROVIDE THEM WITH THE GEOGRAPHICALLY APPROPRIATE HELP LINE INFORMATION AFTER THE SURVEY IS COMPLETE.

**C8. Do you now have an emotional or other health condition that limits the amount or type of work you could do?**

- YES..... 1
  - NO..... 0
  - DON'T KNOW ..... d
  - REFUSED ..... r
- } → GO TO C10

**C9. What condition is the main reason you are limited? By what name do doctors call your health condition?**

\_\_\_\_\_  
NAME OF CONDITION

- DON'T KNOW ..... d
- REFUSED ..... r

**C10. Since [MONTH AND YEAR OF LAST SURVEY], how many times did you have four or more drinks in one day?**

- |\_|\_| NUMBER OF TIMES
- NEVER..... 0
  - DON'T KNOW ..... d
  - REFUSED ..... r
- } → GO TO C12

**C11. Since [MONTH AND YEAR OF LAST SURVEY], has there been a time when your drinking or being hung over interfered with your job, school, or home life?**

- YES..... 1
- NO..... 0
- DON'T KNOW ..... d
- REFUSED ..... r

**C12. Since [MONTH AND YEAR OF LAST SURVEY], have you been in counseling or therapy for alcohol problems?**

- YES..... 1
- NO..... 0
- DON'T KNOW ..... d
- REFUSED ..... r

**C13. Since [MONTH AND YEAR OF LAST SURVEY], how many times did you smoke marijuana or hashish (pot, grass, hash)?**

|\_|\_|\_| NUMBER OF TIMES

NEVER..... 0

DON'T KNOW ..... d

REFUSED ..... r

**C14. Since [MONTH AND YEAR OF LAST SURVEY], how many times did you use any hard drugs such as heroin, cocaine, or LSD?**

|\_|\_|\_| NUMBER OF TIMES

NEVER..... 0

DON'T KNOW ..... d

REFUSED ..... r

**C15. Since [MONTH AND YEAR OF LAST SURVEY], have you been in counseling or therapy for drug problems?**

YES..... 1

NO..... 0

DON'T KNOW ..... d

REFUSED ..... r

**C16. Since [MONTH AND YEAR OF LAST SURVEY], have you spent the night at any of the following places?**

**We are interested if any of these places were your primary residence.**

INTERVIEWER: STRESS PRIMARY RESIDENCE FOR STREET, CAR, PARK, OR OTHER PLACE OUTSIDE; HOSPITAL; OR IN A FRIEND'S OR FAMILY MEMBER'S ROOM, APARTMENT, OR HOUSE. WE ARE ONLY INTERESTED IF THE PARTICIPANTS SLEPT THERE BECAUSE THEY WERE UNABLE TO SLEEP SOMEWHERE ELSE.

CIRCLE ONE FOR EACH ROW

	YES	NO	DON'T KNOW	REFUSED
a. Emergency shelter, including hotel or motel voucher paid for by a social service or charitable organization .....	1	0	d	r
b. Transitional housing for homeless persons .....	1	0	d	r
c. Permanent supportive housing for formerly homeless persons .....	1	0	d	r
d. Psychiatric hospital or other psychiatric facility .....	1	0	d	r
e. Substance abuse treatment facility, rehabilitation center, or other detox facility .....	1	0	d	r
f. Hospital (non-psychiatric) (because you did not have a fixed, regular nighttime residence) .....	1	0	d	r
g. Jail, prison or juvenile detention facility .....	1	0	d	r
h. Half-way house or three-quarter-way home for persons with criminal offenses .....	1	0	d	r
i. Room, apartment or house that you rent.....	1	0	d	r
j. Apartment or house that you own.....	1	0	d	r
k. In a friends or family member's room, apartment or house (because you did not have a fixed, regular nighttime residence) .....	1	0	d	r
l. Hotel or motel paid for without emergency shelter voucher (because you did not have a fixed, regular nighttime residence) .....	1	0	d	r
m. Group home or other supervised residential care facility (because you did not have a fixed, regular nighttime residence) .....	1	0	d	r
o. Street, car, park, other place outside (because you did not have a fixed, regular nighttime residence) .....	1	0	d	r
p. Other (SPECIFY) .....	1	0	d	r

**C17. Please tell me if the following statements are very much like you, mostly like you, somewhat like you, not much like you or not like you at all.**

CIRCLE ONE FOR EACH ROW

	VERY MUCH LIKE YOU	MOSTLY LIKE YOU	SOMEWHAT LIKE YOU	NOT MUCH LIKE YOU	NOT LIKE YOU AT ALL	DON'T KNOW	REFUSED
a. I have overcome setbacks to conquer an important challenge ...	1	2	3	4	5	d	r
b. New ideas and projects sometimes distract me from previous ones .....	1	2	3	4	5	d	r
c. My interests change from year to year.....	1	2	3	4	5	d	r
d. Setbacks don't discourage me .....	1	2	3	4	5	d	r
e. I have been obsessed with a certain idea or project for a short time but later lost interest .....	1	2	3	4	5	d	r
f. I am a hard worker .....	1	2	3	4	5	d	r
g. I often set a goal but later choose to pursue a different one .....	1	2	3	4	5	d	r
h. I have difficulty maintaining my focus on projects that take more than a few months to complete ....	1	2	3	4	5	d	r
i. I finish whatever I begin.....	1	2	3	4	5	d	r
j. I have achieved a goal that took years of work .....	1	2	3	4	5	d	r
k. I become interested in new pursuits every few months.....	1	2	3	4	5	d	r
l. I am diligent .....	1	2	3	4	5	d	r

**SECTION 4. FACILITATING FACTORS**

Now I'm going to ask you about other programs you may have participated in and your thoughts about them and work life in general.

**F1. Since [MONTH AND YEAR OF LAST SURVEY], have you participated in any education and training programs and courses that were supposed to lead to a degree, license or certificate?**

**PROBE:** Please include training programs that helped you learn job skills or prepare for an occupation, as well as general educational programs, such as college, regular high school, or GED courses.

- YES..... 1
  - NO..... 0
  - DON'T KNOW ..... d
  - REFUSED..... r
- } → GO TO F8

**F2. Since [MONTH AND YEAR OF LAST SURVEY], how many different education and training programs have you participated in?**

|\_\_|\_\_| NUMBER OF EDUCATION AND TRAINING PROGRAMS

- 0..... 0 → GO TO F8
- DON'T KNOW ..... d
- REFUSED..... r

**F3. In how many training and education programs are you currently participating?**

|\_\_|\_\_| NUMBER OF EDUCATION AND TRAINING PROGRAMS

- 0..... 0
- DON'T KNOW ..... d
- REFUSED..... r

I would like to ask you about up to 3 of these training programs. If you participated in more than 3 programs, can you tell me about the 3 most recent ones.

	PROGRAM 1	PROGRAM 2	PROGRAM 3
<b>F4. What is the name of each program? ..</b>	_____	_____	_____
<b>F5. Did you complete this program? .....</b>	YES.....1 NO.....0 CURRENTLY PARTICIPATING ...2 DON'T KNOW .....d REFUSED .....r	YES .....1 NO .....0 CURRENTLY PARTICIPATING...2 DON'T KNOW .....d REFUSED .....r	YES ..... 1 NO ..... 0 CURRENTLY PARTICIPATING ... 2 DON'T KNOW ..... d REFUSED ..... r
<b>F6. What is the name of the certificate, degree, or license you received (will receive) for completion of this program? .....</b>	_____ NAME OF CERTIFICATE DON'T KNOW .....d REFUSED .....r	_____ NAME OF CERTIFICATE DON'T KNOW .....d REFUSED .....r	_____ NAME OF CERTIFICATE DON'T KNOW ..... d REFUSED ..... r
<b>F7. Is that a certificate, a license, or degree? .....</b>	CIRCLE ONE ONLY CERTIFICATE .....1 LICENSE .....2 DEGREE .....3 OTHER.....4 DON'T KNOW .....d REFUSED .....r	CIRCLE ONE ONLY CERTIFICATE.....1 LICENSE .....2 DEGREE .....3 OTHER.....4 DON'T KNOW .....d REFUSED .....r	CIRCLE ONE ONLY CERTIFICATE ..... 1 LICENSE ..... 2 DEGREE ..... 3 OTHER ..... 4 DON'T KNOW ..... d REFUSED ..... r
<b>F7a. What kind of work is this certificate, degree, or license for? That is, what kind of job would you be prepared to do? .....</b>	_____ KIND OF WORK DON'T KNOW .....d REFUSED .....r	_____ KIND OF WORK DON'T KNOW .....d REFUSED .....r	_____ KIND OF WORK DON'T KNOW ..... d REFUSED ..... r
INTERVIEWER: IF THERE IS ANOTHER PROGRAM GO BACK TO F5 IF YOU ARE ON THE LAST PROGRAM, GO TO F8.	NO MORE PROGRAMS.....1	NO MORE PROGRAMS .....1	NO MORE PROGRAMS ..... 1

**F8. Think about work in general, please tell me how much you agree or disagree with the following statements. Do you strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree?**

CIRCLE ONE FOR EACH ROW

	STRONGLY AGREE	AGREE	NEITHER AGREE NOR DISAGREE	DISAGREE	STRONGLY DISAGREE	DON'T KNOW	REFUSED
a. A job is just a way of earning money – no more.....	1	2	3	4	5	d	r
b. I would enjoy having a paid job even if I did not need the money.....	1	2	3	4	5	d	r

**F9. How important do you think the following qualities are in a job: very important, important, neither important nor unimportant, not important, not important at all.**  
**How important is...**

CIRCLE ONE FOR EACH ROW

	VERY IMPORTANT	IMPORTANT	NEITHER IMPORTANT NOR UNIMPORTANT	NOT IMPORTANT	NOT IMPORTANT AT ALL	DON'T KNOW	REFUSED
a. ...job security?.....	1	2	3	4	5	d	r
b. ...high income?.....	1	2	3	4	5	d	r
c. ...good opportunities for advancement?.....	1	2	3	4	5	d	r
d. ...an interesting job?.....	1	2	3	4	5	d	r
e. ...a job that allows someone to work independently?.....	1	2	3	4	5	d	r
f. ...a job that allows someone to help other people?.....	1	2	3	4	5	d	r
g. ...a job that is useful to society?.....	1	2	3	4	5	d	r
h. ...a job that allows someone to decide their times or days of work?.....	1	2	3	4	5	d	r

**F10. We are interested in what you think you might be doing in 5 years. Please answer yes if you think you might be doing the activity, no if you don't think you will, and maybe if you think you might possibly be doing it. Do you think you will...**

CIRCLE ONE FOR EACH ROW

	YES	NO	MAYBE	DON'T KNOW	REFUSED
a. Have continued your education or undertaken additional job training? .....	1	0	2	d	r
b. Own or rent your own home or apartment? ...	1	0	2	d	r
c. Be established in a career? .....	1	0	2	d	r
d. Be in good mental health?.....	1	0	2	d	r
e. Be in good physical health? .....	1	0	2	d	r
f. Be economically self sufficient? .....	1	0	2	d	r
g. Rarely drink alcohol and use drugs? .....	1	0	2	d	r
h. Be removed from illegal activity?.....	1	0	2	d	r
i. Other (SPECIFY).....	1	0	2	d	r

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SECTION 5. DEMOGRAPHICS

This is the final section of the survey.

D1. What is your current marital status—are you now...

CIRCLE ONE ONLY

- Married, ..... 1
In a domestic partnership, ..... 2
Separated, ..... 3
Divorced, ..... 4
Widow, or ..... 5
Single? ..... 6
DON'T KNOW ..... d
REFUSED ..... r

D2. What kind of health insurance plans are you currently covered by?

CIRCLE ALL THAT APPLY

- NOT CURRENTLY COVERED BY HEALTH INSURANCE ..... 1
MEDICAID/MEDICARE ..... 2
AN EMPLOYER OR UNION SPONSORED HEALTH PLAN ..... 3
A GOVERNMENT PROGRAM OTHER THAN MEDICAID OR MEDICARE ..... 4
MILITARY HEALTH CARE ..... 5
INSURANCE PURCHASED DIRECTLY FROM AN INSURER..... 6
SOME OTHER TYPE OF HEALTH INSURANCE (SPECIFY) ..... 7
DON'T KNOW ..... d
REFUSED ..... r

D3. We are interested in learning about any changes in the individuals who are dependent on you since [MONTH AND YEAR OF LAST SURVEY]. By dependents we mean individuals that are financially dependent on you and those that are dependent on you for day-to-day care, or both. The person or people do not necessarily need to live with you. Has the number of individuals who are dependent on you changed since [MONTH AND YEAR OF LAST SURVEY]? Please do NOT include yourself in your count.

- YES..... 1
NO..... 0
DON'T KNOW ..... d
REFUSED ..... r
} -> GO TO D6

**D4. Please tell me the...**

INTERVIEWER: ENTER "0" IN EACH BOX IF RESPONDENT HAS NOT GAINED OR LOST DEPENDENTS.

**COMPLETE ONLY ONE COLUMN PER RESPONSE**

FILL COLUMN FOR EACH AGE GROUP	GAINED	LOST
<p>a. Number of dependents that you <b>GAINED</b> since [MONTH AND YEAR OF LAST SURVEY] that you support financially AND have responsibility for their day-to-day activities.</p> <p>Number of dependents that you <b>LOST</b> since [MONTH AND YEAR OF LAST SURVEY] that you supported financially AND had responsibility for their day-to-day activities but no longer do.</p>	<p>NUMBER</p> <p>d <input type="checkbox"/> DON'T KNOW</p> <p>r <input type="checkbox"/> REFUSED</p>	<p>NUMBER</p> <p>d <input type="checkbox"/> DON'T KNOW</p> <p>r <input type="checkbox"/> REFUSED</p>
<p>b. Number of dependents that you <b>GAINED</b> since [MONTH AND YEAR OF LAST SURVEY] that you support financially only but do NOT have responsibility for their day-to-day activities.</p> <p>Number of dependents that you <b>LOST</b> since [MONTH AND YEAR OF LAST SURVEY] that you supported financially only but did NOT have responsibility for their day-to-day activities and no longer support financially?</p>	<p>NUMBER</p> <p>d <input type="checkbox"/> DON'T KNOW</p> <p>r <input type="checkbox"/> REFUSED</p>	<p>NUMBER</p> <p>d <input type="checkbox"/> DON'T KNOW</p> <p>r <input type="checkbox"/> REFUSED</p>
<p>c. Number of dependents that you <b>GAINED</b> since [MONTH AND YEAR OF LAST SURVEY] that you have responsibility for their day-to-day activities but do NOT support financially.</p> <p>Number of dependents that you <b>LOST</b> since [MONTH AND YEAR OF LAST SURVEY] that you had responsibility for their day-to-day activities but did NOT support financially and you are no longer responsible for their day-to-day care.</p>	<p>NUMBER</p> <p>d <input type="checkbox"/> DON'T KNOW</p> <p>r <input type="checkbox"/> REFUSED</p>	<p>NUMBER</p> <p>d <input type="checkbox"/> DON'T KNOW</p> <p>r <input type="checkbox"/> REFUSED</p>

SUM THE SIX RESPONSES FROM D4A – D4C: \_\_\_\_\_

IF 0 GO TO D6

IF 1 OR 2 READ: **"I am now going to ask you some specific questions about these dependents."** THEN GO TO D5

IF 3 OR MORE READ: **"Please think about the two dependents you have gained or lost since [MONTH AND YEAR OF LAST SURVEY] for whom you have the greatest financial responsibility. The next questions will be about them."** THEN GO TO D5

	DEPENDENT 1	DEPENDENT 2
<b>D5a. Did you gain or lose responsibility for this dependent? .....</b>	GAIN ..... 1 LOSE ..... 2 DON'T KNOW..... d REFUSED..... r	GAIN ..... 1 LOSE ..... 2 DON'T KNOW..... d REFUSED..... r
<b>D5b. What is their relationship to you? .....</b>	<b>CIRCLE ONE ONLY</b> Spouse/partner ..... 1 Boyfriend/girlfriend ..... 2 Child (natural step, or custodial)..... 3 Parent or stepparent..... 4 Grandparent, aunt, or uncle ..... 5 Sibling (brother or sister) ..... 6 Nephew or niece, cousin ..... 7 Grandchild ..... 8 Other relative or in-law ..... 9 Non-relative (including roomer or boarder) ..... 10 Other ..... 11 DON'T KNOW..... d REFUSED..... r	<b>CIRCLE ONE ONLY</b> Spouse/partner ..... 1 Boyfriend/girlfriend ..... 2 Child (natural step, or custodial)..... 3 Parent or stepparent..... 4 Grandparent, aunt, or uncle ..... 5 Sibling (brother or sister) ..... 6 Nephew or niece, cousin ..... 7 Grandchild ..... 8 Other relative or in-law ..... 9 Non-relative (including roomer or boarder) ..... 10 Other ..... 11 DON'T KNOW..... d REFUSED..... r
<b>D5c. Are they male or female? ...</b>	MALE ..... 1 FEMALE ..... 2	MALE ..... 1 FEMALE ..... 2
<b>D5d. Approximately how old are they? .....</b>	____ YEARS OLD Less than one year old ..... 0 DON'T KNOW..... d REFUSED..... r	____ YEARS OLD Less than one year old ..... 0 DON'T KNOW..... d REFUSED..... r
<b>D5e. Are you financially responsible for them, responsible for their day-to day activities, or both? ..</b>	FINANCIALLY RESPONSIBLE ..... 1 RESPONSIBLE FOR DAY-TO-DAY ACTIVITIES ... 2 BOTH ..... 3 DON'T KNOW..... d REFUSED..... r	FINANCIALLY RESPONSIBLE ..... 1 RESPONSIBLE FOR DAY-TO-DAY ACTIVITIES.... 2 BOTH ..... 3 DON'T KNOW..... d REFUSED..... r
<b>D5f. What type of health insurance plan are they currently covered by? .....</b>	<b>CIRCLE ALL THAT APPLY</b> Currently not covered by any health insurance ..... 1 Medicaid/Medicare ..... 2 An employer or union sponsored health plan ..... 3 Military health care ..... 4 Other government health plan (SPECIFY) ..... 5 _____ Insurance purchased directly from an insurers ..... 6 Some other type of health insurance.... <b>7-GO TO D4g</b> DON'T KNOW..... d REFUSED..... r	<b>CIRCLE ALL THAT APPLY</b> Currently not covered by any health insurance ..... 1 Medicaid/Medicare ..... 2 An employer or union sponsored health plan ..... 3 Military health care ..... 4 Other government health plan (SPECIFY) ..... 5 _____ Insurance purchased directly from an insurers ..... 6 Some other type of health insurance.... <b>7-GO TO D4g</b> DON'T KNOW..... d REFUSED..... r
<b>D5g. If necessary, please specify the type of health insurance. ....</b>	_____ HEALTH INSURANCE DON'T KNOW..... d REFUSED..... r	_____ HEALTH INSURANCE DON'T KNOW..... d REFUSED..... r

INTERVIEWER: IF THERE IS A SECOND DEPENDENT GAINED OR LOST GO BACK TO D4A AND COMPLETE FOR THE SECOND DEPENDENT.

D6a. Thank you for completing our survey. We would like to send you a Target gift card.

D6b. Now, please tell me the correct spelling of your name and your current mailing address so that we can mail your \$20 gift card.

\_\_\_\_\_  
NAME (VERIFY SPELLING)

\_\_\_\_\_  
ADDRESS LINE 1

\_\_\_\_\_  
ADDRESS LINE 2

\_\_\_\_\_  
APT. #

\_\_\_\_\_  
CITY/TOWN

\_\_\_\_\_  
STATE

\_\_\_\_\_  
ZIP CODE

REFUSED .....

**IF PARTICIPANT REFUSES TO PROVIDE ADDRESS READ: "You do not have to tell us your address, but you should know that if we do not have your address, we will not be able to send you a gift card for participating in our survey. Do you understand this?"**

STILL REFUSES ..... r \_\_\_\_\_  
(INTERVIEWER: initial here to indicate you read statement)

AGREES TO PROVIDE ADDRESS ..... 1 GO TO D6b

INTERVIEWER: IF THE RESPONDENT REPORTS THOUGHTS ABOUT ENDING LIFE (FOR EXAMPLE, QUESTION C7.F IS A 3, 4, OR 5) OR ASKS ABOUT WHETHER WE COULD PROVIDE THEM WITH SOME HELP, STATE, “**At Mathematica we conduct interviews and do research. but we wanted participants to know of a place to call in case they want to speak with a mental health professional in their area. In [location] the name and number of a place to call is [SEE BELOW].**”

Location	Mental Health Hotline Information
Los Angeles	Didi Hirsch Mental Health Services <a href="http://www.didihirsch.org/spc">http://www.didihirsch.org/spc</a> (877)727-4747
Marin County	Psychiatric Emergency Services <a href="http://www.co.marin.ca.us/depts/HH/main/mh/pes_faq.cfm">http://www.co.marin.ca.us/depts/HH/main/mh/pes_faq.cfm</a> (415) 473-6666 (no toll free available)
San Diego	800-SUICIDE (784.2433) National Domestic Violence Hotline at 1-800-799-7233 Non-emergency referral service: Dial 211
Bay Area (San Francisco)	<a href="#">Mobile Crisis Treatment Team</a> Phone: (415) 355-8300 OR Westside Community Services (415) 355-0311.

**Thanks again and best wishes to you.**

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