

**The Social Security
Administration's Youth Transition
Demonstration Projects: Interim
Report on *West Virginia Youth
Works***

December 3, 2012

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MATHEMATICA
Policy Research

Contract Number:
SS00-05-60084

Mathematica Reference Number:
06209.125

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ACRONYMS

ADD = attention deficit disorder

AWIC = area work incentives coordinator

BLS = Bureau of Labor Statistics

BPQY = benefits planning query

CDB = Childhood Disability Benefits

CDR = continuing disability review

CED = Center for Excellence in Disabilities (at West Virginia University)

CES = customized employment specialist

CPI-W = consumer price index for urban wage earners and clerical workers

DI = Social Security Disability Insurance

DRS = (West Virginia) Division of Rehabilitation Services

EIE = earned income exclusion

ETO = Efforts-to-Outcomes, a management information system

GED = general educational development (or general equivalency diploma)

HRDF = Human Resource Development Foundation

IDA = individual development account

IEP = individualized education program

MEF = Master Earnings File

NBS = National Beneficiary Survey

OLS = ordinary least squares

PASS = plan for achieving self-support

PCP = person-centered planning (or plan)

RA = random assignment

SEIE = student earned income exclusion

SNAP = Supplemental Nutrition Assistance Program

SSA = Social Security Administration

SSI = Supplemental Security Income

TANF = Temporary Assistance for Needy Families

TRF = Ticket Research File

WIPA = Work Incentives Planning and Assistance (grant or project)

YTD = Youth Transition Demonstration

EXECUTIVE SUMMARY

The Youth Transition Demonstration (YTD) is a large-scale demonstration and evaluation sponsored by the Social Security Administration (SSA) to improve understanding of how to help youth with disabilities reach their full economic potential. In particular, SSA is interested in testing promising approaches for helping young people with disabilities become more self-sufficient and less reliant on disability benefits. The YTD conceptual framework, which was based on best practices in facilitating youth transition, specified that the six projects that participated in the evaluation provide employment services (emphasizing paid competitive employment), benefits counseling, links to services available in the community, and other assistance to youth with disabilities and their families. Additionally, the youth who received those services were eligible for SSA waivers of certain benefit program rules, which allowed them to retain more of their disability benefits and health insurance while they worked for pay. Using a rigorous random assignment methodology, the YTD evaluation team is assessing whether these services and incentives were effective in helping youth with disabilities achieve greater independence and economic self-sufficiency.¹ The earliest of the evaluation projects began operations in 2006 and ended in 2009. The latest started in 2008 and ended in 2012.

In this report, we present first-year evaluation findings for West Virginia Youth Works, which served youth ages 15 through 25 who were Social Security disability beneficiaries. While it will take several more years before we fully observe the transitions that the participants in this study make to adult life, early data from the evaluation provide rich information on how Youth Works operated and the differences it made in key outcomes for youth. Specifically, the report includes findings from our process analysis of Youth Works, including a description of the program model, and documentation of how the project was implemented and services were delivered. The report also includes impact findings, based on data collected 12 months after youth entered the evaluation, on the use of services, paid employment, educational progress, income from earnings and benefits, and attitudes and expectations.

In brief, we learned that Youth Works was well implemented and had statistically significant impacts on several important outcomes during the year following random assignment. Through the process analysis, we learned that Youth Works enrolled 85 percent of eligible youth as participants in the project and provided all of the participants with services. We also found that those services conformed to the YTD program model and focused on person-centered planning, employment, benefits planning, and case management to resolve barriers to employment. On average, enrollees received 34 hours of services, 70 percent of which were employment related, such as the development of work experiences and job coaching. The impact analysis found that youth who had been given the opportunity to participate in the project were more likely to have used employment-promoting services and to have been employed for pay than in the absence of the intervention. They also had higher earnings and total income (earnings plus benefits) in the year following their entry into the evaluation. However, the project had no impacts on goals for earning enough to stop receiving disability benefits or a composite measure of school enrollment or high school completion.

¹ In 2005, under SSA contract #SS00-05-60084, Mathematica Policy Research, a nonpartisan firm that conducts policy research and surveys, and its partner organizations, MDRC and TransCen, Inc., were awarded a contract to design and conduct the YTD evaluation and provide technical assistance to projects as they developed and implemented their interventions. The evaluation is advised by a technical working group consisting of young adults with disabilities, providers of services to teenagers and young adults with disabilities, policy researchers, academics, and representatives of federal agencies other than SSA.

The Youth Transition Demonstration Evaluation

The target population for the YTD evaluation was youth ages 14 through 25 who either were receiving SSA disability benefits or at risk of receiving them in the future.² The evaluation is based on a rigorous random assignment design. Youth who agreed to participate in the evaluation were assigned at random to a treatment or control group. Youth in the treatment group were eligible to receive YTD services in addition to the SSA waivers, while those in the control group could receive only those services available in their communities, independent of the YTD initiative. The evaluation sought to enroll approximately 880 youth in each of the six project sites.

We gathered information from a variety of sources to inform the findings in this report. We obtained information about project operations and the service environment through reviews of project documents, site visits, interviews with managers and staff, and focus group discussions with participating youth. We also examined data on enrollment of youth and service provision in Youth Works' management information system, Efforts-to-Outcomes (ETO). Data for the impact analysis came from a 12-month follow-up survey and SSA administrative records. The survey focused on outcomes such as service use, employment, education, and attitudes and expectations. SSA administrative records provided data on benefits and the use of SSA work incentives and waivers. We also collected baseline data on the period immediately prior to random assignment through a survey and SSA administrative records. The comprehensive final report on the YTD evaluation, scheduled for 2014, will use data from a survey conducted 36 months after random assignment and SSA administrative records to assess more completely the transition process and the extent to which Youth Works and the other five random assignment YTD projects improved transition outcomes.

The Youth Works Project

The Human Resource Development Foundation (HRDF), a private, nonprofit corporation that has provided employment and training services to economically disadvantaged West Virginians since 1967, administered Youth Works. The Center for Excellence in Disabilities (CED) at West Virginia University was a formal partner to HRDF in implementing the project, with responsibility for benefits planning services. Youth Works sought to maximize economic self-sufficiency and independence for youth with severe disabilities by improving their employment outcomes. To promote this goal, the project provided participating youth with person-centered planning, customized employment services, and benefits counseling. It also provided participants with case management services, including transportation assistance and referrals to other organizations for services that Youth Works was not well positioned to provide directly.

The director of education, training, and employment services at HRDF had administrative responsibility for Youth Works as the project director. A full-time Youth Works project manager was responsible for the day-to-day operations of the project, assisted by a regional coordinator who was directly responsible for operations in 8 of the 19 counties served by the project. The ETO system manager at HRDF and the supervisor of benefits counselors at the CED rounded out the five-person management team for Youth Works. Between 14 and 16 geographically dispersed front-line staff delivered services to Youth Works participants. During phase 1 of the project, which began in April 2008, the front-line staff consisted of eight customized employment specialists (CESS), four job developers, and two benefits counselors. Two additional staff were added just prior to the start

² The YTD projects could opt to serve a segment of the full YTD target age range. Youth Works exercised this option, choosing to serve individuals ages 15 to 25.

of phase 2 in December 2009 to help with enrollment and other project activities. The CESSs provided work-readiness assessments and services, assisted with job placement, and delivered career exploration and case management services. The job developers were responsible for most of the project's contacts with employers. They provided job development, placement, and coaching services. The benefits counselors provided planning and counseling on benefits from SSA and other programs, and assisted Youth Works participants in accessing the waivers that SSA had established for YTD.

From lists of disability beneficiaries provided by SSA, Mathematica identified individuals who satisfied the Youth Works age criteria and resided in the project's 19-county service delivery area. We conducted outreach to those youth and recruited them into the study, starting in March 2008 and ending in September 2010. Upon completing a baseline interview and providing written consent, we admitted the youth into the evaluation's research sample. We randomly assigned members of the research sample to the evaluation's treatment or control groups at approximately a six-to-five ratio, resulting in 455 treatment cases and 397 control cases. Of these, 389 treatment group members and 344 control group members responded to the evaluation's 12-month follow-up survey and constitute the sample for most of the impact findings presented in this report.

The average age of the youth in the research sample at the time of random assignment was 20.5 years. This sample was 58 percent male, 9 percent black, and 3 percent Hispanic (of any race). For 55 percent of the youth in the research sample, the primary disabling condition recorded in SSA files was either learning disabilities or cognitive/developmental disabilities. Thirty-seven percent of the youth were enrolled in school at the time of random assignment, and 29 percent had worked for pay during the prior year.

Youth Works staff obtained signed application forms for 388 of the 455 randomly assigned treatment group members, which meant that they were formally enrolled in project services. Youth who did not provide signed application forms were ineligible for project services and the SSA waivers. The initial enrollment was in April 2008 and the final in October 2010. Enrollees were eligible for 18 months of project services, but the project continued to serve some of them past that point.³ The project ended in March 2012.

Implementation Findings for Youth Works

Youth Works delivered at least some services to every youth who enrolled in the project, and the intensity of the services was high. Our analysis of data from ETO revealed that 99 percent of participating youth received both benefits planning and case management services. A similarly large proportion of participants, 96 percent, received employment services from the project. Consistent with the absence of a distinct emphasis on education in the Youth Works design, a smaller proportion of participants, 72 percent, received education services. These services were delivered quickly: the average elapsed times between enrollment and the first and second service contacts were two days and ten days, respectively. During the initial 15 months following random assignment, the average Youth Works participant received 46 service contacts from project staff, for a total of 34 hours, of which 24 hours were for employment services.

³ Youth who enrolled in YTD project services are eligible for the SSA waivers for four years following random assignment, or until age 22, whichever comes later. All waiver eligibility is scheduled to cease in September 2013.

Systematic monitoring of Youth Works services and participant outcomes facilitated the project's sharp focus on employment. That monitoring entailed the use of two forms developed by TransCen, Inc., a subcontractor to Mathematica for technical assistance on the YTD evaluation. The job developers used the first of these forms to report their contacts with employers. This allowed project management to monitor whether the job developers were aggressively reaching out to employers for the purpose of identifying or creating employment opportunities for Youth Works participants. The CESs used the second form to report on the job readiness and employment status of Youth Works participants. They completed this form on a monthly basis and submitted it to project management. A section of the form, referred to as the "hot list," identified youth who were ready for paid employment but had not yet obtained jobs. Both of these forms were central to the day-to-day operation of Youth Works and served to focus the attention of job developers and CESs on forming relationships with employers and helping participants obtain paid jobs. Just over half (50.5 percent) of the participants held competitive paid jobs at some point during their involvement in the project, as recorded by staff in ETO.

Case management in Youth Works supported the attainment of the project's employment goals. The project had a pool of flexible funds that staff could use to help participants access needed supports. The principal application of these funds was to improve access to transportation so that participants could travel to and from their jobs. Youth Works also provided participants with referrals to other programs for such services as vocational rehabilitation and mental health services. These West Virginia programs had been experiencing difficulties in connecting with youth with disabilities, so the referrals from Youth Works helped them to better serve a key segment of their target populations.

First- Year Impact Findings for Youth Works

We estimated the impacts of Youth Works on outcomes in five domains: (1) employment-promoting services, (2) paid employment, (3) educational progress, (4) youth income, and (5) attitudes and expectations. Within each domain, we analyzed one primary outcome and a number of secondary outcomes. The results for the primary outcomes are the basis for our principal conclusions regarding the project's impacts in the year following random assignment.

Impacts on the Use of Services

Consistent with the YTD conceptual framework, Youth Works increased the use of *employment-promoting services* by youth with disabilities. Nearly two-thirds of treatment group youth reported having used any employment-promoting service in the year following random assignment (Table ES.1). We estimated that, in the absence of the project, only one-third of these youth would have used any such service. Thus, the impact of Youth Works was a 30 percentage point increase in the use of employment-promoting services. This overall impact was a product of impacts on the use of a number of specific types of employment services. The largest of these impacts were on support for resume writing and job search activities (31 percentage points), benefits counseling (24 percentage points), and career counseling (16 percentage points).

Youth Works also increased participation in non-employment services, such as discussions about the youth's interests and plans for the future, by 17 percentage points (Table ES.1). Considering all types of services, 78 percent of treatment group members reported having used any employment or non-employment service. In the absence of Youth Works, we estimated that 58 percent of them would have used any service. Youth Works thus increased the share of youth using any service by 21 percentage points.

Table ES.1. Estimated Impacts of Youth Works on the Use of Services (percentages)

	Treatment Group		Impact	***	P-Value
	Observed Mean	Est. Mean w/o Youth Works			
Domain: Employment- Promoting Services					
Primary outcome: used any employment-promoting service	63.6	33.8	29.8	***	0.00
Used employment-promoting services:					
Career counseling	30.7	14.9	15.7	***	0.03
Support for resume writing and job search	43.1	12.1	31.0	***	0.00
Job shadowing, apprenticeships/internships	14.4	9.3	5.1	**	0.02
Other employment-focused services (basic skills training, computer classes, problem solving, and social skills training)	4.6	1.4	3.2	**	0.01
Counseling on SSA benefits and work incentives	39.0	15.2	23.7	***	0.00
Additional Service- Use Outcomes					
Used any non-employment service	68.6	51.2	17.4	***	0.00
Used any service (employment or non-employment)	78.2	57.5	20.7	***	0.00

Source: YTD 12-month follow-up survey.

Notes: The table reports observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates. We measured explanatory variables in the regression model prior to random assignment using data from the study's baseline survey and SSA administrative records. The sample consists of all youth who enrolled in the evaluation and completed the study's 12-month follow-up survey, of whom 389 were members of the treatment group and 344 were members of the control group. We calculated all statistics using sample weights to account for interview non-response. Survey item non-response may have resulted in smaller sample sizes for specific outcomes. See Appendix A, Table A.5, for the sample sizes for all outcomes.

*/**/**Impact estimate is significantly different from zero at the .10/.05/.01 level using a two-tailed t-test.

The previously mentioned positive impact of Youth Works on the use of benefits counseling services appears to have been reflected in greater knowledge of SSA work incentives and requirements among treatment group members. We estimated that Youth Works significantly increased awareness of each of six work incentives and requirements by between 12 and 35 percentage points (Table IV.3). This enhanced awareness was accompanied by greater understanding of the broader concepts that disability benefits and medical coverage do not end as soon as a beneficiary begins working for pay.

Impacts on Paid Employment and Other Key Outcomes

Youth Works sought to improve economic self-sufficiency and independence among youth receiving SSA disability benefits by providing employment-promoting services, such as job-search assistance, and enhanced SSA work incentives. Our primary outcome in the domain of *paid employment* was whether a youth was ever employed in a paid job during the year following random assignment. We found that 43 percent of treatment group youth worked for pay at some time during the year, whereas we estimated that only 24 percent would have done so in the absence of Youth Works (Table ES.2). The estimated impact of 19 percentage points is statistically significant. We also estimated the project's impact on earnings, a supplementary outcome of considerable policy interest

Table ES.2. Estimated Impacts of Youth Works on Employment and Other Key Outcomes in the Year Following Random Assignment (percentages, unless otherwise noted)

	Treatment Group		Impact	P-Value
	Observed Mean	Est. Mean w/o Youth Works		
Domain: Paid Employment				
Primary outcome: ever employed in paid job	42.7	23.6	19.1	*** 0.00
Total earnings ^{a, b}	\$1,559	\$1,035	\$524	*** 0.01
Domain: Educational Progress				
Primary outcome: ever enrolled in school, or completed high school by the end of the year	82.4	78.6	3.7	0.19
Domain: Youth Income				
Primary outcome: total income (earnings and SSA benefits)^{a, b}	\$8,060	\$7,343	\$717	*** 0.00
Number of months of benefit receipt	10.8	10.5	0.2	0.19
Total SSA benefit amount	\$6,421	\$6,228	\$192	* 0.08
Domain: Attitudes and Expectations				
Primary outcome: youth agrees that personal goals include working and earning enough to stop receiving Social Security benefits	66.0	67.0	- 1.1	0.78

Sources: YTD 12-month follow-up survey and SSA administrative records.

Notes: The table reports observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates. We measured explanatory variables in the regression model prior to random assignment using data from the study's baseline survey and SSA administrative records. For the two outcomes specific to SSA benefits (benefit receipt and benefit amount), the sample consists of all youth who enrolled in the evaluation (less 3 who died during the year following random assignment), of whom 455 were members of the treatment group and 397 were members of the control group. For all other outcomes, the sample consists of all youth who enrolled in the evaluation and completed the study's 12-month follow-up survey, of whom 389 were members of the treatment group and 344 were members of the control group. We calculated statistics for the survey-based outcomes using sample weights to account for interview non-response. Survey item non-response may have resulted in smaller sample sizes for specific outcomes. See Appendix A, Table A.5, for the sample sizes for all outcomes.

^aFor these outcomes, item non-response occurred conditionally, depending on the values of other measures in the follow-up survey. The rate of missing data is 6.7 percent for both earnings and income. We used a multiple imputation procedure to assign values when they were missing. See Appendix A, Section E, for more information on this procedure.

^bThe average includes youth who were not employed during the year following random assignment.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level using a two-tailed t-test.

in this domain. We found that Youth Works increased earnings by about 50 percent; treatment group youth earned an average of \$1,559 in the year following random assignment, whereas we estimated that they would have earned just \$1,035 if they had not had the opportunity to participate in Youth Works.

Although Youth Works did not place much emphasis on the provision of education services, the project did offer such services to participants who identified education goals during the person-centered planning process or subsequently requested such services. In the domain of *educational progress*, we estimated that 82 percent of the treatment group members either had completed high school by the time of the survey or been enrolled in school during the previous year (the primary

outcome in this domain), but that Youth Works was not a significant determinant of that percentage.

In the domain of *youth income*, we found that Youth Works had a positive impact on the primary outcome: total youth income from earnings and SSA benefits (combined) during the year following random assignment. The impact of \$717 per year represents an increase of ten percent over the income that treatment group youth would have received if they had not had the opportunity to participate in Youth Works. We have noted that the project had a positive impact on earnings. It also had a statistically significant positive impact on the amount of disability benefits received by youth. It is likely that treatment group youth were able to receive more benefits despite having higher earnings than they would have in the absence of the Youth Works because the project had positive impacts on the actual use (not just awareness) of several SSA work incentives (Table VII.3).

Finally, we found that Youth Works had no impact on the primary outcome in the domain of *attitudes and expectations*. Table ES.2 shows that two-thirds of treatment group youth agreed that their personal goals included working and earning enough to stop receiving disability benefits. However, we estimated that this fraction essentially would have been the same in the absence of the intervention. When we expanded the analysis to include supplementary measures of attitudes and expectations, we obtained estimates suggesting that the project increased youths' expectations of working in the future and living independently.

Conclusion

Youth Works delivered a statistically significant supplement to the services that youth with disabilities in 19 West Virginia counties received from other sources. On average, participants in the intervention received 34 hours of Youth Works services of all types, of which 70 percent were designed to directly improve employment outcomes. Aided by systematic reporting and monitoring, staff were intensively focused on developing work experiences for participating youth and placing them in paid competitive jobs. Our impact analysis revealed that the rate of employment in paid jobs by treatment group members during the year following random assignment was significantly higher, by 19 percentage points, than it would have been in the absence of the project. This was accompanied by a 50 percent increase in annual earnings and a 10 percent increase in total income. However, the intervention had no impacts on primary outcomes in the domains of educational progress and expectations. Whether these findings of short-term impacts will prove to be precursors of longer-term impacts, in the form of higher earnings and lower benefits resulting in higher total income, will be assessed in subsequent analyses of additional follow-up data.

It is important to recognize that this report has presented interim impact estimates based on data pertaining to the first year in the evaluation's multiyear follow-up period. More than a third of the youth in the research sample were still in school during that period and so had limited opportunities to work and achieve other milestones of independence. Furthermore, the Youth Works participants still were eligible to receive project services at the time they completed the 12-month interview. Interim evaluation findings from the other five random assignment YTD projects will enable us to extend the initial assessments presented in this report. Interim reports on three of those projects were completed in 2011, while the interim reports on the remaining two projects, along with this report on Youth Works, will be completed in 2012. As planned, the projects vary in the mix and intensity of services while broadly adhering to the YTD program model. Therefore, we expect that the full set of six interim evaluation reports will provide SSA with a better understanding

of the challenges that youth with disabilities face in making transitions and the specific types of interventions that might assist more of them to succeed. Furthermore, the YTD evaluation's comprehensive final report will present impact estimates based on 36 months of follow-up data from all six of the random assignment projects. Our analyses of those data may reveal longer-term impacts of Youth Works in addition to the short-term impacts reported here.

I. INTRODUCTION

Youth with disabilities often face a particularly difficult transition to adulthood. In addition to the host of issues facing all transition-age youth, those with disabilities face special challenges related to health, social isolation, service needs, and lack of access to supports. These challenges complicate their planning for education, work, and adult life in general. Many of these youth experience poor educational and employment outcomes, high risk of dependency on public benefits, and a lifetime of poverty. Despite broad recognition of these challenges and poor outcomes (Loprest and Wittenburg 2005, 2007), little is known about how best to help transitioning youth with disabilities improve their employment and earnings opportunities in adulthood.

To understand more fully how to help youth with disabilities reach their economic potential, the Social Security Administration (SSA) initiated the Youth Transition Demonstration (YTD) evaluation. The purpose of the evaluation is to find and test the most promising service strategies for helping youth with disabilities maximize their economic self-sufficiency as they transition from school to work. SSA also is interested in testing the effectiveness of altering certain benefit program rules as an incentive to encourage youth with disabilities to initiate work or increase their work activity to increase earnings. The target population for YTD is youth ages 14 to 25 who currently receive SSA disability benefits or are at risk of receiving such benefits.⁴

Using a rigorous random assignment methodology, the YTD evaluation examines the extent to which the various work-promoting services and incentives help youth with disabilities achieve greater economic self-sufficiency as they transition to adulthood.⁵ Under YTD, SSA (with input from the evaluation contractor) selected six project sites for evaluation based on their adoption of promising strategies to support youth with disabilities. The earliest of these projects began operations in 2006 and ended in 2009. The latest started in 2008 and ended in 2012. The YTD projects focused on youth empowerment, self-sufficiency, employment, and earnings, and provided employment services, benefits counseling, links to services in the broader community, and other family and youth supports. In addition, SSA provided special waivers for YTD to improve work incentives by allowing participating youth to retain more of their disability benefits and health insurance in the short term while they worked or engaged in work-based experiences.

As part of the YTD evaluation, Mathematica Policy Research and its subcontractors are conducting site-specific interim studies to examine implementation of the intervention and assess the short-term impacts during the year after youth were offered demonstration services. In this report, we present the first set of findings for the West Virginia Youth Works YTD project. We

⁴ The SSA disability population eligible for YTD included beneficiaries of the following programs: child and adult Supplemental Security Income (SSI), Social Security Disability Insurance (DI), and Childhood Disability Benefits (CDB). SSI is a means-tested program in which eligibility is based on severe functional limitations (for child SSI benefits) or a medically determined disability that prevents substantial gainful employment (for adult SSI benefits). DI beneficiaries are individuals with an earnings history and a disability that prevents substantial gainful employment. CDB beneficiaries must be age 18 or older, have a disabling condition with an onset before age 22, and a parent receiving Social Security benefits (see Rangarajan et al. 2009a, pp. 18–19).

⁵ Under SSA contract #SS00-05-60084, Mathematica Policy Research, a nonpartisan firm that conducts policy research and surveys, assembled a multidisciplinary team, including key partner organizations MDRC and TransCen, Inc., to design and conduct the YTD evaluation and provide technical assistance to the projects as they developed and implemented their YTD interventions. The YTD project is advised by a technical working group that has reviewed the evaluation design (Rangarajan et al. 2009a).

provide both a detailed explanation of the Youth Works intervention and an in-depth discussion of how this project was implemented, including its fidelity to the intended demonstration model. We also provide estimates of the impacts of the project on the receipt of services by youth and short-term outcomes, such as increased participation in paid employment, advancement in education, higher income from earnings and benefits, and a stronger sense of self-efficacy. In this evaluation's comprehensive final report, we will assess longer-term effects of this and the other five random assignment YTD projects on the transition to adult life, particularly in terms of improved employment and income.

We begin the report with an introduction to the YTD initiative, the YTD evaluation, and the Youth Works project. In Chapter II, we describe our approach to conducting the process and impact analyses, including data sources, samples, key measures, and our analytic methodology. In Chapter III, we present the analysis of program implementation. In Chapters IV through IX, we present the short-term impacts on outcomes such as service use, employment, educational experiences, income, and youths' expectations about the future. We present our conclusions from this interim research in Chapter X. In Appendix A, we present supplementary analyses and technical discussion. In Appendix B, we provide descriptions of the SSA waivers for YTD.

A. The YTD Conceptual Framework

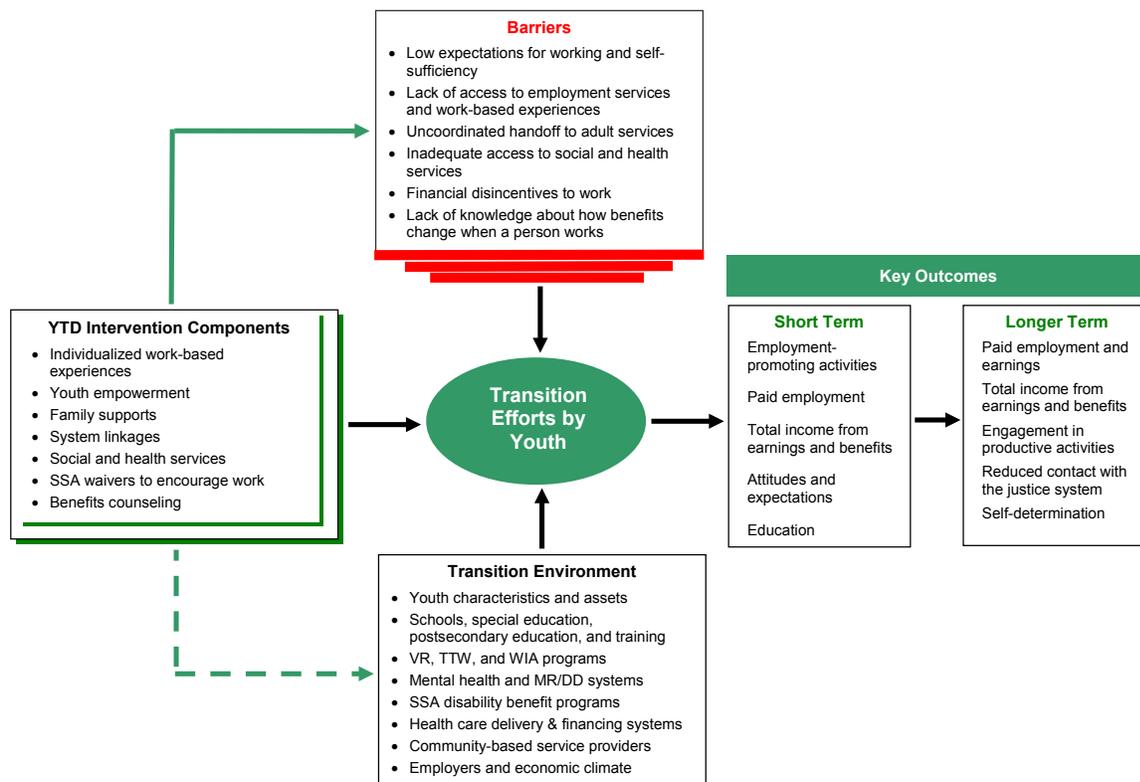
The YTD evaluation is testing whether the provision of services and new work incentives to youth with disabilities can help young people overcome the barriers they face during their transition to adulthood. Many youth with disabilities, particularly those whose impairments are sufficiently severe to qualify them for SSA disability benefits, do not reach their full potential and instead experience high rates of unemployment, poverty, and incarceration (Loprest and Wittenburg 2007). Youth with disabilities may benefit from interventions designed to reduce the barriers they face in transitioning to adulthood.

In designing the YTD intervention, we identified several barriers to successful transitions and then drew on the existing evidence to determine promising means of addressing those barriers. In particular, earlier demonstration projects provided evidence about what has worked for serving people similar to YTD youth.⁶ We also drew on the Guideposts for Success, developed by the National Collaborative on Workforce and Disability for Youth (2005). In the YTD evaluation design report (Rangarajan et al. 2009a), we summarize the research evidence that forms the basis of the demonstration.

The YTD intervention design was informed by a conceptual framework (Figure I.1) based on the research evidence and informed by SSA's goals for the intervention. The transitions to adulthood made by youth with disabilities are shaped by the youths' characteristics and their social, educational, and employment environments. However, several barriers may inhibit those transitions. The YTD intervention is intended to address the barriers and work within the environment of each demonstration site to facilitate better transitions.

Youth with disabilities face many barriers that can affect the success of their transition to adulthood. Some of these are the product of youths' perceptions of their impairments and

⁶ The U.S. Department of Labor's Structured Training and Employment Transitional Services demonstration and SSA's Transitional Employment Training Demonstration provided valuable evidence for the design of the YTD intervention (Rangarajan et al. 2009a).

Figure I.1. Conceptual Framework for SSA's YTD Projects

opportunities, which can lead to low expectations about working and self-sufficiency. Low expectations can, in turn, lead to marginalization, isolation, and diminished expectations about a youth's abilities among family members, teachers, and employers. Other barriers arise because youth do not identify or obtain appropriate support services, and a lack of high-quality employment services and opportunities for work-based experiences can create barriers to successful entry into the adult labor market (Mank et al. 2003; Wehman 2006). Furthermore, youth with disabilities may have to deal with school support systems that have significant gaps in both student services and critical linkages to adult services. The latter can lead to an uncoordinated handoff to adult services. Program rules that often reduce cash benefits with a rise in earnings or result in possible redetermination of a youth's status as disabled may create financial disincentives to work. Finally, lack of knowledge about work incentives in SSA benefit programs and the interaction of work experiences, benefits, and SSA incentives can inhibit beneficiaries' interest in pursuing employment. Together, these barriers can lead to significant challenges in navigating the transition to adulthood successfully.

As shown in Figure I.1, the YTD projects were designed to address each of these barriers by providing services and financial incentives directly to youth with disabilities and their families. As described in the conceptual model, the key components of the projects—services and incentives—included work experiences, youth empowerment, family support, system linkages, social and health services, SSA waivers to encourage work, and benefits counseling. Although the YTD projects were not intended to bring about systems change, they may have improved the transition environment indirectly. For example, the YTD project in Colorado was based in One-Stop Workforce Centers, where through their daily activities the project staff demonstrated strategies for delivering employment services to youth with disabilities for the broader staff of the Workforce Centers

(Martinez et al. 2008). The YTD evaluation does not test this potentially indirect effect (shown by the dashed arrow in the conceptual framework).

YTD was intended to help youth become as economically self-sufficient as possible as they transitioned to adulthood. Work-based experiences were a core component of the YTD intervention, and the YTD model stressed the importance of paid employment experiences. The projects offered a range of work-based service options, including career exploration, job shadowing, volunteer work, internships, apprenticeships, and paid employment. These experiences helped youth learn workplace skills and identify the career preferences, workplace supports, and accommodations that may be essential to employment success. The YTD intervention's various options were designed to address the lack of access to employment services and paid work experiences faced by youth with disabilities. In addition, recognizing that education is an important determinant of future work success, some YTD projects, including Youth Works, supported educational goals, such as completing high school, obtaining a General Educational Development (GED) credential, and enrolling in postsecondary education.

By emphasizing youth empowerment—the acquisition of skills and knowledge that enable youth to control their life choices—the YTD intervention addressed youths' low expectations associated with working and self-sufficiency. Empowerment is critical to choices about participation in services that will influence youths' education, employment, and career directions. The YTD projects facilitated empowerment by involving youth in developing person-centered plans for services that promote success in future goals. Through this process, the YTD projects identified the key barriers relevant to each youth and specified steps for addressing them.

Another important component of the YTD intervention was the provision of support to families so that they would be better able to encourage and guide their youth in making appropriate choices about work, education, and services. Such support helped families address the barriers of low expectations and inadequate access to social and health services. In addition, to address the barriers resulting from uncoordinated service environments and inadequate access to services, the intervention emphasized linkages between systems, particularly those between academic coursework and work-based experiences, and effective coordination of social and health services after school exit.

To enhance work incentives, the YTD projects also provided SSA waivers of disability program regulations. One barrier faced by youth is the disincentive to work due to SSA program rules that reduce benefits as earnings rise, effectively reducing the extent to which employment financially benefits youth with disabilities. In response, the waivers for YTD encouraged paid employment by allowing youth to keep more of their benefits while working and earning.

- Under the earned income exclusion (EIE), SSI benefits are reduced by \$1 for every \$2 earned above a base amount. An important SSA waiver for YTD made the EIE more generous, so that benefits were reduced by only \$1 for every \$4 earned above a base amount.
- For the student earned income exclusion (SEIE), which disregards up to \$1,700 per month (in 2012) of a student's earnings for those age 21 and younger, a waiver extended the earnings exclusion to all youth participating in YTD who attended school, regardless of age.

- For youth who were determined ineligible for disability insurance for medical reasons based on a continuing disability review (CDR) or age-18 medical redetermination, a waiver delayed the cessation of benefits for the duration of the other waivers.

In addition to the above waivers, SSA provided YTD participants with enhanced incentives for investing in self-sufficiency goals and accumulating savings. For youth with approved plans for achieving self-sufficiency goals (known as the “plan for achieving self-support,” or PASS), SSA disregarded the funds used for the PASS activities from eligibility determination and adjusted benefits to compensate partially for these expenses. The YTD waiver expanded eligible PASS activities to include postsecondary education and career exploration. Finally, SSA encouraged asset accumulation in federally funded individual development accounts (IDAs) by not including any beneficiary deposits in the calculation of earned income that would reduce benefits and disregarding matching deposits, account balances, and interest earned from eligibility determinations. For YTD participants, these exclusions were extended to IDAs that are not federally funded. In Appendix B, we provide more complete descriptions of the five SSA waivers for YTD.

Finally, the YTD intervention provided benefits counseling to compensate for the lack of information about benefits and clarify the relationship between benefits and work. YTD benefits counseling assisted youth and their families in understanding the complexity of work incentives under SSA program rules and informed them about SSA’s waivers for YTD.

The YTD evaluation team identified the key intervention components deemed best practices and required all projects to consider these components as part of their service models. TransCen, Inc. provided the projects with training and technical assistance on the implementation of the components. However, each project enjoyed the flexibility to customize its approach to service delivery in the manner determined to be most effective in improving outcomes for youth. It also should be noted that the components were delivered within the existing transition environment, and the projects, to varying degrees, leveraged services available in their communities. For these reasons, the projects differed in their service models and implementation, which in turn may have led to differential impacts on youth outcomes.

B. The YTD Evaluation

In addition to informing the interventions, the conceptual framework for YTD (Figure I.1) guides the evaluation. The evaluation assesses whether eligible youth offered YTD services achieve improved short- and longer-term outcomes relative to eligible youth not offered the services. In the short term, as examined in this and other interim reports on the YTD projects, we assess whether the planned intervention was delivered; the impact of YTD on service use; and short-term impacts on employment, earnings, education, income, and expectations. In the longer term, we will examine whether YTD affected key markers of a successful transition to adult life: employment, earnings, income, engagement in productive activities, reduced contact with the justice system, and self-determination.

The YTD evaluation design called for six projects to be selected for participation in the national impact evaluation. The projects were required to meet four key criteria. First, they had to offer high-quality intervention services expected to improve self-sufficiency. Second, as a group, the sites had to reflect a mix of service strategies and target populations. Third, they had to demonstrate their ability and willingness to participate in a random assignment evaluation. Finally, they had to be sufficiently large to serve 400 youth over a two- to three-year period because the evaluation required

that this many youth be served to have sufficient statistical power to assess whether the intervention was effective.

In 2003, SSA entered into cooperative agreements with seven organizations to implement YTD projects that emphasized employment and youth empowerment. In 2006, SSA selected three of the seven projects for the random assignment evaluation.⁷ The choice of projects, based on recommendations from the evaluation team, included those with the capacity to serve the large number of youth required by the evaluation and a willingness to use a random assignment design. The projects were the Youth WINS project in Colorado; the Transition WORKS project in Erie County, New York; and the City University of New York's Youth Transition Demonstration Project in Bronx County, New York.

Also in 2006, the evaluation team conducted a nationwide search for potential new YTD projects by reaching out to organizations that either were operating strong transition programs or had the capacity to do so and met the evaluation requirements of an adequately sized target population and a willingness to implement random assignment. That search resulted in the selection of five organizations in fall 2006 to run pilot programs in 2007. Based on recommendations from the evaluation team, in November 2007 SSA selected three of the five organizations to implement their interventions fully and participate in the national impact study: these were the Florida regional office of Service Source; St. Luke's House, Inc. in Montgomery County, Maryland; and the Human Resource Development Foundation, Inc. in West Virginia.⁸ Descriptions of all six random assignment YTD projects can be found in Martinez et al. (2008).

The YTD evaluation is based on a multicomponent design, to provide strong evidence on the extent to which the intervention led to intended changes in the transition outcomes of youth. The process analysis examines the implementation of YTD in the six projects and considers how well the intended intervention was delivered. The impact analysis is based on a rigorous random assignment design. The target number of voluntarily enrolled youth for each site was between 840 and 880, with approximately 55 percent randomly assigned to a treatment group and the remainder assigned to the control group. Youth in the treatment group could receive YTD services as well as the SSA waivers, while those in the control group could receive only those services available in their communities, independent of the YTD initiative. Finally, the pending cost analysis of the evaluation will examine the costs of the intervention components so as to assess the potential benefits and costs of scaling up implementation of the intervention.

Information for the evaluation comes from a wide range of data sources. We rely on program documents, site visits, interviews with managers and staff, and focus groups with youth and parents to examine the program service model, implementation, and participation. We also examine service provision data from the evaluation's management information system, which was used by each project. Data for the impact analysis come from baseline and follow-up surveys and SSA administrative records. The follow-up surveys gather information on youth and family characteristics, as well as outcome measures, such as service use, employment, earnings, and attitudes and expectations. We are conducting the follow-up surveys at one year and three years

⁷ Among the four original YTD projects that did not participate in the random assignment evaluation, two (located in Iowa and Maryland) ceased operations in 2007 and two others (in California and Mississippi) continued providing services through 2009. Descriptions of the seven original YTD projects can be found in Martinez et al. (2010).

⁸ SSA funding for the two pilot projects (located in Vermont and Washington) not selected into the random assignment evaluation ceased on December 31, 2007.

following random assignment. The administrative records provide information on earnings and benefits and a small number of individual characteristics, covering a period ranging from one year before to three to four years after random assignment.

C. West Virginia Youth Works

The Human Resource Development Foundation, Inc. (HRDF) administered West Virginia Youth Works in collaboration with the Center for Excellence in Disabilities at West Virginia University. Since its founding in 1967, HRDF has administered employment programs for disadvantaged youth and adults. The key components of the Youth Works approach to promoting the economic self-sufficiency of youth with disabilities were goal identification through person-centered planning, job development, job placement, post-placement support, and benefits counseling. Youth Works served youth ages 15 to 25 who received SSA disability benefits in 19 counties throughout West Virginia. (Although the YTD demonstration targeted youth ages 14 to 25, sites were given the option of targeting a subset of the full age range.)

HRDF staff delivered most services directly, including work readiness assessments, career exploration, and case management services, as well as job development and placement services. After job placement, HRDF provided services designed to promote job retention, such as job coaching. The Center for Excellence in Disabilities was responsible for providing benefits counseling. HRDF also partnered with organizations that provided disability and/or employment services throughout the state, including the West Virginia Division of Rehabilitation Services and WorkForce West Virginia.

In West Virginia, as in four of the other five YTD sites, SSA provided Mathematica with lists of Social Security beneficiaries from which to draw a random sample of eligible youth for Youth Works. Mathematica conducted outreach to and recruited sample members for the study. The recruitment process extended from March 2008 until September 2010, when we obtained the target number (875) of baseline interviews and written consents for participation in the evaluation. After the initial outreach, the baseline interviews, and grants of consent, Mathematica randomly assigned youth to the treatment or control groups. Youth Works enrolled treatment group youth in project services in two distinct phases, with a substantial gap between phases in order to allow the staff to work intensively with smaller caseloads. The first phase of enrollment began in April 2008 and lasted until the summer of 2009. After a five-month period with virtually no enrollments, the second phase started in December 2009. Services terminated and the project formally ended in March 2012.

Following random assignment, the staff of Youth Works reached out to each youth in the treatment group and conducted an enrollment meeting. During that meeting, each youth was informed about Youth Works services and the YTD waivers. Each youth was considered as enrolled in the project upon the youth or guardian signing an agreement to participate; treatment group youth who did not have a signed agreement were not eligible for either project services or the waivers. From the initial meeting, Youth Works customized employment specialists worked with participants to identify their interests, abilities, challenges, and employment goals, and develop a person-centered plan (an individualized plan for achieving self-identified goals). Benefits specialists provided participants and families with information on SSA benefits and waivers. Following the development of the person-centered plan, Youth Works provided assistance with employment preparation, job identification, and employment applications. For youth who were not employed, the project provided work experiences such as job shadowing, occupational training, subsidized on-the-job training, and volunteer work. Job developers at Youth Works networked with employers to identify paid, competitive jobs for participants. Once youth were in such jobs, the project provided

follow-up services, including additional benefits counseling, job coaching, and performance evaluations. Youth Works staff worked with most participants for 18 months and concluded project services with closeout activities, such as reviewing progress toward goals and counseling on the pending termination of YTD waivers.⁹

In Chapter III, we provide a fuller description of Youth Works, the intended sequence of services for a youth who enrolled in the project, the roles of the Youth Works staff members and their partners, and the services that participants actually received.

D. Research Objectives for this Report

In this interim report, we examine the services that Youth Works provided, assess how they were delivered and their fidelity to the proposed service model, and identify the successes and challenges associated with implementation. This analysis, known as process analysis, provides critical information for future replication or adoption of promising practices and informs policy by providing evidence of what is needed to implement programs similar to Youth Works. The process analysis also improves our understanding of major impacts (or the lack thereof) by examining factors such as the fidelity of implementation to the proposed design, who participated in project activities, the intensity of services received, and challenges faced by the project.

Building on the process analysis, we examine whether Youth Works improved short-run outcomes for youth 12 months after random assignment. If the project succeeded in engaging youth in services, we would expect that youth randomly selected to have the opportunity to participate in Youth Works (treatment group members) would have higher levels of service use than youth ineligible for Youth Works (control group members). Engaging youth in work-related activities through employment services is of particular importance for YTD, and we would expect to find an impact of Youth Works on receipt of such services. We also would expect youth to take advantage of at least some of the SSA waivers within the first year. Furthermore, all YTD sites emphasized youth empowerment and individual goal setting; thus, we would expect some measures of youth empowerment, such as future expectations, to improve within the first year.

Given that the YTD program model emphasized paid employment and that all YTD project sites were required to adopt an employment focus, it is important to examine short-term impacts on paid employment, earnings, and benefits. All YTD projects made some effort to place youth in employment. In light of this, the short-run impacts on employment-related measures reflect both participation in the YTD projects and the outcomes resulting from that participation. Indeed, more substantial employment impacts beyond project placements may not be subject to immediate influence, especially for youth who are under age 18 or in school. Hence, while we examine employment outcomes as part of this interim report, we will focus more attention on them in subsequent reports.

Youth Works was among a subset of YTD projects that also provided education services, although these services were fairly limited. For high school youth, project staff participated in educational and transitional planning meetings. They referred youth who had dropped out of high school to GED classes and helped others who wished to pursue post-secondary education to access

⁹ Youth who enrolled in YTD project services are eligible for the SSA waivers for four years past random assignment or until they reach age 22, whichever comes later. All waiver eligibility ceases after September 2013.

support services for students with disabilities. Since education services were a component of the Youth Works service model, we examine the short-term impact on youths' educational progress.

Before turning to the process and impact analyses, we describe our evaluation approach in Chapter II, including key outcome measures, data sources and analysis samples, and our approaches to conducting the process and impact analyses.

II. STUDY DESIGN, METHODS, AND DATA SOURCES

Rigorous assessment of the impacts of the YTD projects is a central component of the YTD evaluation. An experimental design, often considered the gold standard for evaluations, allows us to infer with a high degree of certainty whether the projects had any impacts on youth. As important as it is to estimate project impacts, it is also critical to describe the process by which YTD services were delivered so that others considering the development of similar interventions will benefit from an understanding of both the context for interpreting project impacts and the information on project implementation successes and challenges. In this chapter, we describe our approach to conducting the impact and process analyses.

A. Impact Analysis

One of the hallmarks of the YTD evaluation is that it is based on a rigorous random assignment design. Youth identified as eligible for the evaluation are randomly assigned either to the treatment or the control group; the treatment group is eligible to receive YTD services and the SSA waivers for YTD, while the control group has no access to YTD services or waivers but may use other services available in the community. Random assignment should lead to the creation of two groups with virtually identical pre-intervention experiences and characteristics. As a result, any observed differences in outcomes for the two groups over time may be attributed with a known degree of certainty to the effects of the program.

It should be noted that participation by youth in the evaluation was voluntary. Therefore, we expect that youth particularly interested in receiving employment-related services were more likely to have volunteered to participate. As a result, youth assigned to the control group and not eligible for YTD services might have been likely to seek similar types of services elsewhere in the community. Hence, the impacts of interest to the evaluation are the effects of the YTD interventions relative to other services in the community that youth may have used, rather than a counterfactual environment of “no services.” The impact analysis in this interim report examines whether Youth Works was effective in improving the short-term outcomes of those youth offered project services and the SSA waivers for YTD, covering the period up to one year following random assignment.

1. Outcome Measures

As detailed in the conceptual framework for the YTD intervention and evaluation in Chapter I (Figure I.1), by providing expanded services and waiving certain disability program rules, Youth Works was expected to promote work and improve other outcomes for youth. If Youth Works succeeded in implementing YTD services and waivers, the most immediate impacts of the intervention should be reflected by youth randomly assigned to the treatment group showing increased use of employment-promoting services, more work-related experiences, and more paid employment. We would also expect to observe treatment group youth having greater income resulting from increased employment, more use of SSA work incentives as a consequence of the waivers, greater educational progress, and more positive attitudes and expectations about the future.¹⁰

¹⁰ In the intermediate and longer terms, we would expect treatment group youth to increase their employment and earnings, have higher income, reduce risky behaviors, demonstrate greater self-determination and self-efficacy, and move toward independent living. The longer-term outcomes will cover a period from three to four years following random assignment for youth in the study and will be based on data from the 36-month follow-up survey and administrative records.

Information on these short-term impacts is based on data from the YTD evaluation's 12-month follow-up survey as well as administrative data on benefit receipt and use of SSA work incentives. In the 12-month survey, we gathered a large volume of information on outcomes for different aspects of youths' lives, particularly participation in a variety of services, educational progress, work-related experiences, understanding of work incentives, and expectations about the future.

While all of the above outcomes are important, and it is useful to assess the intervention's impacts on each one, we must be mindful of the statistical problem of "multiple comparisons."¹¹ This problem arises when we estimate impacts on a large number of outcomes such that at least a few of the estimates likely will be statistically significant by chance, even if no true impacts occurred. For example, if we were to examine 50 independent outcomes, we would expect to find statistically significant impacts (at the ten percent level of statistical significance) for five outcomes simply by chance, even in the absence of any true impacts. We addressed the problem by specifying, a priori, a small number of primary outcomes. We chose five domains or areas in which we expected to see program impacts and identified a primary outcome to be tested in each domain.¹² Our goal was to be as parsimonious as possible in defining the domains and primary outcomes while capturing the major areas in which the intervention might produce impacts. The primary outcomes were the basis for the tests of our main hypotheses. In addition, we examined a number of supplementary outcomes to help explain impacts on the primary outcomes. Even if we did not find a statistically significant impact on a primary outcome, we examined the related supplementary outcomes to enhance our understanding of the lack of impact on the primary outcome. In addition, we considered whether there was a pattern of impacts on the supplementary outcomes that suggested the project may have had an impact that our primary outcome measure did not capture. We highlighted the findings for the supplementary outcomes only if we found statistically significant impacts on the primary outcomes.

Guided by the YTD conceptual framework, our evaluation design report identified the primary domains and outcomes to be examined in our impact analyses (Rangarajan et al. 2009a). In Table II.1, we show the domains for which we expected Youth Works to have short-term impacts and describe the primary outcomes examined as part of each domain. In this table, we also describe the supplementary outcomes related to these domains.

- **Employment-promoting services.** Through individualized employment-related services and case management support, Youth Works was expected to improve youths' employability. The primary outcome measure in the domain of employment-promoting services is whether a youth received any such services. This composite measure indicates whether the youth received career counseling, support for resume writing and job search activities, job shadowing and apprenticeships, other employment services, and counseling on SSA benefits and work incentives during the year following random assignment.

¹¹ This discussion, and our approach to addressing the multiple comparisons problem, are summarized from Schochet (2008).

¹² We specified all outcomes a priori in an analysis plan (Rangarajan et al. 2009b). However, we determined the specific measures for some outcomes after examining distributions in the data and the extent of missing information (with treatment and control groups combined). For example, we specified in the analysis plan that we would examine the degree of employment. Subsequently, based on preliminary data analysis of the full sample (treatment and control cases combined), we determined that "ever employed on a paid job in the year following random assignment" was the best measure of the degree of employment.

Table II.1. Primary and Supplementary Outcomes

Outcome Measure	Description of Measure
Employment- Promoting Services	
Primary outcome	Receipt of any employment-promoting services (including career counseling, support for resume writing and job search activities, job shadowing and apprenticeships, benefits and waivers counseling, and other employment services)
Supplementary outcomes	Receipt of individual employment-promoting and non-employment services; knowledge of SSA work incentives; type of service provider; amount of service utilization (number of months of services received, total number of contacts, total hours of services, number of providers); and unmet service needs
Paid Employment	
Primary outcome	Ever employed in a paid job in the year following random assignment
Supplementary outcomes	Employment status at the time of the 12-month survey, ever employed in a paid or unpaid job in the year following random assignment, percent of weeks employed, number of jobs held, time pattern of employment by month after random assignment, hours worked per week, total hours worked, annual earnings, earnings per month, and job characteristics
Educational Progress	
Primary outcome	Ever enrolled in school in the first year following random assignment or completed high school by the time of the 12-month survey
Supplementary outcomes	Enrolled in school in the first year following random assignment, completed high school by the time of the 12-month survey, type of school attended, number of months in school
Youth Income	
Primary outcome	Total income from earnings and benefits during the first year following random assignment
Supplementary outcomes	Fraction of annual income from earnings, number of months of benefit receipt in the year following random assignment, amount of SSA benefits, use of SSA work incentives, health insurance coverage, and receipt of public assistance
Attitudes and Expectations	
Primary outcome	Youth agrees that personal goals include working and earning enough to stop receipt of SSA benefits
Supplementary outcomes	Independent living expectations, educational expectations, employment expectations, internal and external locus of control, independent activities, decision making, and social interactions
Exploratory Analysis: Training and Productive Activity	
Primary outcome	None
Supplementary outcomes	Ever enrolled in a training program in the first year following random assignment, number of months in a training program, and participation in any productive activity in the year after random assignment

- **Paid employment.** One of the core service components of the YTD initiative was to help youth find paid employment in the short term and put them on a path to consistent paid employment in the longer term. Hence, paid employment was an important domain for the evaluation. The primary outcome in the domain is whether a youth was ever employed on a paid job in the year following random assignment. Paid employment in the year following random assignment is, in part, a measure of receipt of services, as the YTD interventions are intended to emphasize experiences in paid employment.
- **Educational progress.** Although Youth Works did not have an explicit goal of increasing educational attainment, project staff did provide educational counseling and other education services to youth who sought to further their education. Furthermore, education is a key short-term outcome in the YTD conceptual framework. Thus, one of the important outcomes for examination is a composite measure of enrollment in school at any time during the year following random assignment or completion of high school by the time of the 12-month survey.¹³
- **Youth income.** The YTD initiative was expected to improve the income of participants by increasing earnings and offering work incentives that permitted youth to retain more of their benefits as their earnings increased. Thus, one of the important outcomes for examination is total income received by youth from earnings and SSA disability benefits in the first year following random assignment.
- **Attitudes and expectations.** Youth Works sought to promote independence and self-sufficiency among participants through identification of goals and person-centered planning. Thus, Youth Works was expected to improve outcomes related to youths' attitudes and beliefs about themselves. The primary outcome for the attitudes and expectations domain was whether youth agreed with the statement that their "personal goals include working and earning enough to stop receiving SSA benefits."
- **Exploratory analysis: training and productive activity.** As a supplementary analysis, we explored whether Youth Works had an impact on job training activities. We also estimated its impact on a composite measure of productive activities, including enrollment in school, job training, paid employment, and unpaid employment.

2. Sample Selection and Recruitment

Youth Works targeted youth ages 15 through 25 who received SSI, DI, or CDB. The sampling frame for the YTD evaluation was Social Security disability beneficiaries who were in the target age range and lived in the Youth Works service delivery area, which covered 19 counties of West Virginia (see Chapter III, Figure III.1). All youth in the sampling frame (and in the research sample that we drew from the sampling frame) were on the SSA benefit rolls at the time of data extraction; however, a small percentage was not in "current pay" status. Subsequent analysis of benefit records showed that four percent of youth in the research sample did not receive benefits in the year prior to random assignment. These youth were considered to be at high risk of returning to "current pay" status in the future. With this caveat, we refer to the members of the research sample as "beneficiaries."

¹³ Our measure of enrollment in school includes even brief periods of enrollment to capture participation in education regardless of the duration of participation. As a supplementary measure, we also examine the number of months of enrollment.

Mathematica conducted outreach and recruited eligible youth into the study. During a 31-month recruitment period, from March 2008 through September 2010, Mathematica randomly selected 5,207 eligible youth from beneficiary rolls provided by SSA (Figure II.1).¹⁴ After receiving informed consent orally, we conducted baseline interviews with 37 percent of the youth (1,930).¹⁵ Of those who completed the baseline interview, 65 percent returned completed consent forms (guardian consent was required for minor youth). Among youth with signed consent forms, 69 percent agreed to participate in the evaluation, for a total enrollment of 875 youth in the evaluation.

Overall, we were able to enroll a broad group of disability beneficiaries in the evaluation. While there were some differences between enrollees and non-enrollees, overall those differences were not large (based on data from administrative records; Appendix A, Table A.1).¹⁶ In particular, although differences between enrollees and non-enrollees were statistically significant for 6 of 12 baseline characteristics for which we conducted tests, the overall differences were not large. For example, enrollees were more likely to have had earnings in the prior year. However, average earnings among enrollees were no different than those of non-enrollees. As a result of their self-selection into or out of the evaluation, enrollees and non-enrollees may also have differed on unobserved characteristics, such as motivation to work in the future. However, the impact estimates are not affected by these baseline differences because both treatment and control groups include exclusively youth who had enrolled in the evaluation.

Of the 875 youth recruited into the evaluation, 852 were randomly assigned: 455 to a treatment group whose members were eligible to enroll in Youth Works and 397 to a control group. The remaining 23 youth who provided written consent had siblings already in the evaluation. These youth automatically were assigned to the same groups (17 treatment and 6 control) as their siblings and were not part of the research sample for the Youth Works evaluation.

Following random assignment, Youth Works staff were responsible for enrolling treatment group members in the project and providing them with services. In Chapter III, we provide a detailed description of the enrollment effort. The enrollment target was 83 percent, or 378 of the 455 youth who had been randomly assigned to the treatment group. Project staff ultimately enrolled 388 of these youth as participants in Youth Works.¹⁷ Throughout this study, we use the term “participants” to refer to these youth in the treatment group who participated in Youth Works services.

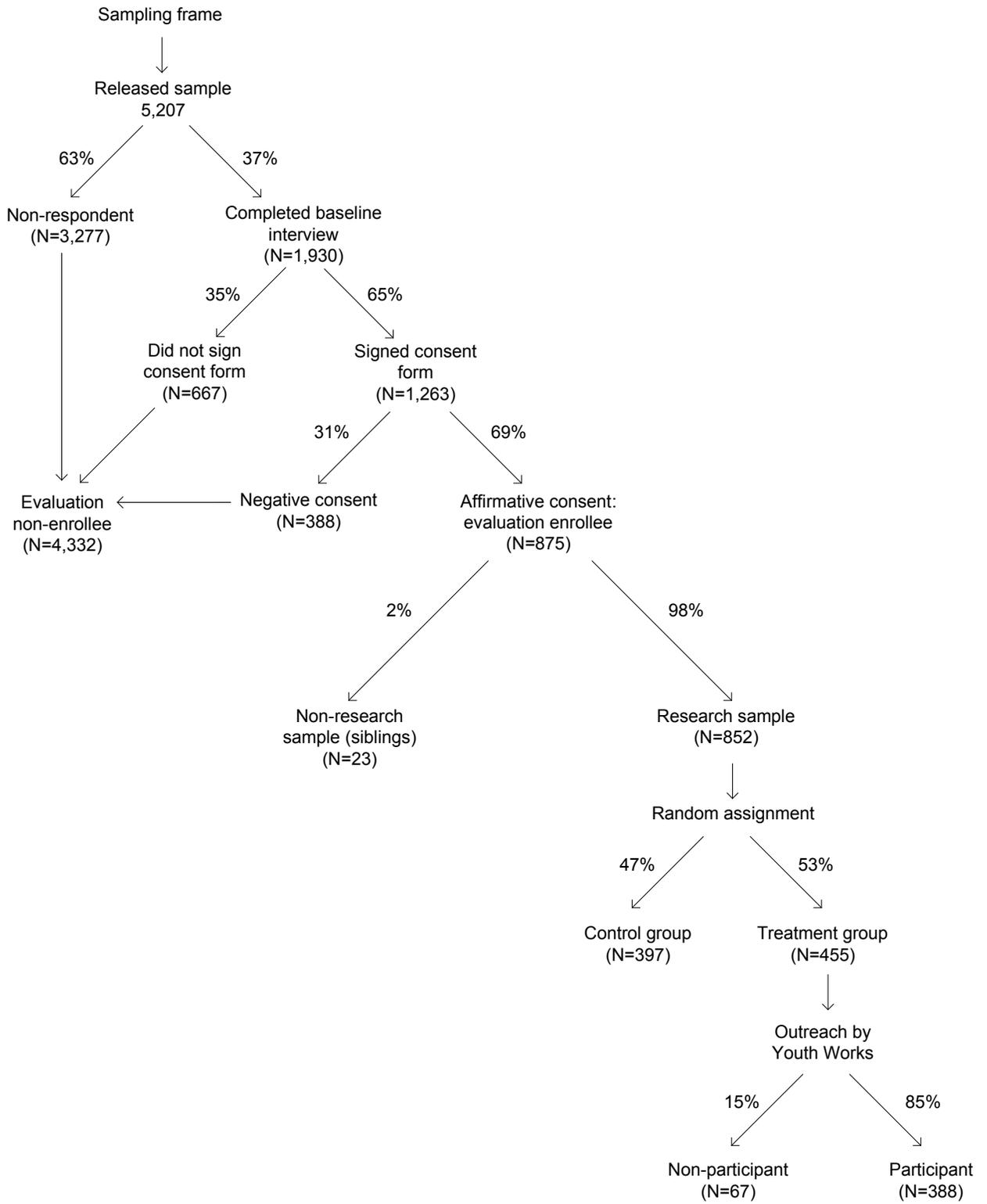
¹⁴ SSA provided Mathematica with lists of youth who were disability beneficiaries in the program catchment areas. The lists, which constituted the sampling frame for the evaluation, were updated periodically to capture new entrants. Mathematica randomly sorted the lists into survey replicates containing ten eligible beneficiaries each. Each replicate was a random sample of the frame. We gradually released the replicates for purposes of baseline interviewing and gathering written informed consent to participate in the evaluation.

¹⁵ Of the 3,277 youth with whom we could not conduct interviews, 19 percent refused to participate in the survey. The rest were “unlocatable” (36 percent; we were unable to reach them by using the information in SSA files or additional contact information drawn from publicly available sources); found to be ineligible (29 percent; they had moved out of the target county, were no longer age eligible, or were deceased); or still in some stage of contact attempts when the survey concluded (16 percent).

¹⁶ Youth were considered “enrolled” in the evaluation once they completed the baseline survey and signed a consent form agreeing to participate in the evaluation.

¹⁷ Youth Works staff also enrolled 16 of the 17 non-research treatment group youth, resulting in a total of 404 participants in the project.

Figure II.1. Intake Flow Diagram for Youth Works



3. Data Sources and Analytic Sample

Data Sources. The impact analysis relied on both survey and administrative data from SSA records. We collected survey data at baseline (just before random assignment and the receipt of written consent for enrollment in the evaluation) and at 12 months following random assignment. We collected the data primarily through interviews with the youth, although we obtained some information from both the youth and the parent or guardian (satisfaction with YTD services and future expectations).¹⁸ In addition, for youth under age 18, we obtained some information only from the parent or guardian (school enrollment, service utilization, knowledge of SSA waivers). If the youth was unable to respond to questions, we asked the parent or guardian for the relevant information. Below, we briefly discuss the various data sources used in this interim impact report; we provide a more detailed discussion of these sources in the evaluation's data collection and survey plan (Rangarajan et al. 2007).

The baseline survey was conducted as part of the evaluation's sample intake process over the period from March 2008 through July 2010. The survey consistently collected data on demographic characteristics and personal and family background for all youth enrolled in the evaluation (both treatment and control groups). The baseline survey was the principal source of the control variables in the regression models used to improve the precision of impact estimates and control for observable pre-existing differences between the two groups. It also was a source for variables that identified subgroups of youth for examination.

The first of two follow-up surveys of evaluation enrollees began in April 2009, 12 months after the first evaluation enrollee was randomly assigned. We collected follow-up data through December 2011 for 389 of the 455 youth in the treatment group and 344 of the 397 youth in the control group (response rates of 85 percent and 87 percent, respectively). The overall response rate, excluding three youth who were deceased at the time of the follow-up survey, was 86 percent.¹⁹ The follow-up survey gathered information on outcomes for the year following random assignment that may have been affected by participation in Youth Works, such as receipt of employment-related services, understanding of SSA work incentives, employment, education, and measures reflecting youth attitudes and expectations. For some outcomes, such as employment and receipt of services, the survey information covers the entire period following random assignment. For other outcomes, such as living arrangements and educational attainment, the survey information is specific to the time of the follow-up interview.

In addition to survey data, we relied on data from SSA administrative files for the impact analysis. SSA benefits and use of work incentives are of particular interest to the agency for understanding program implementation and assessing program savings. We obtained benefit information from the Ticket Research File (TRF), which includes information on receipt of any disability benefits, type of benefits received, and monthly dollar amount of benefits received

¹⁸ In the impact analysis chapters, we provide details on the sources of information for specific outcome variables.

¹⁹ As discussed in Section A.6 of this chapter, we found that follow-up survey non-respondents differed from respondents to some extent. However, given high overall response rates, we found no substantial differences in conclusions based on impact estimates for the respondent sample relative to the full sample when we examined impacts on benefits and work incentive outcomes for these groups based on SSA administrative data, which are available for all youth (Appendix A, Table A.9).

(Hildebrand et al. 2010).²⁰ We also used information from SSA records on the use of SSA work incentives. In addition, we used data from the SSA Master Earnings File (MEF) to assess earnings of various sample groups in the year before random assignment.²¹ Finally, for all evaluation enrollees, we used information from SSA records on gender, age, language, primary disabling condition, and representative payee type.

Analytic Sample. We treated as our main sample for the interim impact analysis the 733 randomly assigned evaluation enrollees who completed the 12-month follow-up survey, which provided information on many of our primary outcomes. We refer to this sample as the “analytic sample.” However, we also have a larger sample of all randomly assigned evaluation enrollees for whom we have follow-up data on benefits and use of SSA work incentives from administrative records. We refer to this sample as the “research sample.” For outcomes obtained from administrative records—measures of SSA benefits and the use of work incentives—we report impact analysis results based on the research sample, the larger of the two samples.²² For these outcomes, we found no meaningful differences in the impact analysis results when, in a methodological investigation, we limited the analysis to the smaller sample of youth who had completed the 12-month survey (Appendix A, Table A.9).

We compared the baseline characteristics of treatment and control group members in the analytic sample to assess their equivalence at the time of random assignment. In all, we examined 50 characteristics. (We report 32 characteristics in Table II.2 and the rest in Appendix A, Table A.2.²³) We found that the two groups were highly similar with respect to most characteristics, including demographics, past employment, living arrangements, health status, expectations about the future, duration of benefit entitlement, and primary disabling condition. However, we did find differences between the two groups. Notably, among the treatment group youth, there was a higher share of youth who were not in school at baseline: 65 percent, compared with 61 percent for control group youth. In addition, treatment group youth were more likely than control group youth to report that their fathers had completed high school. Treatment group youth were less likely than control group

²⁰ The TRF is an ongoing data extraction and file creation effort that originally was undertaken to support the evaluation of SSA’s Ticket to Work program, which provides SSA beneficiaries with vouchers (“Tickets”) that can be used to obtain employment services from Employment Networks of their choice. To support the YTD evaluation, the TRF was expanded to include SSI beneficiaries as young as ten years old. Previously, the minimum age for inclusion in the file was 18.

²¹ Post-random assignment data from the MEF were not available for the research sample in time to be analyzed for this interim report. We will present estimates of impacts on annual earnings as measured in the MEF in the comprehensive final report on all of the random assignment YTD projects. For this report, we used information from SSA records on whether youth reported monthly earnings to SSA following random assignment to help understand the findings on the use of SSA work incentives.

²² The full research sample for the impact analysis of outcomes measured in administrative records consisted of the 852 youth who enrolled in the evaluation and were randomly assigned to treatment or control status, less three youth who had died as of the one-year anniversary of their random assignment, for a total of 849 youth (454 treatment and 395 control youth).

²³ Table II.2 reports the baseline characteristics we identified as most likely to affect outcomes, plus any characteristics we examined that showed a statistically significant difference between the treatment and control groups at baseline.

Table II.2. Baseline Characteristics of Analytic Sample (percentages, unless otherwise noted)

	All	Treatment	Control	Difference	P-Value
Baseline Survey Data					
Demographic Characteristics					
Race					0.75
White ^a	80.2	81.0	79.3	1.8	
Black	8.9	8.7	9.1	-0.5	
American Indian/AK/HI/Pacific Islander	3.5	2.8	4.3	-1.5	
Asian	0.0	0.0	0.0	0.0	
Other or unknown	7.4	7.5	7.3	0.2	
Hispanic	2.7	3.0	2.4	0.7	0.59
Primarily speaks English at home	98.1	98.0	98.3	-0.3	0.78
Education					
School Attendance					** 0.03
Does not attend school ^a	63.2	65.2	60.9	4.4	
Attends regular high school	25.9	27.3	24.4	2.9	
Attends special high school	0.5	0.0	1.1	-1.1	
Attends other school	10.4	7.5	13.7	-6.2	
Employment					
Received job training in last year	27.6	27.5	27.7	-0.2	0.96
Worked as volunteer in last year	10.6	9.9	11.3	-1.4	0.55
Worked for pay in last year ^a	28.9	27.7	30.1	-2.4	0.50
Worked for pay in last month	11.7	12.5	10.8	1.7	0.49
Never worked for pay at baseline	46.6	48.7	44.2	4.5	0.25
Living Arrangements and Household Composition					
Living Arrangements ^a					0.83
Two-parent family	44.4	45.2	43.5	1.7	
Single-parent family	34.9	34.8	35.0	-0.2	
Group home	0.1	0.0	0.3	-0.3	
Other institution	0.8	1.1	0.5	0.5	
Lives alone or with friends	19.8	19.0	20.7	-1.8	
Average number of people in household	3.6	3.6	3.6	0.0	0.79
Lives with others with disabilities	46.1	46.1	46.0	0.1	0.98
Family Socioeconomic Status					
Annual Income					0.26
Less than \$10,000	38.0	35.0	41.4	-6.4	
\$10,000–\$24,999	33.7	34.8	32.5	2.3	
\$25,000 or more	28.2	30.2	26.1	4.1	
Parents' Education					
Mother high school graduate ^a	66.3	65.4	67.4	-2.0	0.59
Father high school graduate ^a	64.5	67.5	60.9	6.6	* 0.09
Self-Reported Health Status ^a					
Excellent	15.4	15.5	15.4	0.1	0.55
Very good/good	55.7	53.9	57.7	-3.8	
Fair/poor	28.9	30.6	26.9	3.7	
Assistance					
Reading, hearing, speaking, or walking aids ^a	18.2	15.6	21.2	-5.5	* 0.07
Help with personal care needs ^a	15.3	16.0	14.5	1.5	0.59
Expectations About the Future					
Expects to live independently (w/ or w/o help) ^a	72.3	70.1	74.7	-4.6	0.22
Expects to continue education ^a	65.0	62.6	67.8	-5.3	0.19
Expects to work at least part-time for pay ^a	77.5	74.0	81.6	-7.6	** 0.04
Independent Activities and Decision Making					
Makes snacks or sandwiches (most/some of the time)	92.3	92.6	92.0	0.6	0.78
Picks clothes to wear (most/some of the time)	95.5	93.7	97.6	-3.9	** 0.01

	All	Treatment	Control	Difference	P-Value
Administrative Data					
Demographic Characteristics					
Male ^a	55.3	56.2	54.2	2.0	0.61
Age in Years ^a					1.00
14–17	18.8	18.8	18.8	0.0	
18–21	41.9	41.8	42.1	-0.3	
22–25	39.3	39.5	39.1	0.3	
Average age (years)	20.5	20.5	20.5	0.0	1.00
Benefits					
SSA Beneficiary Status					
SSI (only or concurrent with CDB or DI) ^a	93.6	93.9	93.3	0.6	0.75
Duration of benefit entitlement (years) ^a	7.9	8.0	7.8	0.3	0.59
Benefit amount in year before month of RA (\$)	6,422	6,365	6,488	-123	0.53
Disability					
Primary Disabling Condition (SSA data) ^a					0.87
Mental illness	23.9	22.2	25.8	-3.6	
Cognitive/developmental disability	42.0	42.9	41.1	1.8	
Learning disability/ADD	13.7	14.6	12.7	1.9	
Physical disability	16.1	15.9	16.3	-0.4	
Speech, hearing, visual impairment	4.3	4.4	4.1	0.2	
Duration of disability (years)	8.2	8.3	8.1	0.3	0.60
Earnings in year before year of RA (\$)	801	720	893	-173	0.33
Sample Size	733	389	344		

Sources: YTD baseline survey and SSA administrative records.

Notes: We weighted statistics to adjust for non-response to the 12-month survey. Baseline survey item non-response may have resulted in smaller sample sizes for some characteristics than indicated at the bottom of the table. Missing information on primary disabling condition and duration of disability resulted in a smaller sample size for these characteristics than shown at the bottom of the table.

^a We included these characteristics in the regression models for the impact analysis. In addition, the regression models include indicators for enrollment during the first of two phases of the project and residence in northern West Virginia. For outcomes in the income domain, the regression models include the amount of SSA benefits received in the year before random assignment.

RA = random assignment

*/**/****Treatment-control difference is statistically different from zero at the .10/.05/.01 level using either a two-tailed t-test or a chi-square test.

youth to report that they require reading, hearing, speaking, or walking aids, expect to work at least part-time for pay; and pick their own clothes to wear.²⁴

The degree of difference between the treatment and control groups is similar to what we would expect based on chance alone. For example, of the 50 baseline characteristics we investigated, we would expect two or three to be statistically different at the five percent significance level or lower, and about five characteristics to be statistically different at the ten percent significance level or lower. We found statistically significant differences for three characteristics at the five percent significance level and for two additional characteristics at the ten percent significance level.

²⁴ We also compared the baseline characteristics of the treatment and control groups in the full research sample, regardless of whether they responded to the 12-month survey (see Appendix A, Table A.3). This analysis was based on all 852 youth randomly assigned to the treatment or control groups, including the three youth who died during the year following random assignment. In general, the patterns were largely similar to those shown in Table II.2. More specifically, the two samples have the same set of baseline characteristics that have statistically significant differences between treatment and control groups, and the magnitudes of the differences are similar.

4. Estimating Overall Impacts

Although well-executed random assignment ensures that a simple comparison of mean values of outcomes will yield unbiased estimates of program impacts, we estimated regression-adjusted impacts to increase the precision of the estimates. In addition, the regression-adjustment approach allowed us to control for chance differences in baseline characteristics between treatment and control group members, which may be correlated with outcome measures. We estimated ordinary least squares regression models for continuous outcome measures, logistic regressions for binary outcomes, and multinomial logit models for categorical outcomes. We estimated impacts for all youth in the analytic sample, without any exclusions. In particular, we included all treatment group members in the analytic sample, regardless of whether they participated in Youth Works.

The impact estimates address the policy question: “What were the effects of Youth Works on eligible youth who were interested in the project and were offered the opportunity to participate in it?” The impacts reflect both the decisions of those who were offered the opportunity but declined to participate in project services and the effects of Youth Works on those who accepted the offer of services. Youth in the treatment group who declined to participate are a self-selected subset of treatment group youth who are likely to have different baseline characteristics, on average, than Youth Works participants. If these youth were excluded from the analysis, the control group would no longer provide a valid basis for comparison with the participant subsample.

Our regression models used 18 distinct variables or sets of related variables to control for baseline characteristics believed to be correlated with the outcomes of interest.²⁵ An important consideration in selecting the control variables was the need to adjust for any pre-existing differences at baseline between the treatment and control groups. We also used as controls (1) variables believed or known to have strong behavioral relationships with the outcome measures (for example, work experience or education); (2) variables that could be used to target intervention services to youth for whom they would have the greatest impacts (for example, age and school enrollment); and (3) variables related to the enrollment cohort or timing of random assignment.²⁶

To provide context for interpreting the impact estimates, we report the estimates and observed means for the treatment group. We decided to report the treatment group means (rather than the observed control group means) because we judged them to be of greater interest to readers. To illustrate the expected treatment group experience in the absence of Youth Works, we show the observed treatment group means less the regression-adjusted impact estimates and refer to these as the “estimated treatment group means in the absence of Youth Works.” Where we observe

²⁵ We list the control variables in the impact regression models in Table A.4 of Appendix A. Most of the variables also appear in Table II.2, where they are designated by an “a” superscript. In addition to the control variables in Table II.2, the regression models include indicators for residence in northern West Virginia and random assignment during the first of two phases of the project. To keep Table II.2 brief, we present these and additional baseline characteristics in Table A.2 of Appendix A. For outcomes in the income domain, the regression models also include the amount of SSA benefits received in the year before random assignment because it is a strong predictor of the primary outcome, which is calculated as earnings plus SSA benefits. We verified that inclusion of this variable in the model would not change the nature of our findings in the other outcome domains.

²⁶ We excluded from the regression model one variable with a statistically significant treatment-control difference in Table II.2. We excluded the independent activity “pick clothes to wear” because we concluded that there was no systematic difference between the treatment and control groups in the area of independent activities and decision making due to the lack of differences for the four other measures: make snacks or sandwiches (Table II.2), ride public transportation alone, decide how to spend own money, and decide how to spend free time (Table A.2).

significant program impacts and want to describe their magnitudes in proportional terms, we use the estimated treatment group means in the absence of Youth Works as our base. For all outcome measures, the estimated treatment group means in the absence of Youth Works do not differ substantially from the estimated control group means.²⁷

We tested the sensitivity of the estimated impact on the primary outcome in each domain to the use of either the regression adjustment or a comparison of simple means (Appendix A, Table A.6) and found that the impact estimates were robust with respect to the particular estimation approach. The absolute sizes and proportional magnitudes of the impact estimates were very similar when we estimated using regression adjustment or simple means. Hence, the choice of estimation methodology did not affect our conclusions about the impacts of Youth Works.

5. Estimating Subgroup Impacts

In addition to the impacts of Youth Works on outcomes for all eligible youth, we were interested in estimating whether the project had different impacts on different types of youth. The subgroup analysis examined whether the intervention worked better for some youth versus others. Subgroup analysis can inform decisions about targeting scarce resources to specific groups. However, the limited size of the analytic sample (733 youth) meant that, for some subgroups, the sample sizes were insufficient to test for meaningful differences between them. Further, to be responsive to the multiple comparisons problem, we minimized the number of subgroups for which we would estimate impacts on primary outcomes and also identified them prior to the analysis.

In our design report, which we prepared before conducting the impact analysis, we identified several baseline characteristics defining the subgroups that might be expected to experience different impacts of YTD: youth under age 18, youth enrolled in school, and youth experienced in working for pay (Rangarajan et al. 2009a). For example, we might expect to see larger employment impacts on older or out-of-school youth—as opposed to younger or in-school youth—and youth with at least some paid work experience. In addition, the expectations of youth who did not work for pay in the year before random assignment might have been more malleable than those of older youth and those with work experience. In addition to these three subgroups identified in our design report, for Youth Works, we also conducted the impact analysis by implementation phase for the project because our process analysis suggested that the Youth Works intervention may have been different for those entering the program after June 2009 (see Chapter III for details). In Section G of Appendix A, we discuss impact estimates for several other (exploratory) subgroups.

In Table II.3, we describe the sample sizes of the subgroups selected for analysis. To estimate subgroup impacts, we modified the regression models to include the interaction of the treatment status indicator with specific subgroup indicator variables. For each subgroup, we conducted tests to determine the statistical significance of the subgroup impact estimates and whether the impact estimates across the subgroups differed significantly from each other.

²⁷ We show the observed control group means for all outcomes in each domain in Table A.5 of Appendix A, along with the observed treatment group means.

Table II.3. Sample Size by Subgroup

	Number	Percentage of Sample
Implementation Phase		
Random assignment before July 1, 2009	363	49.5
Random assignment on or after July 1, 2009	370	50.5
Age		
Under age 18 at baseline	138	18.8
Age 18 or over at baseline	595	81.2
School Attendance		
In school at baseline	452	62.8
Not in school at baseline	268	37.2
Paid Work Experience		
Worked for pay in year prior to random assignment	211	28.9
Did not work for pay in year prior to random assignment	520	71.1
Total	733	100

Sources: YTD baseline survey and SSA administrative records.

Notes: We did not weight percentages to account for non-response to the 12-month survey. For school attendance, numbers do not total 733 due to missing information on school attendance at baseline for seven youth in the treatment group and six in the control group. For paid work experience, numbers do not total 730 due to missing information on prior paid work experience for one youth in the treatment group and one youth in the control group.

6. Other Analytic Considerations

As noted, the response rate to the 12-month follow-up survey was quite high and fairly similar for the treatment and control groups (85 and 87 percent, respectively). Even with relatively high response rates, if respondents differed systematically from non-respondents and we did not account for the differences, the estimated impacts could be biased in the sense that they would not represent all youth enrolled in the evaluation.

We found that respondents did differ from non-respondents on a number of baseline characteristics. Specifically, respondents were more likely to have completed high school, have received job training in the year prior to random assignment, be living with both parents, be covered by private health insurance, have family income of \$25,000 or more, not be receiving Special Nutrition Assistance Program (SNAP, previously Food Stamps) benefits, have a mother who is a high school graduate, have a father who is employed, and require help with personal care needs (Appendix A, Table A.7). Respondents were less likely than non-respondents to pick what clothes to wear and expect to live independently. To account for the differences between the respondent and non-respondent samples, we used survey weights that adjusted the estimated impacts for survey non-response in all of our impact analyses for outcomes measured in survey data. The weights made the respondent cases more representative of the original sample of youth enrolled in the evaluation and reduced the potential for non-response bias. To calculate the weights, we used logistic models to estimate the propensity for a sample member to respond. In Section D of Appendix A, we describe the calculation of survey weights.

The availability of administrative data on benefit outcomes for all evaluation enrollees during the year following random assignment allowed us to assess whether non-respondents experienced changes in their benefits after random assignment that may have been correlated with non-response

status (Appendix A, Table A.8). We found that respondents were more likely than non-respondents to have received benefits in the year before and the year after random assignment. However, using administrative data on SSA disability benefit receipt, benefit amount, and use of SSA work incentives, we estimated impacts for both the 12-month survey respondents and the full research sample and found little difference in the estimated impacts (Appendix A, Table A.9). Overall, the results suggest that non-response to the 12-month follow-up survey did not introduce substantial bias in the estimated impacts—not surprising, given the high response rate of 86 percent.

For most of the control variables in our regression models, only a few observations had missing information, and we replaced any missing information with the mean value from the non-missing observations. For five control variables for which values were missing for more than five percent of the observations, we included dummy variables in our regression models to indicate that the values were missing: “mother completed high school,” “father completed high school,” “youth expects to live independently,” “youth expects to work for pay,” and “primary disabling condition.”

For outcome measures, we typically excluded observations with missing information from analyses of those outcomes. However, for some outcome measures, information was non-randomly missing; that is, missing conditional on the values of other measures. For example, for youth who reported that they did not work for pay during the year following random assignment, earnings in that year are known to be zero. Thus, missing information on earnings could arise only for youth who worked for pay during the year. Excluding observations with missing information on earnings would exclude only youth who worked, leading to an underestimate of average earnings. For outcomes measures for which information was missing conditional on another outcome, we used a multiple imputation procedure.²⁸ In Section E of Appendix A, we provide a full description of our approach to dealing with missing information for control variables and outcome measures.

B. Process Analysis

In the process analysis, we addressed the question: Did the demonstration test the intervention the YTD evaluation set out to test? In other words, were Youth Works services provided with fidelity to the YTD service model and, if not, why not? We also examined descriptive information essential to any program replication efforts. In particular, we considered the major aspects of service delivery, along with background on Youth Works and the local context and service environment in which Youth Works operated. In addition, we examined the enrollment process, project implementation, service utilization, and youth satisfaction with services. Below, we describe our broad analytic approach to conducting the process analysis, followed by the data sources for this analysis.

1. Analytic Approach

Our approach to the process analysis was driven by the theory of change presented in the conceptual framework for YTD (Figure I.1). The analysis examined whether the Youth Works intervention included all of the core components shown in the conceptual framework and emphasized particular components of the design. We examined the extent to which Youth Works

²⁸ We used a multiple imputation procedure for measures of the amount of services received, monthly employment rates, employment intensity, earnings, employment tenure, employment benefits, income, and expectations of future employment. For nearly all of these variables, no more than 9 percent of observations had missing data. The only exception was expectations of future employment (19 percent were missing the youth response and 42 percent were missing the parent response).

staff members were able to deliver services related to the core components and the successes and challenges they faced in doing so. We considered whether the barriers to successful transition in West Virginia differed from those in the conceptual framework and how the intervention interacted with the environment and community service providers to shape youth transitions.

To ensure that we captured several perspectives on key issues, we used a systematic approach to gather information from a variety of sources. We started by identifying the key domains or areas in which we wanted to obtain information and the types of information we needed for each domain. We then developed a source grid that identified the sources that could provide reliable information for each domain of interest. The sources included interviews with program operators, direct service staff, program managers, and staff at other related community organizations. They also encompassed published statistics about the local environment (such as the unemployment rate) and administrative data from the Youth Works management information system, Efforts-to-Outcomes (ETO); program observations; and case file reviews. In addition, we gathered information from youth via focus group discussions. We developed a set of standard protocols to ensure that we covered all key items and collected data in a uniform fashion. The protocols included open-ended sections to capture information about unexpected challenges or successes. (For a detailed description of our analytic approach to conducting the process analysis, see Rangarajan et al. 2009a.)

The use of more than one perspective on key domains was a central element of our process analysis. To verify and analyze key questions, we assessed the extent to which multiple respondents suggested the same types of input and insights, and how often they reported different experiences. The different perspectives might reflect information obtained from (1) different sources by the same informants (information provided by staff during site visit interviews vs. information staff entered into ETO while delivering services); (2) staff in different agencies (for example, Youth Works staff at HRDF vs. staff of other agencies participating in the project); or (3) staff at different levels within an organization. The different perspectives provided a fuller understanding of implementation issues.

2. Data Sources and Sample

We tapped a wide range of qualitative and quantitative data sources to inform the process analysis, gathering qualitative data from interviews and focus group discussions during site visits to the project and obtaining quantitative data primarily from ETO. Project document reviews and ongoing communications with project management also informed the analysis.

The analysis of the Youth Works' implementation relied primarily on data collected during site visits. The evaluation team assigned to Youth Works conducted three visits to West Virginia to observe project activities and engage Youth Works staff and partners in discussions about project implementation. The purpose of the first visit by the evaluation team, in November 2008, was to conduct an early assessment of Youth Works during the first few months of the project (Wittenburg et al. 2009). The second visit, in September and October of 2009, was made to gather data on project operations after the first phase of enrollment had been completed and the second phase had not yet begun. During the third visit, in April 2011, evaluation staff systematically gathered data for assessing project operations. During each of these later visits, the evaluation team conducted individual and group interviews with Youth Works staff and project partners, and reviewed participant case files. In addition, during the 2011 visit, the evaluation team conducted four focus group discussions with Youth Works participants and their families. Two of the groups were comprised of youth and two were comprised of parents. Finally, the evaluation team also engaged in periodic telephone calls (weekly during the first two years of full implementation and biweekly in the

later years) with key Youth Works staff and reviewed project documents, such as monthly management reports and quarterly progress reports to SSA.

As mentioned in Chapter I, given that SSA wanted to ensure that all YTD projects delivered strong services, it provided funding through the evaluation contract for a technical assistance provider, TransCen, to help the projects design and implement services and make certain that all recommended components were included in the projects' service approaches. As an integral part of the evaluation, TransCen helped Youth Works implement the core employment-focused components and integrate them into the project's intervention; it delivered other technical assistance as needed. The evaluation team met regularly with TransCen to learn about project-specific issues and challenges. Information obtained from these meetings also fed into the process analysis and helped the evaluation team understand the project's successes and challenges.

The process analysis relied heavily on quantitative data from the Youth Works management information system. As part of the YTD evaluation, each project was provided with ETO, which served as a case management tool for project line staff and a management tool for project managers, and provided information for the evaluation on services delivered. Process analysis data on enrollment activities and service utilization came from ETO. Staff members used ETO to record outreach efforts related to enrolling youth in Youth Works and information related to the provision of services to or on behalf of enrolled youth. Services included individualized services, such as assistance in preparing a resume, and group services, such as conducting a job fair. Staff also entered information on services provided on behalf of youth, such as contacting a community partner to arrange services for a specific youth. Staff time on the project not directed to helping specific youth was not included in ETO (for example, meeting with community partners to discuss service needs for YTD youth generally). In addition, staff time provided on behalf of youth but not involving the delivery of services was not included in ETO (for example, time spent travelling to meet with a youth).²⁹

We used the ETO data to address critical questions related to enrollment efforts, participant take-up of project services, type and level of services, and other service delivery issues. The sample for the analysis of enrollment included all youth randomly assigned to receive an offer of Youth Works services (that is, all treatment group members), while the sample for the analysis of service utilization included just those treatment group youth who enrolled in Youth Works (about 85 percent of all treatment group youth). We had 15 months of ETO data available (through December 2011). As part of the process analysis, we also assessed the use of ETO by project staff and addressed its strengths and limitations in tracking services.

The process analysis relied on ETO data to describe service utilization among youth in the treatment group who had participated in Youth Works. In contrast, the impact analysis of service utilization used data from the 12-month follow-up survey to compare service utilization among treatment and control group youth. For several reasons, data from the survey are not directly comparable to ETO data. For example, ETO may provide more complete data on service utilization because the data were entered by project staff at the time of service delivery, whereas the follow-up

²⁹ Our analysis suggests that, in some cases, certain services were improperly omitted from ETO by YTD project staff at all six of the random assignment sites (see Wittenburg et al. 2009 for information on the quality of ETO data for Youth Works approximately six months after the start of project operations). Problems occurred despite the evaluation team's delivery of substantial technical assistance to site staff on the use of ETO. Information to correct past omissions was not available. However, additional technical assistance was provided to reduce improper omissions going forward.

data rely on youths' recall of services received. Furthermore, ETO data reflect staff time spent on services with or on behalf of a specific youth. In contrast, youth reports in the survey data do not include efforts made on their behalf when the efforts did not directly involve them (such as calls made by Youth Works staff to potential employers). In addition, our analysis of ETO data covered 15 months following random assignment, whereas our analysis of the follow-up survey covered 12 months after random assignment. On the other hand, the follow-up survey data could reflect services not captured in ETO because youth reports of service receipt included services provided by organizations or programs other than Youth Works, whereas ETO captured Youth Works services only.

We used data from the baseline survey to provide information on the characteristics of the youth the project intended to serve, allowing us to develop useful descriptions of the target population and those who enrolled in project services. We compared the baseline characteristics of treatment group youth who participated in Youth Works with the baseline characteristics of treatment group youth who were offered the opportunity to receive project services but chose not to participate, using the baseline survey data and SSA administrative data on earnings and benefits. Finally, data from the 12-month follow-up survey provided information on participants' satisfaction with project services. Table II.4 summarizes the key sources of data for the process analysis of Youth Works.

Table II.4. Data Sources for the Process Analysis

Methodology	Time Period	Number of Observations	Nature of Information
Site visits: Youth Works staff interviews ^a	11/2008	HRDF: 8 staff, 3 managers CED: 1 staff, 2 managers	Youth Works service delivery
	9/2009	HRDF: 12 staff, 5 managers CED: 1 staff, 2 managers	
	4/2011	HRDF: 14 staff, 3 managers CED: 2 staff, 2 managers	
Site visits: partner interviews	9/2009	4 staff and managers of partner organizations	Other services in the state; partnership with Youth Works
	4/2011	4 staff and managers of partner organizations	
Site visits: focus groups	4/2011	20 Youth Works participants; 7 parents of participants	Services received and satisfaction
Efforts-to-Outcomes (ETO)	15 months after RA	455 treatment group members	Youth Works enrollment efforts and results
Efforts-to-Outcomes (ETO)	15 months after RA	388 Youth Works participants	Service efforts
YTD baseline survey	12 months before RA	455 treatment cases	Background information
YTD 12-month survey	12 months after RA	336 Youth Works participants who responded to the survey	Satisfaction with Youth Works services
SSA administrative records	12 months before month of RA	455 treatment cases	Benefits
SSA administrative records	Year before year of RA	455 treatment cases	Earnings
SSA administrative records	12 months after RA	388 Youth Works participants (less 1 deceased participant)	Use of SSA waivers and work incentives

^aTwo researchers and two research assistants conducted each of the site visits: however, two additional researchers joined the team on the third visit to conduct focus group discussions.

HRDF = the Human Resource Development Foundation

CED = the Center for Excellence in Disabilities at West Virginia University (subgrantee to HRDF)

RA = random assignment

III. IMPLEMENTATION OF YOUTH WORKS

Youth Works provided comprehensive services to promote employment and foster self-sufficiency for youth with disabilities, with a particular emphasis on work-based experiences. Youth Works staff customized the services to meet the unique needs of participants and often met with them on an individual basis in their homes, schools, community centers, and workplaces. The project served 388 randomly assigned youth who were 15 through 25 years old, had a wide range of disabilities, and received Social Security disability benefits. The project operated in 19 counties, which were assigned to two administrative regions in the northern and southern portions of the state (Figure III.1). Enrollment occurred during two phases in each region. The model of service delivery and the duration of services were identical across phases and regions, but the intensity of services may have been greater during the second phase.

HRDF, in partnership with the Center for Excellence in Disabilities (CED) at West Virginia University, implemented Youth Works. HRDF provided most project services, while the CED provided benefits counseling. The frontline service-delivery staff consisted of customized employment specialists (CESs) and job developers at HRDF and benefits counselors at the CED. The CESs recruited youth and enrolled them as participants in the project. They then worked one on one with the participants, often in their homes, conducting assessments, providing case management services, and preparing them for employment. The job developers worked primarily with employers to identify job opportunities for participants. They also coordinated with the CESs and worked directly with participants to provide job placement services. Finally, the benefits counselors provided planning and counseling on benefits from SSA and other public assistance programs, and assisted Youth Works participants in accessing the waivers that SSA had established for YTD.

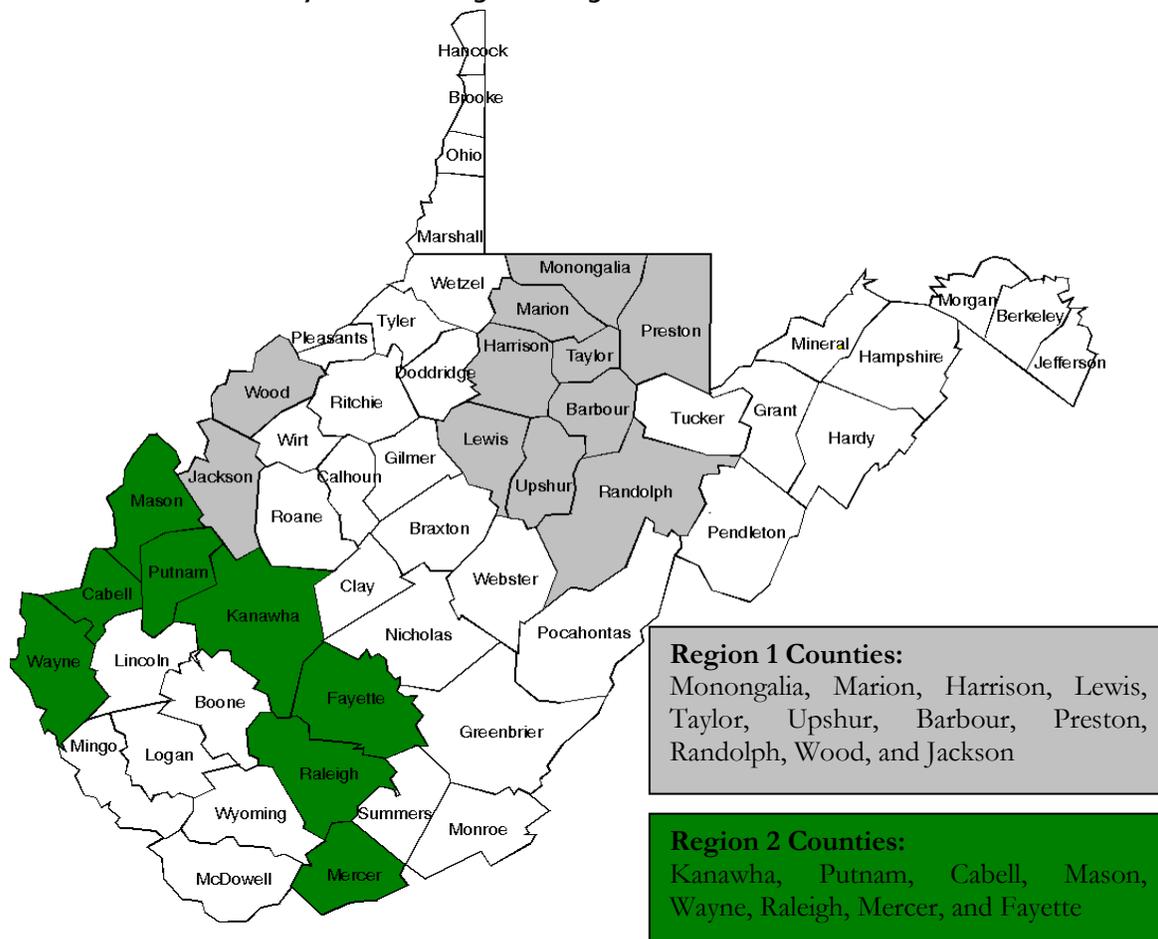
The initial sections of this chapter provide an overview of HRDF and its formal and informal partners in implementing Youth Works, describe the local environment in which Youth Works operated, flesh-out the organization and staffing of the project, and describe project services. Later sections present quantitative findings from the project's management information system, ETO, on the enrollment of youth in the project and the receipt of services from youth Works by enrolled youth. The chapter concludes with a discussion of lessons learned from the implementation of Youth Works that may be useful for similar projects.

A. Overview of the Sponsoring Organization and Its Partners

HRDF administered Youth Works and was directly responsible for providing most services under the project. At the time of its initial involvement in YTD, in 2007, HRDF had 40 years of experience administering employment programs, occupational skills training, and education programs for disadvantaged youth and adults. It also had extensive experience in the construction and management of subsidized housing for both the elderly and people with disabilities.³⁰ HRDF's central office was in Morgantown, where it remains as of this writing. It also had regional offices in eleven locations around the state, which facilitated the implementation of Youth Works across the project's large service delivery area. All management-level staff assigned by HRDF to Youth Works had experience delivering employment services to disadvantaged individuals, and the youth Works

³⁰ HRDF's sister corporations, Human Resource Development and Employment (HRDE) and Unity Housing, operate the subsidized housing programs.

Figure III.1. Service Delivery Area and Regional Organization for Youth Works



project manager had extensive experience providing supported employment to youth with disabilities.

Youth Works was one of three YTD pilot projects selected by SSA in November 2007 for full implementation from April 2008 through March 2012.³¹ Youth Works was initiated on a pilot basis in January 2007 to demonstrate its ability to enroll youth and deliver services. During the year-long pilot phase, a small staff of CESs and benefits counselors enrolled and provided services to 24 youth. During the full implementation phase, HRDF maintained essentially the same service model for Youth Works, but greatly expanded the project staff to serve the 388 youth who eventually enrolled in services. The principal refinement to the model was the addition of a new staff position for job developers, which was done in recognition of the centrality of the project’s goal of promoting employment among youth with disabilities.

Beginning during the pilot phase and continuing through full implementation, HRDF initiated and fostered strong working relationships with a number of service providers that significantly enhanced Youth Works. Most notable among these partner organizations were the CED at West

³¹ Martinez et al. (2008) describe the six random assignment YTD projects and the selection of the final three of those projects from five pilot projects.

Virginia university, with which HRDF executed a memorandum of understanding formalizing the CED's provision of benefits counseling services to Youth Works participants. Established in 1978, the CED provides community living, assistive technology, health and wellness, and employment supports to state residents with disabilities. Of particular relevance to the Youth Works project was the CED's designation as the sole Work Incentives Planning and Assistance (WIPA) provider in West Virginia.³² Because of their experience in providing counseling on SSA benefits under the WIPA project and their resultant contacts at SSA field offices, the CED's staff could efficiently address the needs of Youth Works participants for information about their benefits and the use of work incentives.³³

In addition to its formal arrangement with the CED, Youth Works had informal relationships with a number of organizations that serve youth with disabilities in West Virginia. These included the West Virginia Division of Rehabilitation Services (DRS), WorkForce West Virginia, service providers funded by the Medicaid Waiver Program, and public schools districts in the project's 19-county service delivery area. At the start of the project, Youth Works management and staff held several informational meetings in Regions 1 and 2 with various stakeholders to provide information about the project, particularly with disability service providers, vocational rehabilitation providers, Centers for Independent Living, and the ARC. Youth Works leveraged the relationships that it fostered with these organizations to provide project participants with additional services, such as education supports (e.g., tuition assistance), transportation assistance, and employment support.

TransCen, Inc., under subcontract to Mathematica, provided training and technical assistance to all of the YTD projects, including Youth Works. TransCen trained project staff on individualized and customized employment services, case management, and re-engagement of uninvolved participants. That training shared effective strategies for achieving positive employment outcomes for Youth Works participants with CESs. Additionally, TransCen provided support to job developers, especially with respect to networking employers and developing an understanding of their operations and staffing requirements. TransCen delivered training and technical assistance through annual YTD conferences, site visits, monthly conference calls with staff from all YTD projects, and telephone calls directly with Youth Works staff.

B. Local Context and Infrastructure

1. State Socioeconomic Characteristics

Youth Works operated in a state with high rates of disability among both adults and children, which created a large pool of potential candidates from which to recruit for full implementation. West Virginia has the largest share of adults with disabilities and ranks third among all states in the proportion of children ages 5 to 17 with disabilities. The prevalence of self-reported disability among adults and children in 2009 was 19 percent in West Virginia compared with 12 percent nationally.³⁴

³² During the period of the YTD random assignment evaluation, SSA funded 103 WIPA projects throughout the country. They provided disability beneficiaries with information about SSA work incentives and assistance in using the incentives.

³³ HRDF assumed responsibility for benefits planning services in Youth Works during the final nine months of the project's operation, starting in the summer of 2011. By that time, the caseload had declined, making it efficient to consolidate all project services in a single organization. During this period, HRDF staff delivered follow-up benefits planning services primarily by telephone.

³⁴ See <http://cedwvu.org/facts.php>, for statistics on West Virginia disability prevalence and <http://www.disabilitycompendium.org/> for national disability prevalence rates.

Consistent with this high prevalence of self-reported disability, there were over 80,000 residents of West Virginia (approximately 9,000 of whom were under age 18) who received SSI in 2010 (Table III.1). The per capita rates of SSI receipt were substantially higher in West Virginia than for the entire United States: 2.4 percent of children and 4.9 percent of adults in West Virginia received SSI, compared with national rates of 1.7 percent and 2.9 percent, respectively.

West Virginia's relatively low population density created special challenges for enrolling youth as participants in the project and delivering services to them, even though many of the state's most thinly populated counties were not included in the service delivery area. The state had a population of 1.9 million persons in 2010, and a population density 75 persons per square mile, which was below that of the entire United States (Table III.1). This likely contributed to the low use of public transportation among the state's residents; less than one percent of West Virginians reported using public transportation in 2010. As noted later in this chapter, the lack of public transportation was a major barrier to employment for many Youth Works participants.

West Virginia was negatively affected by the economic recession that officially began in December 2007, but somewhat less so than many other states and the country as a whole. The annual unemployment rate for 2007 was 4.6 percent for the United States and 4.2 percent for West Virginia (Table III.1). The annual unemployment rate peaked in 2010 at 9.6 percent for the country and 8.5 percent for the state. Nevertheless, West Virginians were economically disadvantaged during this period relative to the residents of most other states. In 2010, West Virginia's median household income of \$38,218 was well below the national median of \$50,046, and its poverty rate was three points higher than the national rate. The general scarcity of jobs in the service delivery area for Youth Works, especially in the more rural locations, was a major challenge for the project in facilitating employment for project participants.

2. Existing Services for People with Disabilities

A number of public and private agencies provided services to youth with disabilities in West Virginia during the period of performance of Youth Works (2008-2012). However, those services were often fragmented, uncoordinated, and limited, with many agencies resorting to waiting lists to manage excess demand. A major challenge noted during our 2009 and 2011 site visit interviews with West Virginia service providers (e.g., school districts and providers of DRS-funded services), was that these organizations had very limited funds to provide services to geographically dispersed youth. Some of these service providers lacked systematic means of identifying youth who were potentially eligible for their services. During our 2011 interviews, the staff of several service providers told us that Youth Works performed a critical service coordination function by referring eligible youth to their programs.

The West Virginia DRS is one of the largest providers of services to state residents with disabilities. Its services include vocational training, job development, job search and placement assistance, post-employment services, attendant care services, counseling and guidance, and rehabilitation. To be eligible for DRS services, a person must have a physical and/or mental disability that affects his or her ability to work or get and keep a job. Eligibility usually is determined within 60 days of application. The DRS offers services to students with disabilities to help them transition from school to employment and adult life. DRS counselors work with students, their family members, and their teachers to develop formal individualized plans for employment, which document the students' employment goals and the services that are available to them. During the operation of Youth Works, the DRS moved away from funding services that were provided in institutional settings to funding services that were provided in community-based settings. However,

Table III.1. Characteristics of the Service Environment for Youth Works (percentages, unless otherwise noted)

	West Virginia	United States
Demographic and Economic Characteristics		
Population (number)	1,853,973	309,349,689
Population density (number per square mile) ^a	75.1	87.4
Median annual household income (\$)	38,218	50,046
Residents below the federal poverty level	18.1	15.3
Residents with disabilities below the federal poverty level ^b	24.8	21.8
Language other than English spoken at home	2.2	20.6
High school graduate, over age 25 ^c	83.2	85.6
Bachelor's degree or higher, over age 25	17.5	28.2
Unemployment rate, 2007	4.2	4.6
Unemployment rate, 2010	8.5	9.6
Percentage of employed population in manufacturing ^d	7.7	10.4
Percentage of employed population in services ^d	20.0	18.0
Public transportation use ^e	0.7	4.9
SSI Beneficiaries		
Number under 18 years old	9,216	1,277,109
Percentage of population under age 18	2.4	1.7
Number age 18 and older	71,151	6,831,266
Percentage of population age 18 and older	4.9	2.9
Other Disability Beneficiaries (all ages)		
Number of recipients of Childhood Disability Benefits	10,890	949,200
Percentage of total population	0.6	0.3
Number of SSI/DI concurrent beneficiaries	25,788	2,697,963
Percentage of total population	1.4	0.9

Sources: U.S. Census Bureau, 2010 American Community Survey; U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics; Social Security Administration 2011 and 2012.

^aPopulation density calculations as of December 2010.

^bAll residents with disabilities constitute the denominator for this statistic.

^cIncludes high school equivalency.

^dThese measures refer to civilian workers age 16 and older.

^eThe percentage of all workers, age 16 and over, who use public transportation (excluding taxicabs) to travel to work.

SSI = Supplemental Security Income; DI = Social Security Disability Insurance.

NA = not available.

access to DRS-funded services by transition-aged youth was quite limited during this period, so it is unlikely that this change had any substantive impact on the service environment for either Youth Works participants or their counterparts in the evaluation's control group.

WorkForce West Virginia, the state's network of One-Stop Workforce Centers, is another major provider of services to West Virginians with disabilities. It partners with programs under the Wagner-Peyser Act and Workforce Investment Act, as well as other programs that promote employment. Through WorkForce West Virginia, job seekers can search an online database for available jobs, post resumes to apply online for jobs, research careers, file for unemployment compensation, and identify job training opportunities. HRDF is a WorkForce West Virginia partner, with offices in several of the One-Stops. Youth Works was able to leverage resources from this partner, especially to help project participants search for jobs. However, aside from its partnership with Youth Works, WorkForce West Virginia was not a significant provider of services to people with disabilities.

The Bureau for Behavioral Health and Health Facilities in the West Virginia Department of Health and Human Resources provides employment, rehabilitation, and housing services to people with intellectual/developmental disabilities and psychiatric impairments through the Title XIX Medicaid Waiver Program. Access to these services depends on an individual's medical and financial eligibility, as well as the level of funding for the program. When the demand for services exceeds the available funding, eligible individuals are placed on waiting lists. A small number of Youth Works participants received extensive services funded by the Medicaid Waiver Program. These included professional services for intellectual/developmental disabilities, transportation services; and environmental accessibility adaptations.

Finally, public school districts in West Virginia are a source of transition services for youth with disabilities. These services vary considerably by county, and are notably sparse in rural areas. Most Youth Works participants were no longer enrolled in school. However, project staff did accompany some participants who were in school and receiving special education services to meetings with school staff to coordinate Youth Works services with school-based transition services.

C. Organization and Staffing of Youth Works

1. Management and Staffing Plan

The Youth Works management team comprised five individuals from HRDF and the CED. The director of education, training, and employment services at HRDF served as the Youth Works project director, with responsibility for contractual relationships with Mathematica and the CED. The project director supervised the Youth Works project manager, who had overall responsibility for operations in both of the regions served by the project and direct responsibility for operations in Region 1. These two individuals were based in HRDF's Morgantown office. A regional coordinator, based in HRDF's Charleston office, had direct management responsibility for Youth Works operations in Region 2. The manager of the CED's WIPA program, who was based at WVU in Morgantown, supervised all benefits counseling under Youth Works. The fifth member of the management team was an HRDF staff member who served as the ETO site administrator for Youth Works, providing design, maintenance, and training support for the project's management information system.

The Youth Works CESs were the central point of contact with the project for participants. They conducted person-centered planning with participants and their families and provided case management-services, including referrals to the benefits counselors and outside agencies. The CES helped participants to formulate their career goals and prepare for employment. While all CESs provided job placement services, some of them did so intensively while others were more inclined to refer their participants to the Youth Works job developers. Active caseloads for CESs ranged from 20 to 30 cases, with larger caseloads in urban areas where there were more participants.

The job developers conducted outreach to employers to introduce Youth Works, learn about their organizations, and describe the services offered by the project, including wage subsidies and on-the-job training. They also worked with participants and their CESs to find appropriate jobs and to provide post-employment support, most notably job coaching. In general, job developers were responsible for job development and post-employment support, whereas CESs were responsible for services that were delivered to participants prior to job placement and for case-management services. As will be described in Section D, there was some overlap in CES and job developer

responsibilities as Youth Works staff attempted to meet the needs of participants in a timely fashion.³⁵

The Youth Works benefits counselors from the CED interacted with participants at three different points in their involvement in the project. The first of these was at the time of the youth's enrollment in the project, or shortly thereafter. The second was after they had obtained paid employment or experienced changes in their benefits. And the third was just prior to the termination of project services for each participant. The initial interaction was in-person, but most of the subsequent interactions were by telephone. The benefits counselors did occasionally schedule in-person follow-up meetings with participants, but these often entailed extensive travel by the counselors and it was not unusual for participants to miss these appointments.

The coordination of service delivery among the three staff positions was primarily the responsibility of the CESs. Once a participant was ready for job development and/or placement services, the youth's CES would work with a job developer to initiate the delivery of employment supports. The CES would also determine whether a participant had an on-going need for benefits planning services (for example, after obtaining paid employment) and, if so, follow-up with the benefits counselor, who would then deliver those services.

Youth Works management and frontline staff met on a frequent periodic basis to organize and manage activities within and across the project's two regions. In these meetings, service-delivery goals for individual staff members were outlined and plans for upcoming group activities were developed. Staff also presented challenging cases and shared ideas for addressing them. The benefits counselors initially did not participate in these meetings, but when some service lapses arose due to incomplete coordination, Youth Works management expanded the meeting to include them.

2. Enrollment Phases and Changes in Staffing

As designed and as implemented, the enrollment of treatment group members in Youth Works occurred in two distinct phases to allow project staff to work intensively with smaller caseloads. Phase 1 of enrollment started in April 2008 in Region 1 and in September 2008 in Region 2. Phase 2 of enrollment started in December 2009 in Region 1 and in January 2010 in Region 2. There was a six-month gap between the phases during which virtually no enrollments occurred. In both phases, services for individual participants lasted approximately 18 months, after which time cases were closed, although exceptions were made to the rule for a substantial minority of participants, primarily to allow employment support services to be continued.

A team of 14 frontline staff members delivered Youth Works services during phase 1. Eight CESs, four job developers, and two benefits counselors were allocated approximately evenly across the two regions.³⁶ At the end of phase 1, two additional frontline staff members were added to the project. These individuals assisted with phase-2 enrollment and provided job coaching services to certain employed participants. Notwithstanding this expansion in staffing, there may have been

³⁵ In some Youth Works locations, the CESs and job developers combined their efforts, with a resultant blurring of the distinctions between the two positions. For example, some CESs did job coaching when needed, while some job developers occasionally provided case management services.

³⁶ There were seven full-time and one 80-percent-time CESs, two full-time and two 80-percent-time job developers, and one full-time and one half-time benefits counselor.

some reduction in the intensity of services for individual participants during the approximately four months when phase-1 services and phase-2 services overlapped.

Low staff turnover on Youth Works was a strength of the project over its entire period of performance. There was essentially no turnover in the five management positions and minimal turnover in the frontline positions.³⁷ All five members of the project management team from HRDF and the CED already had long tenures (five years or more) with their organizations, so the lack of turnover in these positions was not surprising. The reasons for the low turnover in the frontline positions are more difficult to identify, particularly given that many of those positions were filled at the outset of the project by individuals who had not previously been associated with HRDF or the CED. During our site visit interviews, many of the frontline staff spoke of the importance of their work in affecting the lives of young people with disabilities. The project management team consistently reinforced that perspective, which fostered strong staff morale. HRDF also had a long history of providing services in West Virginia, which likely made jobs with Youth Work's desirable and competitive. For example, when there were open frontline positions, they were typically filled within a month. The low turnover among frontline staff facilitated their maintaining consistent relationships with participants, which promoted the attainment of personal and project goals. In focus group discussions that we conducted with participants and their parents, the consistency of Youth Works staffing was noted and positively contrasted with staffing on other programs, which was often fragmented.

D. Youth Works Services

Frontline Youth Works staff from HRDF and the CED delivered project services to individual youth in the following four stages:

- **Enrollment and goal identification.** A treatment group member was enrolled in the project; initial benefits counseling was provided; the youth's interests, assets, and challenges were assessed; and a person-centered plan (PCP) was developed. A PCP is a roadmap for services that is driven by an individual's strengths and preferences rather than by the structure of the service system.
- **Job development and placement.** The participant prepared for job search and employment, project staff conducted job development activities, and the participant obtained and engaged in employment.
- **Follow-up.** Project staff provided post-employment benefits counseling, job coaching, worksite visits, and job performance evaluations.
- **Participant close-out.** After a minimum of 18 months of services, the participant's Youth Works case was closed. At close out, the participant's PCP was reviewed; counseling was provided on the termination of the SSA waivers for YTD; and the participant was referred to other programs and agencies.

Youth Works staff also provided case management services and supports throughout a youth's engagement with the project. These promoted employment in a broad sense and included support for further education, transportation support, and referrals to social and health care services.

³⁷ The Youth Works project director retired from HRDF approximately nine months prior to the project end date.

Figure III.2 illustrates how youth progressed through the four stages of Youth Works. The remainder of this section expands upon these stages and their service components.

1. Enrollment and Goal Identification

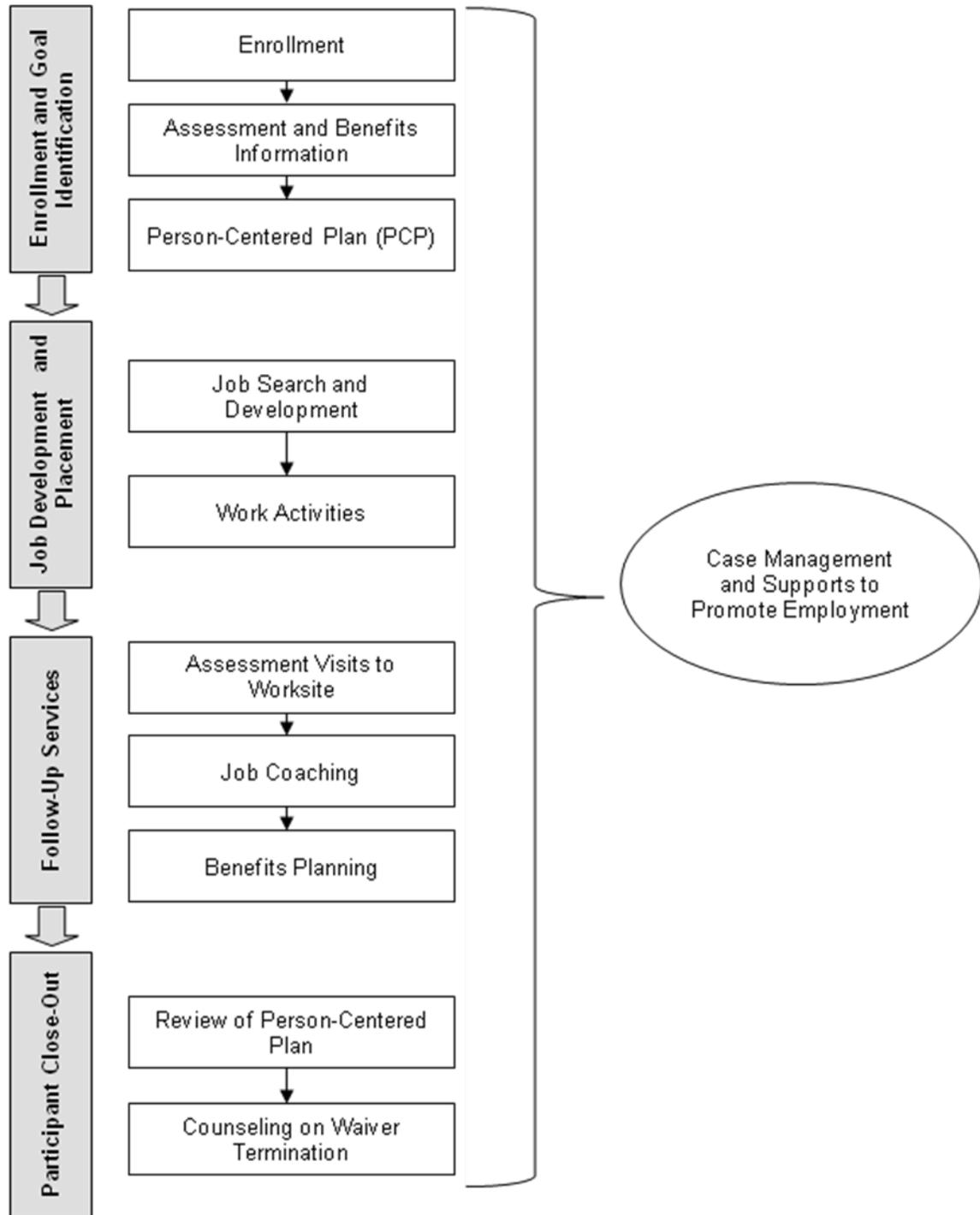
After randomly assigning a youth to the evaluation's treatment group, Mathematica used ETO to transfer information about the youth, including name and contact information, to Youth Works. Upon receipt of this information, the project manager assigned the youth to a CES, based on staff caseloads and proximity of the youth's residence to the various Youth Works offices. The CES attempted to contact the youth by telephone to schedule an enrollment meeting; however, such contact was frequently ineffective, so the CES had to visit the youth's home to either conduct the enrollment meeting on-the-spot or schedule it for a future date. In these cases the initial in-person contact was necessary to gain the trust of the youth and his or her family and generate sufficient interest in Youth Works to move forward with enrollment.

During the enrollment meeting, which typically occurred in the youth's home, the CES provided an overview of the project's goals, services, and waivers. Enrollment was formalized at this time by the youth or guardian signing an "agreement to participate" form as well as several data release forms. Following a successful enrollment meeting, the CES updated the participant's information in ETO, executed a step in ETO that classified the youth as having been enrolled, and informed the benefit counselors (via e-mail or telephone) of the youth's decision to participate in the project.

Through a process that often began during the enrollment meeting and typically continued through at least one subsequent meeting, the CES assessed the participant's abilities, challenges, and interests, and worked with him or her to identify employment goals and develop a PCP. Tools used in this process included (1) a parent and participant survey to obtain information on the needs of the youth and the family; (2) a positive personal profile describing the youth's long-term employment goals (including, for example, a written description of the youth's ideal job) to facilitate the identification of vocational ideas, skills, and interests; and (3) an employment skills checklist. The CES conducted additional assessments to capture information on employability and barriers to employment; medical and dental needs; grooming; and housing. Using the information thus obtained, the CES worked with the participant and a job developer to develop a PCP detailing the plan of action for each stage of the intervention. It specified career interests, short- and long-term employment goals, and strategies for overcoming barriers to employment and independence. The youth's active involvement in developing the PCP fostered his or her commitment to carry out the plan.

Youth Works benefits counselors often accompanied CESs to enrollment meetings and initiated benefits planning at that time. Even when that did not occur, benefits planning was initiated within a month of enrollment and the initial meeting for that purpose was in-person. The counselor reviewed the participant's current benefits and explained both the basic SSA work incentives and the enhanced incentives provided by the waivers for YTD. One purpose of this meeting was to allay concerns that the youth would lose his or her benefits or health insurance as a consequence of employment obtained through Youth Works, and the waivers were a powerful tool in this regard. Following the meeting, the counselor submitted a Benefits Planning Query (BPQY) to the local SSA office to obtain a detailed review of the youth's benefit situation. The counselor used the BPQY to prepare a detailed benefits assessment, which included advice on the implications of paid employment for benefit amounts and the importance of reporting earnings to SSA in order to avoid overpayments. The benefits counselor sent this assessment to the participant, typically within

Figure III.2. Participant Flow Through West Virginia Youth Works



45 days of enrollment. Youth Works management used reporting functions in ETO to ensure that initial benefits counseling was delivered in a timely fashion and that follow up counseling was provided promptly when a participant needed it.

A key function of the benefits counselors was to resolve any benefit issues identified in participants' BPQYs. This was especially critical for avoiding or resolving over or underpayments of benefits, which could arise due to changes in the participants' lives, such as the initiation of paid employment or entry into new living arrangements. In some cases, these changes occurred even before youth entered the project and were identified shortly after enrollment. The benefits counselors worked with the participants to understand these issues and they often directly contacted the SSA field offices to resolve them.

2. Job Development and Placement

As laid out in the PCP, a Youth Works participant might engage in basic employment-preparation activities and then quickly move into competitive paid employment. Alternatively, a participant might require more extensive preparation before taking a competitive paid job, including any of several types of work-based experiences. Regardless of a participant's path to paid employment, he or she received assistance from a CES, with additional support provided by a job developer.

A CES helped each participant acquire the necessary skills to engage in job search and work activities through individual counseling, workshops, and referrals. Specific activities included preparation of a resume, mock interviews, correction of hygiene problems, and development of a transportation plan. Youth Works also offered workshops on time management, communication in the workplace, financial literacy, independent living, conflict resolution, and job retention. As necessary, referrals were made to other programs for supportive services to remove other barriers to employment. Because of HRDF's long-standing relationship with WorkForce West Virginia and the diversity of employment supports it could provide, the CESs primarily referred participants to One-Stop Workforce Centers for additional employment related supports. There, participants engaged in skills testing, accessed the online job listings, polished their resumes, and gathered general information on transition supports.

Assisted by a CES and a job developer, a participant in Youth Works was expected to take an active role in the job search process. The youth learned how to contact employers, fill out applications, and interview for positions. He or she could take advantage of opportunities provided by the project to attend job fairs and participate in informational interviews with employers to learn about specific jobs and careers. The job developer used his or her contacts with employers, as well as contacts developed by HRDF staff on other programs, to supplement and focus the job search process. At the end of this process, the youth was expected to have obtained a paid job in either an existing position or one that had been customized to match the youth's interests and abilities. When that occurred, the job developer provided limited job coaching and follow-up support. Melvin's story on page 40 illustrates how Youth Works enabled participants to identify career paths that matched their interests.³⁸ If more extensive job coaching, adaptive technologies, or transportation

³⁸ Melvin's story (and Candice's story on page 51) is presented to illustrate the various services provided by Youth Works. To ensure that we supplied enough information to present a comprehensive picture of youth experiences, we selected youth who were active participants in Youth Works. These vignettes thus are not representative of a typical Youth Works participant's experiences or outcomes.

Melvin's Story

Melvin, who lived in an apartment with his mother and grandmother in Charleston, enrolled in Youth Works a few days after his 22nd birthday. At that time, he was receiving SSI based on a mental impairment. He had already graduated from high school, but was neither working nor attending post-secondary school. Melvin's assigned CES engaged him in discussions of his general interests and his educational and career goals, and then worked with him to develop a PCP. During the discussions and planning, Melvin identified several of his barriers to employment. The most notable of these was a problem with anger management, especially in difficult, high-stress situations. The CES helped Melvin to practice redirecting his anger, particularly in work environments, to achieve his desired outcomes.

The CES assisted Melvin with updating his resume and searching for a job. After several months, Youth Works staff placed Melvin in a full-time position as a host in a restaurant. While working at that job, he applied for a wait staff position at another restaurant and eventually was hired for that position, earning \$7.25 per hour for 40 hours per week. It was Melvin's belief that he would not have achieved employment without the help he received from Youth Works.

During the course of his participation in Youth Works, Melvin developed a passion for personal fitness. He discussed with his CES ways that he might incorporate this interest into a career. Subsequently, Melvin entered training to become a Zumba instructor, with the intention of teaching classes at a local gym. Melvin was also interested in entering a college-level health sciences program to obtain a degree in personal fitness. His CES provided him with the names of several relevant faculty members at local colleges with whom he could engage in more detailed discussions of his academic and career interests. His CES also reviewed the federal student aid application process with him. As Melvin exited Youth Works, he was employed and on a path that could allow him to integrate his personal interests with a career.

assistance were required, Youth Works coordinated with other service providers to make sure that those supports were in place.

It was a challenge for Youth Works management to clearly define and distinguish the duties of the CESs and job developers. In the early stages of the project, the activities of these two staff positions often overlapped with respect to job search, job placement, and case management. One of the reasons for this was that project participants often wanted assistance immediately and went to the first available staff member, regardless of position, or they sought out the individual with whom they were most comfortable. However, Youth Works management identified the lack of clarity regarding these two positions as an issue and took steps to more clearly define them. As a consequence of those steps, the CESs ultimately came to focus their efforts on participants, while the job developers became especially attuned to the needs of employers. Management also allowed CESs and job developers to create hybrid positions, in which a single staff member performed both the CES and job developer functions for certain participants, typically those who were geographically far removed from the nearest job developer. Youth Works participants recognized that the CESs were their central point of contact with the project, although they understood that they could also contact the job developers directly, especially regarding employment-related supports. During qualitative interviews, the CESs and job developers mentioned that they often collaborated to meet the needs of participants, particularly those related to transportation and job coaching for youth who had started working.

Over the full period of performance of Youth Works, TransCen provided intensive technical assistance to project staff on PCP, job development, job placement, and post-employment support services. This included the development of two forms, both of which were implemented in

July 2008. The job developers used one of these forms to report their contacts with employers. This allowed project management to monitor whether the job developers were aggressively reaching out to employers in their regions and achieving goals that had been established for such contacts. The second form was used to track the employment readiness and employment status of all Youth Works participants. The CESs completed it on a monthly basis and submitted it to project management. A section of this form, referred to as the “hot list,” identified youth who were ready for paid employment but had not yet obtained jobs. Both of these forms were central to the day-to-day operation of Youth Works and served to focus the attention of job developers and CESs on forming relationships with employers and helping participants to obtain paid jobs. In June 2010, these forms were supplemented with a set of reports, prepared monthly by Mathematica from ETO data, on hours of efforts provided by project staff on behalf of participants and on employment outcomes for participants. The management of Youth Works met monthly with the evaluation team and SSA to discuss these reports, thus underscoring the centrality of employment to the intervention. The last of these reports showed that just over half (50.5 percent) of Youth Works participants had been employed in paid competitive jobs at some point during their involvement in the project.

3. Follow-Up Services

Youth Works provided follow-up services to improve employment retention and ensure the accuracy of benefits for participants who had obtained paid jobs and certain other work-based experiences. These services included assessment visits to the worksite by project staff, job coaching, and benefits planning.

After a participant had obtained a paid job or had been placed in a work experience, the CES or job developer followed a structured protocol for visiting the youth at the worksite and assessing his or her performance and the quality of the match. They conducted these visits weekly during the initial month of employment and less frequently thereafter for one year. During these visits, the Youth Works staff member observed the participant on the job and engaged him or her and the supervisor in discussions of job performance and related matters. The information thus obtained was recorded on a standard form on which the participant’s performance was assessed relative to the employer’s own criteria. Based on this assessment, the CES and job developer collaborated to identify and develop a plan for remediating any issues that jeopardized the youth’s success in that position.

Job coaching was sometimes necessary in order for a youth to perform a job with sufficient independence and efficiency to obtain or retain employment. Youth Works job developers typically provided job coaching directly, but in some cases they arranged for organizations like the ARC or Easter Seals to provide it. Participants who were likely to require job coaching in the event of their employment were often identified shortly after enrollment, during the assessment process, as flagged in their PCPs. The worksite assessment visits also revealed participants who were in need of this service. The duration and intensity of job coaching were determined by a youth’s ability to learn and perform the various functions of a job and varied greatly.

After a participant had obtained paid employment or experienced another change that might affect his or her benefits (e.g., an age-18 medical redetermination), the CES informed the benefits counselor of what had transpired. The benefits counselor would contact the youth, typically by telephone, to review the standard SSA work incentives as well as the waivers for YTD and to explain the procedures for reporting earnings to the SSA. These topics were originally addressed in the post-enrollment benefits planning session, but by covering them again it was hoped that benefit

overpayments could be avoided. As a follow-up to the meeting, the benefits counselor provided the youth with an updated written benefits assessment.

The benefits counselors often found it challenging to get in touch with participants for follow-up benefits planning. When they were successful, much of their subsequent work entailed interacting with the participants, their families, and the SSA field offices to ensure that benefit amounts were correctly calculated and paid. Over much of the project's period of performance, there was an ongoing issue of whether the waivers, especially the Section 301 waiver, had been applied correctly for certain youth. To address this, the Youth Works benefits counselors developed a list of project participants, which they sent to the SSA area work incentive coordinator (AWIC) to assess the participants' waiver status. The AWIC reviewed benefit payments for the youth and notified the field offices of any needed updates. The benefits counselors subsequently met monthly with the AWIC to ensure that these reviews continued through the end of the project.

4. Participant Close-Out

Youth Works provided 18 months of services to most participants, concluding with the closing out of each individual case. A review of progress toward the goals established in the PCP and counseling on the eventual termination of the YTD waivers were key close-out activities. A participant's CES met in-person with the youth and his or her family to implement the close-out process. The PCP was reviewed and the achievement of its goals discussed. If all present agreed that the goals had been attained and there were no outstanding work-related issues, then the case was closed. If non-work-related needs were identified, then referrals were made to other programs. Also as part of the close-out process, the benefits counselor sent the youth a package containing an updated benefits assessment and individualized information regarding the termination of SSA's waivers for YTD, including the implications for the youth's benefits. At this time the benefits counselor attempted to contact the youth by telephone to discuss these matters, but successful contacts were the exception rather than the rule.

5. Case Management

Case management services in Youth Works were intended to help participants achieve their employment goals. All front-line staff delivered case management services. In general, the CESs and job developers provided case management for employment and education issues, while the benefits counselors provided case management for other social and support services.³⁹ Key to the provisions of case management services was the existence of a pool of flexible funds that Youth Works staff could tap into to provide needed supports. This was especially important in addressing transportation issues, which constituted one of the biggest barriers to employment for Youth Works participants. Project staff used these funds to provide participants with bus tokens, vouchers for taxis, and financial assistance for driver's education.

An important aspect of case management was connecting participants with other programs. As noted in Section B of this chapter, the service system in West Virginia was fragmented, which made

³⁹ Promotion of educational attainment was not central to the Youth Works program model, but the project did provide participants with some education services. For participants who were still in high-school, the CESs attended individualized education program (IEP) meetings and assisted school transition coordinators in making referrals to DRS and other agencies. The CESs referred participants who had dropped out of high school to GED classes and helped those who wished to pursue post-secondary education to contact college offices that administer services for students with disabilities.

it difficult for providers to reach youth who did not proactively seek their services. The CESs worked with the participants and their families to identify additional supports that they could access from other public and private agencies. Referrals from Youth Works to these other service providers were important in building relationships between the project and those agencies. They also helped Youth Works participants to obtain additional needed services that were not always available or well funded by the project, such as education supports and intensive vocational rehabilitation supports (for example, dedicated job coaches). The biggest source of support through referrals was summer youth employment programs, which operated through local Workforce Investment Boards and received substantial funding through the American Recovery and Reinvestment Act of 2009. Several service providers, including HRDF, operated summer youth programs. These programs provided Youth Works participants with subsidized employment experiences that filled out their resumes and could be a springboard to competitive paid jobs.

Finally, Youth Works provided opportunities for participants and their families in each region to socialize with each other while learning more about disability benefits and employment-related services. These “career connections” events, which occurred several times yearly in each region, were organized and attended by one or two CESs and a benefits counselor. They were designed to be fun for the youth, often taking place in bowling alleys or at swimming pools and including gift bags and door prizes. Youth Works staff led discussions on job interviewing, career planning, and SSA benefits and other public assistance. They also organized Jeopardy-like games based on these same topics. Invited outside experts spoke at many of the events, sharing information on topics such as setting goals and achieving them, dos and don’ts for job interviews, and financial literacy. These group events were a valuable counterpoint in program model in which participants were otherwise atomistic recipients of services.

E. Enrollment in Youth Works

The effort to recruit youth into the evaluation of Youth Works and enroll them in project services began in April 2008 and ended in October 2010. As a result of that effort, 875 youth consented to participate in the evaluation. A total of 455 of the consenting youth were randomly assigned to the evaluation’s treatment group.⁴⁰ Youth Works staff successfully enrolled 388 (85 percent) of these youth in project services.

1. Enrolling Youth in Project Services

After the YTD evaluation team had randomly assigned a youth to the treatment group, it sent the youth’s contact information and selected information from the baseline survey to Youth Works via ETO. The project manager and Region 2 coordinator worked together to assign treatment group members to CESs, primarily based on location but also taking into account staff caseloads. The CESs reached out to the youth very soon after random assignment. In Table III.2, we show that the median elapsed time between random assignment and the first contact was four days for youth who eventually enrolled (“participants”) as well as those who did not (“non-participants”). The CESs contacted 80 percent of all treatment group youth during the first week after random assignment and another 15 percent during the second week. Following the initial contact, it typically required just over a week to enroll a youth in services; for youth who eventually enrolled, the median duration

⁴⁰ In addition, 17 of the evaluation enrollees were intentionally assigned to treatment status because they were siblings of treatment group members. Such youth were not part of the research sample and were not included in the analysis. Youth Works enrolled 16 of these youth in services.

Table III.2. Staff Efforts to Enroll Treatment Group Members in Youth Works

	All	Participants	Non-Participants	Difference		P-Value
Staff Enrollment Efforts						
Number of outreach contacts						
Total	2,253	1,750	503			
Average per youth	5.0	4.5	7.5	-3.0	***	0.00
Median per youth	4.0	3.0	6.0			
Staff time per contact						
Average (minutes)	18.4	20.9	9.5	11.4	***	0.00
Median (minutes)	5.0	10.0	5.0			
Staff time per youth						
Distribution of hours (%)						
Less than 1	24.6	19.8	52.2	-32.4	***	0.00
1 to less than 3	69.7	74.0	44.8	29.2		
3 to less than 5	4.8	5.4	1.5	3.9		
5 or more	0.9	0.8	1.5	-0.7		
Average (hours)	1.5	1.6	1.2	0.4	***	0.00
Median (hours)	1.4	1.5	0.9			
Duration of Enrollment Efforts						
Number of days from random assignment to first attempted contact						
Distribution of days (%)						
1 or less	9.9	9.0	14.9	-5.9		0.35
2 to 3	33.4	34.8	25.4	9.4		
4 to 7	36.0	36.6	32.8	3.8		
8 to 14	14.9	14.2	19.4	-5.2		
15 or more	5.7	5.4	7.5	-2.1		
Average (days)	6.0	5.7	7.6	-1.8		0.29
Median (days)	4.0	4.0	4.0			
Number of days from first attempted contact to enrollment in Youth Works						
Distribution of days (%)						
1 to 7	n.a.	16.2	n.a.			
8 to 14	n.a.	35.1	n.a.			
15 to 30	n.a.	25.8	n.a.			
31 to 60	n.a.	12.9	n.a.			
61 or more	n.a.	10.1	n.a.			
Average (days)	n.a.	19.9	n.a.			
Median (days)	n.a.	9.0	n.a.			
Number of days from random assignment to enrollment in Youth Works						
Average (days)	n.a.	24.5	n.a.			
Median (days)	n.a.	14.0	n.a.			
Sample Size	455	388	67			

Source: The Youth Works ETO management information system.

Note: The sample includes all youth who were randomly assigned to treatment group for the evaluation of Youth Works. Random assignment began on April 11, 2008, and ended on June 30, 2009. The first treatment group member enrolled in Youth Works on April 21, 2008; the last enrolled on October 4, 2010.

*/**/** The difference between participants and nonparticipants is significantly different at the .10/.05/.01 level, using a two-tailed t-test for mean values or a chi-square test for distributions.

n.a. = not applicable.

between first contact and enrollment was 9 days. The median number of days to complete the entire process, from random assignment to enrollment in services, was 14.

The CESs conducted enrollment efficiently, as they needed only about three contacts to successfully enroll a youth. As noted earlier, during the enrollment meetings, they provided information about Youth Works services and the SSA waivers for YTD to the youth and their families. The median time spent on enrollment for those youth who eventually did become participants was an hour and a half, with 94 percent of the participants enrolling in less than three hours. The median time spent attempting to enroll youth who never did become participants was slightly less than an hour. Thus, the CESs avoided investing large amounts of time in enrollment efforts that ultimately turned out to be unsuccessful. Although more than three times as many enrollment contacts were conducted by telephone as were made in person, the in-person contacts accounted for about two-thirds of the total staff enrollment time (results not shown). A large majority (71 percent) of the in-person contacts were home visits.

2. Characteristics of Participants and Non-Participants

Youth Works participants (the 388 youth who had agreed to enter the study, were randomly assigned to the treatment group, and enrolled in the project) and non-participants (the 67 youth who had agreed to enter the study, were randomly assigned to the treatment group, but did not enroll in the project) were similar with respect to many baseline characteristics. In Table III.3 we show no statistically significant differences between these two groups with respect to race, ethnicity, school attendance, living arrangements, self-reported health status, type and amount of disability benefits, duration of benefit entitlement, primary disabling condition, and earnings history. However, participants and non-participants did differ significantly with respect to five sets of baseline characteristics:

- **Employment.** Youth who participated in Youth Works (29 percent) were more likely to have received job training in the year prior to random assignment than those who did not participate (16 percent). Participants (14 percent) were also more likely than non-participants (5 percent) to have worked for pay in the month prior to random assignment. While a majority (60 percent) of the non-participants never worked for pay, that was true for less than half (46 percent) of participants.
- **Family socioeconomic status.** Only a third of participants (33 percent) were from families with annual incomes under \$10,000, whereas nearly half of the non-participants (47 percent) were from families with annual incomes below that level.
- **Expectations about the future.** Youth Works participants had higher expectations for the future than non-participants. Sixty-five percent of the participants expected to continue their educations and more than three-quarters (79 percent) of them expected to work at least part time for pay. Only a little more than half of the youth who did not participate in the project (53 percent) had such expectations.
- **Gender.** Youth Works participants (60 percent) were more likely to be male than were non-participants (49 percent).
- **Age.** On average, participants were about two-thirds of a year younger than non-participants

Table III.3. Baseline Characteristics of Treatment Group Members Who Did/Did Not Participate in Youth Works (percentages, unless otherwise noted)

	All	Participants	Non-Participants	Difference		P-Value
Baseline Survey Data						
Demographic Characteristics						
Race						0.47
White	80.4	80.9	77.6	3.3		
Black	8.8	9.0	7.5	1.6		
HI/Pacific/Am Ind/AK	3.1	2.6	6.0	-3.4		
Asian	.	.	.	.
Other or unknown	7.7	7.5	9.0	-1.5		
Hispanic	2.7	3.1	0.0	3.1		0.15
Primarily speaks English at home	98.2	98.4	97.0	1.5		0.40
School Attendance						0.42
Does not attend school	64.9	63.3	73.8	-10.5		
Attends regular high school	27.3	28.2	21.5	6.7		
Attends special high school	0.2	0.3	0.0	0.3		
Attends other school	7.7	8.2	4.6	3.6		
Employment						
Received job training in last year	27.2	29.1	16.4	12.7	**	0.03
Worked as a volunteer in last year	10.4	10.1	11.9	-1.8		0.65
Worked for pay in last year	27.5	28.9	19.4	9.5		0.11
Worked for pay in last month	12.5	13.9	4.5	9.4	**	0.03
Never worked for pay	48.4	46.4	59.7	-13.3	**	0.04
Living Arrangements						0.41
Two-parent family	45.9	45.2	50.0	-4.8		
Single-parent family	34.8	36.4	25.8	10.6		
Group home	0.4	0.5	0.0	0.5		
Other institution	0.9	1.0	0.0	1.0		
Lives alone or with friends	18.0	16.9	24.2	-7.4		
Family Socioeconomic Status						
Annual Income					*	0.09
Less than \$10,000	34.7	32.5	47.4	-14.8		
\$10,000 - \$24,999	35.5	36.7	28.1	8.6		
\$25,000 or more	29.8	30.7	24.6	6.2		
Mother is a high school graduate	68.1	66.7	77.6	-10.9		0.13
Self-Reported Health Status						0.87
Excellent	14.6	14.3	16.4	-2.1		
Very good/good	54.6	55.1	52.2	2.8		
Fair/poor	30.8	30.6	31.3	-0.7		
Expectations About the Future						
Expects to live independently (w/ or w/o help)	71.1	70.4	75.0	-4.6		0.50
Expects to continue education	63.4	65.0	52.9	12.0	*	0.10
Expects to work at least part-time for pay	75.1	78.5	52.9	25.5	***	0.00
Administrative Data						
Demographic Characteristics						
Male	58.7	60.3	49.3	11.1	*	0.09
Average age (years)	20.5	20.4	21.0	-0.7	*	0.08
Benefits						
SSI Beneficiary Status						
CDB or DI	5.9	5.9	6.0	0.0		0.99
SSI (only or concurrent with CDB or DI)	94.1	94.1	94.0	0.0		0.99
Duration of benefit entitlement (years)	7.9	7.8	8.3	-0.5		0.55
Benefit amount in year before month of RA	\$6,331	\$6,378	\$6,058	\$320		0.32
Disability						
Primary Disabling Condition						0.94
Mental illness	23.3	22.6	27.1	-4.5		
Cognitive/developmental disability	41.2	41.6	39.0	2.6		
Learning disability/ADD	14.5	14.4	15.3	-0.9		
Physical disability	16.6	16.8	15.3	1.6		
Speech, hearing, visual impairment	4.4	4.6	3.4	1.2		
Duration of disability (years)	8.2	8.2	8.5	-0.3		0.74
Earnings in Year Before Year of RA	\$728	\$750	\$599	\$152		0.61
Sample Size	455	388	67			

Sources: The baseline survey for the YTD evaluation, SSA program administrative files, SSA's Master Earnings File.

Note: The sample includes all youth who were randomly assigned to the evaluation's treatment group.

*/**/** The difference between participants and non-participants is significantly different from zero at the .10/.05/.01 level using either a two-tailed t-test or a chi-square test.

F. Receipt of Youth Works Services

In this section, we use quantitative data from ETO to explore the services that participating youth received. We first examine the rates at which participants received specific types of project services and then document the timing and intensity of the services. To ensure a uniform follow-up period for all participants, we analyzed data for only the first 15 months after random assignment, as these data were available for all participants. To focus the analysis on substantial contacts only, we excluded contacts with participants lasting two minutes or less, such as leaving telephone messages, and contacts via letter, text messaging, and email (except those related to benefits planning). The tables presented in this section summarize findings from the analysis of the ETO data as well as SSA administrative data on the use of work incentives and waivers.

Youth Works staff were expected to enter into ETO any service provided to or on behalf of a project participant, as well as the time spent during the service contact. The staff were trained to record separately each type of service provided during one contact. For example, if a CES discussed education options with a youth for 20 minutes and provided general case management for another 30 minutes, the staff member was to record each of these services and the associated time in its own category. ETO was not intended to be a staff timesheet system, meaning that the information recorded in it was not expected to reflect all of a staff member's work efforts. For example, time spent doing general job development was not recorded in ETO because it was not attributable to a specific youth. Moreover, although the staff of Youth Works received extensive training on ETO and project managers monitored the quality of data entered, the staff may not have input complete data on the services provided to or for specific youth.⁴¹ The ETO data analyzed here thus may not fully reflect the intensity of services provided.

1. Types of Services Received

All participants in Youth Works received some project services and most received at least one contact for each of four types or categories of services: benefits planning, employment, education, and case management. In Table III.4, we show the percentage of youth who received each of these types of services, as well as the breakdown of specific services within each category. The "other" services shown in the table are accumulations of all related services within the categories other than specific listed services. For example, "other education-related service" includes general discussions with youth about their education plans. Below, we present details on the four types of services that participants received, along with explanations of how Youth Works staff delivered those services.

a. Benefits Planning

Virtually every participant (99 percent) received benefits planning services, which reflects the project's emphasis on educating beneficiaries about how to use work incentives to retain some of their benefits while working (Table III.4). The high percentage of participants with such services is due to almost all participants receiving three specific benefits planning services: an overview of benefits, a general discussion of the YTD waivers and SSA's standard work incentives, and

⁴¹ We noted in Section D.2 of this chapter that Youth Works management began meeting monthly with the evaluation team and SSA in June 2010 to discuss ETO-based reports on service efforts and employment outcomes. These reports and meetings focused the attention of Youth Works management on the delivery of employment-focused services and the achievement of positive employment outcomes by participants. They also underscored the importance of staff accurately recording their service hours in ETO. Recorded service hours increased shortly after these meetings were initiated.

Table III.4. Receipt of Youth Works Services (percentages)

	Youth Works Participants
Any Youth Works Service	100.0
Any Benefits Planning Service	98.7
Any waiver or work incentive discussion	98.7
Discussions of non-SSA benefits and work incentives (e.g., TANF and SNAP)	94.8
Benefits overview	90.2
Benefits analysis and advisement	78.1
Benefits assessment	77.3
Additional discussions of YTD waivers (beyond general overview) ^a	30.4
Additional discussions of Non-YTD SSA work incentives (beyond general overview)	21.9
Other (e.g., faxing forms to SSA, discussions with youth regarding benefits)	88.7
Any Employment-Related Service	96.4
Career exploration and job search	93.3
Direct employment services ^b	61.6
Employment training	31.2
Other (e.g., coordination with job coaches, discussions with youth regarding job opportunities)	64.7
Any Education-Related Service	72.2
Education counseling and academic advisement	35.1
Assistance with accommodations or student support services	16.8
Registration or enrollment assistance	12.9
Preparing for or attending IEP or transition meetings	4.4
Accessing financial aid	3.4
Academic retention services (help to remain in school)	1.8
Other (e.g., discussions with youth regarding education status, communications with education providers)	40.7
Any Case Management Service	99.0
General check-in	85.3
Person-centered planning ^c	63.1
Case reviews	48.5
Family support	30.9
Transportation	18.8
Vocational rehabilitation	18.6
Life skills	10.6
Housing	9.8
Mental health	5.9
Juvenile justice	5.4
Legal information	4.9
Other (e.g., updating PCPs, scheduling meetings)	74.0
Sample Size	388

Source: The Youth Works ETO management information system.

Notes: We excluded service contacts of less than two minutes and mail contacts that were not related to benefits planning from this analysis. Within each service group, more than one type of service may have been recorded in ETO. The service types displayed within a group may not be exhaustive. All percentages are based on 388 participants.

^a"Additional discussions of YTD waivers" includes only focused discussions of specific individual waivers or all five waivers. It does not include discussions that may have taken place during an enrollment meeting or a benefits assessment.

^b"Direct employment services" includes development of work experiences, job coaching, job placement, and follow-up.

^cPerson-centered plans were developed for 88 percent of Youth Works participants; however, due to omissions in entering data in ETO, the associated person-centered planning services were not recorded for some of those participants.

discussion of non-SSA benefits and work incentives. A benefits counselor and a participant would cover these topics during their initial meeting, which often occurred immediately following a youth's enrollment in the project. More than three-quarters of Youth Works participants received benefits analysis, which included benefits management, problem solving and advocacy, and other benefits advisement. A similar fraction of participants received a written benefits assessment, which the benefits counselor completed based on information obtained during the initial meeting and on information provided by the local SSA field office in response to a BPQY. The assessment document summarized in simplified language the financial situation of the youth and his or her family, as well as the benefits they received. Less than a third of the youth participated in detailed discussions of the waivers and about a fifth participated in discussions of non-YTD work incentives beyond the introduction that was provided in the initial benefits planning meeting.

These rates of participation in the project's benefits planning services are consistent with the Youth Works model, under which the waivers and work incentives were introduced during the initial meeting, but in-depth discussions of them were deferred until they were immediately relevant. Only 14 percent of participants had been working for pay in the month before random assignment (see Table III.2), so the waivers and work-incentives were not immediately relevant to many of them.

The receipt of benefits planning services was reflected in the understanding of SSA benefits and work-incentives displayed by Youth Works participants and their parents during focus group discussions in April 2011.⁴² The members of these groups were generally appreciative of the benefits planning services they had received. For some, the services had allayed their fears that the youth would lose their disability benefits if they were to work.

The provision of assistance in accessing SSA's standard work incentives and the waivers for YTD was an important component of the project's benefits planning services. (Appendix B provides descriptions of the SSA waivers for YTD.) Table III.5 shows the percentages of Youth Works participants who used the work incentives and waivers in the first 12 months after random assignment. Thirty-one percent of project participants used any of the standard work incentives or waivers. Most, but not all, of those were triggered by earned income and 30 percent of participants reported any earnings to SSA. The most frequently used work incentive was the EIE, which is an offset to earnings. Sixteen percent of participants used the waiver version of the EIE. Participants used the other work incentives and waivers that offset earnings less frequently: six percent used either the standard or waiver versions of the SEIE and fewer than one percent used the waiver version of the PASS.⁴³ The reporting of earnings to SSA is not a precondition for using the Section 301 waiver and 12 percent of participants did so. This allowed them to continue to receive SSA benefits temporarily following a negative CDR/age-18 redetermination.

b. Employment-Related Services

Youth Works maintained a sharp focus on employment over the project's full period of performance. Nearly all participants (96 percent) received employment-related services (Table III.4). Most of these youth received career exploration and job search services, which included discussions

⁴² In each of the two Youth Works regions, we conducted one focus group discussion with participants and one with parents. We selected the members of these groups from among phase-2 enrollees in such a way as to ensure diversity in educational attainment, disabling condition, employment experiences, and engagement in project services.

⁴³ Some Youth Works participants who reported earnings to SSA might not have benefitted from the EIE because of the SSI \$20 general income exclusion and the exclusion of the initial \$65 of earnings.

Table III.5. Percentage of Youth Works Participants Who Used SSA Work Incentives and Waivers

	Youth Works Participants
Reported any earnings to SSA	29.5
Used any SSA work incentive (standard or waiver)	30.5
Used SEIE (standard or waiver)	5.7
Standard only	5.4
Waiver only	0.3
Used EIE (waiver only)	15.8
Used PASS (standard or waiver)	0.3
Standard only	0.0
Waiver only	0.3
Used IDA (standard or waiver)	0.0
Used Section 301 waiver	11.6
Sample Size	387

Source: Calculations based on SSA administrative extracts on waiver and work incentive usage.

Notes: We excluded one deceased participant from this analysis.

SEIE = student earned income exclusion

EIE = earned income exclusion

PASS = plan for achieving self-support

IDA = individual development account

of their career interest and job opportunities, assistance in preparing resumes, and guidance on conducting job searches. About three in five participants received direct employment services, such as work-based experiences, placement in paid jobs, and job coaching and other post-employment services. Slightly less than one-third of the youth also received employment training, such as training on soft skills training and training on occupation specific skills.

Work-based experiences were an important component of Youth Works services for those participants who had been assessed by staff to be in need of honing their skills prior to taking paid competitive jobs. Depending on their preparedness for work, school schedules, and other considerations, these experiences were selected from four categories: (1) job shadowing, (2) occupational exploration and training, (3) on-the-job training, and (4) volunteer work. Youth Works provided a three dollar hourly stipend to participants as they engaged in job shadowing and occupational exploration and training, and it subsidized 75 percent of the employer-paid wages of participants who were engaged in on-the-job training. Candice's story on page 51 provides an example of a participant's sequential use of occupational exploration and training and on-the-job training as springboards to a paid competitive job.

During the initial 18 months of project operations, Youth Works management became concerned that staff were allowing participants to remain in these work-based experiences for too long. This realization was followed by a strong effort to transition youth from these experiences to paid competitive jobs. Such transition was actually built into on-the-job training, as the employers involved were contractually obligated to retain at full pay youth who performed well during the training period.

Candice's Story

Candice was a young woman with severe intellectual and physical disabilities who did not have any work experience when she enrolled in Youth Works, but she was interested in working with animals or in a video/computer game store. Her Youth Works CES helped Candice tailor her resume to reflect those interests as well as her volunteer experiences and general skills in caring for animals. A job developer at Youth Works set up interviews and visits for her with a number of employers, including pet stores, pet grooming services, veterinary hospitals, and game stores.

Candice achieved a breakthrough in her search for employment when the owner of a pet care salon agreed to give her a trial work experience for a weekend. This was implemented through Youth Works as an occupational exploration and training experience, for which Candice received a stipend of three dollars per hour from the project. Candice's first day went well—she worked for six hours and loved it. The owner wanted Candice to continue working for her, but felt that considerable training would be required. So, the owner requested of the CES that the occupational exploration and training experience be extended, after which Candice might be put on the payroll. This seemed reasonable at first, but after a week or so the CES sensed that the owner was taking advantage of Candice, as she was not being adequately compensated. That relationship then ended.

Within a month of Candice's departure from the pet salon, her job developer at Youth Works arranged another trial work experience for her, this time at a veterinary clinic. This position, like her previous one, was structured as an occupational exploration and training experience. Candice's responsibilities were to exercise the animals, assist with bathing and drying them, clean their cages, and help with feeding them. She also got to observe pre- and post-operative procedures. The job developer provided Candice with job coaching in this position. Her supervisor was pleased with her performance and work ethic. The job developer arranged for the position to be converted to an on-the-job training position, under which the clinic directly paid Candice a competitive wage that was subsidized at a 75 percent rate by Youth Works. Initially, Candice felt that the position required her to work too many hours. However, after several months her mother reported that Candice "enjoys this job, most of the time." After a year of working at the clinic, Candice's status was changed to that of a permanent, competitively paid employee (i.e., the Youth Works wage subsidy was terminated).

Given the severity of Candice's disabilities, she is unlikely to be able to work and earn enough to allow her to exit the SSI rolls; however, her family expressed satisfaction with the Youth Works project, as it helped her get a job in one of her areas of interest.

The project's emphasis on employment was noted by participants during focus group discussions. They reported that Youth Works had helped them with job applications and job search, buying work clothes, and transportation to interviews. The project had also arranged for them to take tours of work sites and helped them find internships, jobs through the summer youth employment program, and competitive paid jobs. They pointed out that most of their jobs had low wages and high turnover. However, most of the focus group participants agreed that they probably would not have engaged in any productive activity if they had not been involved in Youth Works.

Youth Works staff encountered numerous challenges to assisting youth in finding employment. Three of these came up repeatedly in their interviews with the evaluation team:

1. Lack of transportation to and from work sites was a major barrier to employment for Youth Works participants. Project staff attempted to mediate this by seeking transportation assistance from vocational rehabilitation providers, using the project's

flexible funds to subsidize transportation costs for some participants, and helping youth obtain drivers' licenses.

2. The generally weak economy meant that participants who were ready for employment had fewer job opportunities and faced more competition for the jobs that were available.
3. It was difficult to provide employment services to youth in remote locations, especially during the winter due to weather-related transportation issues and reduced levels of economic activity.

The project staff routinely surmounted these obstacles. Indeed, a significant achievement of the project was its success in helping participants in remote and economically depressed areas to find jobs.

c. Education-Related Services

Education-related services were not central to the Youth Works program model. Whereas project staff delivered employment services systematically to virtually every participant, they delivered education services as needed by individual project participants. Seventy-two percent of the youth participating in the project received some form of education-related service. The most common of these was education counseling and academic advisement, which was received by just over one-third of participants. Project staff also helped between one-tenth and one-fifth of participants access accommodations/support services and register for/enroll in academic programs. Less than one participant in twenty received other specific types of education services, including attendance by project staff at individualized education program (IEP) meetings.

d. Case Management Services

Almost all Youth Works participants (99 percent) received case management services through the project (Table III.4). The most common of these services by a considerable margin was general check-in services, a generic category of staff contact with participants or their families to determine how they were doing and whether they were in need of assistance or supports. Eighty-five percent of participants received general check-in services. Other case management services received by at least 30 percent of participants were person-centered planning (beyond the initial development of a PCP), case reviews, and family support services. The completion of a PCP for 88 percent of participants (results not shown) shortly after their enrollment in the project is not reflected in the statistics reported here.

The CESs frequently referred participants to outside organizations for vocational rehabilitation services, mental health services, family support services, housing services, and legal services. The referrals allowed the participants to avail themselves of services in their communities that were rarely accessed by transition-aged youth in general. The CESs would either accompany participants to meetings with these organizations or follow-up with the agencies to ensure that the youth had received the intended services.

2. The Timing of Services

Youth Works staff initiated services with youth very soon after they enrolled in the project. Table III.6 shows that the median elapsed time between enrollment and the first service contacts was actually zero days, reflecting the fact that benefits planning services were typically initiated

Table III.6. Timing of Youth Works Services (percentages, unless otherwise noted)

	Youth Works Participants
Ever Received Service	100.0
Timing of Service Receipt	
Time between enrollment and first service contact	
Average number of days	1.8
Median number of days	0.0
First service contact occurred within:	
30 days of enrollment	98.5
180 days of enrollment	100.0
Time between enrollment and second service contact	
Average number of days	9.6
Median number of days	6.0
Second service contact occurred within:	
30 days of enrollment	96.9
180 days of enrollment	99.7
Types of services received during the first service contact ^a	
Benefits planning	88.4
Employment	61.6
Education	51.0
Case management	61.3
Types of services received during the most recent service contact ^a	
Benefits planning	18.6
Employment	43.3
Education	2.1
Case management	39.7
Sample Size	388

Source: The Youth Works ETO management information system.

Notes: We excluded service contacts of less than two minutes and mail contacts that were not related to benefits planning from this analysis. We calculated the percentage of youth who ever received any service based on all 388 Youth Works participants. We calculated the statistics on the timing of service contacts based on those participants who ever received a first or second contact.

^aThe types of services received are not mutually exclusive, so the percentages add to more than 100.

immediately following enrollment, during the same meeting. Over 98 percent of the initial service contacts occurred within 30 days of enrollment. Staff also provided subsequent services very quickly; the median number of days between enrollment and the second service contact was 6 and 97 percent of second contacts occurred within 30 days of enrollment.

As dictated by the Youth Works program model, initial service contacts almost always entailed the provisions of benefits planning services, whereas the last service contacts that project staff had with participants were most likely to entail the provision of employment services. Table III.6 shows that Youth Works staff delivered benefits planning services during 88 percent of their initial service contacts with participants. They also delivered employment, education, and case management services during more than half of the initial contacts. The final contacts with participants in the 15-month post-random assignment observation period for this analysis included employment services

43 percent of the time and case management services 40 percent of the time; benefits planning services were less frequently provided and education services were rarely provided.⁴⁴

3. The Intensity of Services

We have seen that Youth Works staff moved quickly to deliver services to every enrolled youth, but it was also the case that the intensity of those services generally was high, whether measured by the number of service contacts or by their cumulative duration. On average, project staff made 46 service contacts of any type for each participant, lasting a total of 34 hours (Table III.7).⁴⁵ Some of those contacts were with employers, parents, and other individuals or organizations on behalf of the youth. The average cumulative duration of service contacts that directly involved the youth was 24 hours (results not shown). While the median length of a single service contact was 15 minutes, the average length was 30 minutes, indicating that some contacts may have been of a very long duration, though most were shorter. Only 19 percent of service contacts lasted longer than 30 minutes.

Consistent with the Youth Works program model, the number and cumulative duration of service contacts per participant were greater for employment-related services than for any other category of services. On average, project staff made 29 contacts per participant to deliver employment services, with a cumulative duration of 24 hours. We note that the median duration of employment service contacts is about one-third of the mean value, indicating that a small number of participants accounted for a disproportionate share of total employment service hours. Case management services also were relatively intense in Youth Works. On average, project staff made 16 contacts per participant to deliver case management services, with a cumulative duration of 6 hours. A comparison of median and mean values indicates that the distribution of the duration of case management services is not highly skewed by extremely intense services provided to a small proportion of youth.

Although nearly all Youth Works participants received benefits planning services, the intensity of those services was low relative to the intensity of employment services and case management services. On average, participants received seven service contacts for the purpose of benefits planning, with a cumulative duration of three hours. These statistics are consistent with the Youth Works service model for benefits planning, which entailed an initial in-person visit followed by telephone contacts as-needed (typically upon starting a paid job) and at case closeout.

The receipt of education-related services was less than universal among Youth Works participants but, more notably, the intensity of those services was relatively low for the youth who did receive them. Among the 72 percent of participants who received education services, the average number of service contacts was somewhat less than four and the average cumulative duration of those contacts was two hours.

⁴⁴ Note that the final service contacts with participants during the 15-month post-random assignment window were rarely the last contacts that these youth had with the project. Participants typically received 18 months of services. According to the Youth Works program design, participant close-out meetings were to include benefits planning services.

⁴⁵ This estimate does not include travel time for staff to meet participants, which was significant given that many services were provided in the participants' home and/or places of employment.

G. Changes in Service Receipt Between Implementation Phases

As noted in Section III.C, Youth Works was implemented in two phases; phase 1 began in April 2008 and phase 2 in December 2009.⁴⁶ We begin this section by reviewing features of the intervention and its implementation that were consistent across the phases, as well as features that changed. We then present statistics on the intensity of project services received by participants, separately by phase, using the same measure as in Table III.7. We conclude by interpreting those statistics in light of the program features that did or did not change between the phases.

Project staffing was stable across the two implementation phases with the exception of the addition of two staff members near the end of phase 1. While the new staff members were designated “job developers,” they did not perform the full range of functions of the four existing job developers. The new job developers assisted the CESs with enrolling phase-2 participants and they assisted the existing job developers with providing job coaching services to employed participants. As a rule, these two additions to the Youth Works staff did not reach out to employers for the purpose of job development, nor did they place participants in jobs. However, they may have freed up time by the CESs and existing job developers to perform those functions.

Youth Works had a strong emphasis on employment and the placement of participants in paid jobs from its outset, as discussed in Section D.2. Technical assistance provided by TransCen facilitated that emphasis. That assistance included the introduction in July 2008 (within a few months after the project started enrolling youth in April 2008) of data-driven systems to track employer contacts and participant employment. These systems, which were independent of ETO, were designed to ensure that youth who were ready for paid employment were not overlooked, but rather were assigned high priority for job development and job placement. About six months into phase 2 of the intervention, in June 2010, additional procedures and reports were introduced to further underscore the centrality of employment in the intervention. These entailed close monthly monitoring via ETO of staff service hours and participant employment outcomes.

As recorded by project staff in ETO, the rates of receipt of specific Youth Works services were higher and the numbers of hours of those services were greater for phase-2 participants than for phase-1 participants. Table III.8 confirms that all youth in both phases received some Youth Works services, but it also shows that the average number of recorded hours of any type of service was much higher for phase-2 participants (44 hours) than for phase-1 participants (23 hours). The reciprocity rate for employment services was significantly higher for phase-2 participants in a formal statistical sense, but almost all participants in both phases received employment services and the difference is small in absolute terms. In contrast, the difference between participants in the two phases in the average number of hours of recorded employment services is large in both a formal statistical sense and in absolute terms: 32 hours for phase-2 youth compared with 13 hours for phase-1 youth.

⁴⁶ Youth in phase 1 were randomly assigned to the treatment group between April 11, 2008 and June 30, 2009; those in phase 2 were randomly assigned to the treatment group between December 7, 2009 and September 9, 2010. The cohorts of participants associated with these phases were intended to be equal in size, and that is how it turned out, with 194 participants in each phase.

Table III.7. Intensity of Youth Works Services

	Any Youth Works Service ^a	Benefits Planning	Employment-Related	Education-Related	Case Management
Ever Received Service (%)	100.0	98.7	96.4	72.2	99.0
Intensity of Service Use					
Number of service contacts per participant					
Average	46.1	7.1	28.9	3.6	15.9
Median	37.0	6.0	18.0	2.0	14.0
Service time per participant					
Average (hours)	33.7	2.9	23.6	2.0	6.0
Median (hours)	17.9	2.8	8.3	0.5	4.2
Service time per contact					
Average (minutes)	29.7	19.1	37.0	29.4	18.9
Median (minutes)	15.0	15.0	15.0	20.0	15.0
Percentage of contacts lasting longer than 30 minutes	19.3	13.3	24.5	18.9	10.4
Sample Size	388	388	388	388	388

Source: The Youth Works ETO management information system.

Notes: We excluded service contacts of less than two minutes and mail contacts that were not related to benefits planning from this analysis. We calculated the percentages of youth who ever received services based on all 388 Youth Works participants. We calculated the statistics on the intensity of services based on those participants who actually received the services in question.

^aWe capped the "number of service contacts per participant" at one per day per youth for the analysis of any Youth Works service.

The findings presented in Table III.8 should be interpreted in light of the changes or stability in staffing and program focus between the two phases of Youth Works, as discussed above. Because employment services accounted for virtually all of the difference in average total service hours between the two phases, we will focus on interpreting the findings for those services. Many phase-1 participants remained active in the project after the start of phase 2, putting upward pressure on staff caseloads. So it is not clear that phase-2 participants had greater access to employment services relative to their phase-1 counterparts despite the hiring of two additional job developers at the end of phase 1. Given that a system designed and monitored by TransCen had been in place since July 2008 to keep track of staff contacts with employers and employment outcomes for participants, the implications of the introduction of additional monitoring reports and procedures in June 2010 are mixed. It is unclear whether the 2010 changes led to substantive increases in staff attention to employers and employment relative to high base levels of attention. On the other hand, it is likely that the 2010 changes led to more complete recording of staff service hours in ETO, especially those pertaining to employment efforts. This is because there was no systematic monitoring of staff service hours by external parties (i.e., the evaluation team, TransCen, and SSA) prior to June 2010. Thus, it is possible that the increase in average employment service hours per participant between phase 1 and phase 2 shown in Table III.8 reflects primarily more complete recording of staff service efforts in ETO rather than a true increase in the intensity of employment services.

Table III.8. Use of Youth Works Services by Random Assignment Cohort (percentages)

	Cohort		Difference		P-Value
	Enrollment Phase 1 ^a	Enrollment Phase 2 ^b			
Any YTD Service					
Percentage of youth receiving	100.0	100.0	0.0		0.00
Average service time (hours)	23.4	44.1	20.8	***	0.00
Any Benefits Planning Service					
Percentage of youth receiving	100.0	97.4	-2.6	**	0.03
Average service time (hours)	3.0	2.8	-0.2		0.25
Any Employment-Related Service					
Percentage of youth receiving	94.3	98.5	4.1	**	0.03
Average service time (hours)	13.2	32.3	19.1	***	0.00
Any Education-Related Service					
Percentage of youth receiving	74.2	70.1	-4.1		0.37
Average service time (hours)	1.3	1.6	0.3		0.42
Any Case Management Service					
Percentage of youth receiving	98.5	99.5	1.0		0.32
Average service time (hours)	4.8	7.1	2.3	***	0.00
Sample Size	194	194			

Source: The Youth Works ETO management information system.

Notes: We excluded service contacts of less than two minutes and mail contacts that were not related to benefits planning from this analysis. Average service times were computed on the basis of all members of the cohorts, not just on those who received the designated services.

^aThe phase-1 cohort consists of Youth Works participants who were randomly assigned before July 1, 2009.

^bThe phase-2 cohort consists of Youth Works participants who were randomly assigned on or after December 1, 2009.

*/**/*** The difference between the Phase I and Phase II cohorts is significantly different from zero at the .10/.05/.01 level using a two-tailed t-test.

H. Youth Satisfaction with Services

Although a large proportion of Youth Works participants did not recall having received services from the project, many of those who did were satisfied with the project as a whole and regarded their specific experiences in it as having been helpful. In Table III.9, we present findings from the evaluation's 12-month follow-up survey on satisfaction with Youth Works. These corroborate findings from our 2011 focus group discussions with participants, during which the youth generally expressed positive opinions about Youth Works and appreciation for the assistance that the project had provided them on employment and benefits matters. It should be noted, however, that some of the focus group participants mentioned that they would have appreciated more assistance from the project, particularly in finding jobs.

Approximately half of Youth Works participants felt that each of six specific experiences or services that they may have had or received through the project had been somewhat or very helpful. The values range from 45 percent of the participants feeling that the project had helped them work effectively with others to 51 percent feeling that the project had helped them to gain information about career opportunities. For this analysis, the 30 percent of participants who did not recall having received services from Youth Works were classified with those who did recall the services but did not consider them to have been somewhat or very helpful.⁴⁷

More than half (58 percent) of Youth Works participants reported that their overall experience with the project had been either good or very good. Only 2 percent rated their experience in the project as having been poor. A somewhat higher proportion of participants, 62 percent, believed that the project services, in general, had been somewhat or very useful. Again, only a small proportion (5 percent) had an unambiguously negative opinion of the project, telling us that the services had been not at all useful.

I. Summary and Implementation Lessons

Youth Works was designed to promote the economic self-sufficiency of youth with disabilities by providing them with job development and employment services, benefits counseling, and a range of support services provided through case management. A distinguishing feature of Youth Works was the delivery of intensive one-on-one services in participants' homes or workplaces. Additionally, Youth Works offered participants a menu of work-based experiences that served as stepping stones to competitive paid jobs. The project's emphasis on employment was complemented by benefits planning services that were first delivered in-person to all participants and then subsequently by telephone on an as-needed basis, typically after the youth had entered paid employment.

Youth Works was a well-managed project that gave highest priority to paid employment for participants throughout its period of performance. Front-line staff followed the program model (Figure III.2) by quickly meeting with new participants to design PCPs consistent with their wishes and needs. The staff then worked intensively with the participants to help them find paid jobs, which all staff agreed was the project's fundamental mission. Staff contacts with employers and placements of participants in jobs were systematically monitored to ensure mission success. Initially, there was some lack of clarity regarding the distinctions between the responsibilities of the CESs and

⁴⁷ As reported in Table III.4, all Youth Works participants received some project services. Additional analysis, not shown, indicates that for 93 percent of the participants who did not recall having received services from Youth Works, at least five service contacts were recorded in ETO.

Table III.9. Satisfaction with Youth Works Services Among Participants (percentages)

	Youth Works Participants
Youth Works was "Somewhat Helpful" or "Very Helpful" in Assisting Participant with:	
Gaining information about career opportunities	50.8
Developing a sense of confidence in abilities	50.6
Developing clearer career goals	48.4
Acquiring a job or work-related knowledge and skills	47.2
Understanding self	47.0
Working effectively with others	45.2
Sample Size	336
Participant's Overall Experience with Youth Works	
Very good	36.1
Good	21.1
Fair	8.6
Poor	1.6
Don't know	0.3
Did not recall receiving services	32.3
Usefulness of Youth Works Services	
Very useful	39.9
Somewhat useful	20.8
Not very useful	2.2
Not at all useful	4.8
Don't know	0.0
Did not recall receiving services	32.3
Sample Size	313

Source: YTD 12-month follow-up survey.

Note: This analysis is based on 336 treatment group youth who enrolled in Youth Works and completed the 12-month interview. In this group, 101 youth did not mention having received Youth Works services. The analysis of the helpfulness of Youth Works (top panel) assumes that those who did not recall receiving services did not find those services to be somewhat or very helpful. Data are missing for between zero and four cases, depending on the measure of helpfulness. We excluded cases with missing data from the calculations. The sample size for the analyses of participants' overall experience with Youth Works and the usefulness of Youth Works services (bottom panel) is smaller because questions on these topics were not asked of 23 proxy respondents.

job developers, but this was resolved as the project matured. Rural isolation and lack of access to transportation for participants, along with local economies that generated few jobs, were major challenges to project staff in delivering employment services. However, virtually all of the participants received at least some employment services from Youth Works, and half of them worked in competitive paid jobs during their involvement in the project.

We conclude this chapter by presenting five key lessons for the implementation of employment interventions for youth with disabilities that we identified through the process analysis of Youth Works.

- 1. Implementation of employment-focused individualized services for youth with disabilities in a primarily rural area is challenging but feasible.** Youth Works covered a large geographic area and a significant fraction of the participants in the project lived in rural locations. The expansive and rural service delivery area posed a

challenge for project staff in that they had difficulty reaching participants in remote locations. It also made it difficult for some participants to remain engaged in the project due to transportation issues. Notwithstanding these challenges, the project provided services to large numbers of broadly dispersed youth with disabilities. Those services had a strong employment focus and were typically delivered on a one-on-one basis in the youths' homes or workplaces. The staff of Youth Works successfully engaged half of the project participants in paid competitive employment and provided additional participants with other forms of work-based experiences.

2. **Early in-person contact, as opposed to telephone contact, was essential for reaching many youth and engaging them in project services.** In the first year of the project, CESs often called youth multiple times to try to schedule enrollment meetings with them, frequently to no avail. They learned to more quickly turn to in-person visits to the youths' homes for the purpose of sparking their interest in the project, scheduling enrollment meetings, and completing the enrollment procedures.
3. **Setting clear benchmarks to emphasize employment, especially goals for employment placements and employer contacts, clarified staff responsibilities and helped ensure that services were delivered evenly across locations.** During the initial months of implementation, project staff had difficulty in being effective in their roles to support employment among youth in their caseload as there were no clear goals for individual staff. Recognizing this challenge, Youth Works management, with technical assistance from TransCen, developed clear goals in July 2008 for paid job placements, work based experiences, and employer contacts for the CESs and job developers. Staff expressed strong support for the explicit goals, as they viewed the goals as helping them to be effective in their roles.
4. **In the absence of a well-coordinated service system, a strong intervention can play an important role in connecting youth with underutilized services.** The service system in West Virginia was fragmented and uncoordinated, which made it difficult for providers to serve youth with disabilities who did not proactively seek them out. By referring its participants to those providers, Youth Works provided them with a pool of youth who were in need of their services, thus allowing the resources of the service system to be more efficiently utilized.
5. **Flexible funding to address the needs of youth with disabilities is an important tool for supporting their employment.** Access to transportation was especially problematic for many Youth Works participants. The project created a pool of flexible funds that staff used to help participants access needed supports. The principal application of these funds was to improve access to transportation for youth so that they could participate in project activities and travel to and from their places of employment.

IV. IMPACTS ON USE OF EMPLOYMENT SERVICES AND OTHER SERVICES

The YTD initiative was designed to help youth with disabilities maximize their economic self-sufficiency as they transition from school to work. Given that paid employment is critical to the achievement of economic self-sufficiency, employment-promoting services were a core component of the initiative, as described in the conceptual framework (Figure I.1), and participation in those services constitutes one of the five outcome domains for the impact analysis. Employment-promoting services were intended to increase work-related experiences in the short term, and short-term participation in employment—an outcome examined in the next chapter—was regarded as pivotal to improving the potential for long-term employment.

The goal of Youth Works was to place treatment group youth participating in project services in competitive employment based on their individual interests. As described in Chapter III, Youth Works fully embraced work-related experiences and short-term employment as the central focus of its services: 62 percent of participants received direct employment services, which included the development of work experiences, job placement, and post-placement follow-up services such as job coaching (Table III.4).

In this chapter, we begin with a discussion of the findings pertaining to the primary outcome measure in the domain of employment-promoting services—the use of any such service. Based on our analysis of this measure, we answer the following question: During the year following random assignment, did Youth Works lead to treatment group youths’ use of more employment-promoting services than if the project had not been available? In Chapter III, we used data from the project’s management information system to show that nearly all treatment group youth participating in the project received employment-promoting services from project staff. However, in this chapter, to answer the above question, we use information from survey data collected from both treatment and control group youth about 12 months after random assignment.⁴⁸ It is important to note that this analysis captures the use of services delivered by Youth Works and other providers. Because the project provided referrals to local service providers, it could have increased the use of services beyond those provided directly by Youth Works. On the other hand, Youth Works services could have displaced some services that other organizations otherwise would have provided.

We found that Youth Works increased the proportion of youth who reported using any employment-promoting service and several specific types of such services, including support for job search activities, benefits counseling, and career counseling. The project also increased the proportion of youth who used non-employment services, particularly those related to person-centered planning. Youth Works had a significant impact on the number of months of overall service use. As would be expected by the project’s emphasis on benefits counseling, we found that it increased both the understanding of the relationship between benefits and employment and the knowledge of specific SSA work incentives. All of these service-utilization measures cover the period between random assignment and the evaluation’s 12-month follow-up survey.

⁴⁸ For youth under age 18 at the time of the 12-month survey, we gathered information on service utilization from a parent or guardian. For ease of reference, we refer to the responses as “youth reports.”

A. Youth Works Increased the Use of Employment Services

Consistent with the intent of the YTD program model, Youth Works increased the use of any employment-promoting service by youth with disabilities. Sixty-four percent of treatment group youth reported using any employment-promoting service in the year following random assignment (Table IV.1). We estimated that, in the absence of Youth Works, only 34 percent of these youth would have used any such service. The project had a positive impact of 30 percentage points on the primary outcome measure in the domain of employment-promoting services (reflecting a relative impact of 88 percent). The impact is statistically significant at the one percent level.⁴⁹

The YTD 12-month follow-up survey asked about the use of specific employment-promoting services, including career counseling, support for resume writing and job search activities, job shadowing and apprenticeships/internships, and other employment-focused services (such as basic skills training, computer classes, problem solving, and social skills training). Given that SSA benefits-related work incentives are integral to the YTD initiative, counseling on SSA benefits also is considered an employment-promoting service. The Youth Works service model emphasized the provision of employment-promoting services, including direct employment services and benefits counseling. Consistent with this model, we found that the project increased the use of support for career counseling (by 16 percentage points, a relative increase of 105 percent); resume writing and job search (by 31 percentage points, a relative increase of 256 percent); job shadowing and apprenticeships/internships (by 5 percentage points, a relative increase of 55 percent); other employment-focused services (by 3 percentage points, a relative increase of 229 percent); and benefits counseling (by 24 percentage points, a relative increase of 156 percent).⁵⁰

While important, the receipt of benefits counseling was not the primary factor underlying the increase in overall use of employment services. To assess whether the impact on the use of any employment-promoting service was attributable mainly to the increase in benefits counseling, we conducted an impact analysis that excluded benefits counseling from the definition of “any employment-promoting service.” With this change, the share of treatment group youth receiving employment-promoting services fell to 55 percent (from 64 percent), and the estimated impact decreased slightly, to 29 percentage points (from 30 percentage points) and remained statistically significant at the one percent level (results not shown in table).

⁴⁹ As noted in Chapter II, Section A.4, the estimated impacts presented in this and subsequent chapters are regression adjusted. To provide context, in Table IV.1 and subsequent tables, we report observed mean values for the treatment group, estimates of what the treatment group means would have been in the absence of Youth Works, and regression-adjusted impact estimates. A regression-adjusted impact estimate is the difference between the treatment and control group means after adjusting for differences in baseline characteristics. The “estimated mean without Youth Works” is calculated as the observed treatment group mean less the regression-adjusted impact estimate. We report unadjusted mean impacts in Table A.5 for all outcomes.

⁵⁰ In Chapter III, Section F, we reported that our analysis of ETO data revealed that Youth Works delivered benefits planning services to 99 percent of the treatment group youth who participated in the project. The participation rate was 85 percent, so it follows that the project delivered benefits planning services to $.85 \times 99 = 84$ percent of all treatment group members. The difference between this rate, computed from ETO data, and the 39 percent rate of use of benefits planning services computed for treatment group members from the 12-month survey data (Table IV.1) may be explained by the low intensity of the benefits planning services provided by Youth Works. As reported in Table III.7, Youth Works provided an average of only 2.9 hours of benefits planning services to project participants. Some youth may not have remembered these services when they completed the follow-up survey.

Table IV.1. Use of Employment- Promoting Services and Non- Employment Services (percentages)

	Treatment Group		Impact	P-Value	
	Observed Mean	Estimated Mean w/o Youth Works			
Primary Outcome					
Any Employment-Promoting Service	63.6	33.8	29.8	***	0.00
Supplementary Outcomes					
Employment-Promoting Services					
Career counseling	30.7	14.9	15.7	***	0.00
Support for resume writing and job search activities	43.1	12.1	31.0	***	0.00
Job shadowing, apprenticeship/internship	14.4	9.3	5.1	**	0.02
Other employment-focused services (basic skills training, computer classes, problem solving, and social skills training)	4.6	1.4	3.2	**	0.01
Counseling on SSA benefits and work incentives	39.0	15.2	23.7	***	0.00
Non-Employment Services					
Any non-employment service	68.6	51.2	17.4	***	0.00
Discussions about youth's general interests, life, and future plans	62.2	42.9	19.4	***	0.00
Life skills training	26.5	20.9	5.6	*	0.06
Help getting into an education or training program	19.4	10.4	9.0	***	0.00
Help with accommodations	20.8	18.1	2.6		0.34
Referrals to another agency	0.5	0.3	0.2		0.37
Transportation services	2.1	0.9	1.2		0.15
Health services	2.1	5.0	-2.9	**	0.04
Case management (not otherwise specified)	1.6	1.0	0.6		0.44
Other non-employment services	7.2	6.5	0.7		0.73
Overall Service Use					
Any employment or non-employment service	78.2	57.5	20.7	***	0.00

Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the study's 12-month follow-up survey. In the table, we report observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model before random assignment by using data from the study's baseline survey and SSA administrative records. We calculated all statistics with sample weights to account for interview non-response. The analysis sample includes 389 treatment group youth and 344 control group youth. Survey item non-response may have resulted in smaller sample sizes for specific outcomes. See Appendix A, Table A.5, for sample sizes for all outcomes.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level using a two-tailed t-test.

We also examined whether Youth Works led to more youth using non-employment services. Typically, general case management services tend to be more readily available than employment-promoting services, such that control group youth also would have had access to these services. In fact, we found higher levels of use of non-employment services relative to employment-promoting services among members of both the treatment and control groups. Our estimates show that, even in the absence of Youth Works, more than half of treatment group youth would have received non-employment services and the project increased the use of these services by 17 percentage points (a relative increase of 34 percent). Furthermore, consistent with the Youth Works service model and its

use of person-centered planning, we found the largest impact on the percentage of youth who reported that someone had talked with them about their general interests, life, and future plans. Sixty-two percent of the treatment group youth reported having had such discussions, compared with only 43 percent who would have had them in the absence of the intervention, leading to an impact of 19 percentage points (reflecting a relative increase of 45 percent).

Additionally, we found statistically significant impacts on the use of three other types of non-employment services. Youth Works increased the use of life skills training by six percentage points and receipt of assistance in getting into an education or training program by nine percentage points. Surprisingly, Youth Works decreased the share of youth using health services by three percentage points. Although health services were not a focus of the project, Youth Works did provide referrals to health services, and our knowledge of the project suggests no reason why it would lead to a reduction in their use. The lack of an estimated impact on transportation services also is surprising, given that Youth Works provided transportation support. However, some of that support was in the form of bus passes and taxi vouchers, as well as staff providing rides to youth. Youth who received this type of support from Youth Works may not have thought of it as transportation services when responding to the follow-up survey.

Finally, we found that Youth Works increased the share of youth using any service. Looking at overall service use (employment-promoting or non-employment), we found that 78 percent of treatment group members used any service at all. In the absence of Youth Works, 58 percent of them would have used services. The 21 percentage point difference is statistically significant and represents a relative increase of 36 percent. Thus, the project led to an increase in the combined use of employment and non-employment services.

In sum, we found that Youth Works resulted in greater use of both employment-promoting and non-employment services. In the next chapter, we examine whether the increased services under Youth Works, combined with other aspects of the intervention, were sufficient to produce an impact on employment. However, an impact on employment also may depend on the amount of services used. In the next section, we address the impact of Youth Works on the amount of services used.

B. Youth Works Led to Increases in the Amount of All Services Used

In addition to examining the proportion of youth who used services, we examined the amount of all (employment and non-employment) services used.⁵¹ Although control group youth were less likely than treatment group youth to have received any services, if control group youth who did receive services tended to utilize a large amount of them, then the control group may have received a similar amount, or even more services on average, than the treatment group.

Our measures of the amount of all services used are subject to considerable error because they are based on youth recall over a one-year period. However, there is no reason to believe that the measurement error differs between treatment and control group members. This means that, while the measurement error may reduce the precision of our impact estimates, it should not cause them to be biased. The 12-month survey asked each youth about the starting and ending dates for services from each provider the youth had reported using. Our principal measure of the amount of services

⁵¹ Our data from the 12-month survey did not allow us to analyze the amount of employment services separately from the amount of all services.

is the number of months during which a youth reported using services from any provider. We estimated that treatment group members used services for 7.5 months, which is about 2 months more than the duration of services they would have used in the absence of the intervention (Table IV.2). This represents a relative impact of 43 percent (statistically significant at the one percent level). Further analysis suggests that this impact was driven largely by the fact that more treatment group youth used any service, and not by additional months of services among those who used any service. Among youth who used any service, the average number of months of services was just under 10 months for the treatment group and just over 9 months for the control group (not shown in the table). Notwithstanding the positive impact on the number of months of services, we estimated that the project had no impact on the number of contacts that youth had with service providers. This finding is based on information the youth provided about the typical frequency of their service contacts (for example, weekly or monthly).

The survey-based measure of hours of service use is especially problematic. For each service provider reported by a youth, we used information on the starting and ending dates of service, the frequency of visits, and the typical length of each visit (in minutes). We multiplied these components together to calculate the total hours of services for each provider and then summed across the providers to calculate the grand total of service hours. We thus constructed our measure of service hours from three measures that are themselves difficult to measure accurately, based on recall over an entire year.

We estimated that Youth Works had no impact on the number of hours of services used. Treatment group members used 243 hours of services, on average, and we estimated that they would have used 259 hours in the absence of the project. The estimated impact of negative 16 hours is not statistically significant.⁵² The average number of hours of services treatment group members used may seem surprisingly high in light of the finding from the process analysis, which showed that youth participating in Youth Works received an average of 34 hours of services from the project (Table III.7). One explanation is that the survey-based measure reflects services received from Youth Works and other providers, such as schools and personal care providers; the average includes some very high values for youth who received personal care or other services on a daily basis.⁵³ Two additional explanations are (1) the fundamental differences between how Youth Works staff and survey respondents perceived and reported services, and (2) the measurement error in the hours of service receipt as calculated from the follow-up survey.

In collaboration with other service providers in West Virginia, Youth Works used partners and referrals to meet the needs of its participants, perhaps leading to the expectation that the project would have increased the total number of service providers used. On the other hand, given that the

⁵² To flesh out this estimate, we examined the average hours of services among youth who received any services. The average hours of services were lower for treatment group youth (314 hours) than control group youth (461 hours) and the difference (147 hours) is statistically significant at the five percent level (not shown in Table IV.2). Because this analysis was conducted on a self-selected subsample (youth who used any services), rather than on the full research sample, this finding should not be interpreted as a formal impact estimate.

⁵³ To understand the hours of services measure better, we examined this measure for youth who used fewer than 1,000 hours of services over the one-year recall period. The 1,000-hour level is roughly equivalent to 4 hours of services every weekday over the year. Ninety-two percent of treatment group members and 90 percent of control group members used fewer than 1,000 hours of services. Among these youth, the average amount of services used was 113 hours for those in the treatment group and 93 hours for those in the control group.

Table IV.2. Amount of Services Used and Unmet Service Needs

	Treatment Group		Impact	P-Value	
	Observed Mean	Estimated Mean w/o Youth Works			
Supplementary Outcomes					
Amount of Services Used^a					
Average number of months of service use ^b	7.5	5.3	2.3	***	0.00
Average number of contacts with providers ^b	70.8	66.2	4.6		0.60
Average number of hours of service ^b	242.9	259.1	-16.2		0.70
Average number of providers	1.7	1.1	0.5	***	0.00
Unmet Service Needs (%)					
Any unmet service need	14.8	15.4	-0.6		0.82
Type of unmet service need					
Help finding a job	5.0	4.3	0.7		0.64
Other employment services	5.9	6.8	-0.9		0.62
Basic skills training	0.9	2.0	-1.1		0.22
Other unmet needs	12.1	11.3	0.8		0.76

Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the study's 12-month follow-up survey. In the table, we report observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model before random assignment by using data from the study's baseline survey and SSA administrative records. We calculated all statistics with sample weights to account for interview non-response. The analysis sample includes 389 treatment group youth and 344 control group youth. Survey item non-response may have resulted in smaller sample sizes for specific outcomes. See Appendix A, Table A.5, for sample sizes for all outcomes.

^aThe average values include youth who did not use any (employment or non-employment) services.

^bFor these outcomes, item non-response occurred conditionally, depending on the values of other measures in the follow-up survey. The rate of missing data ranges from 7.3 to 8.2 percent. We used a multiple imputation procedure to assign values when they were missing. See Appendix A, Section E, for more information on the procedure.

*/**/**Impact estimate is significantly different from zero at the .10/.05/.01 level using a two-tailed t-test.

project provided youth with a number of services directly, and that control group youth may have had to rely on several providers for the services they wanted, the project could have had the opposite effect on the number of service providers used. We estimated that Youth Works increased the number of service providers used by youth. On average, treatment group members received services from 1.7 providers (including Youth Works), and we estimated that they would have used just 1.1 providers had they not had the opportunity to participate in the project (a relative increase of 45 percent). The difference is statistically significant at the one percent level.

Although Youth Works increased the amount of services used, the project did not reduce the share of youth with unmet service needs. Among youth in the treatment group, 15 percent reported any unmet need (Table IV.2).⁵⁴ We estimated that the share would have been the same in the absence of the project. The result is surprising in light of the poor service environment in West Virginia (as described in Chapter III). Furthermore, because Youth Works emphasized employment

⁵⁴ Specifically, the evaluation's 12-month follow-up survey asked if the youth "needed any (other) help or services preparing for work or school" that they had not received. One possible explanation for the absence of an impact on unmet service needs is that Youth Works may have increased youth awareness of needs. This increased awareness of needs could have offset any potential reduction in unmet service needs due to the intervention.

services, it is surprising that we found that the project had no impact on the unmet needs related to help finding a job. On average, among treatment group members, five percent reported having an unmet service need for help finding a job. We estimated that in the absence of Youth Works, four percent of youth would have reported the same unmet need. The impact is not statistically significant.

C. Youth Works Increased Understanding of the Relationship Between Benefits and Employment

The Youth Works service model emphasized intensive benefits counseling by benefits specialists. This focus of the project was borne out by our previously reported finding that the project increased the proportion of youth who received benefits counseling by 24 percentage points (Table IV.1). In this section, we show that Youth Works led to increased understanding of the relationship between benefits and employment. Additionally, the project increased knowledge of specific SSA requirements and work incentives.

We analyzed two measures that capture whether youth understood that, when they started working, they would not lose (1) all of their SSA benefits or (2) their related medical insurance.^{55, 56} Sixty-seven percent of treatment group members reported correctly that the entire cash benefit is not lost once work begins, whereas in the absence of Youth Works, we estimate this would have been 55 percent. Seventy-six percent of treatment group youth reported correctly that medical insurance is not lost as soon as work commences (Table IV.3). In the absence of Youth Works, we estimate that 67 percent would have understood this relationship correctly. These differences are both significant at the one percent level.⁵⁷

In addition to determining whether youth understood the basic principle that all benefits are not lost when they start working, we examined whether Youth Works increased their awareness of specific SSA requirements and work incentives. Awareness among treatment group youth was not as great as might have been expected, given the project's emphasis on benefits counseling; however, it was significantly greater than what it would have been in the absence of the project. The 12-month survey asked youth whether they had ever heard of each of the following six requirements or work incentives for disability beneficiaries:⁵⁸

⁵⁵ For most measures discussed in this section and reported in Table IV.3, we collected information on knowledge of SSA benefits from one source per respondent. For youth age 18 or older, the 12-month follow-up survey asked the youth directly about knowledge of SSA benefits. For youth who were under age 18, the survey asked a parent (or guardian) about knowledge of SSA benefits. For ease of exposition, we discuss these measures as if they had been reported by the youth themselves. For two measures, we collected information from both youth and parents. For knowledge of IDAs, we report both measures: 12 percent of records were missing youth responses and 45 percent were missing parent responses. For knowledge of the CDR or age-18 medical redetermination, we report only parent responses due to missing information on youth responses: 93 percent of records were missing youth responses, whereas 47 percent were missing parent responses. The high degree of missing information on youth responses occurred in large part because the information was asked only of youth under age 18.

⁵⁶ These measures report the share of youth who (correctly) disagreed with the statements, "As soon as people start working, they stop getting their Social Security benefits" and "As soon as people start working, they lose their medical coverage."

⁵⁷ Understanding of these relationships was somewhat higher among treatment group youth who had worked for pay in the year following random assignment. Of these youth, 73 percent understood the relationship between work and SSA benefits, and 79 percent understood the relationship between work and medical coverage (not shown).

⁵⁸ The survey questions provided both the name of each requirement or incentive and a brief description.

1. The earned income exclusion (EIE)
2. The student earned income exclusion (SEIE)
3. The continuing disability review (CDR) or age-18 medical redetermination requirement
4. The plan for achieving self-support (PASS)
5. Individual development accounts (IDAs)
6. Medicaid-while-working or continued Medicaid eligibility

Table IV.3 shows that more than half of treatment group members were aware of the EIE and the CDR/age-18 medical redetermination requirement, but far less than half were aware of each of the other four work incentives. In all six cases, we estimated that their awareness would have been lower if they had not had the opportunity to participate in Youth Works. We estimated that the project significantly increased awareness of the CDR/age-18 medical redetermination requirement and all five work incentives by between 12 and 35 percentage points.⁵⁹ Knowledge of SSA requirements and work incentives does not appear to be strongly related to work experience: Among treatment group members, knowledge of these was similar between those who had worked for pay during the year following random assignment and those who had not worked (not shown).⁶⁰

With the exception of Youth Works itself, the project had no impact on where youth and their parents would turn for information on how working might affect their SSA benefits. Twenty-three percent of treatment group members reported that they viewed Youth Works as a potential source of such information, whereas this would not have been an option for them if they had not had the opportunity to participate in the project (Table IV.3).⁶¹ The project did not have statistically significant impacts on the shares of youth who would seek information on work and benefits from sources other than Youth Works.

⁵⁹ Awareness of SSA work incentives was substantially higher among treatment group youth in this evaluation versus a nationally representative sample of beneficiaries from the National Beneficiary Survey (NBS). In the NBS from 2006, 16 percent of beneficiaries were aware of continued Medicaid coverage, and smaller shares were aware of the EIE, PASS, and SEIE (percentages calculated as a share of the population eligible for the benefit; see Livermore et al. 2009b, Exhibit 16). Even among work-oriented beneficiaries in the NBS from 2004, only 20 percent were aware of continued Medicaid coverage, and only 16 percent were aware of the PASS (Livermore et al. 2009a, Exhibit 17). Data from the National Survey of SSI Children and Families 2001, a nationally representative survey of current and former child SSI recipients, also suggest lower-level knowledge of SSA work incentives, as only 22 percent of the respondents reported ever having heard of SSA work incentives (Loprest and Wittenburg 2005, Table 8).

⁶⁰ Among treatment group youth who had worked following random assignment, 70 percent had heard of the EIE, 36 percent had heard of the SEIE, 68 percent had heard of the CDR, 49 percent had heard of the PASS, and 38 percent had heard of continued Medicaid eligibility. Knowledge of IDAs was higher among treatment group youth who had worked than among all treatment group youth: 22 percent of these youth had heard of IDAs, and 22 percent of their parents had heard of IDAs.

⁶¹ Specifically, the 12-month survey asked, “If you wanted information about how working would affect your Social Security benefits, where would you get that information?” We collected the information from each youth and a parent or guardian. For a sample member, we coded each source as a potential source of information if either the parent or youth mentioned it.

Table IV.3. Knowledge and Sources of Information on SSA Requirements and Work Incentives (percentages)

	Treatment Group		Impact		P-Value
	Observed Mean	Estimated Mean w/o Youth Works			
Supplementary Outcomes					
Knowledge of SSA Requirements and Work Incentives					
Understands the relationship between work and SSA benefit receipt	67.4	55.4	12.1	***	0.00
Understands the relationship between work and medical coverage	76.3	66.5	9.8	***	0.00
Ever heard of EIE	57.0	22.4	34.6	***	0.00
Ever heard of SEIE	28.0	5.6	22.4	***	0.00
Ever heard of CDR/age-18 medical redetermination requirement (parent report)	64.4	51.5	12.9	***	0.01
Ever heard of PASS	38.8	11.6	27.2	***	0.00
Ever heard of IDAs (parent report)	16.1	4.2	11.9	***	0.00
Ever heard of IDAs (youth report)	19.2	3.8	15.5	***	0.00
Ever heard of Medicaid-while-working or continued Medicaid eligibility	32.4	18.6	13.7	***	0.00
Potential Sources of Information on Work and SSA Benefits					
Youth Works ^a	22.7	0.0	22.7	***	0.00
SSA office	66.6	70.2	-3.6		0.33
SSA website	5.9	5.4	0.4		0.81
Friends and family	6.2	7.8	-1.7		0.38
Internet	11.1	14.1	-3.0		0.22
Vocational rehabilitation agency	1.7	2.8	-1.2		0.30
Benefits planner/WIPA ^a	2.6	1.1	1.5		0.20
Other	15.6	12.3	3.4		0.22

Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the study's 12-month follow-up survey. In the table, we report observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model before random assignment by using data from the study's baseline survey and SSA administrative records. We calculated all statistics with sample weights to account for interview non-response. The analysis sample includes 389 treatment group youth and 344 control group youth. Survey item non-response may have resulted in smaller sample sizes for specific outcomes. See Appendix A, Table A.5, for sample sizes for all outcomes.

^aWe were unable to obtain a regression-adjusted impact estimate because no control group member cited Youth Works as a potential source of information on work and SSA benefits; instead, we report an impact estimate based on a simple comparison of mean values for treatment and control group members.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level using a two-tailed t-test.

D. Youth Works Had Mixed Impacts on the Types of Service Providers Used

The Youth Works service philosophy was to provide transition services directly to participants and leverage those services, when possible, through referrals to other providers. This philosophy did not lead to strong expectations on the part of the evaluation team regarding project impacts on the types of providers of transition services—other than Youth Works—used by youth with disabilities in West Virginia.

Among youth in the treatment group, 42 percent reported using services from Youth Works (Table IV.4). Not surprisingly, this is smaller than the share receiving services as recorded in ETO by project staff: 85 percent of treatment youth enrolled in Youth Works, of whom 100 percent used project services (Chapter III, Sections E and F). That the share of treatment group members reporting project services is smaller than the share derived from ETO data probably is attributable to the youths' inability to recall either (1) the services they used or (2) that Youth Works was the provider.

We found significant impacts of Youth Works on the use of services from One-Stop Workforce Centers, other work-related service providers, such as sheltered workshops and job training, and all other providers. Among treatment group youth, six percent reported receiving services from a One-Stop. We estimated that, in the absence of Youth Works, the share would have been one percent. This positive impact may have been due to the project's informal relationship with WorkForce West Virginia, which provided Youth Works participants with access to One-Stop services. We also found that Youth Works increased the use of other types of work-related service providers by three percentage points and the use of all other providers by nine percentage points.

Table IV.4. Use of Services, by Type of Provider (percentages)

	Treatment Group		Impact		P-Value
	Observed Mean	Estimated Mean w/o Youth Works			
Supplementary Outcomes					
Type of Service Provider					
Youth Works ^a	42.2	0.0	42.2	***	0.00
One-Stop Workforce Center	5.5	1.4	4.0	**	0.01
Schools or school districts	25.5	26.5	-0.9		0.73
Vocational rehabilitation agency (DRS)	8.7	10.3	-1.6		0.51
Work-related, sheltered workshop, employment agency, job training	4.6	1.4	3.2	**	0.02
SSA office	5.5	8.0	-2.5		0.19
Health services providers	4.8	6.1	-1.3		0.49
Other providers primarily serving people with disabilities	14.4	13.8	0.6		0.80
All other providers	22.7	14.0	8.7	***	0.00

Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the study's 12-month follow-up survey. In the table, we report observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model before random assignment by using data from the study's baseline survey and SSA administrative records. We calculated all statistics with sample weights to account for interview non-response. The analysis sample includes 389 treatment group youth and 344 control group youth. Survey item non-response may have resulted in smaller sample sizes for specific outcomes. See Appendix A, Table A.5, for sample sizes for all outcomes.

^aWe were unable to obtain a regression-adjusted impact estimate for the use of Youth Works services because no control group member reported the use of such services. Instead, we report an impact estimate based on a simple comparison of mean values for treatment and control group members.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 level using a two-tailed t-test.

We found no impacts of Youth Works on the use of services from the state vocational rehabilitation agency, the local SSA office, schools, health service providers, or other providers primarily serving people with disabilities.

E. Impacts on the Use of Employment Services Did Not Vary Across Subgroups

Reasonable arguments can be advanced for why the impacts of Youth Works on the use of employment-promoting services might have been different for some subgroups of youth than others. For example, as we describe in Chapter III, Youth Works instituted additional monitoring of service hours as recorded by staff in ETO and of employment outcomes for participants in the second phase of implementation; thus, we might expect to observe larger impacts on the use of employment services for youth who enrolled in the evaluation and were randomly assigned on or after July 1, 2009. As another example, youth age 18 or older at baseline might have been more interested in employment and so more receptive to employment services than younger youth. Similarly, youth not enrolled in school at baseline might have had more interest and time available to participate in employment services than their in-school peers. To investigate whether such differences in impacts on service use actually occurred, we estimated impacts on the primary outcome measure in the domain of employment-promoting services—the use of any employment-promoting service—for subgroups of youth defined by random assignment cohort and baseline values of age, school attendance, and work experience.

Overall, we did not find evidence that the impact of Youth Works on the use of employment services varied across the subgroups considered. Table IV.5 shows that the difference between the impact estimates for youth who were randomly assigned in the first phase of implementation (36 percentage points) and for those randomly assigned later (24 percentage points) is not statistically significant.⁶² This result suggests that the finding from the process analysis of greater service hours for phase-2 participants relative to phase-1 participants was primarily due to more complete recording of service hours in ETO during the later part of the project, as opposed to the actual delivery of more service hours.⁶³ As with the phase of implementation, for the other subgroup pairs the impact estimates differ between the two subgroups, but the differences are not statistically significant.

⁶² Table IV.5 shows a p-value of 0.10 due to rounding, but the p-value is slightly greater than 0.10.

⁶³ Our process analysis of ETO data showed that nearly all youth who participated in Youth Works services received some employment services. The average hours of employment services per participant, as recorded by Youth Works staff in ETO, increased from 13 hours for phase-1 participants to 32 hours for phase-2 participants (Table III.8). As discussed in Section III.G, some, perhaps most, of this increase can be attributed to a heightened emphasis on and monitoring of the recording of service hours beginning in June 2010.

Table IV.5. Use of Any Employment- Promoting Service, by Subgroup (percentages)

	Treatment Group		Impact		P-Value	Treatment Group Size	Control Group Size
	Observed Mean	Estimated Mean w/o Youth Works					
Implementation Phase							
Phase 1: random assignment before July 1, 2009	65.1	29.3	35.8	***	0.00	200	161
Phase 2: random assignment on or after July 1, 2009	62.1	38.0	24.1	***	0.00	186	175
(P-value of difference in impacts)					(0.10)		
Age							
Under age 18 at baseline	80.0	50.4	29.6	***	0.00	70	67
Age 18 or over at baseline	59.9	30.0	29.8	***	0.00	316	269
(P-value of difference in impacts)					(0.77)		
School Attendance							
In school at baseline	75.2	50.3	25.0	***	0.00	137	139
Not in school at baseline	57.1	24.2	33.0	***	0.00	249	196
(P-value of difference in impacts)					(0.41)		
Paid Work Experience							
Worked for pay in prior year	72.7	41.9	30.8	***	0.00	109	99
No work for pay in prior year	60.4	31.4	29.0	***	0.00	276	236
(P-value of difference in impacts)					(0.80)		

Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the study's 12-month follow-up survey. In the table, we report observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model before random assignment by using data from the study's baseline survey and SSA administrative records. We calculated all statistics with sample weights to account for interview non-response. Survey item non-response may have resulted in smaller sample sizes, as indicated in the table.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level using a two-tailed t-test.

V. IMPACTS ON EMPLOYMENT AND EARNINGS

Youth Works sought to improve economic self-sufficiency and independence among youth receiving SSA disability benefits by providing intensive services, including work-based experiences, as well as the waiver of certain disability program rules. Work-based experiences, ranging from workplace tours to placement in paid jobs, were integral to the intervention, so its effective implementation could be expected to lead to increased employment and earnings within the first year of service receipt. In Sections A-C of this chapter, we examine the short-term impacts of Youth Works on employment, earnings, and job characteristics. In Section D we present estimates of the project's impacts on employment for key subgroups of its target population. Finally, in Section E we provide a descriptive analysis of job characteristics and job search activities among treatment group youth during the year following random assignment.

We found that Youth Works had a substantial and statistically significant positive impact on paid employment during the year after youth enrolled in the evaluation. We also found statistically significant positive impacts of the intervention on almost all measures of employment, earnings, and job characteristics that we analyzed.

A. Youth Works Increased Paid Employment

Maximizing self-sufficiency through work was a central goal of the YTD interventions; consequently, we identified employment as a key domain for the analysis of the short-term impacts of Youth Works and the other YTD projects. The primary outcome in this domain is the share of youth ever employed in paid jobs during the year after random assignment. This measure is preferred to a measure of the intensity of employment, such as the number of weeks worked during the year, because almost 40 percent of the youth in the evaluation were students, who would not be expected to work intensively over the course of the year. We constructed the primary outcome measure based on youth reports of paid employment during the period between random assignment and the 12-month follow-up interview. As noted in Chapter II, paid employment in the year following random assignment is, in part, a measure of receipt of services, as Youth Works emphasized experiences in paid employment.

Youth Works significantly increased the share of youth with paid employment during the year following random assignment. Forty-three percent of the treatment group youth were ever employed in paid jobs during the follow-up period (Table V.1).⁶⁴ In the absence of Youth Works, we estimated that 24 percent of the youth would have ever been employed in paid jobs during that period. The estimated impact of 19 percentage points (a relative increase of 81 percent) is statistically significant at the one percent level.

To enhance our understanding of the impact on the primary employment outcome, we conducted supplementary analyses of other employment-related outcomes. Table V.1 presents the

⁶⁴ In Chapter III, Section D.2, we report that our analysis of ETO data revealed that 50.5 percent of Youth Works participants were employed in competitive paid jobs at some point during their involvement in the project. When we focus on the year following random assignment, 35 percent of the Youth Works participants were employed in competitive paid jobs according to ETO records; the rate is 43 percent for paid jobs at or above the minimum wage (regardless of whether they were competitive). The employment rates computed from ETO data and the 43 percent rate of paid employment computed for treatment group members from the 12-month survey data (Table V.1) are thus quite similar.

Table V.1. Employment and Number of Jobs (percentages, unless otherwise noted)

	Treatment Group			Impact	P-Value
	Observed Mean	Estimated Mean w/o Youth Works			
Primary Outcome					
Ever employed in paid job during first year after random assignment (RA)	42.7	23.6	19.1	***	0.00
Supplementary Outcomes					
Employment During the First Year After RA					
Ever employed in any (paid or unpaid) job	44.1	25.6	18.5	***	0.00
Ever employed in unpaid job (but not on paid job)	1.2	1.9	-0.7		0.53
Extent of Employment During First Year After RA ^a					
Percentage of weeks employed in any (paid or unpaid) job since RA	21.9	12.8	9.1	***	0.00
Percentage of weeks employed in paid jobs since RA	20.3	11.7	8.6	***	0.00
Percentage of weeks employed in unpaid jobs since RA	1.6	1.1	0.5		0.49
Employment Status at the Time of the Follow-Up Survey					
Employed in paid job	25.2	13.7	11.5		***
Employed in unpaid job	1.2	1.6	-0.4		
Not employed, looking for work	16.9	15.1	1.8		
Not employed, out of the labor force	56.7	69.6	-12.9		
Number of Jobs Held During the First Year After RA ^a					
Number of jobs (paid and unpaid)				**	0.03
0	57.6	75.6	-18.0		
1	38.1	22.3	15.8		
2 or more	4.3	2.0	2.3		
(Average, paid and unpaid) ^b	0.59	0.30	0.29	***	0.00
Average number of jobs (paid) ^b	0.54	0.27	0.27	***	0.00
Average number of jobs (unpaid) ^b	0.03	0.03	0.00		0.87

Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the study's 12-month follow-up survey. In the table, we report observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model before random assignment by using data from the study's baseline survey and SSA administrative records. We calculated all statistics with sample weights to account for interview non-response. The analysis sample includes 389 treatment group youth and 344 control group youth. Survey item non-response may have resulted in smaller sample sizes for specific outcomes. See Appendix A, Table A.5, for sample sizes for all outcomes.

^aFor these outcomes, item non-response occurred conditionally, depending on the values of other measures in the follow-up survey. The rate of missing data ranges from 0.3 percent to 3.4 percent. We used a multiple imputation procedure to assign values when they were missing. See Appendix A, Section E, for more information on this procedure.

^bThe average includes youth who were not employed during the year following random assignment.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level using either a two-tailed t-test or a chi-square test.

estimated impacts on these outcomes, including the prevalence of employment in any job (paid or unpaid) and solely in unpaid jobs. Similar to what we found for paid jobs, Youth Works had a statistically significant positive impact on the share of youth employed in any job (paid or unpaid). Forty-four percent of treatment group youth were ever employed in any job during the year following random assignment, which was 19 percentage points more than would have been employed in the absence of the intervention (a relative increase of 72 percent). The prevalence of

employment in unpaid jobs was low; only one percent of treatment group youth were ever employed in jobs without pay. We found no impact on the share of youth employed in unpaid jobs.

Youth Works also had a positive impact on the extent of employment, as measured by the percentage of weeks that youth were employed during the year following random assignment. We constructed this measure by first identifying a respondent's employment status in each week following random assignment and then aggregating that information over the 52-week follow-up period. Table V.1 shows that youth in the treatment group were employed in any (paid or unpaid) job for 22 percent of the 52 weeks (roughly 11 weeks) following random assignment. (This average includes values of zero for youth who were never employed during the year, as do all other employment and earnings averages reported in this chapter.) In the absence of Youth Works, they would have been employed for 13 percent of the 52 weeks. The estimated impact of 9 percentage points (a relative increase of 71 percent) is statistically significant at the one percent level.⁶⁵

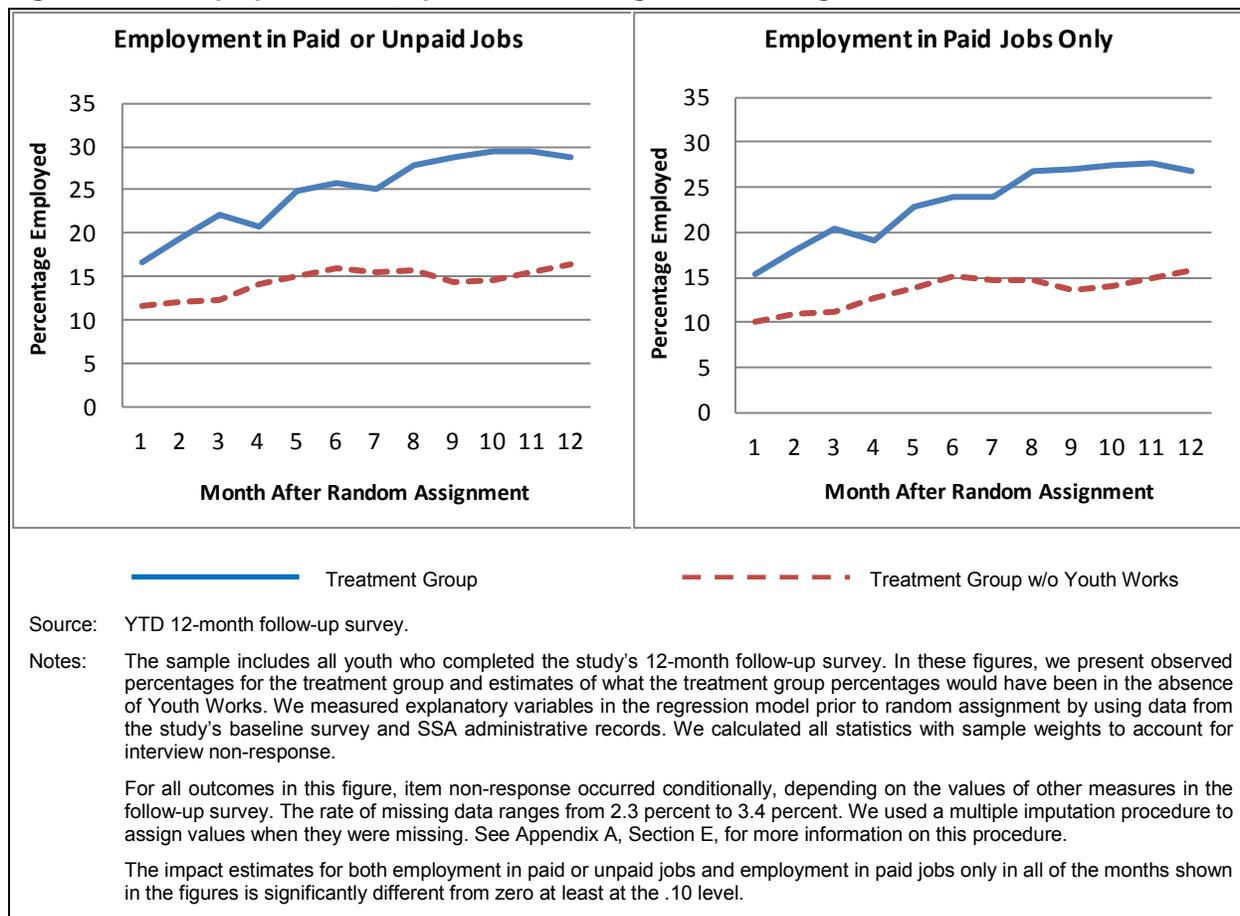
In addition, Youth Works had a positive impact on employment status at the time of the follow-up survey. Youth could have been in any one of four employment statuses when they completed the survey: employed in a paid job; employed in an unpaid job only (no paid employment); not employed but in the labor force (that is, actively looking for work); and not employed and out of the labor force. To identify the impact of the project, we conducted a test of the difference between the observed distribution of treatment group youth across these employment statuses and our estimate of what that distribution would have been in the absence of the project. The results in Table V.1 show a statistically significant impact of the project on employment status at the time of the follow-up survey. In particular, Youth Works increased the share of treatment group youth in paid jobs and decreased the share out of the labor force. These results, along with the previous finding of positive impacts on employment and percentage of weeks worked during the year following random assignment, suggest that treatment group youth were more likely to have sustained engagement in employment throughout the year than would have been the case in the absence of the intervention.

The project also increased the number of jobs (paid and unpaid combined) held during the year following random assignment. We found that Youth Works decreased the share of youth having no job and increased the share having one job. Accordingly, the project increased the average number of jobs held by youth during the year. The average number of jobs held by treatment group youth was 0.59, which was 0.29 more than the number of jobs they would have held without the intervention (a relative increase of 97 percent). This impact is statistically significant at the one percent level.

In addition to having positive impacts on employment at any time during the year following random assignment, Youth Works had significant positive impacts on employment in all months during the year. We used youth reports from the 12-month follow-up survey on the starting and ending dates of each job to construct monthly measures of employment. Figure V.1 presents the rates of employment for youth in any job, and in paid jobs only, for each month during the year

⁶⁵ Given the low level of engagement in unpaid employment only, we found that the estimated impacts of Youth Works on various employment-related measures reported in this chapter for any (paid or unpaid) employment and for paid employment only are similar in magnitude. For instance, the impact on the extent of paid employment only is similar to the impact on any (paid or unpaid) employment—9 percentage points and statistically significant at the one percent level. The project had no significant impact on the extent of unpaid employment only.

Figure V.1. Employment Rate, by Month Following Random Assignment

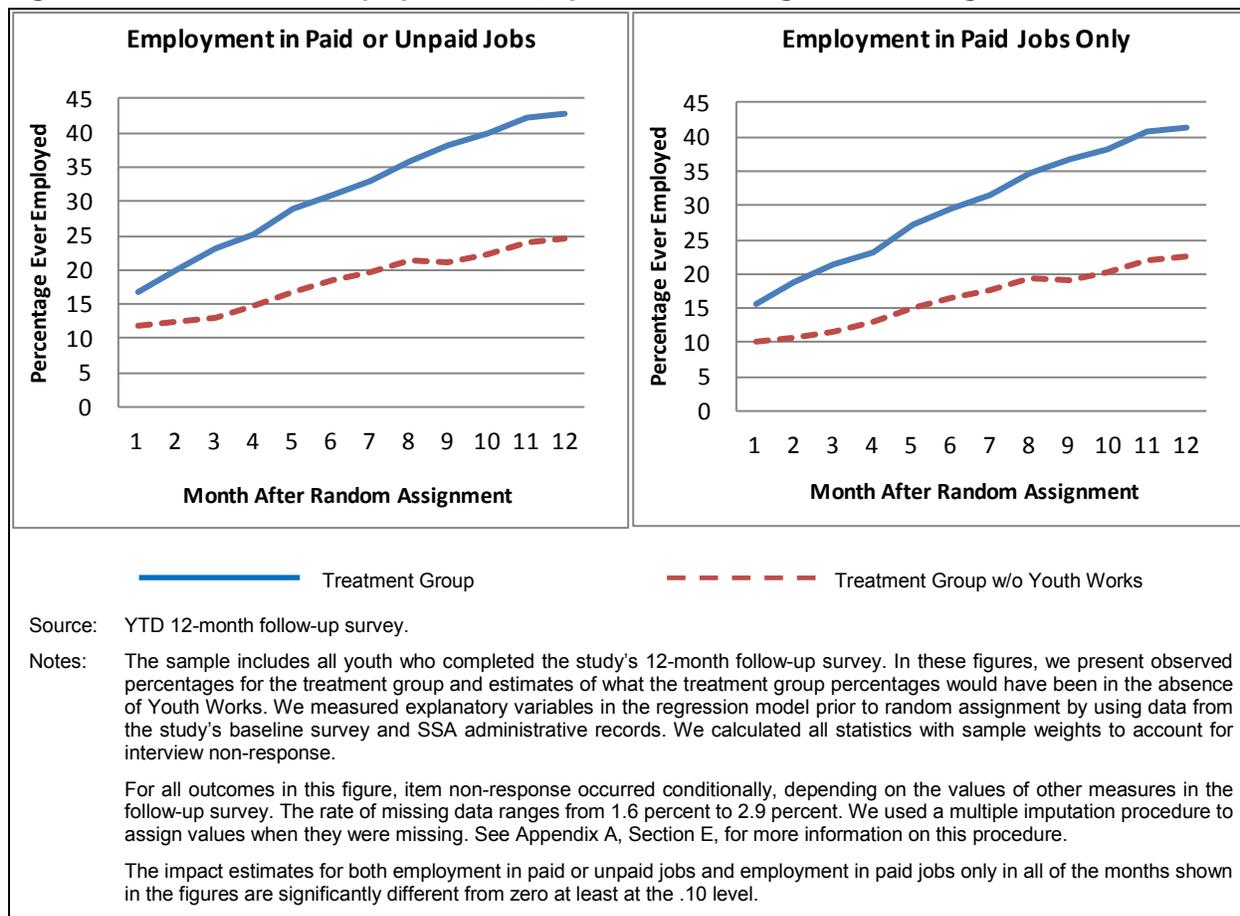


following random assignment.⁶⁶ The figure shows the actual employment rates for treatment group members and our estimates of what the rates would have been if they had not had the opportunity to participate in the project. In the figure, the vertical difference between the two plotted employment rates for any month is a graphical representation of the estimated impact. The rates of employment in paid and unpaid jobs and in paid jobs only for treatment group youth were significantly higher for each month during the year than they would have been in the absence of Youth Works.

Figure V.2 displays the proportion of youth who had ever been employed since random assignment for each month during the year following random assignment. The cumulative employment rate for treatment group youth in paid and unpaid jobs combined increased gradually during the year following random assignment, and it is significantly higher in all months of the

⁶⁶ We interviewed 21 percent of the analysis sample during (before the end of) the 12th month following random assignment; consequently, employment outcomes measured for month 12 may reflect some underlying censoring in the data (that is, incomplete data on employment in month 12 for these cases). Because there were no significant treatment-control differences in the timing of responses to the 12-month follow-up survey, we do not anticipate any bias in the estimated impacts for month 12.

Figure V.2. Cumulative Employment Rate, by Month Following Random Assignment



year than it would have been in the absence of the intervention.⁶⁷ We obtained similar results for the cumulative employment rate in paid jobs only. Thus, the accumulation of positive and statistically significant impacts on monthly employment rates over the course of the year (Figure V.1) led to impacts on cumulative employment rates that were also positive and statistically significant throughout the year (Figure V.2). The increasing share of treatment group youth employed in each month (as shown in Figure V.1) suggests that, in almost every month, additional treatment group youth entered employment. This is confirmed in Figure V.2, which shows that the cumulative share of treatment group youth who had ever been employed during the year increased by an average of about two percentage points per month.

⁶⁷ The cumulative employment rate in paid or unpaid jobs in the 12th month following random assignment for treatment group members shown in Figure V.2 (42.7 percent) does not equal the percentage of those youth employed on any paid or unpaid job during the year following random assignment shown in Table V.1 (44.1 percent). This deviation is a result of our use of the multiple imputation procedure in Stata (the statistical software used for this analysis) to assign employment status by month to youth who reported in the follow-up survey that they had worked but did not report the start and/or end dates for their jobs. This procedure imputed a status of *not employed* to several of these youth.

B. Youth Works Had Positive Impacts on Hours of Work and Earnings

In the previous section, we reported that Youth Works increased the percentage of weeks worked in any job (paid and unpaid jobs) and in paid jobs only. Based on this finding, we would expect to find that the project also increased the total annual hours of work and annual earnings from work. Consistent with this, we found that the project reduced the share of youth with no hours of work and increased the average total number of hours in paid and unpaid jobs during the year following random assignment. In addition, Youth Works reduced the share of youth with no paid employment and increased average earnings over the year.

We estimated the impacts of the project on total hours worked in any (paid or unpaid) job and paid jobs only during the year following random assignment. On average, youth in the treatment group were employed for a total of 234 hours in paid and unpaid jobs and 230 hours in paid jobs only (Table V.2). We found that treatment group members worked 80 hours more in paid and

Table V.2. Total Hours Worked (percentages, unless otherwise noted)

	Treatment Group		Impact	P-Value	
	Observed Mean	Estimated Mean w/o Youth Works			
Supplementary Outcomes					
Total Hours Worked in All Jobs During First Year After Random Assignment					
Total Hours Worked in Paid or Unpaid Jobs				***	0.00
Not employed	56.7	75.2	-18.5		
>0 to 260 hours	19.2	9.1	10.0		
>260 to 1,040 hours	16.8	8.6	8.2		
>1,040 hours	7.4	7.1	0.2		
(Average total hours in all jobs) ^a	233.9	153.7	80.2	***	0.01
Total Hours Worked in Paid Jobs Only				***	0.00
No paid employment	57.9	77.2	-19.3		
>0 to 260 hours	19.1	8.3	10.8		
>260 to 1,040 hours	15.7	7.6	8.2		
>1,040 hours	7.3	6.9	0.3		
(Average total hours in paid jobs) ^a	229.6	143.3	86.3	***	0.00

Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the study's 12-month follow-up survey. In the table, we report observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model before random assignment by using data from the study's baseline survey and SSA administrative records. We calculated all statistics with sample weights to account for interview non-response. The analysis sample includes 389 treatment group youth and 344 control group youth. Survey item non-response may have resulted in smaller sample sizes for specific outcomes. See Appendix A, Table A.5, for sample sizes for all outcomes.

260 and 1,040 hours per year correspond to 5 and 20 hours per week, respectively, for 52 weeks.

For all outcomes in this table, item non-response occurred conditionally, depending on the values of other measures in the follow-up survey. The rate of missing data is 3.5 percent. We used a multiple imputation procedure to assign values when they were missing. See Appendix A, Section E, for more information on this procedure.

^aThe average includes youth who were not employed during the year following random assignment.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 level using either a two-tailed t-test or a chi-square test.

unpaid jobs (a relative increase of 52 percent) and 86 hours more in paid jobs only (a relative increase of 60 percent) than they would have if they had not had the opportunity to participate in the project. These estimated impacts are statistically significant at the one percent level. To better understand these findings, we investigated the impacts on the distribution of total hours. We found that Youth Works had a statistically significant impact on the distribution of total hours of work in paid and unpaid jobs (combined) by reducing the share of youth not employed over the year and increasing the share employed for no more than 1,040 hours. We found a similar impact on the distribution of total hours of work in paid jobs only.

We also estimated the impacts of the intervention on hours worked per week for each month during the year following random assignment. Among treatment group youth, the average number of hours worked per week in paid and unpaid jobs combined ranged from 3.2 hours to 5.6 hours (Figure V.3). These values are low because we included non-workers (with zero hours) in the calculation, and less than one-third of youth were working during these months (Figure V.1). We estimated that the average hours worked per week in any (paid or unpaid) jobs in months 3 through 12 following random assignment would have been significantly lower in the absence of Youth Works. In light of the small amount of unpaid employment (discussed in the previous section), it is not surprising that the monthly pattern of average hours worked per week is essentially the same for paid jobs only as for paid and unpaid jobs combined. We found, however, that the estimated impacts on the average hours worked per week in paid jobs only was somewhat stronger, as the impacts are statistically significant for all months of the year following random assignment.

We estimated that Youth Works had a positive impact on earnings from employment during the year following random assignment (Table V.3). Combining youth reports of their hours and wage rates on each paid job during the follow-up period, we calculated their earnings for the entire year.⁶⁸ On average, youth in the treatment group had earnings of \$1,559 during the year following random assignment, which was \$524 more than our estimate of their earnings absent the intervention (a relative increase of 51 percent); this difference is statistically significant at the one percent level. In addition, we found that Youth Works had a significant impact on the distribution of yearly earnings by reducing the share of youth who were not employed and therefore had no earnings and by increasing the share with positive earnings.

Similarly, we found that Youth Works had a positive impact on earnings per month worked during the year following random assignment (Table V.3). On average, youth in the treatment group earned \$261 per month worked, which was \$107 more than our estimate of what their average earnings would have been in the absence of Youth Works (a relative increase of 70 percent). The difference is statistically significant at the one percent level. The project also reduced the share of youth who were not employed for pay and increased the share with earnings.⁶⁹

⁶⁸ We adjusted the earnings measures for inflation using the consumer price index for urban wage earners and clerical workers (CPI-W) created by the U.S. Bureau of Labor Statistics (BLS). We chose this index because SSA uses it to adjust benefits. The earnings measures thus represent real earnings in 2008 dollars. For the yearly measure of earnings, we used the annual average of the CPI-W (as is the convention for SSA and BLS). For the monthly measures of earnings, we used the monthly CPI-W (not seasonally adjusted).

⁶⁹ Youth not employed in paid jobs during the year following random assignment had zero earnings per month worked. For youth who were employed in paid jobs, we calculated their total earnings over the year and divided by the number of months worked. On average, treatment group youth who were employed in paid jobs during the follow-up period worked about five and a half months and earned \$587 per month worked.

Figure V.3. Hours Worked per Week, by Month Following Random Assignment

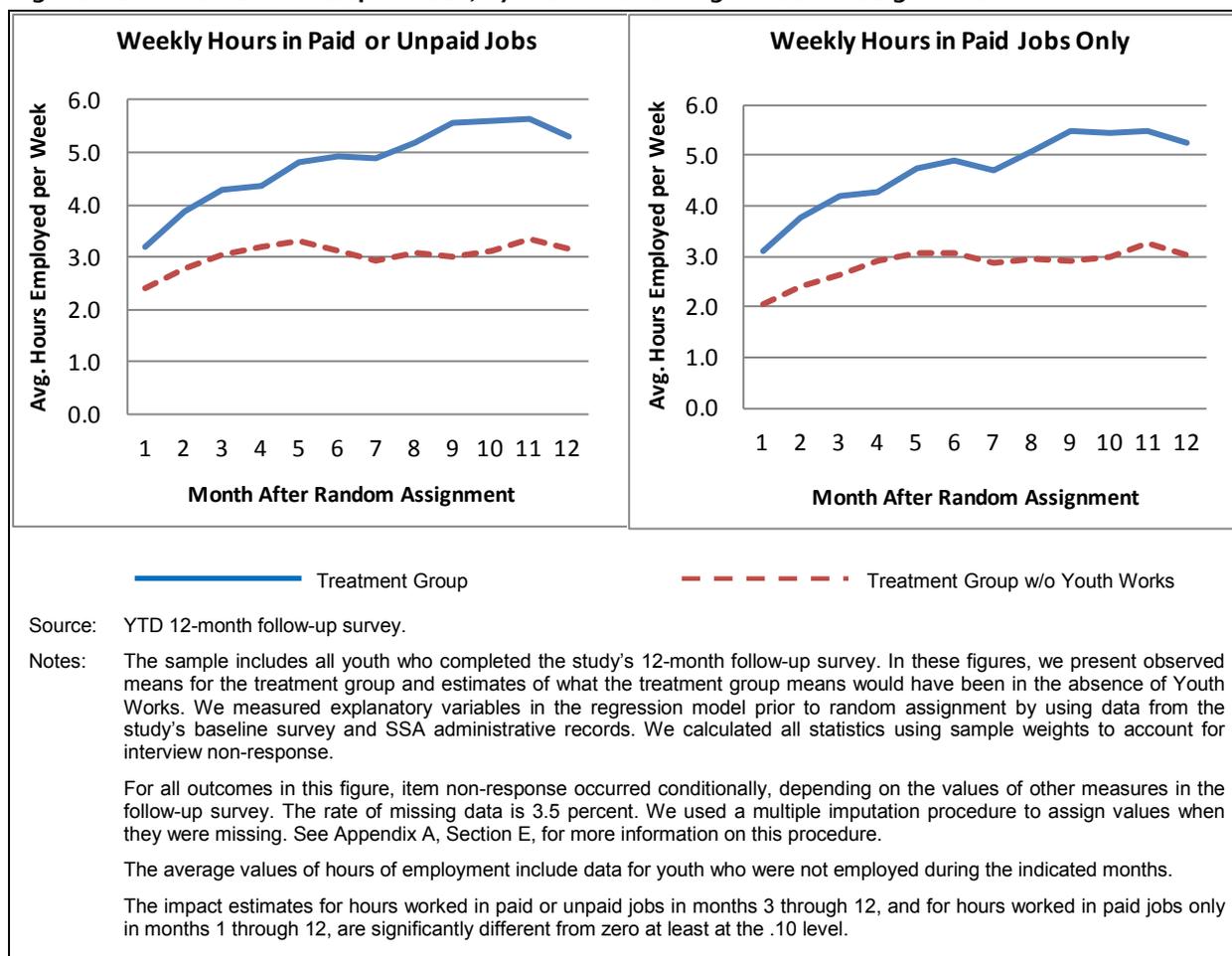


Figure V.4 presents the estimated average monthly earnings and average cumulative earnings for each month during the year following random assignment.⁷⁰ The timelines in the figure show that the average monthly earnings and cumulative earnings by month for treatment group members were higher than what they would have been in the absence of the intervention. We found that those differences are statistically significant in months 2 through 12 for average monthly earnings, and in months 3 through 12 for average cumulative earnings.

C. Youth Works Had Positive Impacts on Job Characteristics

Youth Works affected various characteristics of the jobs held by youth in the treatment group. We analyzed impacts on the characteristics of the primary paid jobs held by youth during the year following random assignment (Table V.4)⁷¹ We found that the project increased job tenure and usual

⁷⁰ The average cumulative earnings in the 12th month following random assignment for treatment group members in Figure V.4 (\$1,462) does not equal the average annual earnings during the year following random assignment in Table V.3 (\$1,559). This deviation is a product of differential rates of item non-response across the annual and monthly measures of earnings and our use of the multiple imputation procedure to address non-response. For both measures, item non-response occurred conditionally, depending on the values of other measures in the follow-up survey.

⁷¹ For youth who had more than one paid job during the follow-up period, we defined the primary job as the one that generated the most earnings.

Table V.3. Earnings from Employment (percentages, unless otherwise noted)

	Treatment Group		Impact	P-Value	
	Observed Mean	Estimated Mean w/o Youth Works			
Supplementary Outcomes					
Earnings During First Year After Random Assignment					
Annual Earnings				*	0.09
No paid employment	56.9	76.0	-19.0		
\$1 to \$1,000	14.3	6.1	8.2		
>\$1000 to \$5,000	16.8	9.2	7.7		
>\$5,000	12.0	8.8	3.2		
(Average earnings) (\$) ^a	1,559	1,035	524	***	0.01
Earnings Per Month Worked During First Year After Random Assignment					
Earnings per Month Worked				***	0.00
No paid employment	56.9	76.5	-19.6		
\$1 to \$500	20.2	11.3	8.9		
>\$500	22.9	12.2	10.7		
(Average earnings per month worked) (\$) ^a	261	154	107	***	0.00

Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the study's 12-month follow-up survey. In the table, we report observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model before random assignment by using data from the study's baseline survey and SSA administrative records. We calculated all statistics with sample weights to account for interview non-response. The analysis sample includes 389 treatment group youth and 344 control group youth. Survey item non-response may have resulted in smaller sample sizes for specific outcomes. See Appendix A, Table A.5, for sample sizes for all outcomes.

For all outcomes in this table, item non-response occurred conditionally, depending on the values of other measures in the follow-up survey. The rate of missing data is 6.7 percent. We used a multiple imputation procedure to assign values when they were missing. See Appendix A, Section E, for more information on this procedure.

^aThe average includes youth who were not employed during the year following random assignment.

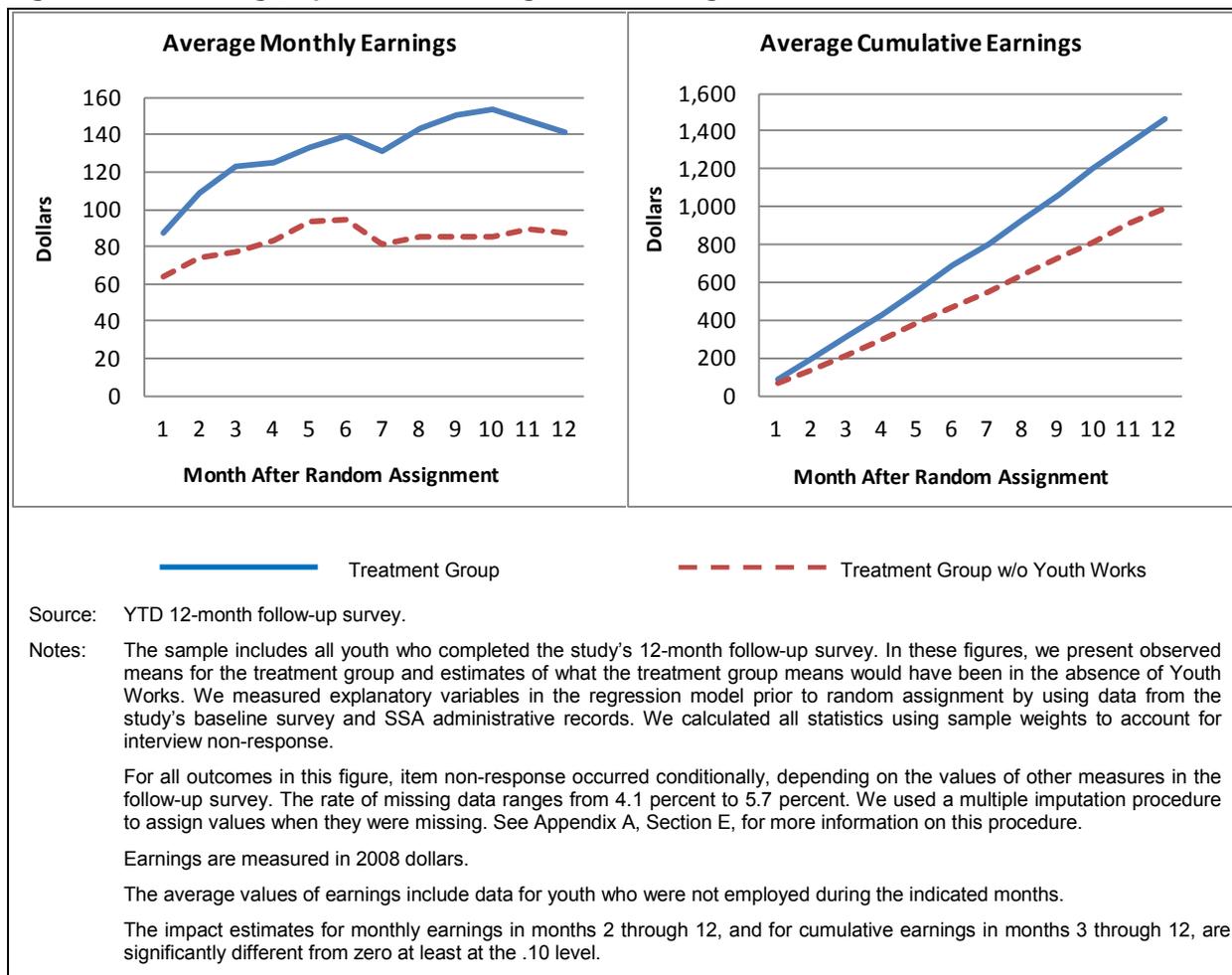
*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 level using either a two-tailed t-test or a chi-square test.

hours worked per week. Youth Works also reduced the share of youth not employed and increased the shares employed in jobs with hourly wage rates of no more than \$9, as well as in jobs without health insurance and paid leave benefits.

We defined the measures of job characteristics in a manner that allowed us to retain all sample members in the analysis, regardless of whether they had been employed for pay during the follow-up period.⁷² This maintained the integrity of the evaluation's experimental design and allowed us to generate reliable estimates of whether the intervention resulted in better jobs for treatment youth.

⁷² Characteristics of the primary job are observed only for youth who were ever employed for pay during the year following random assignment. Since employed youth are a self-selected group, comparing the job characteristics of employed treatment group youth with those of employed control group youth would not provide unbiased estimates of the impacts of Youth Works on job characteristics. Hence, to estimate impacts on job characteristics reliably, the analysis must maintain the experimental nature of the evaluation sample by using measures of job characteristics defined to include youth who were never employed as well as those who were ever employed.

Figure V.4. Earnings, by Month Following Random Assignment



As shown in Table V.4, the average tenure in the primary paid job for youth in the treatment group was slightly more than two months (all averages include values of zero for youth who did not work). We estimated that the average tenure was about a month higher than it would have been if the youth had not had the opportunity to participate in the project (a relative increase of 69 percent); the difference is statistically significant at the one percent level. To better understand this finding, we examined the impact on the distribution of months of tenure in the primary job. We found that Youth Works had a statistically significant impact on the distribution of months of tenure, mainly by reducing the share of youth not employed and increasing the share employed for at least one month but no more than six months.

Youth Works also had a significant impact on the distribution of usual hours worked per week in the primary job, by reducing the share of youth not employed and increasing the shares employed in several weekly hours categories, including the share employed more than 20 hours per week. Consistent with this finding, the project increased the average usual hours worked per week in the primary job by a statistically significant four hours (a relative increase of 74 percent). The project also had a statistically significant impact on the hourly wage rate associated with the primary job. We found that Youth Works shifted the distribution of the hourly wage primarily by reducing the share of youth not employed and increasing the share employed but earning less than \$7 per hour. The estimated impact on distribution of the hourly wage is statistically significant at the five percent level.

Table V.4. Job Tenure, Hours of Work, Hourly Wage, and Benefits in the Primary Paid Job (percentages, unless otherwise noted)

	Treatment Group		Impact	P-Value	
	Observed Mean	Estimated Mean w/o Youth Works			
Supplementary Outcomes					
Tenure				***	0.00
Not employed	57.9	77.2	-19.3		
1 month or less	4.6	2.3	2.3		
>1 to 6 months	21.5	8.9	12.6		
>6 to 11 months	8.4	5.9	2.5		
>11 months	7.5	5.7	1.9		
(Average months of tenure) ^a	2.3	1.3	0.9	***	0.00
Usual Hours Worked per Week				***	0.00
Not employed	56.9	75.9	-19.0		
10 hours or less	10.4	6.4	4.0		
>10 to 20 hours	11.6	3.9	7.7		
>20 hours	21.1	13.7	7.3		
(Average hours per week) ^a	9.4	5.4	4.0	***	0.00
Hourly Wage (in 2008 dollars)				**	0.04
Not employed	56.9	75.5	-18.5		
<\$7	25.6	9.5	16.1		
\$7 to \$9	13.8	10.7	3.0		
>\$9	3.7	4.3	-0.6		
Health Insurance Benefit				***	0.00
Not employed	56.9	75.5	-18.6		
Employed w/o health insurance	32.2	18.5	13.7		
Employed with health insurance	10.9	6.0	4.9		
Paid Vacation/Sick Leave Benefit				***	0.00
Not employed	56.9	76.2	-19.3		
Employed w/o paid vacation/sick leave	30.7	14.9	15.8		
Employed with paid vacation/sick leave	12.4	8.9	3.5		

Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the study's 12-month follow-up survey. In the table, we report observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model before random assignment by using data from the study's baseline survey and SSA administrative records. We calculated all statistics with sample weights to account for interview non-response. The analysis sample includes 389 treatment group youth and 344 control group youth. Survey item non-response may have resulted in smaller sample sizes for specific outcomes. See Appendix A, Table A.5, for sample sizes for all outcomes.

For all outcomes in this table, item non-response occurred conditionally, depending on the values of other measures in the follow-up survey. The rate of missing data ranges from 4.2 percent to 7.2 percent. We used a multiple imputation procedure to assign values when they were missing. See Appendix A, Section E, for more information on this procedure.

^aThe average includes youth who were not employed during the year following random assignment.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 level using either a two-tailed t-test or a chi-square test.

Relatively few treatment group members were employed in primary jobs that provided health insurance benefits (11 percent) or paid vacation or sick leave benefits (12 percent). We found that Youth Works shifted the distribution of health insurance benefits mainly by reducing the share of youth not employed and increasing the share employed on primary jobs that did not provide health insurance. Youth Works did increase the share of youth whose primary jobs provided health insurance, but only by a small amount. The estimated impact of Youth Works on the distribution of the availability of paid vacation or sick leave benefits was similar to that for health insurance coverage (namely, an increase in the share of youth employed on primary jobs that did not provide paid vacation or sick leave, and a smaller increase in the share employed on primary jobs that provided paid leave). The impact estimates on both of these distributions are statistically significant at the one percent level.

D. The Impact on Employment Was Consistent Across Subgroups

We investigated whether the impact of Youth Works on employment varied with the baseline characteristics of youth. That investigation revealed that the impact on the primary outcome in the employment domain—the share of youth ever employed in paid jobs during the year after random assignment—was consistent across subgroups defined by implementation phase and baseline age, school attendance status, and paid work experience (Table V.5). In other words, the differences in the impact estimates for each of the four subgroup pairs are not statistically significant.

The findings for the subgroups defined by implementation phase are especially interesting. As discussed in Chapter III, while the project implemented the Youth Works model consistently across the two phases of implementation, additional procedures were adopted in June 2010 for monitoring service hours recorded in ETO and employment outcomes for participants. These procedures supplemented an older system, instituted in July 2008, for monitoring staff contacts with employers and the employment readiness and employment status of participants. As reported in Table III.8, more than twice as many employment-related service hours for participants were recorded in ETO in phase 2 compared with phase 1. Nevertheless, Table V.5 shows that there was no significant difference in impacts on employment between the two phases. Moreover, while the impact on employment was positive in both phases, the magnitude of the impact was larger in the first phase.

Three factors may help to explain these results. First, some of the greater measured intensity of employment-related services for phase 2 may reflect more complete recording of service hours by Youth Works staff in that phase as opposed to an actual increase in the intensity of services delivered. Second, to the extent that there was an increase in the intensity of employment services in phase 2, some of the additional hours of services may reflect an increase in job coaching services. Recall that two additional job coaches were hired just prior to the start of phase 2. More intensive job coaching is unlikely to have affected the share of youth who worked for pay, as it was a post-employment service. Third, the estimated employment rate for the treatment group in the absence of the project was higher in phase 2 than in phase 1 (27 percent vs. 21 percent), which reduced the magnitude of the impact in phase 2.

For seven of the eight subgroups, we found statistically significant positive impacts on paid employment, ranging in magnitude from 15 to 24 percentage points. The one exception was the subgroup of youth younger than age 18 at baseline. For this group, the estimated impact was only eight percentage points and it is not statistically significant. This finding suggests that Youth Works may not have increased employment for youth under age 18, which may not be surprising, given their age and the fact that many were in school. It is also possible that we were unable to detect an

Table V.5. Ever Employed in Paid Job During the First Year After Random Assignment, by Subgroup (percentages)

	Treatment Group		Impact	P-Value	Treatment Group Size	Control Group Size	
	Observed Mean	Estimated Mean w/o Youth Works					
Implementation Phase							
Phase 1: random assignment before July 1, 2009	45.2	21.4	23.8	***	0.00	199	167
Phase 2: random assignment on or after July 1, 2009	42.6	27.2	15.3	***	0.00	188	177
(P-value of difference in impacts)					(0.15)		
Age							
Younger than 18 at baseline	32.4	24.8	7.7		0.35	71	67
Age 18 or older at baseline	45.1	23.3	21.8	***	0.00	316	277
(P-value of difference in impacts)					(0.13)		
School Attendance							
In school at baseline	45.3	27.1	18.2	***	0.00	137	141
Not in school at baseline	41.3	21.4	20.0	***	0.00	250	202
(P-value of difference in impacts)					(0.61)		
Paid Work Experience							
Worked for pay in prior year	66.8	44.0	22.8	***	0.00	110	102
No work for pay in prior year	33.2	16.2	17.0	***	0.00	276	241
(P-value of difference in impacts)					(0.96)		

Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the study's 12-month follow-up survey. In the table, we report observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model before random assignment by using data from the study's baseline survey and SSA administrative records. We calculated all statistics with sample weights to account for interview non-response. Survey item non-response may have resulted in smaller sample sizes, as indicated in the table.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level using a two-tailed t-test.

impact at a conventional level of statistical significance because of the small sample size for youth younger than 18 (only 19 percent of the analysis sample was in this subgroup).

E. Descriptive Analysis of Job Characteristics and Job Search Activities

To provide context for the findings from the analysis of impacts on employment-related outcomes, we present descriptive information for the primary paid jobs held by treatment group youth during the follow-up period. Among youth in the treatment group who were employed in paid jobs at some time during the year following random assignment, the three most common types of jobs, as shown in Table V.6, were janitorial work (14 percent), bus person or waitperson at food outlets (11 percent), and assembly work (10 percent). Other frequently reported jobs were office assistant and secretarial tasks, retail sales, gardening and grounds maintenance, store stocking clerk, and store cashier (each of these represented 4 to 6 percent of treatment group youth who were employed in paid jobs during the year following random assignment). These types of jobs are similar to those found in other studies of youth with disabilities and of youth in the general population (Wagner et al. 2003; Herz and Kosanovich 2000). About two-thirds of the ever-employed treatment group youth learned about their primary jobs from the following four sources

Table V.6. Types of Paid Jobs Most Frequently Reported by Treatment Group Members with Paid Employment

Treatment Group Youth	Percent
Janitorial work	13.7
Bus person/waitperson at food outlets	10.9
Assembly work	9.7
Office assistant and secretarial tasks	5.5
Retail sales	5.2
Gardening and grounds maintenance	4.8
Store stocking clerk	4.6
Store cashier	4.3
Sample Size	177

Source: YTD 12-month follow-up survey.

Notes: We calculated all statistics using sample weights to account for interview non-response.

(results not shown in the table): Youth Works (29 percent), friends or relatives (16 percent), directly from the employer (15 percent), and a school job placement office (6 percent).⁷³

The average tenure in the primary job by the ever-employed treatment group members was about five and a half months (results in this paragraph and the next are not shown in the table). The 30 percent of youth who had left their primary jobs by the time of the follow-up survey cited many reasons for having done so, but the most common was reaching the end of a temporary job. Other reasons included being fired due to performance problems, returning to school, health considerations, and not liking the job. Although job turnover was common, an overwhelming majority of the ever-employed youth in the treatment group reported that they had been happy with their primary jobs; only nine percent reported that they had been unhappy.

Among the 57 percent of treatment group members who did not work for pay during the year following random assignment, the three most common reasons given were health problems, inability to find the jobs they wanted, and not having reliable transportation to and from work. These reasons for not working are very similar to those mentioned by a national cross-section of all SSA disability program beneficiaries in the 2006 NBS (Livermore et al. 2009c). Additionally, among youth in the treatment group, 35 percent had not been involved in either paid employment or education/training in the year following random assignment and, of those, 30 percent reported that they had looked for work during the four weeks preceding the interview. Those who had looked for work indicated that their search typically involved contacting a One-Stop Workforce Center, asking friends or relatives about jobs, checking job advertisements in a newspaper or on the Internet, and seeking assistance from DRS.

⁷³ Among the subset of ever-employed treatment group youth who actually participated in Youth Works (161 youth), 30 percent reported that they had learned about their primary jobs through the project. Some of the participants may not have understood or may have forgotten that the employment services they received had been provided by Youth Works.

VI. IMPACTS ON EDUCATION

Education is an investment that can improve employment opportunities and increase the potential for self-sufficiency. It is a key short-term outcome in the YTD evaluation conceptual framework (Figure I.1) and some YTD projects, including Youth Works, provided education services to youth whose goals included attaining additional education. Although Youth Works did not have an explicit goal of increasing educational attainment, project staff asked participants about their education goals as part of person-centered planning. The staff then provided limited education services, including counseling and referrals. For high school youth, project staff participated in IEP meetings. The project did not provide substantial education services; our process analysis of ETO data revealed that although Youth Works provided education-related services to nearly three-quarters of its participants, among those who received education services the average amount of such services was just two hours (Table III.7).

In light of the age of Youth Works participants and the importance of completing high school, the primary outcome in the domain of educational progress for the impact analysis is either that a youth (1) was enrolled in an educational institution at any time during the year following random assignment or (2) had completed high school by the time of the 12-month follow-up survey (including youth who had completed high school at baseline). High school completion includes attainment of a high school diploma, GED, or certificate of completion. We found that treatment group members were no more likely to have enrolled in school or completed high school than they would have been in the absence of Youth Works. Examining the two components of this outcome separately, we found that the project did not have an impact on either school enrollment or high school completion.

A. Youth Works Had No Impact on Education Outcomes

Consistent with the absence of explicit education-related goals in the project, we found that Youth Works had no impact on education outcomes. Among treatment group youth, 82 percent either were enrolled in school during the year after random assignment or had completed high school by the time of the 12-month follow-up survey (Table VI.1). We estimated that the share either enrolled in school or having completed high school would have been about the same in the absence of Youth Works.

Examining the two components of the primary education outcome separately, we found no impact of Youth Works on school enrollment or high school completion. Thirty-five percent of treatment group youth were enrolled in school in the year following random assignment.⁷⁴ We

⁷⁴ For youth under the age of 18, education information was collected from the parent or guardian. Respondents were asked to report any education or training activity and, for youth with such an activity, the type of school or training program. We coded youth as enrolled in an education program if the type of program was school, college, GED, adult education, or home schooling. Among treatment group youth in the analytic sample, 35 percent were enrolled in school at the time of the baseline survey (conducted prior to random assignment). In this same sample, an identical share of treatment group youth—35 percent—was enrolled in the year following random assignment. However, enrollment statistics from the baseline and follow-up surveys are not fully comparable. The baseline survey asked about enrollment at the time of the survey or, if the interview was conducted during a summer month, asked if the youth would be returning to school in the fall (if affirmative, the youth was considered to be enrolled). The follow-up survey asked about enrollment during the year since random assignment; if the interview was conducted during a summer month, it did not probe about fall enrollment.

Table VI.1. Educational Progress (percentages)

	Treatment Group		Impact	P-Value
	Observed Mean	Estimated Mean w/o Youth Works		
Primary Outcome				
Ever enrolled in school in the year following random assignment or completed high school by the time of the 12-month follow-up survey	82.4	78.6	3.7	0.19
Supplementary Outcomes				
Ever enrolled in school in the year following random assignment	35.2	36.2	-1.0	0.68
Completed high school (attained high school diploma/GED/certificate or higher)	60.4	59.6	0.8	0.81
Type of School Attended				0.90
Did not attend school	65.0	64.0	1.0	
Elementary/middle/regular high school	19.1	19.3	-0.2	
Special high school for the disabled or home school	1.7	2.5	-0.7	
Postsecondary institution	11.6	12.2	-0.6	
GED/adult continuing education	2.6	2.1	0.5	
Intensity of Educational Activity				
Number of Months Enrolled in School				0.30
None	64.8	64.1	0.7	
Less than nine months	10.7	14.2	-3.5	
Nine to twelve months	24.5	21.7	2.8	

Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the study's 12-month follow-up survey. In the table, we report observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model prior to random assignment using data from the study's baseline survey and SSA administrative records. We calculated all statistics using sample weights to account for interview non-response. The analytic sample includes 389 treatment group youth and 344 control group youth. Survey item non-response may have resulted in smaller sample sizes for specific outcomes. See Appendix A, Table A.5, for the sample sizes for all outcomes.

*/**/****Impact estimate is significantly different from zero at the .10/.05/.01 level using either a two-tailed t-test or a chi-square test.

estimated that this share would have been about the same in the absence of Youth Works. Furthermore, 60 percent of treatment group youth had completed high school by the time of the follow-up survey.⁷⁵ We also estimated that this share would have been about the same in the absence of Youth Works.

Sixty-five percent of the treatment group members were not enrolled in school at some time during the year following random assignment; 19 percent attended an elementary, middle, or regular high school; 2 percent were either home schooled or attended a special high school for the disabled; 12 percent attended a postsecondary institution; and 3 percent attended a GED or adult continuing

⁷⁵ The baseline and follow-up surveys used the same question when asking about high school completion. At baseline, 49 percent of the treatment group had completed high school (including having obtained a GED or certificate of completion).

education program.⁷⁶ We estimated that Youth Works had no impact on the distribution of school type. We also found that Youth Works had no impact on the distribution of the number of months that youth were enrolled in school.⁷⁷

B. The Impact of Youth Works on Education Did Not Vary by Subgroup

The impact of Youth Works on education might be expected to vary across subgroups of youth. For example, decisions and goals related to enrolling in school and high school completion may have been different for youth who were younger, attended school at baseline, or worked in the year prior to baseline. We investigated whether the intervention had a significant impact on the primary outcome in the domain of educational progress—enrollment in an educational institution or completion of high school—for groups of youth defined by phase of project implementation and baseline measures of age, school attendance, and paid work experience.

We found statistically significant positive impacts on the primary measure of educational progress for youth who enrolled in the evaluation before July 1, 2009 and for youth who were not in school at baseline (Table VI.2). Nevertheless, we found no statistically significant differences in the estimated impacts within any of the four pairs of subgroups.

We also separately examined the two components of the primary outcome. We found no statistically significant impacts of Youth Works on school enrollment for any subgroup. We found statistically significant impacts on high school completion only for the subgroups defined by school enrollment at baseline. For youth who were in school at baseline, Youth Works reduced high school completion by ten percentage points (not shown in the table; significant at the ten percent level). A possible explanation for this finding is that Youth Works may have encouraged youth who were in school to stay in school rather than drop out and subsequently obtain a GED. For youth who were not in school at baseline, Youth Works increased high school completion by eight percentage points (not shown in the table; significant at the ten percent level). The difference in impacts between these two subgroups is significant at the five percent level.⁷⁸ For youth who were already out of school, Youth Works may have encouraged them to obtain a GED.

⁷⁶ For this measure, we created mutually exclusive categories by using only the most recently attended institution.

⁷⁷ We calculated months of enrollment in school based on information in the follow-up survey on the start and end dates for attendance in each school attended during the year following random assignment. For the start and end dates, the survey gave no special instructions regarding how to report extended breaks in attendance, such as any summer break. For this reason, we did not separately calculate the months of enrollment beyond nine months or calculate the average months of enrollment.

⁷⁸ The difference in the estimated impacts of Youth Works on school enrollment across subgroup pairs is not statistically significant for any pair. The difference in the estimated impacts of Youth Works on high school completion across subgroup pairs is statistically significant only for the pair defined by school enrollment at baseline.

Table VI.2. School Enrollment or Completion of High School, by Subgroup (percentages)

	Treatment Group			P-Value	Treatment Group Size	Control Group Size	
	Observed Mean	Estimated Mean w/o Youth Works	Impact				
Implementation Phase							
Phase 1: random assignment before July 1, 2009	84.9	78.1	6.8	*	0.10	199	165
Phase 2: random assignment on or after July 1, 2009	79.6	78.9	0.7		0.86	184	172
(P-value of difference in impacts)					(0.27)		
Age							
Under age 18 at baseline	89.1	92.0	-2.9		0.53	70	64
Age 18 or over at baseline	80.8	75.5	5.3		0.11	313	273
(P-value of difference in impacts)					(0.24)		
School Attendance							
In school at baseline	93.9	95.7	-1.9		0.48	139	138
Not in school at baseline	75.7	68.4	7.4	*	0.09	244	198
(P-value of difference in impacts)					(0.20)		
Paid Work Experience							
Worked for pay in prior year	89.7	85.3	4.4		0.33	109	101
No work for pay in prior year	79.4	76.7	2.8		0.42	273	235
(P-value of difference in impacts)					(0.65)		

Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the study's 12-month follow-up survey. In the table, we report observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model prior to random assignment using data from the study's baseline survey and SSA administrative records. We calculated all statistics using sample weights to account for interview non-response. Survey item non-response may have resulted in smaller sample sizes, as indicated in the table.

*/**/****Impact estimate is significantly different from zero at the .10/.05/.01 level using a two-tailed t-test.

VII. IMPACTS ON YOUTH INCOME, SSA BENEFITS, AND RELATED OUTCOMES

Greater income for youth with disabilities is a critical indicator of success for the YTD initiative, as described in the conceptual framework (Figure I.1). This initiative is expected to increase income through greater earnings and, in the short run, greater benefits as a result of the special SSA waivers for YTD participants. Youth Works had a significant positive impact on earnings in the short term (as discussed in Chapter V); also, in principle, the waivers would have allowed the project participants to retain more of their benefits at most levels of earnings, including zero countable earnings.⁷⁹ Through greater earnings and benefits, Youth Works thus could have increased participants' income during the year following random assignment.

The estimates presented in this chapter show that Youth Works had statistically significant positive impacts on the amount of total youth income and the fraction of total income received in the form of earnings during the year following random assignment. The project also had a modest positive impact on the amount of SSA benefits received by youth during that year. In addition, Youth Works had positive impacts on the use of SSA work incentives. In contrast, the project had no impacts on health insurance coverage and receipt of public assistance.

A. Youth Works Increased the Amount of Youth Income and the Fraction of Income from Earnings

Youth Works had a positive impact on the primary outcome measure in the domain of youth income—total income from earnings and SSA disability benefits during the year following random assignment. We constructed this measure by combining earnings information from the 12-month follow-up survey with information on benefit amounts from SSA administrative records.⁸⁰ The first row of Table VII.1 shows that, on average, youth in the treatment group had total income of \$8,060 in the year following random assignment, which was \$717 more than we estimated their average total income would have been in the absence of Youth Works (a relative increase of ten percent).⁸¹ This impact estimate is statistically significant at the one percent level.

To enhance our understanding of the estimated impact on total annual income, we conducted supplementary analyses of the distribution of total annual income and the share of income from earnings. The results shown in Table VII.1 provide no evidence that Youth Works had an impact on the distribution of total income. However, we found that the project had a positive impact on the fraction of total income from earnings. We estimated that, for treatment group youth, 15 percent of their total annual income came from earnings, which was 5 percentage points higher than it would

⁷⁹ One of the SSA waivers for YTD expands access to the PASS. Income set aside for a specific goal under an approved PASS is excluded from SSI countable income. The income need not be from earnings. The waivers are described in Appendix B.

⁸⁰ We used monthly data on SSA benefits obtained from a special extract of the TRF data. For a detailed description of the TRF data, see Hildebrand et al. (2010).

⁸¹ As noted in Chapter II, Section A.4, for all estimated impacts presented in this chapter, we controlled for the amount of benefits received by the youth during the 12 months preceding the month of random assignment (along with the other control variables). Because total benefits during the year prior to random assignment correspond directly to the income and benefit outcomes during the year following random assignment, we included the former as a control to improve the precision of the impact estimator for the income and benefit outcomes.

Table VII.1. Youth Total Income

	Treatment Group		Impact	P-Value	
	Observed Mean	Estimated Mean w/o Youth Works			
Primary Outcome					
Total annual income (earnings and SSA benefits) (\$)	8,060	7,343	717	***	0.00
Supplementary Outcomes					
Distribution of Total Annual Income (%)					0.65
Less than \$5,000	19.1	19.6	-0.5		
\$5,000 to less than \$7,000	24.8	28.5	-3.6		
\$7,000 to less than \$10,000	26.0	25.9	0.0		
\$10,000 or more	30.1	26.0	4.1		
Percentage of Total Annual Income from Earnings	15.3	10.8	4.5	***	0.01

Sources: YTD 12-month follow-up survey and SSA administrative records.

Notes: The sample includes all youth who completed the study's 12-month follow-up survey. The table reports observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model prior to random assignment using data from the study's baseline survey and SSA administrative records. We calculated all statistics using sample weights to account for interview non-response. The analysis sample includes 389 treatment group youth and 344 control group youth. Survey item non-response may have resulted in smaller sample sizes for specific outcomes. See Appendix A, Table A.5, for the sample sizes for all outcomes.

For all outcomes in this table, item non-response occurred conditionally in measuring the earnings component of total annual income, depending on the values of other measures in the follow-up survey. The rate of missing data in the annual earnings measure is 6.7 percent. We used a multiple imputation procedure to assign earnings when they were missing. See Appendix A, Section E, for more information on this procedure.

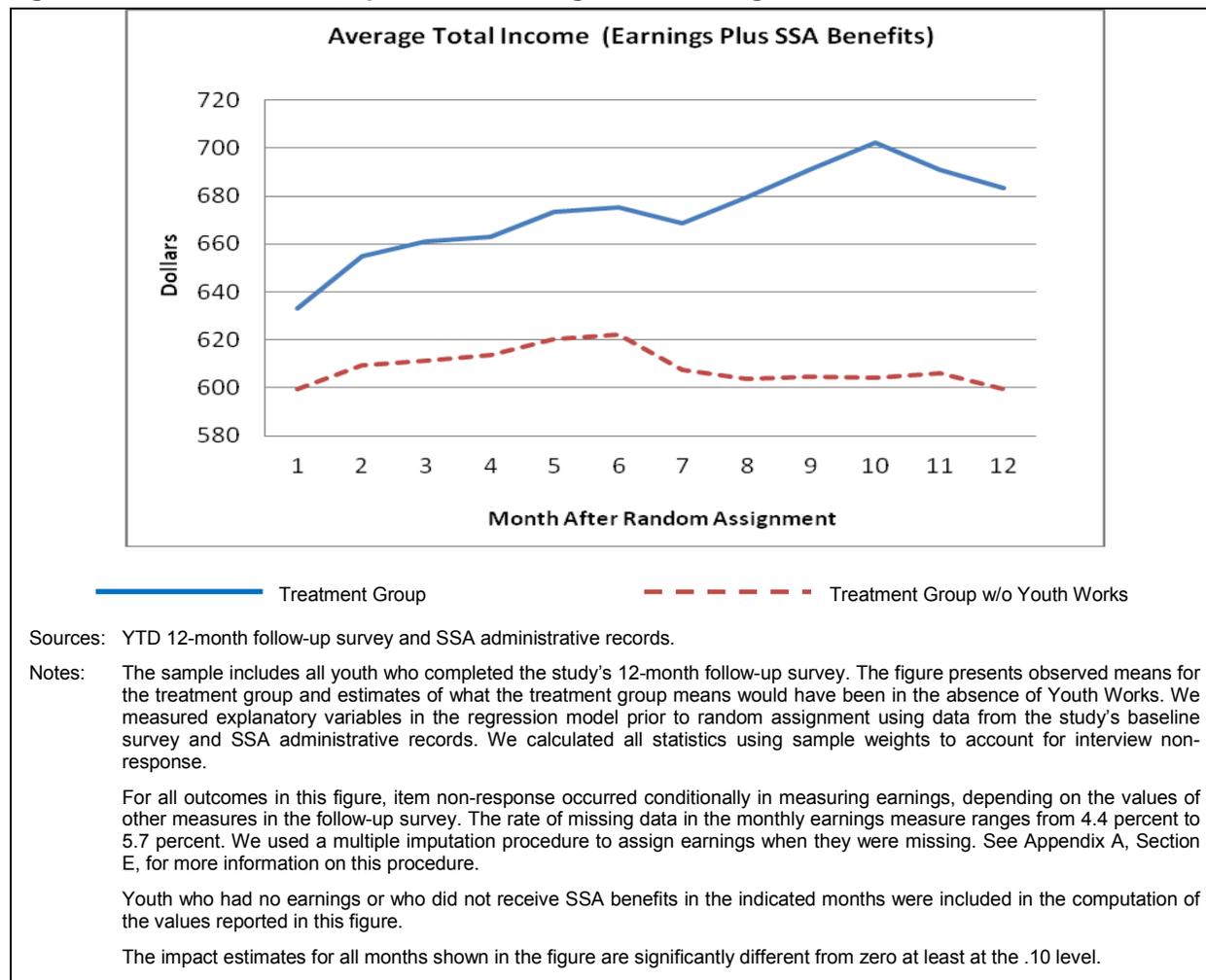
Youth who had no earnings or who did not receive SSA benefits during the year following random assignment were included in the computation of the values reported in this table.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 level using either a two-tailed t-test or a chi-square test.

have been in the absence of Youth Works (a relative increase of 42 percent). This difference is statistically significant at the one percent level. Thus, along with increasing the total income received by youth who had been given the opportunity to participate, Youth Works shifted the source of their income away from benefits and toward earnings.

The positive impact of Youth Works on annual income was underpinned by an increase in the monthly income of youth in each of the 12 months during the year following random assignment. In Figure VII.1, we present average values of earnings plus SSA benefits for each month in the year following random assignment. The timelines in this figure show the average observed monthly income amounts for youth in the treatment group, as well as estimates of what their average monthly income amounts would have been if they had not had the opportunity to participate in Youth Works. The vertical difference between the plotted timelines for any month represents the estimated impact of the intervention in that month. The impact estimates for months 1 through 12 are positive and significantly different from zero at least at the ten percent level, indicating that the project increased the average income of youth in those months.

Figure VII.1. Youth Income, by Month Following Random Assignment



Given the SSA waivers for YTD, we had no expectation that Youth Works would reduce either the rate of receipt or the average amount of disability benefits in the near term, despite the project having increased earnings during the year following random assignment (as reported in Chapter V). In fact, we anticipated that the waivers would result in increased benefits in the short run, since they allow youth to keep more of their benefits while earning income through work. In Table VII.2, we show that the project had no impact on the share of youth who received any SSA benefits during the year following random assignment. The share of treatment group youth who received SSA benefits during the year (92 percent) may seem low in light of the fact that all youth in the research sample were on the SSA benefit rolls at baseline. However, not all of the youth were in current pay status at baseline. The share of treatment group members not receiving SSA benefits in each month in the year before random assignment ranged from 8 percent to 11 percent (Appendix A, Figure A.2).⁸² The most common reasons why research sample members (including those in the treatment group as well as those in the control group) were not in current pay status were cessation of disability and family income in excess of the allowable amount. These cases account for most of the research sample members who received no SSA benefits during the year following random assignment.

⁸² In Appendix A, we also provide the average SSA benefit by month in the year before and the year after random assignment (Figure A.1 and Table A.10).

Table VII.2. Receipt and Amount of SSA Benefits (percentages, unless otherwise noted)

	Treatment Group		Impact	P-Value
	Observed Mean	Estimated Mean w/o Youth Works		
Supplementary Outcomes				
Receipt of SSA Benefits (SSI, DI, or CDB)				
Any benefit receipt during the year following random assignment	92.3	91.9	0.4	0.78
Number of months of benefit receipt during the year following random assignment	10.8	10.5	0.2	0.19
Annual Benefit Amount				
Distribution of annual benefit amount				0.29
None	7.7	8.2	-0.5	
\$1 to \$6,500	23.8	27.5	-3.7	
>\$6,500 to \$8,000	58.4	55.2	3.1	
>\$8,000	10.1	9.0	1.1	
Average annual benefit amount (\$) ^a	6,421	6,228	192 *	0.08

Source: SSA administrative records.

Notes: The sample includes all youth in the research sample less three youth identified as deceased at the time of the 12-month follow-up survey. The table reports observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model prior to random assignment using data from the study's baseline survey and SSA administrative records. The sample includes 454 treatment group youth and 395 control group youth.

^aThe average includes youth who did not receive benefits during the year following random assignment.

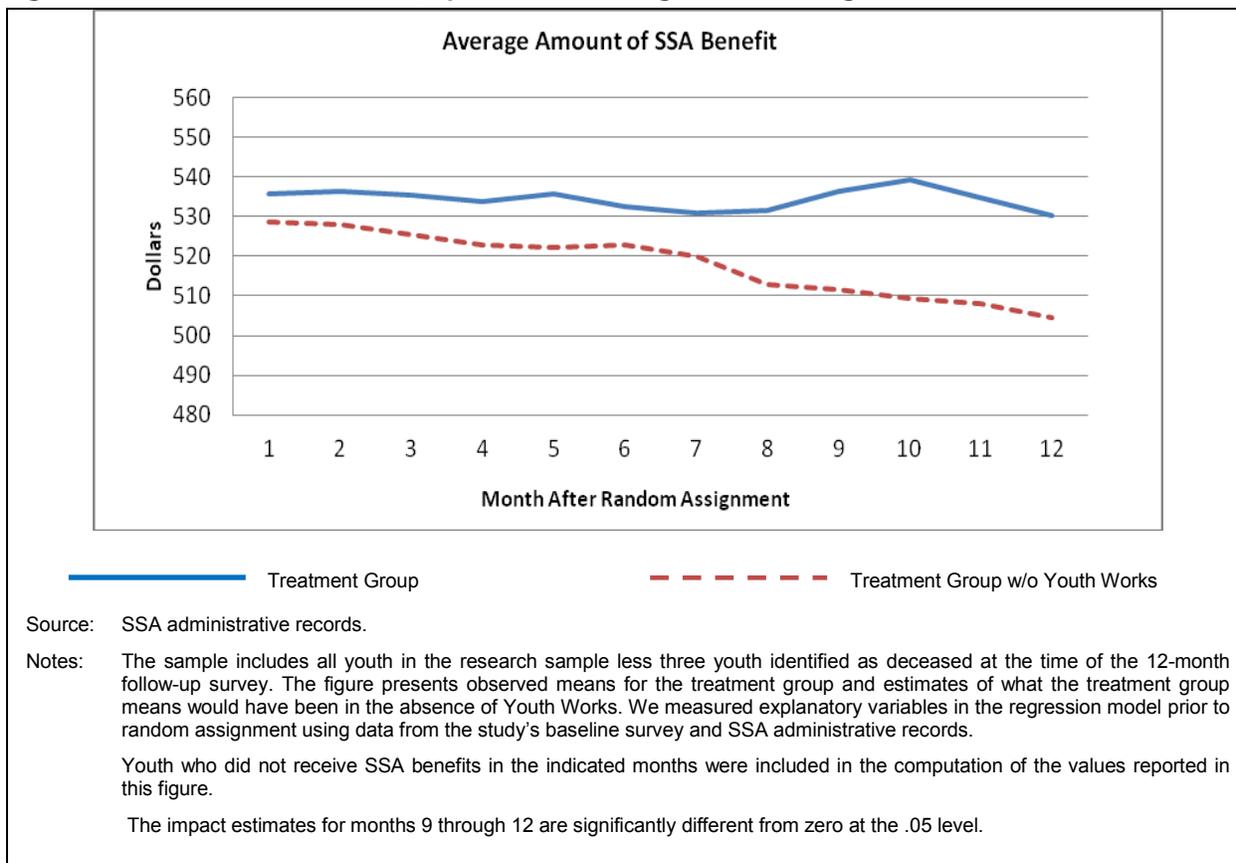
*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 level using either a two-tailed t-test or a chi-square test.

In Table VII.2, we also show that treatment group youth received SSA disability program benefits for an average of 11 months during the year following random assignment. We estimated that their duration of benefit receipt would not have been different in the absence of the Youth Works. The project thus had no impact on the receipt of SSA benefits during the year following random assignment. However, we estimated that the project had a small but positive impact on the annual benefit amount. On average, treatment group members received \$6,421 in benefits during the follow-up year, which we estimated to be \$192 more than what they would have received in the absence of the project (a relative increase of three percent).⁸³ The difference is statistically significant at the ten percent level. To flesh out this finding, we analyzed the distribution of the annual benefit amount, but found no statistically significant impact of Youth Works.

We found that the positive impact of Youth Works on the annual disability benefit amount reflects an increase in the benefits received by treatment group members in 4 of the 12 months following random assignment. Figure VII.2 depicts the average benefit amount received by youth in each month during the year following random assignment. Impacts are represented in the figure by

⁸³ In Table VII.2, we report the estimated impacts on receipt and amount of SSA benefits for the full research sample. We also estimated impacts for the analytic sample (youth in the research sample who completed the study's 12-month follow-up survey), and the estimates are very similar to those for the full research sample. Appendix A, Table A.9, provides benefit impact estimates for both samples.

Figure VII.2. SSA Benefit Amount, by Month Following Random Assignment



the difference between the average benefit received by treatment group members and our estimate of what would have been the average benefit in the absence of the project. We found that the estimated impacts for months 9 through 12 are positive and significantly different from zero at the five percent level, indicating that the project increased the amount of benefits received by youth in those month.^{84, 85}

⁸⁴ The Social Security benefit amount is the only outcome for which we have monthly values for the period before random assignment. The differences in the average monthly benefit amount between the treatment and control groups during the year prior to random assignment are small and statistically insignificant in every month (see Appendix A, Section F). As explained above in Section A, we controlled for the total amount of benefits received during the 12 months prior to random assignment in all impact analyses presented in this chapter.

⁸⁵ The analysis of monthly benefit amounts presented in Figure VII.2 is based on the evaluation's research sample—the sample of all youth who were randomly assigned. In contrast, the analyses of monthly earnings and income presented in Figures V.4 and VII.1, respectively, are based on the evaluation's analysis sample—the sample of youth who were randomly assigned and who also responded to the 12-month follow-up survey. Because of these different samples, these results are not necessarily additive, despite the fact that we defined income to equal earnings plus benefits. In other words, because of the different samples, the earnings results in Figure V.4 and the benefits results in Figure VII.2 do not necessarily sum to the income results in Figure VII.1.

B. Youth Works Had Positive Impacts on the Use of SSA Work Incentives

Treatment group youth who enrolled in Youth Works had the opportunity to use the five SSA waivers for YTD (see Appendix B for a description of these waivers).⁸⁶ Since each of the waivers enhanced an SSA work incentive available to the control group, we were able to analyze the impact of Youth Works on use of the specific incentives. The treatment group youth may have been more likely to use these work incentives than if they had not had the opportunity to participate in Youth Works because the project provided intensive benefits counseling, which led to increased awareness and understanding of the SSA work incentives (as discussed in Chapter IV). Additionally, the greater generosity of the waivers for YTD relative to the standard SSA work incentives may have encouraged treatment group youth to make more use of the incentives. Using data from SSA administrative records, we constructed five supplementary outcome measures that captured the use of each incentive (namely, the EIE, SEIE, Section 301 waiver, PASS, and IDAs). We also constructed a composite outcome measure of the use of any of these work incentives.

We found that Youth Works did increase the use of the collective SSA work incentives under consideration during the year following random assignment. Table VII.3 shows that 29 percent of treatment group youth used at least one of the five work incentives.⁸⁷ We estimated that these youth would have had a 22 percent overall rate of use of work incentives if they had not been given the opportunity to participate in the project. The difference of seven percentage points is statistically significant at the five percent level.⁸⁸ The 29 percent rate of use of work incentives by treatment group members appears to be consistent with 26 percent of them having reported earnings to SSA and 12 percent having used the Section 301 waiver, which is not contingent on employment or earnings.

When we examined the impacts of Youth Works separately on the use of each work incentive, we found that the project had statistically significant positive impacts on the use of the SEIE and the EIE. Youth Works increased the use of the SEIE by 4 percentage points (to 5 percent), and the use of the EIE by 4 percentage points (to 15 percent).⁸⁹ Because Youth Works had significant positive impacts on youths' paid employment (as discussed in Chapter V), it is not surprising that the project had positive impacts on the use of these two work incentives. The SEIE is applied first among all of the income exclusion incentives. With almost one in three treatment group youth reporting full-time school enrollment during the year following random assignment (as discussed in Chapter VI), the SEIE would have been first applied on any substantial earnings reported to SSA by these youth. Non-students with earnings would have received the EIE.

⁸⁶ Some of the SSA work incentives are applied automatically to disability program beneficiaries who meet the criteria for receiving the incentives: the EIE applies automatically to all SSI beneficiaries, and the Section 301 waiver applies automatically to youth participating in Youth Works. For these work incentives, we apply the term "use" of SSA work incentives loosely, to indicate that youth were benefitting from them.

⁸⁷ We provide statistics on the use of YTD waivers by Youth Works participants in Table III.5.

⁸⁸ The estimated impact on the overall use of SSA work incentives for youth who completed the study's 12-month follow-up survey is similar to that for the full research sample in Youth Works. In Table A.9, we provide work incentive impact estimates for both samples.

⁸⁹ Among treatment group youth who reported any earnings to SSA, 18 percent used the SEIE, and 47 percent used the EIE. Among control group youth who reported any earnings to SSA, 8 percent used the SEIE, and 66 percent used the EIE. Differences between treatment group and control group youth in these measures do not reflect impact estimates because the calculations are limited to those who reported earnings to SSA.

Table VII.3. Use of SSA Work Incentives (percentages)

	Treatment Group		Impact		P-Value
	Observed Mean	Estimated Mean w/o Youth Works			
Supplementary Outcomes					
Use of SSA Work Incentives					
Used at least one SSA work incentive	28.6	21.9	6.7	**	0.02
Used the SEIE	4.8	1.0	3.8	***	0.00
Used the EIE	15.0	11.1	3.9	*	0.09
Used the Section 301 waiver	11.9	12.2	-0.3		0.88
Established a PASS ^a	0.2	0.0	0.2		0.35
Opened an IDA ^a	0.0	0.0	0.0		1.00
Reported any Earnings to SSA	26.4	14.9	11.5	***	0.00

Source: SSA administrative records.

Notes: The sample includes all youth in the research sample less three youth identified as deceased at the time of the 12-month follow-up survey. The table reports observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model prior to random assignment using data from the study's baseline survey and SSA administrative records. The sample includes 454 treatment group youth and 395 control group youth.

^aSince no control group member used this work incentive, we could not do regression-adjusted impact analysis. We present the impact estimate from a simple comparison of means.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 level using a two-tailed t-test.

Youth Works had no impact on the use of the Section 301 waiver, which allows beneficiaries to continue receiving SSA program benefits as long as they are participating in a qualified program, such as YTD, if they are determined to be ineligible for medical reasons. The absence of an impact may have been due to the benefits planning services provided by Youth Works, which may have helped some treatment group members avoid negative age-18 redeterminations, thus obviating their need to use the Section 301 waiver.⁹⁰ Youth Works also had no impacts on the use of the IDA or PASS work incentives. No treatment group youth opened an IDA during the year following random assignment and less than one percent of them used the PASS work incentive.

Finally, we examined whether Youth Works had an impact on the share of youth reporting earnings to SSA. As previously noted, 26 percent of treatment group youth reported earnings to SSA. We estimated that the share would have been only 15 percent in the absence of Youth Works. The estimated impact of 12 percentage points is statistically significant at the one percent level. While 43 percent of treatment group youth reported in the follow-up survey that they had been employed for pay during the year following random assignment, only 26 percent of them reported any earnings to SSA. The lower share of youth reporting earnings to SSA may have been due to the reporting requirements for SSI beneficiaries: The first \$65 of earnings each month (or \$85 if the beneficiary receives no unearned income) are automatically excluded from SSI benefit calculations and thus beneficiaries are not required to report earnings at or below these levels.

⁹⁰ Thirteen percent of control group youth used the Section 301 waiver (Appendix A, Table A.5). Among the control group youth who used the Section 301 waiver, 60 percent were enrolled in school at baseline (results not shown). Thus, it is likely that a majority of control group youth who qualified for this incentive did so by being enrolled in an educational institution and receiving services under the Individuals with Disabilities Education Act.

C. Youth Works Had No Impacts on Health Insurance Coverage or Receipt of Public Assistance

To understand whether Youth Works affected broader indicators of the economic status of the youth in the study and their households, we analyzed measures of health insurance coverage and receipt of public assistance at the time of the 12-month follow-up survey. Looking first at self-reported health insurance coverage, we found that 92 percent of the treatment group youth were covered by public health insurance (Table VII.4). We estimated that, in the absence of the project, the public health insurance coverage rate would have been similar, indicating that the project had no impact on public health insurance coverage for youth. Although all SSI recipients in West Virginia are eligible for Medicaid (and DI and CDB recipients are eligible for Medicare), some youth may not have been covered by public health insurance at the time of the follow-up survey because they were not receiving SSA benefits at that time: 11 percent of treatment group youth (and 13 percent of control group youth) were not receiving benefits in month 12 after random assignment (see Appendix A, Figure A.2, and related discussion).

We also examined self-reported private health insurance coverage, which included insurance provided by employers or unions (either those of the youth or their parents) and policies purchased by the youth or their parents. The rate of coverage by private health insurance was 14 percent for treatment group members. We estimated that it would have been 3 percentage points higher in the absence of Youth Works; however, that difference is not statistically significant, suggesting that the project did not have any impact on private health insurance coverage for youth. We also found no significant impact on coverage when we looked at youth who were covered concurrently by *both* public and private health insurance.⁹¹

When we analyzed the share of youth reporting any form of health insurance, we found that 93 percent of youth in the treatment group were covered by some form of health insurance, either public or private. We estimated that this coverage rate was unaffected by the intervention.

Youth Works had no impact on the receipt of public assistance, despite the fact that its benefits counselors tried to connect participants and their families to additional public assistance for which they were eligible. Table VII.4 shows that 46 percent of treatment group members lived in households that received SNAP benefits during the year following random assignment, and 8 percent lived in households that received TANF. We found no statistically significant evidence that the intervention influenced these measures of public assistance receipt.

⁹¹ A provision of the Patient Protection and Affordable Care Act of 2010 allowed children to be covered by their parents' private health insurance until age 26. In principle, this provision, which went into effect on September 23, 2010, could partially account for the absence of significant impact of Youth Works on private health insurance coverage, as it could have expanded private health insurance coverage among all youth in the research sample, thus limiting the potential for Youth Works to further increase coverage. We investigated this by analyzing data from the baseline and follow-up surveys on self-reported private health insurance coverage for control group members. We restricted the analysis to youth who completed the follow-up survey after September 30, 2010. For these control group members, we found no statistically significant expansion in private health insurance coverage between the baseline and follow-up surveys (results not shown). We conclude that the absence of a significant impact of Youth Works on private health insurance coverage cannot be attributed to an expansion in private health insurance coverage under to the Affordable Care Act.

Table VII.4. Health Insurance Coverage and Receipt of Other Public Assistance (percentages)

	Treatment Group		Impact	P-Value
	Observed Mean	Estimated Mean w/o Youth Works		
Supplementary Outcomes				
Youth Health Insurance Coverage				
Public health insurance	91.5	90.1	1.4	0.49
Private health insurance	13.5	17.2	-3.7	0.10
Both public and private health insurance	11.6	13.9	-2.4	0.25
Either public or private health insurance	93.3	92.9	0.4	0.80
Household Receipt of Public Assistance				
SNAP (food stamps)	45.8	48.7	-3.0	0.40
TANF	7.7	7.3	0.5	0.82

Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the study's 12-month follow-up survey. The table reports observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model prior to random assignment using data from the study's baseline survey and SSA administrative records. We calculated all statistics using sample weights to account for interview non-response. The analysis sample includes 389 treatment group youth and 344 control group youth. Survey item non-response may have resulted in smaller sample sizes for specific outcomes. See Appendix A, Table A.5, for the sample sizes for all outcomes.

*/**/**Impact estimate is significantly different from zero at the .10/.05/.01 level using a two-tailed t-test test.

D. Youth Works' Impact on Youth Income Did Not Vary by Subgroup

The impact of Youth Works on the primary outcome in the income domain—the amount of total annual income for youth—did not differ significantly within any of four pairs of subgroups (Table VII.5). We estimated the impacts of Youth Works on youth total income for the same subgroup pairs as in our analyses of the other outcome domains, defined by implementation phase and baseline values of age, school attendance, and paid work experience. Table VII.5 shows that for one subgroup in each of the four subgroup pairs, the project had a statistically significant positive impact on youth income; however, we found no statistically significant differences in the estimated impacts within any of the pairs of subgroups.

Table VII.5. Youth Total Income—Earnings and SSA Benefits, by Subgroup (\$)

	Treatment Group		Impact	P-Value	Treatment Group Size	Control Group Size
	Observed Mean	Estimated Mean w/o Youth Works				
Implementation Phase						
Phase 1: random assignment before July 1, 2009	8,059	7,546	513	0.11	201	167
Phase 2: random assignment on or after July 1, 2009 (P-value of difference in impacts)	8,061	7,148	912	*** (0.37)	188	177
Age						
Under age 18 at baseline	7,518	6,906	612	0.22	71	67
Age 18 or over at baseline (P-value of difference in impacts)	8,185	7,443	741	*** (0.82)	318	277
School Attendance						
In school at baseline	7,870	6,984	885	***	139	141
Not in school at baseline (P-value of difference in impacts)	8,166	7,554	612	** (0.53)	250	202
Paid Work Experience						
Worked for pay in prior year	9,479	8,378	1,101	**	110	102
No work for pay in prior year (P-value of difference in impacts)	7,514	6,951	563	** (0.37)	278	241

Sources: YTD 12-month follow-up survey and SSA administrative records.

Notes: The sample includes all youth who completed the study's 12-month follow-up survey. The table reports observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model prior to random assignment using data from the study's baseline survey and SSA administrative records. We calculated all statistics using sample weights to account for interview non-response.

For all outcomes in this table, item non-response occurred conditionally in measuring earnings, depending on the values of other measures in the follow-up survey. The rate of missing data in various subgroups in the table ranges from 5.8 percent to 9.0 percent. We used a multiple imputation procedure to assign earnings when they were missing. See Appendix A, Section E, for more information on this procedure.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level using a two-tailed t-test.

VIII. IMPACTS ON ATTITUDES AND EXPECTATIONS

Youth Works, like all of the YTD projects, sought to provide youth who had disabilities with services and experiences that would instill in them a belief in their ability to succeed in life. The conceptual framework for the YTD evaluation (Figure I.1) thus posits near-term improvements in youths' expectations for their futures and sense of self-efficacy. Youth Works in particular sought to promote independence and self-sufficiency among participants through person-centered planning. The project's service model featured early discussions of a participant's overall goals, including career interests, short- and long-term employment goals, and other milestones.

The overarching objective of the YTD initiative was to promote economic self-sufficiency and independence. Accordingly, we specified the primary outcome in the domain of "attitudes and expectations" as whether a youth's goals included working and earning enough money to stop receiving Social Security disability benefits. The supplementary outcomes in this domain include additional measures of youth expectations and self-determination. If Youth Works was successful in empowering youth and fostering positive expectations, we should anticipate that treatment group members would demonstrate greater independence in daily activities, decision making, and social interactions. The supplementary outcomes thus also include measures of independence and social interactions.

Attitudes and expectations are difficult to measure, however. Responses to survey questions on these topics are clearly subjective, and research on the stability of self-reports indicates that the same person answering on different days may respond differently.⁹² In addition, youth may feel pressure to respond in a way they think is expected or socially accepted. Due to the difficulty in accurately measuring attitudes and expectations, some studies find no impacts on these measures, even when an objective outcome of interest (such as employment) shows an impact. The YTD follow-up survey was designed to include the best available measures used in other surveys. Nevertheless, even with widely used measures, the concepts of self-efficacy and future expectations are difficult to measure.

In addition, with respect to the primary outcome, it is possible for an intervention that provides benefits counseling or paid work experience to have an unintentional adverse impact on whether a youth's goals include working and earning enough money to stop receiving disability benefits. To the extent that a YTD project increased awareness that working and receiving earnings may not eliminate a youth's entire cash benefit and eligibility for medical insurance, this awareness may result in fewer youth agreeing that their goals include working and earning enough to stop receiving disability benefits. As we showed in Chapter IV, Youth Works improved youths' understanding that their entire cash benefit and medical insurance would not be lost once work begins (Table IV.3). Hence, this phenomenon may be particularly salient for Youth Works participants.

Although Youth Works emphasized youth independence and self-sufficiency, we found no impact on our primary measure of attitudes and expectations—youth goals for future work and earnings. However, we did find significant impacts on supplementary outcomes in this domain. The project increased the youths' expectations of both working and living independently in the future.

⁹² Research finds evidence of low to moderate stability in self-reports of social skills (Gresham and Elliott 1990) and self-concept (Marsh 1983). Also, for youth with developmental disabilities, stability likely would be lower. Stability is related to cognitive rather than chronological age. Younger children have more difficulty in differentiating discrete areas of self-worth (Harper 1990).

A. Youth Works Had Mixed Impacts on Goals for Future Work and Earnings

Our primary outcome measure in the domain of attitudes and expectations is goals for future work and earnings. This measure is based on youth responses to the statement in the follow-up survey, “Your personal goals include someday working and earning enough to stop receiving Social Security disability benefits.”⁹³ This is particularly relevant to the YTD evaluation because it measures whether youths’ goals align with the goal of the YTD initiative for youth to maximize their economic self-sufficiency.⁹⁴

We found no impact on goals for future work and earnings. Among youth in the treatment group, 66 percent agreed with the statement that their goals included working and earning enough to stop receiving disability benefits (Table VIII.1).⁹⁵ In the absence of Youth Works, we estimated that 67 percent of youth would have agreed with the statement. The estimated impact of negative one percentage point is not statistically significant. As discussed in the introduction to this chapter, Youth Works could have had an unintentional negative impact by increasing awareness that benefits do not cease when paid work begins. Because the impact estimate is not statistically significant, we conclude that there is no evidence of an unintentional negative impact. However, the lack of an impact on this outcome may reflect a combination of a positive impact on some youth and an unintended negative impact on others.

We found mixed effects of Youth Works on supplementary measures of youth expectations and plans for the five years after the follow-up survey. These measures capture whether youth expected to (1) go further in school, (2) start or continue working for pay, and (3) live on their own (as opposed to living with parents or guardians).⁹⁶ At baseline, 63 percent of treatment group youth reported that they planned to go further in school in the next five years (Table II.2). In the follow-

⁹³ Youth were asked to respond to this statement in one of four categories: “agree a lot,” “agree a little,” “disagree a little,” and “disagree a lot.” We combined the first two categories to create a measure of whether the youth agreed with the statement. As a robustness check, we verified that there were no impacts of Youth Works on the share of youth responding “agree a lot.” We found a statistically significant impact (at the ten percent level) of Youth Works on the distribution of responses across all four categories, but the pattern of results was not consistent: Youth Works increased the shares responding “agree a little” and “disagree a lot” by a few percentage points and decreased the shares responding “agree a lot” and “disagree a little” by a few percentage points.

⁹⁴ Information on most of the measures of attitudes and expectations reported in this section were collected from youth only. In particular, responses to the primary measure and locus of control measures were not asked of parents (or guardians). The three expectations measures (regarding independent living, employment, and education) were asked of both parents and youth. For these three measures, we report both youth and parent responses in Table VIII.1.

⁹⁵ Information on plans for the future and self-efficacy was missing for a large share of cases—roughly 16 to 19 percent for youth responses and up to 47 percent for parent responses. For youth responses, missing information for many cases occurred due to skip patterns in the survey for proxy respondents: 11 percent of youth had a proxy respondent for the follow-up survey, and most of the proxy respondents were parents of the youth. Regarding plans for the future, proxy respondents who were parents provided information for the parent response only and proxy respondents who were not parents provided information for the youth response only. For self-efficacy, proxy respondents were not asked to provide any information. For parent responses, missing information mainly occurred when the parent (or guardian) was unavailable to respond to the survey.

⁹⁶ For most outcome measures, we do not have similar measures at baseline. However, the baseline and follow-up survey used similar questions to ask about plans for the next five years for further schooling, working for pay, and living independently. The biggest difference between the surveys was that the follow-up survey did not ask youth who were working full time about plans for work. For this reason, for comparison between baseline and follow-up, we examined the share having no plans to work for pay, which is more comparable between the surveys. For our impact analysis of plans for future work based on the follow-up survey, we created a separate category, “working for pay at the time of the follow-up survey” (Table VIII.1).

Table VIII.1. Expectations and Self- Efficacy (percentages, unless otherwise noted)

	Treatment Group		Impact	P-Value
	Observed Mean	Estimated Mean w/o Youth Works		
Primary Outcome				
Youth agrees that personal goals include working and earning enough to stop receiving Social Security disability benefits	66.0	67.0	-1.1	0.78
Supplementary Outcomes				
Plans and Goals for the Next Five Years				
Plans to go further in school, youth response	54.2	48.3	5.9	0.11
Plans to go further in school, parent response	53.8	42.2	11.6	*** 0.01
Expectations for Employment, Youth Response ^a				*** 0.00
Working for pay at the time of the follow-up survey	25.0	13.6	11.4	
Plans to start working for pay	60.3	61.8	-1.5	
No plans to start working for pay	14.7	24.6	-9.9	
Expectations for Employment, Parent Response ^a				*** 0.00
Working for pay at the time of the follow-up survey	25.0	13.2	11.8	
Plans to start working for pay	55.5	59.0	-3.5	
No plans to start working for pay	19.5	27.8	-8.4	
Plans to live on own (with or without help), youth response	74.7	68.5	6.2	** 0.03
Plans to live on own (with or without help), parent response	41.0	36.5	4.4	0.28
Internal locus of control (4-point index) ^b	3.3	3.2	0.1	** 0.02
External locus of control (4-point index) ^b	2.6	2.6	0.0	0.70

Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the study's 12-month follow-up survey. The table reports observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model prior to random assignment using data from the study's baseline survey and SSA administrative records. We calculated all statistics using sample weights to account for interview non-response. The analytic sample includes 389 treatment group youth and 344 control group youth. Survey item non-response may have resulted in smaller sample sizes for specific outcomes. See Appendix A, Table A.5, for the sample sizes for all outcomes.

^aFor these outcomes, item non-response occurred conditionally, depending on the values of other measures in the follow-up survey. The rate of missing information was 19 percent for youth responses on employment expectations and 42 percent for parent responses. We used a multiple imputation procedure to assign values when they were missing. See Appendix A, Section E, for more information on this procedure.

^bSee text for further discussion of the measures of internal and external locus of control.

*/**/**Impact estimate is significantly different from zero at the .10/.05/.01 level using either a two-tailed t-test or a chi-square test.

up survey, a smaller share, 54 percent, reported that they planned to go further in school in this time period (Table VIII.1). The reduction in the share with plans for further schooling may reflect that some youth attained their education goals during the year (or more) between the surveys. We estimated that Youth Works had no impact on educational goals—in the absence of the project, an estimated 48 percent of treatment group youth would have reported in the follow-up survey that they planned to go further in school (the difference of six percentage points is not statistically significant). On the other hand, Youth Works did have positive impacts on expectations for employment and independent living. Fifteen percent of treatment group youth reported no plans to

work for pay in the five years after the follow-up survey (the baseline share was 26 percent). We estimated that, in the absence of Youth Works, 25 percent would have reported that they had no plans for future paid work, and the impact estimate is statistically significant at the one percent level. Additionally, 75 percent of treatment group youth reported plans to live independently in the future with or without help (the baseline share was 70 percent). We estimated that the share would have been 69 percent in the absence of Youth Works, and the difference of six percentage points is statistically significant at the five percent level.

We found impacts of Youth Works on parent responses about youth plans for further schooling and working for pay. Fifty-four percent of parents of treatment group members reported that their children had plans to go further in school. In the absence of Youth Works, we estimated that this share would have been 42 percent. The estimated impact of 12 percent is statistically significant at the one percent level. The positive impact on parental responses about youth plans to go further in school is somewhat surprising because Youth Works did not emphasize educational goals. We also found impacts of Youth Works on parent responses about youth plans for paid employment: 20 percent of treatment group parents reported that youth had no plans to work for pay. We estimated the share would have been 28 percent in the absence of Youth Works. The impact estimate is statistically significant at the one percent level. In contrast, we found no impacts on parents' responses about youths' plans to live on their own.

To investigate the effects of the intervention on youths' feelings of self-efficacy, we created composite measures from a series of questions in the follow-up survey. The self-efficacy measures are based on a battery of questions that includes the Pearlin Mastery Scale (Pearlin and Schooler 1978). After analyzing the degree of correlation between these measures and the concepts measured, we determined that the measures could be combined into an "internal locus of control" and an "external locus of control." See Appendix A, Section H, for further information on these measures.

In this evaluation, the internal locus of control reflects whether youth believe their life outcomes result primarily from their own behaviors and actions. The average value of this index for treatment group youth was 3.3 on a scale of 1 to 4, and we estimated that, in the absence of Youth Works, the average would have been 3.2. The impact estimate of one-tenth point, significant at the five percent level, suggests that Youth Works may have had a very small positive effect on youths' perception that their outcomes result from their own actions. The external locus of control reflects the degree to which youth believe that others, fate, or chance primarily determine their life outcomes. The average value of this index for treatment group youth was 2.6, also on a scale of 1 to 4. We estimated that these youth would have had essentially the same average value even if they had not been given the opportunity to participate in Youth Works.⁹⁷

The findings of no impact of Youth Works on the primary outcome in this domain, some positive impacts on plans for the future, and mixed results regarding the measures of locus of control suggest that Youth Works did not have a broad, positive impact across this domain but did increase the shares of youth planning to work for pay and live independently.

⁹⁷ Appendix A, Section H, presents separate impact estimates for each of the 11 questions used to create the two indices of self-efficacy. These additional impact estimates are consistent with the findings reported here that Youth Works improved the internal locus of control but not the external locus of control.

B. Youth Works Had Minimal Impacts on Independence, Decision Making, and Social Interactions

In principle, a belief by youth that they can succeed in life could lead them to display more independence in daily activities, play a bigger part in decision making, and engage in higher levels of social interaction. We examined measures of these outcomes as a supplementary analysis in the attitudes and expectations domain.

Of the six outcomes we examined, we found only one statistically significant impact (Table VIII.2).⁹⁸ Youth Works increased the share of youth who made snacks on their own. We found that 94 percent of treatment group youth made snacks on their own, whereas in the absence of the intervention, we estimated 89 percent would have made their own snacks. This difference is significant at the one percent level. With respect to the other outcomes, among treatment group youth, 44 percent rode public transportation alone, 95 percent picked the clothes they wore each day, 84 percent decided how to spend their own money, 90 percent decided how to spend their free time, and 61 percent reported that they got together with friends “to have fun or hang out.” We estimated that none of these percentages would have been significantly different in the absence of Youth Works.⁹⁹

C. Youth Works Had a Positive Impact on Goals for Future Work and Earnings for Only One Subgroup

Although Youth Works had no impact on the primary outcome in the domain of attitudes and expectations—goals for future work and earnings—for the entire target population, it nevertheless could have had impacts on certain subgroups. For example, the goals for work and earnings of youth who had not worked for pay in the year prior to random assignment might have been more malleable than those who did have work experience. Accordingly, we estimated the impacts of Youth Works on the primary outcome measure in this domain for the four pairs of subgroups of the target population, defined by phase of project implementation, baseline age, school attendance, and paid work experience.

We found that Youth Works had a differential impact on youth who had worked for pay in the year prior to random assignment compared with youth who had not worked for pay in the prior year (Table VIII.3). Among youth with paid work experience in the prior year, we estimated that Youth Works increased by 13 percentage points the share with a goal of working and earning enough to stop receiving Social Security benefits (the impact is statistically significant at the five percent level).

⁹⁸ We collected the measures of independence in daily activities, decision making, and social interaction from youth only. For the first five measures in Table VIII.2, we asked youth how often they do the activity by themselves. We combined “most of the time” and “some of the time” into a single category, which we interpreted as being indicative of the youth doing the activity on their own. The alternative response was “none of the time.” For social interaction, youth were asked how often they get together with friends “to have fun or hang out.” We combined “sometimes” and “often” into a single category to measure having social interaction. The alternative responses were “never,” “hardly ever,” and “does not have friends.” For all of these measures, we conducted robustness checks by estimating the impact of Youth Works on the full distribution of responses. The results were consistent with the conclusions reported in the text.

⁹⁹ We asked the same battery of questions about independent activities and decision making in the baseline and follow-up surveys. For the treatment group, the baseline levels of independent activity and decision making (Table II.2 and Appendix A, Table A.2) are similar to the follow-up levels reported in Table VIII.2. For each activity or decision making area, the baseline level for the treatment group was within plus or minus five percentage points of the follow-up level.

Table VIII.2. Independent Activities, Decision Making, and Social Interactions (percentages)

	Treatment Group			Impact	P-Value
	Observed Mean	Estimated Mean w/o Youth Works			
Supplementary Outcomes					
Independent Activities and Decision Making					
Makes snacks or sandwiches (most/some of the time)	93.6	89.1	4.5	***	0.00
Rides public transportation alone (most/some of the time)	43.5	37.8	5.7		0.12
Picks clothes to wear (most/some of the time)	94.5	96.3	-1.8		0.30
Decides to spend own money (most/some of the time)	83.5	81.9	1.6		0.55
Decides how to spend free time (most/some of the time)	90.0	88.7	1.2		0.60
Social Interactions					
Gets together with friends (often or sometimes)	60.6	62.5	-1.9		0.59

Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the study's 12-month follow-up survey. The table reports observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model prior to random assignment using data from the study's baseline survey and SSA administrative records. We calculated all statistics using sample weights to account for interview non-response. The analytic sample includes 389 treatment group youth and 344 control group youth. Survey item non-response may have resulted in smaller sample sizes for specific outcomes. See Appendix A, Table A.5, for the sample sizes for all outcomes.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level using a two-tailed t-test.

Among youth who did not have paid work experience in the prior year, Youth Works decreased by nine percentage points the share with this goal (the impact is significant at the ten percent level). The difference in the estimated impacts between these two groups is statistically significant at the one percent level. This suggests that treatment group youth who had worked in the year prior to random assignment developed stronger goals for future work and earnings than treatment group youth who had not worked in the prior year.

For the other subgroups, we found no impacts of Youth Works on the primary outcome. We did find that the difference in estimated impacts for youth under age 18 at baseline compared with those over age 18 at baseline is statistically significant at the ten percent level, but the estimated impact for each of these subgroups is not statistically different from zero.

Table VIII.3. Goals Include Working and Earning Enough to Stop Receiving Social Security Disability Benefits, by Subgroup (percentages)

	Treatment Group		Impact	P-Value	Treatment Group Size	Control Group Size
	Observed Mean	Estimated Mean w/o Youth Works				
Implementation Phase						
Phase 1: random assignment before July 1, 2009	66.6	67.0	-0.3	0.95	163	140
Phase 2: random assignment on or after July 1, 2009	65.3	67.1	-1.8	0.76	152	141
(P-value of difference in impacts)				(0.86)		
Age						
Under age 18 at baseline	76.9	64.9	11.9	0.14	60	57
Age 18 or over at baseline	63.4	67.7	-4.3	0.33	255	224
(P-value of difference in impacts)			*	(0.09)		
School Attendance						
In school at baseline	70.4	64.5	5.9	0.33	108	114
Not in school at baseline	63.8	68.9	-5.1	0.31	207	167
(P-value of difference in impacts)				(0.17)		
Paid Work Experience						
Worked for pay in prior year	77.1	63.8	13.3	**	91	87
No work for pay in prior year	61.5	70.2	-8.7	*	223	193
(P-value of difference in impacts)				***	(0.01)	

Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the study's 12-month follow-up survey. The table reports observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model prior to random assignment using data from the study's baseline survey and SSA administrative records. We calculated all statistics using sample weights to account for interview non-response. Survey item non-response may have resulted in smaller sample sizes, as indicated in the table.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level using a two-tailed t-test.

IX. EXPLORATORY ANALYSES OF IMPACTS ON TRAINING AND PRODUCTIVE ACTIVITIES

While training is an investment that can improve employment and earning opportunities, it is not a key component of the YTD conceptual framework. The individual YTD projects, including Youth Works, did not emphasize training as either a service input or an outcome. However, Youth Works may have promoted training indirectly through its support for developing and pursuing life goals and emphasis on independence. Specifically, some youth may have been motivated to obtain training as an important step on the path to those Youth Works objectives. In addition, Youth Works encouraged and supported youth who desired to enroll in vocational training programs. Because of the importance of training for future employment and earnings and the potential for Youth Works to have influenced such training, we explore the project's impacts on training outcomes in the first of two exploratory analyses presented in this chapter.

As a precursor to our planned longer-term analysis, our second exploratory analysis examines the impact of Youth Works on a composite measure of participation in productive activities during the year following random assignment—specifically, participation in education, training, paid work, or unpaid work. Participation in productive activities is a key longer-term outcome in the YTD conceptual framework.

Consistent with the absence of an emphasis on training in the project, we found that Youth Works had no impact on youth participation in training. However, we found that the project did increase participation in productive activities. This appears to be due to the project's impact on paid employment because, as shown in the preceding chapters, we found no impacts on the other components of the productive activities measure (education, training, and unpaid employment).

A. Youth Works Had No Impact on Participation in Training

Although Youth Works did not emphasize enrollment in training programs, its focus on employment could have prompted some of its participants to enroll in training. However, we found no impacts of the intervention on training outcomes. A small share of treatment group youth, nine percent, was enrolled in training programs during the year following random assignment (Table IX.1).¹⁰⁰ We estimated that the share enrolled would have been about the same in the absence of Youth Works.

¹⁰⁰ At baseline, 28 percent of treatment group youth reported having received job training during the past year (Table II.2). The difference in the rate of receipt of training between the baseline and follow-up surveys may be due largely to differences in the way the surveys asked for this information. The baseline survey asked a very broad question about training in job skills, vocational education, career counseling, and help in finding a job. This measure of “job training” includes activities that fell in the employment services domain in the follow-up survey (as described in Chapter IV). The follow-up survey asked whether youth were “currently in a training program or taking classes to help you learn job skills or get a job?” If youth currently were not participating in training, the survey asked, “Did you go to school, attend a training program, or take any classes?” following the date of random assignment. We distinguished between schooling and training based on a follow-up question about the program type for each program reported. We coded educational institutions as “schooling.” We coded the remaining categories as “training”: “job skills training, job training, interviewing skills, computer skills, on the job training, assistance with finding a job;” “life skills, college preparation, transition programs, YTD;” and “day habilitation, day programs.” Although some of these categories could be considered employment services, youth specifically were asked to report on training programs and classes to learn job skills or get a job, whereas the service section of the survey asked more broadly about “services or training.” If youth perceived Youth Works services as “training,” Youth Works services would be included in this measure of training. For youth under the age of 18, we collected information on participation in training programs from parents or guardians.

Table IX.1. Participation in Training Programs (percentages, unless otherwise noted)

	Treatment Group		Impact	P-Value
	Observed Mean	Estimated Mean w/o Youth Works		
Supplementary Outcomes				
Enrollment in Training				
Ever enrolled in a training program in the year following random assignment	9.2	6.9	2.3	0.24
Intensity of Training				
Number of Months in a Training Program				0.16
None	90.8	92.9	-2.1	
Less than nine months	5.6	2.7	2.9	
Nine to twelve months	3.7	4.4	-0.7	
(Average number of months in a training program)	0.6	0.5	0.1	0.64

Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the study's 12-month follow-up survey. The table reports observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model prior to random assignment using data from the study's baseline survey and SSA administrative records. We calculated all statistics using sample weights to account for interview non-response. The analytic sample includes 389 treatment group youth and 344 control group youth. Survey item non-response may have resulted in smaller sample sizes for specific outcomes. See Appendix A, Table A.5, for the sample sizes for all outcomes.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level using either a two-tailed t-test or a chi-square test.

The intervention also had no impact on the intensity of training activities, as measured by the number of months that youth were enrolled in training programs during the year following random assignment. Treatment group youth were enrolled in training for about one month, on average (the average includes zero values for youth not participating in training). We estimated that they would have experienced essentially the same duration in training in the absence of the intervention. Additionally, the distribution of months of enrollment in training was unaffected by the intervention.¹⁰¹

B. Youth Works Had a Positive Impact on Participation in Productive Activities

In our second exploratory analysis, we estimated the impact of Youth Works on a composite measure of participation in productive activities—specifically, participation in education, training, and paid and unpaid employment.¹⁰² Youth who participated in any of these activities during the

¹⁰¹ We calculated months of training from reported dates of enrollment in training programs. The average number of months of training includes youth who did not participate in training (that is, zero months of training). We chose to group months of training in the same categories used for school enrollment (which were chosen to distinguish between a full academic year and less than an academic year). The training intensity measures do not include a small number of youth who participated in training but did not report information on the number of months of training. We chose not to use the multiple imputation procedure (see Appendix A, Section E) for the training intensity measures in this chapter due to the very small number of youth with missing information on these measures.

¹⁰² For youth under the age of 18, we collected information on participation in education and training programs from parents or guardians. We collected employment information directly from youth of all ages.

year following random assignment are considered to have participated in productive activities. In principle, if an intervention had positive impacts on several of the components of the composite measure, then the anticipated impact on the composite measure could be larger and potentially more statistically significant than the component impacts. Alternatively, an intervention's significant impacts on one or two components could be diluted in a composite measure that combines those components with others on which it had no impacts.

We found that Youth Works had a positive impact on the composite measure of participation in productive activities. Sixty-five percent of treatment group youth participated in productive activities during the year following random assignment (Table IX.2).¹⁰³ We estimated that in the absence of Youth Works, only 55 percent of youth would have participated in productive activities. The impact estimate is statistically significant at the one percent level.¹⁰⁴

Table IX.2. Composite Measure of Participation in Productive Activities (percentages)

	Treatment Group		Impact	P-Value	
	Observed Mean	Estimated Mean w/o Youth Works			
Supplementary Outcome					
Ever participated in school, training, unpaid employment, or paid employment in the year after random assignment	64.6	55.1	9.5	***	0.00

Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the study's 12-month follow-up survey. The table reports observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model prior to random assignment using data from the study's baseline survey and SSA administrative records. We calculated all statistics using sample weights to account for interview non-response. The analytic sample includes 389 treatment group youth and 344 control group youth. Survey item non-response may have resulted in smaller sample sizes for specific outcomes. See Appendix A, Table A.5, for the sample sizes for all outcomes.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level using a two-tailed t-test.

¹⁰³ The overall level of productive activity may seem high—about two-thirds of treatment group youth, based on the composite measure. However, we note that this measure includes participation in school, training, paid work, or unpaid work at any time throughout the entire year following random assignment, even if only for one day. Recall that 35 percent of treatment group youth were enrolled in school at baseline (Table II.2).

¹⁰⁴ We found statistically significant impacts on participation in productive activities for several subgroups: youth in phase 1 (randomly assigned prior to July 1, 2009), youth over age 18 at baseline, youth not in school at baseline, and youth who worked for pay in the year prior to random assignment. In addition, the differences in estimated impacts between the subgroup pairs are statistically significant for two pairs: the pair defined by school enrollment and the pair defined by prior work experience.

X. CONCLUSION

In this report, we present findings from a process analysis and a random assignment impact analysis of Youth Works, the YTD project in West Virginia that served youth ages 15 through 25 who were on SSA's disability benefit rolls. Through the process analysis, we learned that the services delivered by Youth Works conformed to the YTD program model and focused on person-centered planning, employment, benefits planning, and case management to resolve barriers to employment. The project enrolled 85 percent of the 455 randomly assigned treatment group members who had been referred by Mathematica and delivered services to all of the enrollees. On average, the enrollees received 34 hours of services, and 70 percent of those service hours were employment related, including activities such as the development of work experiences, job placement, and job coaching.

We estimated the impacts of Youth Works in the initial year following random assignment on outcome measures in five domains. Within each domain, we based our principal conclusions on statistical results for a single primary outcome measure, as follows:

- Employment-promoting services
 - Receipt of any employment-promoting services
- Paid employment
 - Ever employed in a paid job
- Educational progress
 - Ever enrolled in school during the year following random assignment, or had completed high school by the end of the year
- Youth income
 - Total income from earnings and SSA disability benefits
- Attitudes and expectations
 - Goals include working and earning enough money to stop receiving SSA benefits

We found that Youth Works increased by 30 percentage points the proportion of treatment group youth who received any employment-promoting services during the year following random assignment. Furthermore, it increased by 19 percentage points the proportion of treatment group youth who were employed in paid jobs at any time during that year. This represents a relative increase of 81 percent in the employment rate. Also in the domain of paid employment, the project increased average annual earnings by \$524, or 50 percent. As a result of this impact on earnings, as well as a positive impact on the average annual SSA disability amount, the project increased youth income in the year following random assignment by an average of \$717, or 10 percent. However, the project had no significant impacts on the primary outcomes in the domains of educational progress and attitudes and expectations. When we expanded the analysis to include supplementary outcome measures in these domains, we found no consistent pattern of impacts in the education domain. In the attitudes and expectations domain, estimates for the supplementary outcomes suggest that the project increased youths' expectations of working and living independently in the future.

Given the focus of Youth Works on employment, it is perhaps not surprising that we found positive impacts of the intervention in the domains of paid employment and youth income but no impact in the domain of educational progress and only mixed evidence of an impact in the domain of attitudes and expectations. Whether the impacts on paid employment and earnings will persist and grow in future years, ultimately resulting in reduced benefits but higher total income, will be investigated in planned analyses of data now being collected under the YTD evaluation.

It is important to recognize that this report has presented interim impact estimates based on just one of the six random assignment YTD projects and data pertaining only to the first year in the evaluation's multiyear follow-up period. Many of the youth who participated in Youth Works still were receiving project services when they completed the evaluation's 12-month follow-up survey. Interim evaluation findings from the other five random assignment YTD projects will enable us to extend the initial assessments presented in this report. As planned, the projects vary in their mix and intensity of services, while broadly adhering to the YTD program model. We thus expect that the full set of six interim evaluation reports will provide SSA with a better understanding of the challenges that youth with disabilities face in making transitions and the specific types of interventions that might assist more of them to succeed. Furthermore, the YTD evaluation's comprehensive final report will present impact estimates based on 36 months of follow-up data from all six of the random assignment projects. Our analyses of those data may reveal longer-term impacts of Youth Works in addition to the short-term impacts reported here.

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APPENDIX A

ADDITIONAL ANALYSES AND TECHNICAL DISCUSSION

In this appendix, we provide a detailed discussion of some of the analytic issues raised in Chapter II. We begin by examining baseline characteristics of youth who enrolled in the evaluation relative to those who did not, and of youth in the treatment group relative to those in the control group. We also provide simple unadjusted means for all outcome measures and compare impacts based on simple and regression-adjusted means for the primary outcomes. We then discuss response and non-response to the 12-month survey and our treatment of missing information for dependent and independent variables. In the final sections of the appendix, we present additional analyses to support the impact analysis: monthly average benefit receipt for the annual periods before and following random assignment, outcomes for exploratory subgroups, and impact estimates for the component outcomes of the composite locus of control measures.

A. Characteristics of Youth Who Enrolled in the Evaluation

Although we attempted to contact a representative sample of youth in counties with HRDF services in West Virginia, only about 16 percent of those we attempted to contact were recruited into the study and randomly assigned to the treatment or control groups. Those not randomly assigned, and thus not in the study, included (1) youth we were unable to reach, (2) youth we reached but who were not interested in participating and did not complete a baseline interview, (3) youth who completed a baseline interview but did not return a signed consent form, (4) youth who returned a signed consent form but did not want to participate in the study, and (5) youth who completed the baseline interview and consented to participate in the study but were siblings of youth who had previously agreed to participate in the study and had already been randomly assigned. The latter youth were deliberately assigned to the same treatment/control status as their siblings and were not included in the research sample.

To understand more fully the characteristics of study participants compared to those of the project's full target population (youth ages 15 through 25 who received SSA disability benefits and lived in the 19 counties served by Youth Works), we used SSA administrative data to compare the characteristics of those recruited into the study (enrollees) to those who were not (non-enrollees).¹⁰⁵ Relative to youth who did not enroll, those who did enroll in the evaluation were about half a year younger on average (Table A.1). Enrollees had lower durations of SSA benefit entitlement and disability by about three-quarters of a year. Enrollees were slightly more likely to live in northern West Virginia.¹⁰⁶ Enrollees were also more likely to have worked in the year prior to the year of random assignment.

Although differences between enrollees and non-enrollees are statistically significant for several baseline characteristics, the overall differences are not large. The comparisons suggest that, among

¹⁰⁵ The reference period for earnings data from SSA files is the year prior to the year in which random assignment occurred. This is different from the reference period for self-reported employment in the YTD baseline survey, as reported in Tables II.2 and A.3. The latter reference period is the year prior to the baseline interview date. Random assignment occurred after signed consent to participate in the study was received, subsequent to the baseline interview. The time lag between completion of the baseline survey and random assignment was typically several weeks, but in extreme cases was as long as six months.

¹⁰⁶ Two factors contribute to the higher enrollment rates in the northern region relative to the southern region. First, due to the smaller number of age-eligible youth beneficiaries in the northern region, the evaluation team made a stronger recruiting effort in this region in order to achieve an enrollment target that was nearly as large as that for the southern region. Second, the northern region had fewer services available in the absence of Youth Works and, thus, youth and their families were more interested in project services than were youth and their families in the southern region where alternative services were more plentiful.

Table A.1. Characteristics, by Enrollment in the Evaluation (percentages, unless otherwise noted)

	All	Enrollees	Non-Enrollees	Difference	P-Value
Administrative Data					
Demographic Characteristics					
Male	59.1	56.9	59.5	-2.6	0.15
Age in Years					*** 0.00
14-17	16.9	21.1	16.1	5.1	
18-21	40.2	40.7	40.1	0.6	
22-25	42.9	38.2	43.9	-5.7	
Average age (years)	20.7	20.3	20.8	-0.5	*** 0.0
Language					0.37
English	97.3	98.3	97.0	1.2	
Spanish	0.0	0.0	0.0	0.0	
Other	0.2	0.0	0.3	-0.3	
Unknown/missing	2.5	1.7	2.7	-0.9	
Benefits					
SSA Beneficiary Status					
SSI (only or concurrent with CDB or DI)	93.1	93.9	93.0	1.0	0.31
Duration of benefit entitlement (years)	8.4	7.8	8.5	-0.7	*** 0.00
Representative Payee Type					0.14
None	27.5	26.9	27.7	-0.8	
Natural/adoptive/stepparent	54.9	57.1	54.4	2.7	
Other relative	8.7	9.0	8.7	0.3	
Other	8.9	7.0	9.3	-2.3	
Disability					
Primary Disabling Condition (SSA data)					0.29
Mental illness	24.0	24.2	23.9	0.3	
Cognitive/developmental disability	44.4	41.3	45.0	-3.7	
Learning disability/ADD	13.5	13.9	13.4	0.5	
Physical disability	14.7	16.4	14.4	2.1	
Speech, hearing, visual impairment	3.5	4.2	3.3	0.8	
Duration of disability (years)	8.8	8.1	8.9	-0.8	*** 0.00
Location Within Service Delivery Area					
Northern West Virginia	42.8	46.5	42.0	4.5	** 0.01
Earnings in Year Before Year of RA					
Positive earnings	22.8	26.9	21.9	4.9	*** 0.00
Amount of earnings (\$)	832	825	834	-8	0.94
Sample Size	5,207	875	4,332		

Sources: SSA administrative records. Most measures are from the TRF. Earnings are measured in the MEF.

Notes: Missing information resulted in smaller sample sizes for some characteristics than indicated at the bottom of the table. The table includes all youth randomly selected from the sample frame. The enrollees include all youth who enrolled in the evaluation, including 23 youth who were not in the research sample because they were assigned to the treatment or control group to match the status of their siblings.

RA = random assignment

*/**/**Difference is significantly different from zero at the 0.10/0.05/0.01 level using either a two-tailed t-test or a chi-square test.

eligible youth in West Virginia, the YTD evaluation enrolled a broad group of disability beneficiaries and not merely a distinctive subset. However, enrollees did differ from non-enrollees in that the former had a higher share with earnings in the year before the year of random assignment, although there was no difference in the average amount of those earnings.¹⁰⁷ As a result of their self-selection into or out of the evaluation, enrollees and non-enrollees may also have differed on unobserved characteristics, such as motivation to work in the future. However, baseline differences between youth who enrolled in the evaluation and non-enrollees do not imply bias in the impact estimates, as both the treatment and control groups were populated exclusively with youth who enrolled in the evaluation.¹⁰⁸

For readers unfamiliar with employment rates among youth with disabilities, the share of youth with earnings in the year before random assignment may seem fairly high: 27 percent for enrollees and 22 percent for non-enrollees (based on administrative records, Table A.1). However, these employment rates are similar to rates found in other studies of youth with disabilities. In the American Community Survey, the national employment rate for youth ages 16 to 20 with disabilities was 28 percent (Bjelland et al. 2008).¹⁰⁹

B. Baseline Equivalence

We examined the baseline characteristics of the treatment and control groups to assess the equivalence of the samples before youths' participation in the evaluation. Most important, we assessed baseline equivalence in the analytic sample, which is the sample of all respondents to the 12-month follow-up survey and the source of most outcome measures. In Chapter II (Table II.2), we discuss the baseline equivalence for the analytic sample for several characteristics. In Table A.2, we show that the treatment and control groups were similar at baseline for several additional characteristics.¹¹⁰

We also examined baseline characteristics for the research sample, which is the full sample of youth randomized into the treatment and control groups, including those who did not respond to the 12-month follow-up survey.¹¹¹ We found that the two groups were highly similar at baseline, with small differences that are similar to those we found for the analytic sample (Table A.3). Similar to the analytic sample, in the research sample we found that treatment group youth were more likely than control group youth not to be attending school and to have a father who completed high

¹⁰⁷ We found no statistically significant differences between enrollees and non-enrollees in the share that worked and average earnings for the periods two years and three years prior to the year of random assignment. These values were based on administrative records from the MEF and are not shown in Table A.1.

¹⁰⁸ In future years, we can use administrative data to examine trends in work and earnings for non-enrollees in comparison to trends for the control group to further understand selection into the evaluation. At the time of this writing, administrative data on earnings were not available for the period after random assignment.

¹⁰⁹ We found similar employment rates for YTD youth in most of the other evaluation sites (30-31 percent in the overall samples [enrollees plus non-enrollees] for the Erie County, New York, Colorado, and Montgomery County, Maryland sites; 25 percent for the Miami-Dade County, Florida site). We found a lower employment rate for YTD youth in the Bronx County, New York site (10 percent), perhaps reflecting the greater share of youth under age 18 targeted by that YTD project.

¹¹⁰ In addition, for the analytic and research samples, we found no statistically significant differences between treatment and control group youth in employment and earnings for the three years before the year of random assignment (based on administrative records from the MEF; not shown in Tables A.2 and A.3).

¹¹¹ For the research sample, which includes non-respondents to the 12-month follow-up survey, we can estimate impacts only for outcomes measured in administrative data (Appendix A, Section D).

Table A.2. Additional Baseline Characteristics of the Analytic Sample (percentages, unless otherwise noted)

	All	Treatment	Control	Difference	P-Value
Baseline Survey Data					
Education					
Attainment—Highest Grade Completed					0.64
9th grade or less	14.4	13.7	15.3	-1.6	
10th or 11th grade	28.3	27.0	29.9	-2.9	
12th grade	49.1	51.6	46.1	5.5	
College or technical school	3.5	3.8	3.2	0.5	
Other	4.7	4.0	5.5	-1.6	
High school diploma, GED, or certificate of completion	47.3	49.2	45.0	4.2	0.28
Ever received special education	73.5	73.2	73.9	-0.7	0.83
Health Insurance Coverage					
Covered by public health insurance	92.8	91.7	94.0	-2.3	0.26
Covered by private health insurance	16.8	16.7	17.0	-0.3	0.92
Covered by either public or private health insurance	95.5	94.7	96.4	-1.7	0.29
Covered by both public and private health insurance	14.1	13.7	14.4	-0.7	0.80
Family Socioeconomic Status					
Public Assistance					
TANF/family assistance	7.2	6.3	8.2	-1.9	0.35
SNAP (food stamps)	43.1	41.7	44.6	-2.9	0.46
Parents' Employment Status					
Mother currently employed	38.6	40.7	36.1	4.7	0.23
Father currently employed	57.0	54.7	59.8	-5.0	0.23
Independent Activities and Decision Making					
Rides public transportation alone (most/some of the time)	44.3	44.0	44.7	-0.7	0.86
Decides how to spend own money (most/some of the time)	86.1	86.1	86.1	0.0	1.00
Decides how to spend free time (most/some of the time)	94.9	95.2	94.6	0.6	0.71
Implementation Phase					
Random assignment before June 1, 2009	49.6	51.5	47.3	4.2	0.28
Location Within Service Delivery Area					
Northern West Virginia	47.1	46.4	47.8	-1.4	0.72
Administrative Data					
Language					
English	98.1	97.7	98.6	-1.0	0.36
Spanish	0.0	0.0	0.0	0.0	
Other	0.0	0.0	0.0	0.0	
Unknown/missing	1.9	2.3	1.4	1.0	
Benefits					
Representative Payee Type					0.39
None	27.3	28.6	25.8	2.7	
Natural/adoptive/stepparent	56.3	54.5	58.3	-3.7	
Other relative	9.6	10.9	8.1	2.8	
Other	6.9	6.0	7.8	-1.8	
Sample Size	733	389	344		

Sources: YTD baseline survey and SSA administrative records.

Notes: We weighted statistics to adjust for non-response to the 12-month survey. Baseline survey item non-response may have resulted in smaller sample sizes for some characteristics than indicated at the bottom of the table.

/*Difference is significantly different from zero at the 0.10/0.05/0.01 level using either a two-tailed t-test or a chi-square test.

Table A.3. Baseline Characteristics of the Research Sample (percentages, unless otherwise noted)

	All	Treatment	Control	Difference	P-Value
Baseline Survey Data					
Demographic Characteristics					
Race					0.91
White	80.4	80.4	80.4	0.1	
Black	8.9	8.8	9.1	-0.3	
American Indian/AK/HI/Pacific Islander	3.4	3.1	3.8	-0.7	
Asian	.	.	.	.
Other or unknown	7.3	7.7	6.8	0.9	
Hispanic	2.7	2.7	2.8	-0.2	0.89
Primarily speaks English at home	98.4	98.2	98.5	-0.3	0.77
Education					
School Attendance					** 0.02
Does not attend school	63.2	64.9	61.3	3.5	
Attends regular high school	25.8	27.3	24.2	3.0	
Attends special high school	0.6	0.2	1.0	-0.8	
Attends other school	10.3	7.7	13.4	-5.7	
Employment					
Received job training in last year	27.0	27.2	26.6	0.6	0.85
Worked as volunteer in last year	10.5	10.4	10.6	-0.3	0.90
Worked for pay in last year	28.8	27.5	30.3	-2.8	0.37
Worked for pay in last month	12.3	12.5	12.1	0.4	0.85
Never worked for pay at baseline	46.4	48.4	44.1	4.3	0.21
Living Arrangements and Household Composition					
Living Arrangements					0.93
Two-parent family	44.7	45.9	43.3	2.6	
Single-parent family	35.1	34.8	35.4	-0.6	
Group home	0.5	0.4	0.5	-0.1	
Other institution	0.8	0.9	0.8	0.1	
Lives alone or with friends	18.9	18.0	20.0	-2.0	
Average number of people in household	3.6	3.6	3.6	0.0	0.99
Lives with others with disabilities	45.4	44.2	46.7	-2.6	0.48
Family Socioeconomic Status					
Annual Income					0.33
Less than \$10,000	37.0	34.7	39.7	-5.0	
\$10,000–\$24,999	34.8	35.5	34.1	1.3	
\$25,000 or more	28.1	29.8	26.2	3.7	
Parents' Education					
Mother high school graduate	67.0	67.3	66.6	0.8	0.82
Father high school graduate	64.5	68.0	60.4	7.6	** 0.04
Self-Reported Health Status					
Excellent	14.8	14.6	15.0	-0.4	0.41
Very good/good	56.4	54.6	58.4	-3.7	
Fair/poor	28.8	30.8	26.6	4.1	
Assistance					
Reading, hearing, speaking, or walking aids ^b	18.2	16.0	20.8	-4.7	* 0.08
Help with personal care needs	14.6	15.4	13.6	1.8	0.45
Expectations About the Future					
Expects to live independently (w/ or w/o help)	72.6	71.1	74.4	-3.4	0.31
Expects to continue education	66.0	63.4	69.0	-5.6	0.11
Expects to work at least part-time for pay	77.6	75.1	80.5	-5.4	* 0.08
Independent Activities and Decision Making					
Makes snacks or sandwiches (most/some of the time)	92.5	92.7	92.2	0.6	0.76
Picks clothes to wear (most/some of the time)	96.0	94.7	97.5	-2.8	** 0.04

	All	Treatment	Control	Difference	P-Value
Administrative Data					
Demographic Characteristics					
Male	57.7	58.7	56.7	2.0	0.55
Age in Years					0.88
14-17	18.7	18.0	19.4	-1.4	
18-21	42.3	42.6	41.8	0.8	
22-25	39.1	39.3	38.8	0.5	
Average age (years)	20.5	20.5	20.5	0.0	0.94
Benefits					
SSA Beneficiary Status					
SSI (only or concurrent with CDB or DI)	93.9	94.1	93.7	0.4	0.83
Duration of benefit entitlement (years)	7.9	7.9	7.9	0.0	0.98
Benefit amount in year before month of RA (\$)	6,397	6,331	6,472	-141	0.41
Disability					
Primary Disabling Condition (SSA data)					0.97
Mental illness	24.2	23.3	25.3	-2.0	
Cognitive/developmental disability	41.0	41.2	40.8	0.4	
Learning disability/ADD	13.9	14.5	13.1	1.4	
Physical disability	16.6	16.6	16.7	-0.1	
Speech, hearing, visual impairment	4.3	4.4	4.2	0.2	
Duration of disability (years)	8.2	8.2	8.2	0.1	0.85
Earnings in Year Before Year of RA (\$)	777	728	833	-104	0.51
Sample Size	852	455	397		

Sources: YTD baseline survey and SSA administrative records.

Notes: The research sample consists of respondents and non-respondents to the 12-month survey, including the three youth who were deceased at the time of the 12-month survey. The table includes all of the main baseline characteristics (all of those included in Table II.2). There were no additional baseline characteristics for which differences between the treatment and control group are statistically significant at the .10 level. Baseline survey item non-response may have resulted in smaller sample sizes for some characteristics than indicated at the bottom of the table. Missing information on duration of benefit entitlement, duration of disability, and primary disabling condition resulted in smaller sample sizes for these characteristics than shown at the bottom of the table.

RA = random assignment

*/**/****Treatment-control difference is significantly different from zero at the .10/.05/.01 level using either a two-tailed t-test or a chi-square test.

school. Treatment group youth were less likely to require aids for reading, hearing, speaking, or walking; expect to work at least part-time for pay; and pick their own clothes to wear.

The degree of difference between the treatment and control groups is about what we would expect due to chance. For example, of the 50 baseline characteristics we investigated, we would expect about five characteristics to be statistically different at the ten percent significance level or lower.¹¹² We found five statistically significant differences at this level in the analytic and research samples.

C. Comparison of Means and Regression- Adjusted Means

In the text, we report regression-adjusted impact estimates. We estimated the regressions by using ordinary least squares (OLS) for continuous variables, logistic regression for binary variables,

¹¹² The 50 baseline characteristics that we investigated for the research sample include the 32 shown in Table A.3 plus 18 additional characteristics for which results are not shown. In the research sample, there are no significant treatment-control differences for any of the additional characteristics. These latter results are similar to those based on the analytic sample (reported in Table A.2).

and multinomial logistic regression for categorical variables.¹¹³ The regression adjustments control for small differences in baseline characteristics between the treatment and control groups. In addition, the regression-adjusted approach tends to yield more precise estimates—that is, estimates with smaller standard errors—thereby providing greater statistical power to detect small impacts. In Table A.4, we list the variables in the regression models.¹¹⁴

Some research suggests that the use of OLS multivariate regression models may not always be justified for impact estimation, even with the availability of control variables with significant power to explain the variation in outcome measures (Freedman 2006). Freedman’s argument is that multivariate models, under some circumstances, may lead to biases in the standard errors of impact estimates. Schochet (2010) examined data from several large-scale random assignment evaluations and found that, in practice, regression adjustments did not lead to biases in the standard errors of impact estimates. In general, as long as there is a fairly even split in the sample between treatment and control groups, the regression-adjusted estimates do not lead to biases in the standard errors of impact estimates. The Youth Works analytic sample is only slightly unbalanced (53 percent treatment group) and so should not introduce issues with respect to regression-based standard errors.

To provide a relevant reference point for understanding the regression-adjusted impact estimates, we report the observed mean (or percentage) for the treatment group in the text tables.¹¹⁵ This provides a reference mean (or percentage) for the outcome for youth who had the opportunity to participate in Youth Works. We also report the estimated mean (or percentage) for the treatment group in the absence of Youth Works. We computed this estimated mean as the observed treatment group mean less the estimated regression-adjusted impact. For all outcome measures, the unadjusted control group means (Table A.5) do not differ substantially from the estimated means for the treatment group in the absence of Youth Works (Chapters IV through IX). In reporting impact estimates, we provide a note whenever a statistically significant impact would differ substantially in proportional terms if considered relative to the observed control group mean rather than the estimated mean for the treatment group in the absence of Youth Works. In Table A.5, we provide the simple mean impact estimates for all outcomes.

We compared results from the simple mean and regression-adjusted mean differences for the primary outcomes (Table A.6). For receipt of employment services, both methods produced an estimated impact of about 28 to 30 percentage points (statistically significant at the one percent level). Similarly, both methods produced an estimated impact on paid employment of about 18

¹¹³ For the logistic and multinomial logistic regressions, we computed the estimated impact as the difference between the estimated outcome if all sample youth were in the treatment group (that is, the predicted value with the treatment dummy equal to one) less the estimated outcome if all sample youth were in the control group (that is, the predicted value with the treatment dummy equal to zero). The reported p-value for the estimated impact is the p-value on the treatment dummy in the regression model.

¹¹⁴ The control variables in the regression model were chosen, in part, to include characteristics for which the baseline difference between treatment and control groups was substantial and/or statistically significant. The regression model used here for Youth Works is largely the same as the model used for the interim analysis of the other sites. For Youth Works, we added three indicators due to statistically significant baseline differences between the treatment and control groups in the analytic sample: high school graduate father; expects to work for pay; and requires reading, hearing, speaking, or walking aids.

¹¹⁵ All continuous outcome variables without a specified range (for example, earnings has no specified range, but number of months of service receipt has a range of 0 to 12) were top-coded by assigning to the highest 2 percent of observations the value of the 98th percentile.

Table A.4. Control Variables for Regression- Adjusted Analysis of Impacts

Characteristic	Control Variables
Demographic	Male Age: less than 18 years, 18–21 years (reference 22–25) Race: white
Education and employment	Enrolled in school at baseline Worked for pay in year prior to random assignment
Disability benefit	SSI beneficiary – SSI only or concurrent with CDB or DI Duration of benefit entitlement: less than three years, three years to less than ten years (reference: more than ten years) Benefit amount in year before month of random assignment (continuous variable; included only in models for the income domain)
Health	Self-reported health status: good/very good/excellent Primary disabling conditions: mental illness, cognitive/developmental disability, learning disability/ADD, physical disability (reference: speech, hearing, visual impairment) Requires reading, hearing, speaking, or walking aids Requires help with personal care needs
Family resources	Living arrangement: two-parent family, single-parent family (reference: does not live with either parent) High school graduate mother High school graduate father
Expectations	Expects to live independently Expects to work at least part-time for pay
Project-specific factors	Randomly assigned before June 1, 2009 Residence in northern region of West Virginia

Notes: All control variables are categorical, except as noted. For variables with more than two categories, the table shows the reference category in parentheses. The benefit amount in the year before the month of random assignment is included in models for the income domain because it is a strong predictor of income (which is defined as earnings plus benefits).

19 percentage points (statistically significant at the one percent level). For income also, the impact estimates are fairly similar: \$559 and \$717 (statistically significant at the five percent level for the impact estimate based on simple mean values and at the one percent level for the impact estimate based on regression-adjusted mean values). For the two other primary outcomes, the estimated impacts do not differ statistically from zero and are similar in magnitude.

Table A.5. Descriptive Statistics on Outcomes by Treatment Status and Unadjusted Estimated Impacts (percentages, unless otherwise noted)

Outcome	Treatment Group			Control Group			Unadjusted		
	N	Mean	Standard Deviation	N	Mean	Standard Deviation	Impact (Treatment - Control)	P-Value	
Service Utilization Domain									
Received any employment-promoting service	386	63.6	52.0	336	36.0	51.7	27.7	***	0.00
Received career counseling	385	30.7	49.9	331	15.0	38.5	15.7	***	0.00
Support for resume writing and job search activities	385	43.1	53.6	332	12.8	36.1	30.3	***	0.00
Job shadowing, apprenticeship/internship	385	14.4	37.9	333	9.8	32.0	4.6	*	0.08
Received other employment-focused services (basic skills training, computer classes, problem solving, and social skills training)	385	4.6	22.6	331	2.3	16.0	2.3		0.11
Received counseling on SSA benefits and work incentives	386	39.0	52.7	335	15.7	39.2	23.2	***	0.00
Received other (non-employment) services	385	68.6	50.2	336	52.0	53.8	16.6	***	0.00
Received services related to discussion about youth's general interest, life, and future plans	385	62.2	52.4	335	44.6	53.6	17.6	***	0.00
Received life skills training	385	26.5	47.7	333	20.7	43.6	5.8	*	0.08
Received help getting into a school or training program	385	19.4	42.7	332	10.6	33.2	8.8	***	0.00
Received help with accommodations	385	20.8	43.9	332	19.7	42.8	1.1		0.72
Received referrals to other agencies	385	0.5	7.3	331	0.3	6.1	0.1		0.79
Received transportation services	385	2.1	15.6	331	1.2	11.6	0.9		0.35
Received health services	385	2.1	15.5	331	5.1	23.6	-3.0	**	0.04
Received case management services	385	1.6	13.7	331	0.9	10.0	0.8		0.39
Other non-employment services	385	7.2	27.9	331	6.8	27.1	0.4		0.84
Received any employment or non-employment service	386	78.2	44.6	337	58.8	53.0	19.4	***	0.00
Months of service (average) ^a	362	7.5	5.3	317	5.4	5.8	2.1	***	0.00
Number of contacts with providers (average) ^a	360	70.8	128.0	317	69.0	126.7	1.8		0.86
Hours of service (average) ^a	358	242.9	557.7	315	266.1	587.9	-23.2		0.61
Number of providers (average)	385	1.7	148.3	333	1.2	146.7	0.5	***	0.00
Any unmet service need	383	14.8	38.3	340	16.4	39.6	-1.6		0.57
Unmet service need: help finding a job	383	5.0	23.5	340	5.1	23.5	-0.1		0.98
Unmet service need: other employment services	383	5.9	25.5	340	7.6	28.4	-1.6		0.40
Unmet service need: basic skills training	383	0.9	10.3	340	2.1	15.2	-1.1		0.23
Unmet service need: other	383	12.1	35.2	340	11.8	34.6	0.3		0.90
Understands working does not stop Social Security benefits immediately	381	67.4	50.7	333	56.3	53.2	11.1	***	0.00

Outcome	Treatment Group			Control Group			Unadjusted		
	N	Mean	Standard Deviation	N	Mean	Standard Deviation	Impact (Treatment - Control)	P-Value	
Understands working does not stop medical coverage immediately	382	76.3	46.0	333	68.5	49.8	7.7	**	0.03
Ever heard of EIE	381	57.0	53.6	333	22.8	45.0	34.3	***	0.00
Ever heard of SEIE	381	28.0	48.6	333	6.8	27.0	21.2	***	0.00
Ever heard of CDR/Age-18 medical redetermination	220	64.4	51.5	181	52.8	52.8	11.6	**	0.02
Ever heard of PASS	382	38.8	52.7	333	12.6	35.6	26.2	***	0.00
Ever heard of IDA (parent report)	220	16.1	39.6	181	5.4	23.9	10.7	***	0.00
Ever heard of IDA (youth report)	339	19.2	42.7	304	4.1	21.4	15.1	***	0.00
Ever heard of Medicaid-while-working or continued Medicaid eligibility	381	32.4	50.6	333	19.8	42.7	12.6	***	0.00
Potential source of information on work and benefits: Youth Works	381	22.7	45.4	332	0.0	0.0	22.7	***	0.00
Potential source of information on work and benefits: SSA office	381	66.6	51.0	332	69.7	49.3	-3.1		0.39
Potential source of information on work and benefits: SSA website	381	5.9	25.4	332	5.6	24.7	0.3		0.89
Potential source of information on work and benefits: Friends and family	381	6.2	26.0	332	8.1	29.2	-1.9		0.34
Potential source of information on work and benefits: Internet	381	11.1	33.9	332	14.4	37.6	-3.3		0.20
Potential source of information on work and benefits: Vocational rehab. agency	381	1.7	13.8	332	2.7	17.5	-1.1		0.35
Potential source of information on work and benefits: Benefits planner	381	2.6	17.3	332	0.6	8.0	2.1	**	0.04
Potential source of information on work and benefits: Other	381	15.6	39.3	332	13.2	36.3	2.4		0.38
Type of service provider: Youth Works	375	42.2	53.2	329	0.0	0.0	42.2	***	0.00
Type of service provider: One-Stop Workforce Center	375	5.5	24.5	329	1.9	14.9	3.5	**	0.02
Type of service provider: Schools or school districts	375	25.5	47.0	329	27.8	48.3	-2.3		0.51
Type of service provider: Vocational rehab. agency	375	8.7	30.4	329	10.9	33.6	-2.2		0.35
Type of service provider: Work-related, sheltered workshop, employment agency, job training	375	4.6	22.6	329	2.5	16.8	2.1		0.15
Type of service provider: SSA office	375	5.5	24.6	329	8.3	29.8	-2.8		0.16
Type of service provider: Health services providers	375	4.8	23.0	329	6.5	26.6	-1.7		0.35
Type of service provider: Other providers serving primarily people with disabilities	375	14.4	37.9	329	13.3	36.6	1.2		0.67
Type of service provider: All other providers	375	22.7	45.1	329	15.2	38.7	7.5	**	0.02

Outcome	Treatment Group			Control Group			Unadjusted		
	N	Mean	Standard Deviation	N	Mean	Standard Deviation	Impact (Treatment - Control)		P-Value
Employment Domain									
Ever employed on paid jobs	387	42.7	53.5	344	25.0	46.6	17.7	***	0.00
Ever employed on any (paid or unpaid) jobs	388	44.1	53.7	344	27.1	47.8	17.0	***	0.00
Ever employed on unpaid jobs (but not on paid jobs)	387	1.2	11.9	344	2.1	15.4	-0.9		0.38
Percentage of weeks since RA employed on any (paid or unpaid) jobs ^a	380	21.9	33.8	340	13.7	28.7	8.2	***	0.00
Percentage of weeks since RA employed on paid jobs ^a	379	20.3	32.3	340	12.5	27.6	7.8	***	0.00
Percentage of weeks since RA employed on unpaid jobs ^a	387	1.6	12.5	344	1.1	9.1	0.5		0.54
Employment status at time of survey	387			343				***	0.00
Employed on paid job		25.2			14.0		11.1		
Employed on unpaid job		1.2			1.1		0.1		
Not employed, looking for work		16.9			15.4		1.5		
Not employed, out of the workforce		56.7			69.5		-12.7		
Number of jobs (paid and unpaid) ^a	372			336				***	0.00
0		57.6			74.4		-16.8		
1		38.1			24.2		13.9		
2 or more		4.3			1.4		2.9		
Number of jobs (average, paid and unpaid) ^a	372	0.6	0.9	336	0.3	0.6	0.3	***	0.00
Number of paid jobs (average) ^a	372	0.5	0.8	336	0.3	0.6	0.3	***	0.00
Number of unpaid jobs (average) ^a	387	0.0	0.3	344	0.0	0.3	0.0		0.88
Employment rate on paid and unpaid jobs, by month after RA: Month 1 ^a	376	16.7	38.1	336	12.6	32.0	4.0		0.14
Employment rate on paid and unpaid jobs, by month after RA: Month 2 ^a	373	19.4	40.2	336	13.2	33.0	6.1	**	0.03
Employment rate on paid and unpaid jobs, by month after RA: Month 3 ^a	372	22.2	40.4	336	13.1	32.6	9.0	***	0.00
Employment rate on paid and unpaid jobs, by month after RA: Month 4 ^a	372	20.9	39.9	336	14.9	33.8	6.0	**	0.04
Employment rate on paid and unpaid jobs, by month after RA: Month 5 ^a	372	24.8	42.5	336	15.7	35.6	9.1	***	0.00
Employment rate on paid and unpaid jobs, by month after RA: Month 6 ^a	372	25.8	41.5	337	16.5	36.5	9.3	***	0.00
Employment rate on paid and unpaid jobs, by month after RA: Month 7 ^a	373	25.2	42.5	338	15.6	35.8	9.6	***	0.00
Employment rate on paid and unpaid jobs, by month after RA: Month 8 ^a	374	27.9	44.5	338	16.1	36.0	11.8	***	0.00

Outcome	Treatment Group			Control Group			Unadjusted		
	N	Mean	Standard Deviation	N	Mean	Standard Deviation	Impact (Treatment - Control)		P-Value
Employment rate on paid and unpaid jobs, by month after RA: Month 9 ^a	375	28.8	45.3	338	15.0	34.6	13.7	***	0.00
Employment rate on paid and unpaid jobs, by month after RA: Month 10 ^a	374	29.5	45.5	338	16.1	37.0	13.4	***	0.00
Employment rate on paid and unpaid jobs, by month after RA: Month 11 ^a	376	29.5	45.3	338	16.7	37.8	12.9	***	0.00
Employment rate on paid and unpaid jobs, by month after RA: Month 12 ^a	378	28.8	43.9	338	17.7	38.8	11.1	***	0.00
Employment rate on paid jobs, by month after RA: Month 1 ^a	376	15.3	36.1	336	10.7	29.9	4.6	*	0.08
Employment rate on paid jobs, by month after RA: Month 2 ^a	373	18.1	39.5	336	11.7	30.4	6.4	**	0.02
Employment rate on paid jobs, by month after RA: Month 3 ^a	372	20.3	41.4	336	11.9	31.5	8.5	***	0.00
Employment rate on paid jobs, by month after RA: Month 4 ^a	372	19.0	34.7	336	13.0	32.1	6.0	**	0.03
Employment rate on paid jobs, by month after RA: Month 5 ^a	372	22.8	40.3	336	14.3	34.1	8.5	***	0.00
Employment rate on paid jobs, by month after RA: Month 6 ^a	372	24.0	40.1	337	15.2	35.0	8.8	***	0.00
Employment rate on paid jobs, by month after RA: Month 7 ^a	373	24.0	41.9	338	14.6	33.2	9.4	***	0.00
Employment rate on paid jobs, by month after RA: Month 8 ^a	374	26.7	44.2	338	14.9	34.8	11.8	***	0.00
Employment rate on paid jobs, by month after RA: Month 9 ^a	375	27.1	41.1	338	14.0	34.1	13.1	***	0.00
Employment rate on paid jobs, by month after RA: Month 10 ^a	374	27.5	42.0	338	15.0	35.7	12.5	***	0.00
Employment rate on paid jobs, by month after RA: Month 11 ^a	375	27.8	43.2	338	15.7	37.3	12.1	***	0.00
Employment rate on paid jobs, by month after RA: Month 12 ^a	377	26.9	43.4	338	16.8	37.4	10.1	***	0.00
Cumulative employment rate on paid and unpaid jobs, by month following RA: Month 1 ^a	376	16.7	33.8	336	12.7	32.5	4.0		0.15
Cumulative employment rate on paid and unpaid jobs, by month following RA: Month 2 ^a	376	19.9	38.6	336	13.6	33.5	6.4	**	0.03
Cumulative employment rate on paid and unpaid jobs, by month following RA: Month 3 ^a	376	23.3	43.6	336	14.1	34.0	9.2	***	0.00
Cumulative employment rate on paid and unpaid jobs, by month following RA: Month 4 ^a	376	25.1	43.9	336	16.0	35.3	9.2	***	0.00
Cumulative employment rate on paid and unpaid jobs, by month following RA: Month 5 ^a	376	29.0	46.2	336	18.0	37.5	11.0	***	0.00
Cumulative employment rate on paid and unpaid jobs, by month following RA: Month 6 ^a	376	31.0	46.8	337	19.7	38.5	11.2	***	0.00
Cumulative employment rate on paid and unpaid jobs, by month following RA: Month 7 ^a	376	33.0	48.4	338	20.7	40.7	12.3	***	0.00

Outcome	Treatment Group			Control Group			Unadjusted		
	N	Mean	Standard Deviation	N	Mean	Standard Deviation	Impact (Treatment - Control)		P-Value
Cumulative employment rate on paid and unpaid jobs, by month following RA: Month 8 ^a	377	36.0	49.5	339	22.4	42.2	13.6	***	0.00
Cumulative employment rate on paid and unpaid jobs, by month following RA: Month 9 ^a	378	38.0	50.0	339	22.6	42.1	15.4	***	0.00
Cumulative employment rate on paid and unpaid jobs, by month following RA: Month 10 ^a	378	39.8	50.7	339	24.5	44.2	15.2	***	0.00
Cumulative employment rate on paid and unpaid jobs, by month following RA: Month 11 ^a	379	42.2	51.3	340	25.7	45.1	16.5	***	0.00
Cumulative employment rate on paid and unpaid jobs, by month following RA: Month 12 ^a	381	42.7	51.4	340	26.3	45.5	16.4	***	0.00
Cumulative employment rate on paid jobs, by month following RA: Month 1 ^a	376	15.5	35.1	336	10.9	28.9	4.6	*	0.08
Cumulative employment rate on paid jobs, by month following RA: Month 2 ^a	376	18.9	39.9	336	11.6	28.7	7.4	***	0.01
Cumulative employment rate on paid jobs, by month following RA: Month 3 ^a	376	21.4	41.8	336	12.4	31.7	9.0	***	0.00
Cumulative employment rate on paid jobs, by month following RA: Month 4 ^a	376	23.1	41.9	336	14.1	29.7	9.1	***	0.00
Cumulative employment rate on paid jobs, by month following RA: Month 5 ^a	376	27.2	43.8	336	16.0	36.1	11.3	***	0.00
Cumulative employment rate on paid jobs, by month following RA: Month 6 ^a	376	29.4	46.2	337	17.4	37.6	12.0	***	0.00
Cumulative employment rate on paid jobs, by month following RA: Month 7 ^a	376	31.6	47.0	338	18.6	38.6	13.1	***	0.00
Cumulative employment rate on paid jobs, by month following RA: Month 8 ^a	377	34.6	48.9	339	20.5	40.6	14.1	***	0.00
Cumulative employment rate on paid jobs, by month following RA: Month 9 ^a	378	36.7	49.8	339	20.4	40.4	16.2	***	0.00
Cumulative employment rate on paid jobs, by month following RA: Month 10 ^a	378	38.3	50.0	339	22.2	42.8	16.1	***	0.00
Cumulative employment rate on paid jobs, by month following RA: Month 11 ^a	378	40.8	50.9	340	23.5	43.7	17.3	***	0.00
Cumulative employment rate on paid jobs, by month following RA: Month 12 ^a	380	41.4	51.1	340	24.2	44.2	17.1	***	0.00
Total hours worked on paid and unpaid jobs ^a	371			336				***	0.00
Not employed		56.7			73.7		-17.0		
>0 to 260 hours		19.2			9.0		10.1		
>260 to 1,040 hours		16.8			10.6		6.2		
>1,040 hours		7.4			6.6		0.7		
Total hours worked on paid and unpaid jobs (average) ^a	371	233.9	432.3	336	164.1	389.2	69.8	**	0.02

Outcome	Treatment Group			Control Group			Unadjusted		
	N	Mean	Standard Deviation	N	Mean	Standard Deviation	Impact (Treatment -Control)	P-Value	
Total hours worked on paid jobs ^a	371			336			***	0.00	
No paid employment		57.9			75.8		-17.9		
>0 to 260 hours		19.1			8.3		4.6		
>260 to 1,040 hours		15.7			9.5		7.4		
>1,040 hours		7.3			6.4		9.0		
Total hours worked on paid jobs (average) ^a	371	229.6	434.7	336	153.3	382.0	76.3	**	0.01
Average hours worked per week in paid or unpaid jobs, by month following RA: Month 1 ^a	371	3.2	8.5	336	2.5	7.4	0.7		0.27
Average hours worked per week in paid or unpaid jobs, by month following RA: Month 2 ^a	371	3.9	9.1	336	3.0	8.4	0.9		0.21
Average hours worked per week in paid or unpaid jobs, by month following RA: Month 3 ^a	371	4.3	9.6	336	3.2	9.1	1.1		0.14
Average hours worked per week in paid or unpaid jobs, by month following RA: Month 4 ^a	371	4.4	9.2	336	3.4	8.9	1.0		0.19
Average hours worked per week in paid or unpaid jobs, by month following RA: Month 5 ^a	371	4.8	9.9	336	3.6	9.4	1.2	*	0.10
Average hours worked per week in paid or unpaid jobs, by month following RA: Month 6 ^a	371	4.9	10.0	336	3.3	8.9	1.6	**	0.03
Average hours worked per week in paid or unpaid jobs, by month following RA: Month 7 ^a	371	4.9	9.9	336	3.1	8.4	1.8	**	0.01
Average hours worked per week in paid or unpaid jobs, by month following RA: Month 8 ^a	371	5.2	10.1	336	3.2	8.6	2.0	***	0.01
Average hours worked per week in paid or unpaid jobs, by month following RA: Month 9 ^a	371	5.6	10.7	336	3.2	8.6	2.4	***	0.00
Average hours worked per week in paid or unpaid jobs, by month following RA: Month 10 ^a	371	5.6	10.5	336	3.4	9.0	2.2	***	0.00
Average hours worked per week in paid or unpaid jobs, by month following RA: Month 11 ^a	371	5.6	10.5	336	3.7	10.1	1.9	**	0.02
Average hours worked per week in paid or unpaid jobs, by month following RA: Month 12 ^a	371	5.3	10.2	336	3.5	9.4	1.8	**	0.02
Average hours worked per week in paid jobs, by month following RA: Month 1 ^a	371	3.1	8.1	336	2.2	7.0	0.9		0.12
Average hours worked per week in paid jobs, by month following RA: Month 2 ^a	371	3.8	9.3	336	2.6	8.0	1.1	*	0.09
Average hours worked per week in paid jobs, by month following RA: Month 3 ^a	371	4.2	9.5	336	2.8	8.4	1.4	**	0.05
Average hours worked per week in paid jobs, by month following RA: Month 4 ^a	371	4.3	9.3	336	3.1	8.9	1.2	*	0.10
Average hours worked per week in paid jobs, by month following RA: Month 5 ^a	371	4.7	10.2	336	3.3	9.2	1.5	**	0.05

Outcome	Treatment Group			Control Group			Unadjusted		P-Value
	N	Mean	Standard Deviation	N	Mean	Standard Deviation	Impact (Treatment - Control)		
Average hours worked per week in paid jobs, by month following RA: Month 6 ^a	371	4.9	9.8	336	3.2	9.1	1.7	**	0.02
Average hours worked per week in paid jobs, by month following RA: Month 7 ^a	371	4.7	9.9	336	3.0	8.2	1.7	**	0.01
Average hours worked per week in paid jobs, by month following RA: Month 8 ^a	371	5.1	10.3	336	3.1	8.4	2.0	***	0.00
Average hours worked per week in paid jobs, by month following RA: Month 9 ^a	371	5.5	10.6	336	3.1	8.5	2.4	***	0.00
Average hours worked per week in paid jobs, by month following RA: Month 10 ^a	371	5.5	10.5	336	3.3	8.8	2.2	***	0.00
Average hours worked per week in paid jobs, by month following RA: Month 11 ^a	371	5.5	10.6	336	3.6	10.0	1.9	**	0.02
Average hours worked per week in paid jobs, by month following RA: Month 12 ^a	371	5.2	10.0	336	3.3	9.2	1.9	**	0.01
Annual earnings ^a	353			331				***	0.00
No paid employment		56.9			75.0		-18.0		
\$1 to \$1,000		14.3			6.2		8.1		
>\$1,000 to \$5,000		16.8			10.8		6.0		
>\$5,000		12.0			8.1		3.9		
Annual earnings (average, \$) ^a	353	1,559	2,874	331	1,107	2,803	451.6	**	0.04
Earnings per month worked ^a	353			331				***	0.00
No paid employment		56.9			75.2		-18.3		
\$1 to \$500		20.2			11.8		8.4		
>\$500		22.9			12.9		10.0		
Earnings per working month (average, \$) ^a	353	261	409	331	169	362	92.3	***	0.00
Average monthly earnings, by month following RA: Month 1 (\$) ^a	366	87	246	335	71	228	16.6		0.36
Average monthly earnings, by month following RA: Month 2 (\$) ^a	366	108	279	335	83	255	25.8		0.21
Average monthly earnings, by month following RA: Month 3 (\$) ^a	365	123	286	335	85	264	37.5	*	0.08
Average monthly earnings, by month following RA: Month 4 (\$) ^a	366	125	296	335	92	274	33.5		0.12
Average monthly earnings, by month following RA: Month 5 (\$) ^a	365	133	301	334	101	290	32.5		0.15
Average monthly earnings, by month following RA: Month 6 (\$) ^a	365	139	303	334	99	290	39.4	*	0.09
Average monthly earnings, by month following RA: Month 7 (\$) ^a	364	131	289	334	85	244	46.0	**	0.02
Average monthly earnings, by month following RA: Month 8 (\$) ^a	361	143	293	334	89	249	54.7	**	0.01

Outcome	Treatment Group			Control Group			Unadjusted		
	N	Mean	Standard Deviation	N	Mean	Standard Deviation	Impact (Treatment - Control)	P-Value	
Average monthly earnings, by month following RA: Month 9 (\$)ª	361	150	313	334	90	250	59.8	***	0.01
Average monthly earnings, by month following RA: Month 10 (\$)ª	360	154	264	335	95	265	59.1	***	0.01
Average monthly earnings, by month following RA: Month 11 (\$)ª	358	148	293	335	101	285	46.4	**	0.04
Average monthly earnings, by month following RA: Month 12 (\$)ª	357	142	290	334	97	260	44.8	**	0.04
Cumulative earnings, by month following RA: Month 1 (\$)ª	366	88	240	335	70	228	17.8		0.33
Cumulative earnings, by month following RA: Month 2 (\$)ª	366	195	458	335	153	481	41.2		0.29
Cumulative earnings, by month following RA: Month 3 (\$)ª	366	320	804	335	239	731	81.3		0.17
Cumulative earnings, by month following RA: Month 4 (\$)ª	367	434	1,018	335	333	1,007	100.9		0.21
Cumulative earnings, by month following RA: Month 5 (\$)ª	367	562	1,345	335	431	1,263	131.5		0.18
Cumulative earnings, by month following RA: Month 6 (\$)ª	367	686	1,582	335	520	1,497	166.3		0.15
Cumulative earnings, by month following RA: Month 7 (\$)ª	367	798	1,771	335	597	1,667	200.6		0.13
Cumulative earnings, by month following RA: Month 8 (\$)ª	367	934	1,952	335	690	1,890	244.5		0.10
Cumulative earnings, by month following RA: Month 9 (\$)ª	367	1,066	2,236	335	785	2,120	280.3	*	0.10
Cumulative earnings, by month following RA: Month 10 (\$)ª	367	1,203	2,543	336	879	2,356	323.3	*	0.08
Cumulative earnings, by month following RA: Month 11 (\$)ª	367	1,334	2,789	336	987	2,600	347.6	*	0.09
Cumulative earnings, by month following RA: Month 12 (\$)ª	367	1,462	3,022	336	1,081	2,798	381.1	*	0.09
Tenure on primary jobª	368			334				***	0.00
Not employed		57.9			75.8		-17.9		
1 month or less		4.6			2.7		1.9		
>1 month to 6 months		21.5			10.7		10.9		
>6 months to 11 months		8.4			5.1		3.3		
>11 months		7.5			5.7		1.8		
Months of tenure (average)ª	368	2.3	3.7	334	1.4	3.2	0.8	***	0.00
Usual hours per week on primary jobª	356			334				***	0.00
Not employed		56.9			75.0		-18.0		
10 hours or less		10.4			6.8		3.6		
>10 hours to 20 hours		11.6			4.2		7.5		
>20 hours		21.1			14.1		6.9		
Hours per week on primary job (average)ª	356	9.4	13.5ª	334	5.8	12.5	3.6	***	0.00

Outcome	Treatment Group			Control Group			Unadjusted	
	N	Mean	Standard Deviation	N	Mean	Standard Deviation	Impact (Treatment - Control)	P-Value
Hourly wage rate on primary job ^a	353			331				0.00
Not employed		56.9			74.9		-18.0	
Less than \$7		25.6			9.5		16.1	
\$7 to \$9		13.8			11.5		2.3	
>\$9		3.7			4.1		-0.4	
Health insurance coverage on primary job ^a	354			326				*** 0.00
Not employed		56.9			75.0		-18.0	
Employed without health insurance		32.2			19.8		12.4	
Employed with health insurance		10.9			5.2		5.7	
Paid vacation/sick leave on primary job ^a	358			325				*** 0.00
Not employed		56.9			75.0		-18.0	
Employed w/o paid vacation/sick leave		30.7			15.9		14.8	
Employed with paid vacation/sick leave		12.4			9.1		3.3	
Education Domain								
Ever enrolled in school in the year following RA or completed high school by the time of the 12-month follow-up survey	383	82.4	41.3	337	78.7	43.9	3.7	0.24
Ever enrolled in school	385	35.2	51.7	337	39.1	52.3	-4.0	0.30
High school diploma/GED/certificate or higher	385	60.4	52.9	343	59.6	52.8	0.9	0.82
Type of School Attended	384			336				0.66
Did not attend		65.0			61.0		3.9	
Elementary/middle/regular high school		19.1			19.6		-0.5	
Special school for the disabled or home school		1.7			2.2		-0.5	
Postsecondary institution		11.6			15.1		-3.5	
GED/adult continuing education		2.6			2.0		0.6	
Number of months in school	385			336				0.11
None		64.8			61.0		3.8	
<Nine months		10.7			16.3		-5.6	
Nine or more months		24.5			22.7		1.8	
Income Domain								
Annual income from earnings and SSA benefits (average, \$) ^a	353	8,060	3,351	331	7,501	3,742	559	** 0.04
Distribution of total annual income ^a	353			331				0.86
<\$5,000		19.1			19.8		-0.7	
\$5,000 to <\$7,000		24.8			27.0		-2.2	
\$7,000 to <\$10,000		26.0			26.4		-0.4	
\$10,000 or more		30.1			26.8		3.3	
Percentage of total annual income from earnings ^a	353	15.3	25.4	331	10.8	25.1	4.5	** 0.02

Outcome	Treatment Group			Control Group			Unadjusted		
	N	Mean	Standard Deviation	N	Mean	Standard Deviation	Impact (Treatment - Control)	P-Value	
Youth income, by month following RA: Month 1 (\$) ^a	366	633	303	335	613	305	21	0.37	
Youth income, by month following RA: Month 2 (\$) ^a	366	655	326	335	624	323	31	0.22	
Youth income, by month following RA: Month 3 (\$) ^a	365	661	325	335	626	327	35	0.16	
Youth income, by month following RA: Month 4 (\$) ^a	366	663	316	335	627	337	36	0.15	
Youth income, by month following RA: Month 5 (\$) ^a	365	673	334	334	635	353	38	0.15	
Youth income, by month following RA: Month 6 (\$) ^a	365	675	342	334	634	370	41	0.14	
Youth income, by month following RA: Month 7 (\$) ^a	364	669	334	334	619	346	49	*	0.06
Youth income, by month following RA: Month 8 (\$) ^a	361	680	326	334	616	360	64	**	0.02
Youth income, by month following RA: Month 9 (\$) ^a	361	692	346	334	619	354	73	***	0.01
Youth income, by month following RA: Month 10 (\$) ^a	360	702	296	335	620	351	83	***	0.00
Youth income, by month following RA: Month 11 (\$) ^a	358	691	319	335	623	357	68	**	0.01
Youth income, by month following RA: Month 12 (\$) ^a	357	683	324	334	616	338	68	***	0.01
Any benefit receipt during the year following RA ^b	454	92.3	26.7	395	93.2	25.3	-0.9		0.63
Number of months of benefit receipt during the year following RA (average) ^b	454	10.8	3.4	395	10.7	3.4	0.1		0.61
Dist. of annual benefit amount ^b	454			395					0.80
None		7.7			6.8		0.9		
\$1 to \$6,500		23.8			26.3		-2.5		
>\$6,500 to \$8,000		58.4			56.2		2.2		
>\$8,000		10.1			10.6		-0.5		
Annual benefit amount (average, \$) ^b	454	6,421	2,718	395	6,378	2,745	43		0.82
SSA benefit amount, by month following RA: Month 1 (\$) ^b	454	536	234	395	541	233	-5		0.76
SSA benefit amount, by month following RA: Month 2 (\$) ^b	454	537	238	395	540	236	-4		0.81
SSA benefit amount, by month following RA: Month 3 (\$) ^b	454	535	240	395	538	243	-3		0.86
SSA benefit amount, by month following RA: Month 4 (\$) ^b	454	534	240	395	535	241	-1		0.95
SSA benefit amount, by month following RA: Month 5 (\$) ^b	454	536	237	395	534	244	1		0.93
SSA benefit amount, by month following RA: Month 6 (\$) ^b	454	532	241	395	535	244	-3		0.87
SSA benefit amount, by month following RA: Month 7 (\$) ^b	454	531	245	395	533	252	-2		0.90
SSA benefit amount, by month following RA: Month 8 (\$) ^b	454	532	241	395	526	255	6		0.74
SSA benefit amount, by month following RA: Month 9 (\$) ^b	454	537	239	395	525	256	11		0.50
SSA benefit amount, by month following RA: Month 10 (\$) ^b	454	539	238	395	522	257	18		0.30

Outcome	Treatment Group			Control Group			Unadjusted	
	N	Mean	Standard Deviation	N	Mean	Standard Deviation	Impact (Treatment - Control)	P-Value
SSA benefit amount, by month following RA: Month 11(\$) ^b	454	535	235	395	520	260	14	0.40
SSA benefit amount, by month following RA: Month 12 (\$) ^b	454	530	238	395	517	260	13	0.44
Used at least one SSA work incentive ^b	454	28.4	45.2	395	23.0	42.2	5.4	* 0.08
Used the SEIE ^b	454	4.8	21.0	395	1.3	11.2	3.4	*** 0.01
Used the EIE ^b	454	15.0	35.7	395	11.1	31.5	3.8	* 0.10
Used the Section 301 waiver ^b	454	11.9	32.4	395	13.2	33.9	-1.3	0.58
Established a PASS ^b	454	0.2	4.7	395	0.0	0.0	0.2	0.35
Opened an IDA ^b	454	0.0	0.0	395	0.0	0.0	0.0	1.00
Reported any earnings to SSA ^b	454	26.4	44.1	395	15.4	36.2	11.0	*** 0.00
Public health insurance coverage	378	91.5	30.3	338	90.6	31.1	0.8	0.71
Private health insurance	382	13.5	36.9	334	16.6	39.9	-3.2	0.26
Covered by both public and private health insurance	376	11.6	34.6	333	13.2	36.2	-1.6	0.54
Either public or private health insurance	379	93.3	27.0	339	93.4	26.6	-0.1	0.97
Household receipt of SNAP	374	45.8	53.8	336	49.5	53.5	-3.7	0.34
Household receipt of TANF	371	7.7	28.9	330	8.2	29.3	-0.4	0.84
Attitudes and Expectations Domain								
Youth agrees that personal goals include working and earning enough to stop receiving Social Security benefits	315	66.0	51.4	281	68.4	49.8	-2.4	0.56
Plans to go further in school, youth response	325	54.2	54.1	286	51.6	53.6	2.6	0.54
Plans to go further in school, parent response	215	53.8	53.7	176	44.6	52.6	9.2	* 0.08
Expectations for employment, youth response ^a	311			284				*** 0.00
Working for pay at the time of the follow-up survey		25.0			14.0		11.0	
Plans to start working for pay		60.3			64.1		-3.8	
No plans to start working for pay		14.7			21.9		-7.3	
Expectations for employment, parent response ^a	239			186				*** 0.00
Working for pay at the time of the follow-up survey		25.0			14.0		11.0	
Plans to start working for pay		55.5			61.0		-5.4	
No plans to start working for pay		19.5			25.0		-5.6	
Plans to live on own (with or without help), youth response	327	74.7	47.0	291	70.5	49.0	4.2	0.27
Plans to live on own (with or without help), parent response	218	41.0	53.0	180	36.1	50.7	4.8	0.34

Outcome	Treatment Group			Control Group			Unadjusted	
	N	Mean	Standard Deviation	N	Mean	Standard Deviation	Impact (Treatment - Control)	P-Value
Internal locus of control (average of index)	320	3.3	65.2	288	3.2	69.0	0.1 *	0.07
External locus of control (average of index)	318	2.6	80.9	286	2.6	76.9	0.0	0.65
Makes snacks or sandwiches (most/some of the time)	383	93.6	26.5	337	89.3	33.1	4.3 *	0.05
Rides public transportation alone (most/some of the time)	382	43.5	53.7	335	39.8	52.4	3.6	0.35
Picks clothes to wear (most/some of the time)	383	94.5	24.8	337	96.6	19.5	-2.1	0.20
Decides to spend own money (most/some of the time)	383	83.5	40.1	338	83.6	39.7	-0.1	0.98
Decides how to spend free time (most/some of the time)	383	90.0	32.5	338	89.8	32.4	0.1	0.96
Gets together with friends often or sometimes	383	60.6	52.8	336	64.2	51.4	-3.7	0.34
Exploratory Analysis								
Ever enrolled in training in the year following RA	387	9.2	31.3	342	6.5	26.6	2.7	0.20
Number of months in a training program	387			342				0.23
None		90.8			93.5		-2.7	
<Nine months		5.6			2.9		2.7	
Nine or more months		3.7			3.7		0.0	
Number of months in a training program (average)	387	0.6	2.5	342	0.5	2.4	0.1	0.57
Participated in any productive activity	385	64.6	51.7	339	56.8	53.2	7.8 **	0.04
Analytic Sample Size	389			344				
Research Sample Size	454			395				

Sources: YTD 12-month follow-up survey and SSA administrative records.

Notes: We weighted the statistics to adjust for non-response to the 12-month survey.

^aIndicates outcome measures for which we used a multiple imputation procedure for missing information. See Section E of this appendix.

^bIndicates outcomes based on SSA administrative records. For all outcomes from administrative records, we used the full research sample and did not weight to adjust for non-response to the 12-month survey.

RA = random assignment.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level using either a two-tailed t-test or a chi-square test.

Table A.6. Difference in Simple Means Versus Regression- Adjusted Means for Primary Outcomes (percentages, unless otherwise noted)

	Simple Mean Difference	P-Value	Adjusted Mean Difference	P-Value
Received any employment-promoting service	27.7	***	29.8	***
Ever employed on a paid job during first year after random assignment	17.7	***	19.1	***
Ever enrolled in school in the year following random assignment or completed high school by the time of the 12-month follow-up survey	3.7	0.24	3.7	0.19
Total annual income (earnings and SSA benefits, \$) ^a	559	**	717	***
Youth agrees that personal goals include working and earning enough to stop receiving Social Security benefits	-2.4	0.56	-1.1	0.78

Sources: YTD 12-month follow-up survey and SSA administrative records.

Notes: The sample includes all youth who completed the study's 12-month follow-up survey. We measured explanatory variables in the regression model before random assignment using data from the study's baseline survey and SSA administrative records. We calculated all statistics with sample weights to account for interview non-response. The analytic sample includes 389 treatment group youth and 344 control group youth. Survey item non-response may have resulted in smaller sample sizes for specific outcomes. See Table A.5 for sample sizes for all outcomes.

^aFor this outcome, item non-response occurred conditionally, depending on values of other measures in the follow-up survey. The rate of missing data is 6.7 percent for total income. We used a multiple imputation procedure to assign values when they were missing. See Section E of this appendix for more information on this procedure.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 level using a two-tailed t-test.

D. Non-Response to the 12- Month Follow- Up Survey and Survey Weights

For the 12-month follow-up survey, if respondents differed systematically from non-respondents in terms of characteristics that also were correlated with the outcomes of interest, the estimated impacts could be biased if we did not account for the differences. We found that respondents did differ from non-respondents on several baseline characteristics; for example, respondents were more likely to have completed high school, have received job training in the year prior to random assignment, be living with both parents, be covered by private health insurance, have family income of \$25,000 or more, not be receiving Food Stamps, have a mother who is a high school graduate, have a father who was employed, and require help with personal care needs. Respondents were less likely than non-respondents to pick what clothes to wear and expect to live independently (Table A.7).

Nearly all youth received SSA benefits during the year before random assignment. Respondents were more likely than non-respondents to have received benefits in the year before random assignment and in the year following random assignment (Table A.8).¹¹⁶ One reason for this difference is that youth who were no longer receiving benefits were more difficult to locate through

¹¹⁶ All youth in the research sample were on the SSA benefit rolls at the time data were extracted for the sample; however, a small percentage of them were not in "current pay" status. Subsequent analysis of benefit records showed that four percent of youth in the research sample did not receive benefits in the year prior to random assignment. These youth were considered to be at high risk of returning to "current pay" status in the future.

Table A.7. Baseline Characteristics for Respondents and Non- Respondents (percentages, unless otherwise noted)

	All	Respondents	Non- Respondents	Difference	P-Value
Baseline Survey Data					
Demographic Characteristics					
Race					0.89
White	80.3	79.9	82.8	-2.8	
Black	9.0	9.1	7.8	1.4	
American Indian/AK/HI/Pacific Islander	3.4	3.4	3.4	0.0	
Asian	.	.	.	.
Other or unknown	7.3	7.5	6.0	1.5	
Hispanic	2.7	2.6	3.5	-0.9	0.59
Primarily speaks English at home	98.3	98.1	100.0	-1.9	0.13
Education					
School Attendance					0.84
Does not attend school	63.1	62.8	65.1	-2.4	
Attends regular high school	25.9	26.0	25.7	0.3	
Attends special high school	0.6	0.6	0.9	-0.4	
Attends other school	10.4	10.7	8.3	2.4	
Attainment: Highest Grade					*** 0.00
9th grade or less	15.1	13.3	25.7	-12.4	
10th or 11th grade	28.8	27.1	39.4	-12.4	
12th grade	48.1	50.9	31.2	19.7	
College or technical school	3.5	3.7	1.8	1.9	
Other	4.5	4.9	1.8	3.1	
High school diploma, GED, or certificate of completion	46.6	49.2	29.6	19.7	*** 0.00
Employment					
Received job training in last year	26.9	28.6	16.5	12.0	*** 0.01
Worked as a volunteer in last year	10.5	11.1	6.9	4.2	0.17
Worked for pay in last year	28.7	29.0	26.7	2.3	0.61
Worked for pay in last month	12.2	12.1	12.9	-0.8	0.81
Never worked for pay at baseline	46.4	47.1	42.2	4.8	0.33
Living Arrangements and Household Composition					
Living Arrangements					*** 0.00
Two-parent family	44.6	45.9	36.5	9.4	
Single-parent family	35.1	35.3	33.9	1.4	
Group home	0.5	0.1	2.6	-2.5	
Other institution	0.8	0.5	2.6	-2.1	
Lives alone or with friends	19.0	18.1	24.3	-6.2	
Average number of people in household	3.6	3.6	3.6	0.0	0.95
Lives with others with disabilities	45.4	45.0	48.5	-3.5	0.52
Health Insurance Coverage					
Public health insurance	92.3	92.8	88.7	4.2	0.12
Private health insurance	16.4	17.7	8.0	9.7	** 0.01
Either public or private health insurance	13.7	15.0	5.2	9.9	*** 0.00
Both public and private health insurance	94.9	95.5	91.3	4.2	* 0.06
Family Socioeconomic Status					
Annual Income Level					** 0.01
Less than \$10,000	37.0	35.7	45.8	-10.1	
\$10,000 – \$24,999	34.7	34.1	38.5	-4.4	
\$25,000 or more	28.3	30.2	15.6	14.5	
Receives Food Stamps	42.6	41.3	51.5	-10.2	* 0.05
Parents' Education					
Mother high school graduate	66.4	68.3	43.1	25.2	*** 0.00
Father high school graduate	64.5	65.1	55.3	9.9	0.22
Fathers' Employment Status	57.2	58.9	31.6	27.4	*** 0.00
Self-Reported Health Status					
Excellent	14.6	15.4	9.5	5.9	0.21
Very good/good	56.6	55.7	62.1	-6.4	
Fair/poor	28.8	28.9	28.4	0.4	
Assistance					
Reading, hearing, speaking, or walking aids	18.3	18.3	18.1	0.2	0.95
Help with personal care needs	14.6	15.6	8.7	6.9	* 0.05

	All	Respondents	Non-Respondents	Difference	P-Value
Independent Activities and Decision Making					
Makes snacks or sandwiches (most/some of the time)	92.6	92.2	94.8	-2.6	0.32
Picks clothes to wear (most/some of the time)	96.0	95.5	99.1	-3.6 *	0.06
Expectations About the Future					
Expects to live independently (w/ or w/o help)	72.8	70.9	84.2	-13.2 ***	0.01
Expects to continue education	66.0	65.3	70.3	-5.0	0.33
Expects to work at least part-time for pay	77.8	78.8	71.6	7.2	0.10
	18.3	18.3	18.1	0.2	0.95
Administrative Data					
Demographic Characteristics					
Male	57.7	56.8	63.8	-7.0	0.15
Age in Years					0.48
14-17	18.6	18.8	17.2	1.6	
18-21	42.3	41.5	47.4	-5.9	
22-25	39.1	39.7	35.3	4.4	
Average age (years)	20.5	20.5	20.3	0.1	0.64
Benefits					
SSA Beneficiary Status					
SSI (only, or concurrent with CDB or DI)	93.9	93.6	95.7	-2.1	0.38
Duration of benefit entitlement (years)	7.9	7.9	7.6	0.3	0.60
Benefit amount in month before year of RA (\$)	6,393	6,414	6,258	157	0.53
Disability					
Primary Disabling Condition (SSA data)					0.62
Mental illness	24.1	23.9	25.3	-1.4	
Cognitive/developmental disability	41.0	41.8	36.4	5.4	
Learning disability/ADD	13.9	13.2	18.2	-5.0	
Physical disability	16.7	16.6	17.2	-0.6	
Speech, hearing, visual impairment	4.3	4.5	3.0	1.5	
Duration of disability (years)	8.2	8.2	8.1	0.2	0.77
Earnings in year before year of RA (\$)	780	801	641	160	0.49
Sample Size	849	733	116		

Sources: YTD baseline survey and SSA administrative records.

Notes: The table includes all of the main baseline characteristics (all of those included in Table II.2) and any baseline characteristics for which differences between respondents and non-respondents are statistically significant at the .10 level. The analysis does not include the three research sample youth who were deceased at the time of the 12-month survey. Baseline survey item non-response may have resulted in smaller sample sizes for some characteristics than indicated at the bottom of the table. Missing information on duration of benefit entitlement, duration of disability, and primary disabling condition resulted in smaller sample sizes for these characteristics than shown at the bottom of the table.

RA = random assignment

*/**/***Difference is significantly different from zero at the .10/.05/.01 level using either a two-tailed t-test or a chi-square test.

Table A.8. Annual SSA Benefit Receipt for Respondents and Non- Respondents

	All	Respondent	Non- Respondent	Difference		P-Value
Benefit Receipt (%)						
Any SSA benefits in year before month of random assignment ^a	96.2	96.8	92.2	3.5	*	0.10
Any SSA benefits in year after month of random assignment	92.7	93.5	87.9	5.5	**	0.03
Benefit Amount (\$)						
SSA benefits in year before month of random assignment	6,393	6,414	6,258	157		0.53
SSA benefits in year after month of random assignment	6,401	6,431	6,211	220		0.42
Sample Size	849	733	116			

Source: SSA administrative records.

Notes: We adjusted all benefit amount variables for inflation to 2008 dollars using the average wage index. We defined the previous year as the 12 months preceding the month of random assignment. We defined the year following random assignment as the 12 months following the month of random assignment. The analysis does not include the three research sample youth who were deceased at the time of the 12-month survey.

^aAll youth in the research sample were on the SSA benefit rolls at the time data were extracted for the sample; however, a small percentage of them were not in “current pay” status. Subsequent analysis of benefit records showed that some youth in the research sample did not receive benefits in the year before the month of random assignment. See Figure A.2 for additional details.

*/**/** Difference is significantly different from zero at the .10/.05/.01 level using either a two-tailed t-test or a chi-square test.

SSA records using the most recent beneficiary contact information. Youth not receiving benefits thus were more likely to be non-respondents to the follow-up survey. However, there were no statistically significant differences between respondents and non-respondents in the average annual SSA benefits received in the year before random assignment or the year after random assignment. In addition, we did not find that the estimated impact of Youth Works on benefit receipt differed between the respondent sample and the full research sample (Table A.9). Across all outcomes measured in administrative records, we found little difference in levels or estimated impacts between the respondent and full research samples—not surprising, given the high response rates.

In our analysis, we used weights that adjust for survey non-response to make respondent cases more representative of the original sample and reduce the potential for non-response bias. For the weight adjustments, we used forward and backward stepwise logistic models to estimate the propensity for a sample member to respond. We used the inverse of the propensity score as the non-response weight. We computed the models separately for treatment and control observations. To select variables in the logistic model, we included variables with a statistical significance level of 0.30 or lower (instead of the standard 0.05) because the purpose of the model was to improve estimation of the propensity score, not to identify statistically significant factors related to response. For both the control and treatment groups, the explanatory variables included age, race, representative payee type, mother’s education, father’s education, father’s employment, prior work for pay, public or private health insurance receipt, and rode public transportation alone. Additional characteristics for the control group included type of benefits received; received special education; living arrangement; mother’s employment; expected to live independently; decided how to spend own money; and used an aid for reading, hearing, speaking, or walking. For the treatment group, additional characteristics included school attendance, high school diploma or GED, required help with personal care needs, received job training in year before baseline, made snacks on own, and benefit status.

Table A.9. Impacts on Outcomes Measured with Administrative Records, Respondent and Full Sample (percentages, unless otherwise noted)

	12-Month Survey Respondent Sample				Full Randomly Assigned Sample			
	Treatment Group			P-Value	Treatment Group			P-Value
	Observed Mean	Estimated Mean w/o Youth Works	Impact		Observed Mean	Estimated Mean w/o Youth Works	Impact	
Receipt of SSA Benefits (SSI, DI, or CDB)								
Any SSA benefits	92.8	92.2	0.7	0.62	92.3	91.9	0.4	0.78
Number of months of benefit receipt during the year following random assignment	11.0	10.7	0.2	0.20	10.8	10.5	0.2	0.19
Benefit Amount								
Distribution of annual benefit amount				0.31				0.29
None	6.5	7.2	-0.7		7.7	8.2	-0.5	
\$1 to \$6,500	24.0	27.5	-3.5		23.8	27.5	-3.7	
>\$6,500 to \$8,000	58.9	56.5	2.4		58.4	55.2	3.1	
>\$8,000	10.5	8.8	1.7		10.1	9.0	1.1	
Annual benefit amount (\$)	6,499	6,278	221	* 0.06	6,421	6,228	192	* 0.08
Use of SSA Work Incentives								
Used at least one SSA work incentive	28.2	21.2	7.0	** 0.03	28.6	21.9	6.7	** 0.02
Used the EIE	15.9	11.0	4.9	* 0.06	15.0	11.1	3.9	* 0.09
Used the SEIE	4.9	1.0	3.9	*** 0.00	4.8	1.0	3.8	*** 0.00
Used the Section 301 waiver	10.1	11.3	-1.1	0.58	11.9	12.2	-0.3	0.88
Established a PASS ^a	0.2	0.0	0.2	0.38	0.2	0.0	0.2	0.35
Opened an IDA ^a	0.0	0.0	0.0	1.00	0.0	0.0	0.0	1.00

Source: SSA administrative records.

Notes: The table reports observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model before random assignment using data from the study's baseline survey and SSA administrative records. For the respondent sample, we calculated all statistics using sample weights to account for interview non-response. The 12-month survey respondent sample (also referred to as the analytic sample) includes 389 treatment group youth and 344 control group youth. The full randomly assigned sample (also referred to as the research sample) includes 454 treatment group youth and 395 control group youth. This analysis does not include three research sample youth who were deceased at the time of the 12-month survey.

We adjusted all benefit amount variables for inflation to 2008 dollars using the average wage index.

^aThe control group members did not use this work incentive; hence, the table reports the unadjusted means and unadjusted impacts.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 level using either a two-tailed t-test or a chi-square test.

E. Missing Information for Independent and Dependent Variables

For most of the explanatory characteristics (independent variables) used in our regression models, we had few observations with missing information. For these variables, generally with far fewer than five percent of observations missing information, we replaced the missing information with the mean value from the non-missing observations. For five variables with a larger share of missing observations, we used dummy variables to indicate that the information was missing: mother completed high school (5 percent missing), father completed high school (17 percent missing), youth expects to live independently (16 percent missing), youth expects to work for pay (17 percent missing), and primary disabling condition (15 percent missing). For the subgroup analyses, we omitted observations if the subgroup information was missing.

We typically excluded observations with missing information on an outcome measure (dependent variable) from any analysis of that outcome. For some outcome measures, however, the elimination of missing observations would produce potential bias. Specifically, the potential for bias occurs when the outcome is known to have a specific value for some observations conditional on another outcome. For example, for youth reporting that they did not work for pay in the year following random assignment, earnings in that year are known to be zero. Missing information thus arises only for observations of youth who worked for pay during the year. In this example, the elimination of missing observations would imply elimination only of observations for youth who worked for pay, resulting in an underestimate of average earnings. The degree to which the earnings estimate is too low could differ by treatment status (for example, if treatment youth were more likely to work for pay and just as likely to respond to questions on earnings). For almost all outcome measures with conditionally missing data, no more than 9 percent of observations had missing data. The only exception was future employment expectations (19 percent were missing the youth response, and 42 percent were missing the parent response). In Table A.5, we provide the sample size (N) for every outcome measure.

For outcome measures for which information was missing conditional on another outcome, we used a multiple imputation procedure, as described in Puma et al. (2009). Here, we provide a conceptual description of the imputation process. We first imputed the missing values by using a stochastic regression model. The imputation model included all variables in our impact analysis model, plus key outcome measures and a stochastic residual term to match the observed variance in the sample. We performed the process ten times to create ten separate analytic data sets. We then conducted the impact analysis separately on each of the ten data sets. The impact estimate is computed as the simple average of the impact estimates across the ten data sets. The standard error of the combined impact estimate is calculated from within-imputation variance and between-imputation variance components. To implement the analysis, we used Stata procedures written by Royston (2007), Carlin et al. (2008), and Royston et al. (2009).¹¹⁷

¹¹⁷ Impact estimates for outcomes with conditionally missing data would be biased if we did not adjust for missing information. However, when we calculated the biased impact estimates by dropping observations with missing outcome information, we found results very similar to those of the multiple imputation procedure. The impact estimates were slightly different, but the pattern of statistical significance was the same. The similarity of the findings is not surprising, given the relatively small share of observations with missing outcome information.

F. Monthly SSA Benefits Before and After Random Assignment

Sections A through E of this appendix have provided detailed discussion of analytic issues raised in Chapter II. In the remaining sections of this appendix, we provide additional analyses to support the results of the impact analysis.

In Figure A.1 and Table A.10, we present the unadjusted average monthly benefit amount for youth in the treatment and control groups before and after random assignment. The average benefit amount of the treatment group is not statistically different from that of the control group in any month.

Figure A.1. Average SSA Benefit Amount, by Months Before and After Random Assignment

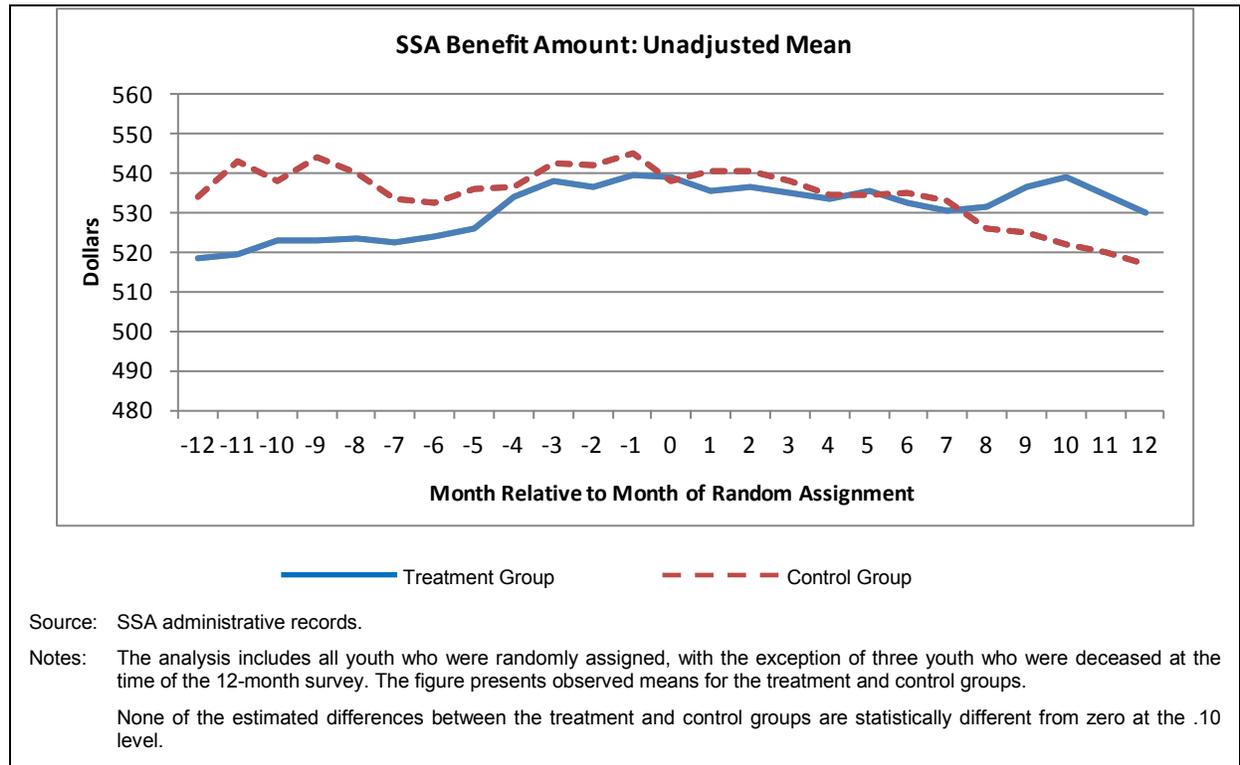


Table A.10. Average SSA Benefit Amount, by Months Before and After Random Assignment (\$)

Month Relative to Random Assignment	Treatment Group	Control Group	Difference	P-Value
12 months before	519	534	-16	0.36
11 months before	519	543	-24	0.14
10 months before	523	538	-15	0.36
9 months before	523	544	-21	0.19
8 months before	524	540	-17	0.30
7 months before	523	534	-11	0.49
6 months before	524	533	-9	0.58
5 months before	526	536	-10	0.52
4 months before	534	536	-3	0.87
3 months before	538	543	-5	0.77
2 months before	537	542	-6	0.71
1 month before	540	545	-5	0.73
Month of random assignment	539	538	1	0.96
1 month after	536	541	-5	0.76
2 months after	537	540	-4	0.81
3 months after	535	538	-3	0.86
4 months after	534	535	-1	0.95
5 months after	536	534	1	0.93
6 months after	532	535	-3	0.87
7 months after	531	533	-2	0.90
8 months after	532	526	6	0.74
9 months after	537	525	11	0.50
10 months after	539	522	18	0.30
11 months after	535	520	14	0.40
12 months after	530	517	13	0.44
Sample Size	454	395		

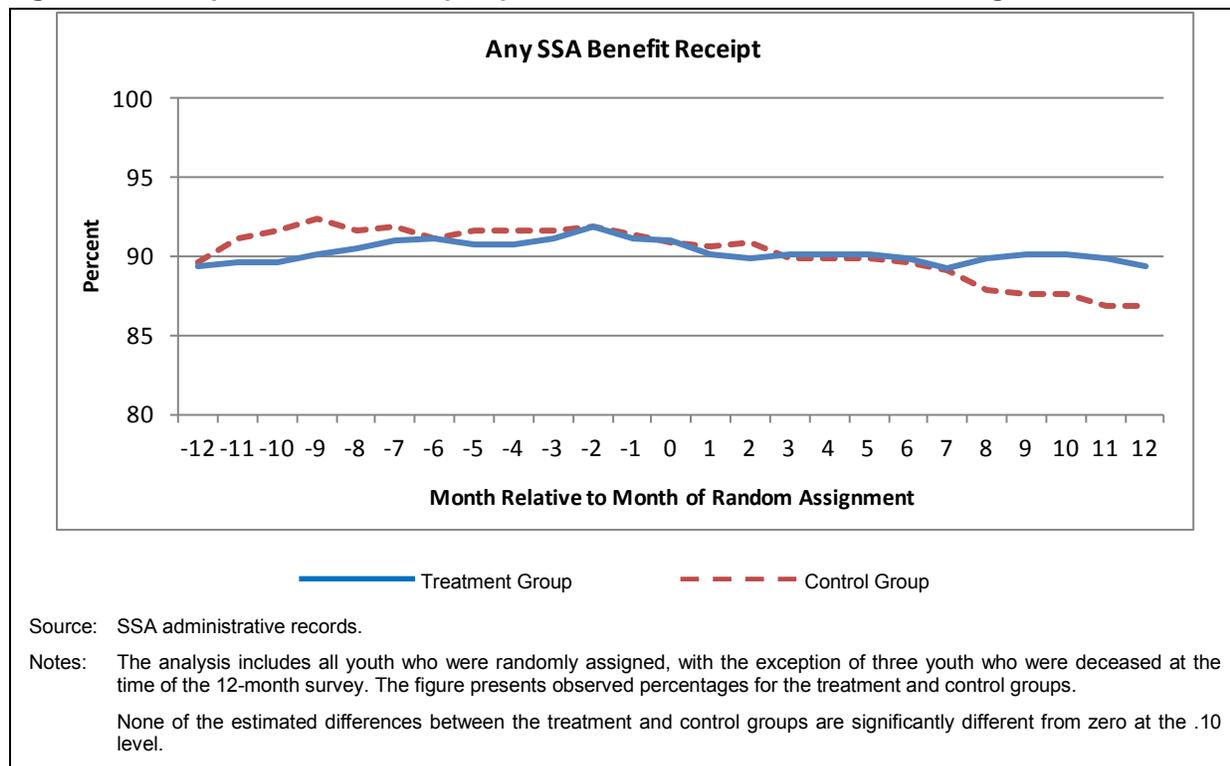
Source: SSA administrative records.

Notes: The analysis includes all youth who were randomly assigned, with the exception of three youth who were deceased at the time of the 12-month survey. The table reports observed means for the treatment and control groups and the difference between the observed means for the two groups.

*/**/**Difference is significantly different from zero at the .10/.05/.01 level using a two-tailed t-test.

In Figure A.2, we present the unadjusted percentage receiving any SSA benefit by month for youth in the treatment and control groups before and after random assignment. The percentage receiving any SSA benefit for the treatment group is not statistically different from the percentage receiving any SSA benefit for the control group in any month.

Figure A.2. Any SSA Benefit Receipt, by Months Before and After Random Assignment



G. Exploratory Subgroups

In the evaluation design report (Rangarajan et al. 2009a), we hypothesized the potential for differential impacts across a number of subgroups. To be responsive to the multiple comparisons problem, we limited the main subgroups discussed in the text to those with the strongest conceptual reasons for likely differential impacts: pairs of subgroups defined by phase of project implementation, age, school attendance, and work experience. In this section, we examine differential impacts for several exploratory subgroups. For these subgroups, we hypothesized the potential for differential impacts but decided before the analysis that the potential was lower than for the main subgroups discussed in the text.

We conducted exploratory analysis of the impact of Youth Works on the primary outcomes for the following five exploratory subgroup pairs:¹¹⁸

- **Time between baseline survey and consent.** To examine whether impacts differed for hard-to-enroll youth, we estimated impacts separately for youth who provided written consent to enroll in four weeks or less time from completion of the baseline survey versus youth who took more than four weeks. The youth who enrolled in four weeks or less made up 50 percent of the sample.¹¹⁹

¹¹⁸ For other sites, we also examined a subgroup pair defined by random assignment cohort with half of the sample in each cohort. For West Virginia, this analysis is equivalent to the subgroup pair defined by phase of project implementation (reported in the main text).

¹¹⁹ We set the cut-off at four weeks to yield relatively balanced shares of youth in each subgroup. By making the two groups similar in size, we maximized the statistical power for detecting differences between groups in the estimated impact. We followed this approach for all exploratory subgroups defined by a continuous variable: time between baseline

(continued)

- **Duration on SSA benefits.** To examine whether impacts differed for youth who had received SSA benefits for a shorter period, we estimated impacts separately for youth who had received benefits for less than six years (50 percent) versus those who had received them for six years or more.
- **Physical primary disabling condition.** Impacts may differ for youth with a physical primary disability, including speech, hearing, and visual impairment (21 percent), compared to those with a mental, cognitive/developmental, or learning disability (79 percent).
- **Two-parent family.** To examine whether impacts differed by socioeconomic status, we estimated separate impacts for those who lived with both parents (46 percent), compared to all other youth (54 percent). Ideally, we would use family income or mother's education to measure socioeconomic status. We chose living with both parents due to the likelihood of a high degree of error in our measure of family income, the relatively greater degree of missing information on mother's education (5 percent missing), and the lack of balance in the sample if divided by mother's education (only 32 percent of the sample had a mother who had not finished high school).
- **Time between random assignment and 12-month follow-up survey.** Ideally, the 12-month follow-up survey would have occurred exactly 12 months after random assignment for all youth. In practice, 52 percent of respondents completed the survey by 12.5 months after random assignment; the remaining 48 percent completed the survey in a later month.¹²⁰ To examine whether the timing of the follow-up survey affected impact estimates, we estimated separate impact estimates for youth interviewed within 12.5 months and those interviewed later. The purpose of this subgroup analysis is to examine the fidelity of the research approach; this is the only subgroup analysis for which the defining characteristic of the subgroup pair was not measured at baseline.

In general, we found no consistent patterns of differential impacts (Tables A.11 through A.15). We found only three cases (out of a total of 25) for which the difference in impacts between the subgroup pairs is statistically significant. Among youth who completed the follow-up survey by month 12.5 after random assignment relative to youth who completed the survey after month 12.5, the findings suggest that Youth Works may have had larger positive impacts on paid employment and goals for earning enough to stop receiving benefits. The results suggest that youth who were quicker to respond to the follow-up survey were those for whom the impact of Youth Works was larger. However, in the case of goals for earnings, the impact estimates were not statistically different from zero for either group in the subgroup pair. We also found among youth who provided consent to participate in the evaluation within four weeks or less of completing the baseline survey relative to youth who took longer to consent, Youth Works may have had a larger positive impact on income. However, given that we have conducted 25 tests of the exploratory subgroup pairs (six subgroups for each of five primary outcomes), we would have expected to find two or three statistically significant differences attributable to chance.

(continued)

survey and consent, duration on SSA benefits, and time between random assignment and the 12-month follow-up survey.

¹²⁰ The earliest completion occurred at 11.1 months; 65 percent of youth completed by the end of the 13th month, 96 percent of youth completed by the end of the 18th month, and the latest completion occurred at month 26.6.

Table A.11. Impact on Use of Employment Services, for Additional Subgroups (percentages)

	Treatment Group		Impact	P-Value	Treatment Group Size	Control Group Size	
	Observed Mean	Estimated Mean w/o Youth Works					
Time Between Baseline Survey and Consent							
Four weeks or less	65.3	35.8	29.5	***	0.00	211	150
More than four weeks	61.7	32.6	29.1	***	0.00	175	186
(P-value of difference in impacts)					(1.00)		
Duration on SSA Benefits							
Less than 6 years	63.1	32.1	31.0	***	0.00	187	178
6 years or more	64.8	33.3	31.5	***	0.00	199	158
(P-value of difference in impacts)					(0.90)		
Primary Disabling Condition							
Physical disability (including speech, hearing, and visual)	68.1	27.9	40.2	***	0.00	69	61
Mental illness, cognitive/developmental, and learning disability	63.4	33.9	29.5	***	0.00	256	224
(P-value of difference in impacts)					(0.26)		
Two-Parent Family							
Lives with both parents	62.1	35.3	26.9	***	0.00	181	150
Does not live with both parents	65.1	32.4	32.7	***	0.00	201	185
(P-value of difference in impacts)					(0.42)		
Time Between Random Assignment and Follow-Up Survey							
Completed survey by month 12.5	68.1	36.0	32.1	***	0.00	194	179
Completed survey after month 12.5	59.4	30.6	28.8	***	0.00	192	157
(P-value of difference in impacts)					(0.71)		

Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the 12-month follow-up survey. The table reports observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model before random assignment using data from the study’s baseline survey and SSA administrative records. We calculated all statistics by using sample weights to account for interview non-response. Survey item non-response may have resulted in smaller sample sizes for specific outcomes, as indicated in the table.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level using a two-tailed t-test.

Table A.12. Impact on Ever Employed in a Paid Job, for Additional Subgroups (percentages)

	Treatment Group		Impact	P-Value	Treatment Group Size	Control Group Size	
	Observed Mean	Estimated Mean w/o Youth Works					
Time Between Baseline Survey and Consent							
Four weeks or less	41.5	16.3	25.1	***	0.00	211	154
More than four weeks	44.2	29.2	15.0	***	0.00	176	190
(P-value of difference in impacts)					(0.13)		
Duration on SSA Benefits							
Less than 6 years	43.3	28.4	14.9	***	0.00	187	182
6 years or more	44.5	20.0	24.5	***	0.00	200	162
(P-value of difference in impacts)					(0.14)		
Primary Disabling Condition							
Physical disability (including speech, hearing, and visual)	46.6	16.9	29.8	***	0.00	69	62
Mental illness, cognitive/developmental, and learning disability	42.1	21.5	20.6	***	0.00	256	231
(P-value of difference in impacts)					(0.29)		
Two-Parent Family							
Lives with both parents	47.8	22.8	24.9	***	0.00	181	152
Does not live with both parents	38.8	23.0	15.8	***	0.00	202	191
(P-value of difference in impacts)					(0.17)		
Time Between Random Assignment and Follow-Up Survey							
Completed survey by month 12.5	46.5	20.6	25.9	***	0.00	194	183
Completed survey after month 12.5	39.2	26.9	12.4	**	0.02	193	161
(P-value of difference in impacts)				**	(0.05)		

Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the 12-month follow-up survey. The table reports observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model before random assignment using data from the study's baseline survey and SSA administrative records. We calculated all statistics with sample weights to account for interview non-response. Survey item non-response may have resulted in smaller sample sizes for specific outcomes, as indicated in the table.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level using a two-tailed t-test.

Table A.13. Impact on Ever Enrolled in School or Has Completed High School, for Additional Subgroups (percentages)

	Observed Mean	Estimated Mean w/o Youth Works	Impact	P-Value	Treatment Group Size	Control Group Size
Time Between Baseline Survey and Consent						
Four weeks or less	83.0	82.7	0.3	0.94	210	150
More than four weeks	81.6	75.1	6.5	0.12	173	187
(P-value of difference in impacts)				(0.31)		
Duration on SSA Benefits						
Less than 6 years	84.5	79.1	5.4	0.15	187	179
6 years or more	85.2	80.8	4.4	0.24	196	158
(P-value of difference in impacts)				(0.89)		
Primary Disabling Condition						
Physical disability (including speech, hearing, and visual)	91.3	93.0	-1.7	0.75	68	62
Mental illness, cognitive/developmental, and learning disability	79.2	73.9	5.3	0.15	254	227
(P-value of difference in impacts)				(0.48)		
Two-Parent Family						
Lives with both parents	84.6	81.3	3.3	0.40	181	147
Does not live with both parents	80.1	76.5	3.7	0.36	198	190
(P-value of difference in impacts)				(0.97)		
Time Between Random Assignment and Follow-Up Survey						
Completed survey by month 12.5	83.3	81.9	1.4	0.71	192	182
Completed after month 12.5	81.5	74.9	6.5	0.11	191	155
(P-value of difference in impacts)				(0.38)		

Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the 12-month follow-up survey. The table reports observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model before random assignment using data from the study's baseline survey and SSA administrative records. We calculated all statistics with sample weights to account for interview non-response. Survey item non-response may have resulted in smaller sample sizes for specific outcomes, as indicated in the table.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level using a two-tailed t-test.

Table A.14. Impact on Income, for Additional Subgroups (\$)

	Treatment Group		Impact	P-Value	Treatment Group Size	Control Group Size	
	Observed Mean	Estimated Mean w/o Youth Works					
Time Between Baseline Survey and Consent							
Four weeks or less	8,071	6,913	1,158	***	0.00	194	150
More than four weeks	8,047	7,712	334		0.30	159	181
(P-value of difference in impacts)				*	(0.06)		
Duration on SSA Benefits							
Less than 6 years	7,872	7,322	551	*	0.09	172	174
6 years or more	8,231	7,373	858	***	0.01	181	157
(P-value of difference in impacts)					(0.50)		
Primary Disabling Condition							
Physical disability (including speech, hearing, and visual)	8,498	7,866	633		0.28	65	61
Mental illness, cognitive/developmental, and learning disability	7,940	7,249	690	***	0.01	233	224
(P-value of difference in impacts)					(0.93)		
Two-Parent Family							
Lives with both parents	8,198	7,202	996	***	0.00	169	147
Does not live with both parents	7,960	7,395	565	*	0.07	180	184
(P-value of difference in impacts)					(0.31)		
Time Between Random Assignment and Follow-Up Survey							
Completed survey by month 12.5	8,323	7,260	1063	***	0.00	178	181
Completed survey after month 12.5	7,813	7,456	357		0.29	175	150
(P-value of difference in impacts)					(0.13)		

Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the 12-month follow-up survey. The table reports observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model before random assignment using data from the study's baseline survey and SSA administrative records. We calculated all statistics with sample weights to account for interview non-response. Survey item non-response may have resulted in smaller sample sizes for specific outcomes, as indicated in the table.

For the outcome in this table, item nonresponse occurred conditionally, depending on the values of other measures in the follow-up survey. The rate of missing data in various subgroups in the table ranges from 3.8 percent to 8.5 percent. We used a multiple imputation procedure to assign values when they were missing. See Section E of this appendix for more information on this procedure.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 level using a two-tailed t-test.

Table A.15. Impact on Goals Include Working and Earning Enough to Stop Receiving Social Security Benefits, for Additional Subgroups (percentages)

	Treatment Group			P-Value	Treatment Group Size	Control Group Size
	Observed Mean	Estimated Mean w/o Youth Works	Impact			
Time Between Baseline Survey and Consent						
Four weeks or less	62.1	64.2	-2.2	0.70	174	128
More than four weeks	70.5	68.9	1.6	0.77	141	153
(P-value of difference in impacts)				(0.63)		
Duration on SSA Benefits						
Less than 6 years	69.4	67.0	2.4	0.65	157	146
6 years or more	64.6	69.1	-4.6	0.39	158	135
(P-value of difference in impacts)				(0.35)		
Primary Disabling Condition						
Physical disability (including speech, hearing, and visual)	78.7	81.0	-2.3	0.77	55	50
Mental illness, cognitive/developmental, and learning disability	62.6	62.6	0.1	0.99	206	189
(P-value of difference in impacts)				(0.78)		
Two-Parent Family						
Lives with both parents	64.1	61.1	3.0	0.62	143	123
Does not live with both parents	67.2	72.6	-5.4	0.29	168	157
(P-value of difference in impacts)				(0.28)		
Time Between Random Assignment and Follow-Up Survey						
Completed survey by month 12.5	72.0	65.6	6.4	0.21	160	152
Completed survey after month 12.5	60.1	69.2	-9.1	0.13	155	129
(P-value of difference in impacts)				*	(0.06)	

Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the 12-month follow-up survey. The table reports observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model before random assignment using data from the study's baseline survey and SSA administrative records. We calculated all statistics with sample weights to account for interview non-response. Survey item non-response may have resulted in smaller sample sizes for specific outcomes, as indicated in the table.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level using a two-tailed t-test.

H. Additional Self- Efficacy Outcomes

In Chapter VIII, we reported that Youth Works improved the internal locus of control but did not have a statistically significant impact on the external locus of control. We created these composite measures from a series of questions in the follow-up survey. The self-efficacy measures are based on a battery of 12 questions that includes the Pearlin Mastery Scale (Pearlin and Schooler 1978). We selected one of these questions, on goals for future work and earnings, as the primary outcome in this domain because of its relevance to the YTD initiative. We used factor analysis to determine that the remaining 11 questions could be aggregated into two factors based on the high degree of correlation of the measures within the two groupings. After examining the concepts in each group of questions, we labeled the first group “internal locus of control” and the second group “external locus of control.”¹²¹

It is preferable to use the two composite outcomes instead of estimating impacts separately for each question because the questions are meant to assess the same underlying concept (self-efficacy) and the responses are highly correlated within two factors. The composite measures have lower random variation than the separate measures, and the approach addresses the multiple comparisons problem (Chapter II). Specifically, with 11 outcomes, we would expect to find one statistically significant impact because of random variation even if Youth Works had no impact on self-efficacy.

In this evaluation, the internal locus of control reflects whether youth believe their life outcomes result primarily from their own behaviors and actions. Our measure of the internal locus of control is an index based on the degree to which youth agreed with the following five statements:

- What happens to you in the future mostly depends on you.
- You can do just about anything you really set your mind to.
- You tell other people how you feel when they upset you or hurt your feelings.
- You know how to get the information you need.
- You have a good sense of the path you want to take in life and the steps to get there.

The index for the internal locus of control runs from 1 to 4, with 1 signaling strong disagreement with the statements and 4 signaling strong agreement. The average value of this index for treatment group youth is 3.3, and we estimated that, in the absence of Youth Works, the average would have been 3.2 and the difference (0.12) is statistically significant at the five percent level.

The external locus of control reflects the degree to which youth believe that others, fate, or chance primarily determine their life outcomes. Our measure of the external locus of control is an index based on the degree to which youth agreed with the following six statements:

- You have little control over the things that happen to you.
- There is really no way you can solve some of the problems you have.
- There is little you can do to change many of the things in your life.

¹²¹ The factor analysis showed that the questions in each group had a high degree of correlation, so it is appropriate to combine the separate questions in a single measure for each group. Furthermore, the results of the factor analysis are consistent with grouping the questions conceptually, based on whether they affirm or suggest a lack of self-efficacy.

- You often feel helpless in dealing with the problems of life.
- Sometimes you feel like you are being pushed around in life.
- Your job opportunities will be limited by discrimination because of your gender, race, or disability.

This index also runs from 1 to 4, with 1 signaling strong agreement with the statements and 4 signaling strong disagreement. The average value of this index for the external locus of control for treatment group youth is 2.6. We estimated that these youth would have registered essentially the same average value on this index even if they had not been given the opportunity to participate in Youth Works.

As a robustness check for the findings from the two composite measures, we also estimated the impact estimates for each question separately (Table A.16). The results are consistent with the findings from the composite outcome measures. Specifically, the results show that Youth Works increased several measures related to participants' sense of internal control but had no impact on measures related to their sense of external control.

Table A.16. Self- Efficacy (percentages)

	Treatment Group			P- Value
	Observed Mean	Estimated Mean w/o Youth Works	Impact	
Supplementary Outcomes				
Internal Locus of Control				
What happens to you in the future mostly depends on you				* 0.10
Agree a lot	69.0	64.4	4.6	
Agree a little	16.6	20.8	-4.2	
Disagree a little	8.8	5.6	3.2	
Disagree a lot	5.6	9.3	-3.7	
You can do just about anything you really set your mind to				** 0.01
Agree a lot	68.6	64.0	4.6	
Agree a little	18.5	14.0	4.5	
Disagree a little	6.9	11.0	-4.0	
Disagree a lot	5.9	11.1	-5.2	
You tell other people how you feel when they upset you or hurt your feelings				0.88
Agree a lot	53.2	55.5	-2.3	
Agree a little	18.8	17.6	1.1	
Disagree a little	10.4	8.8	1.6	
Disagree a lot	17.7	18.1	-0.4	
You know how to get the information you need				** 0.03
Agree a lot	51.1	45.6	5.4	
Agree a little	27.1	22.1	5.0	
Disagree a little	10.6	14.9	-4.3	
Disagree a lot	11.3	17.4	-6.1	
You have a good sense of the path you want to take in life and the steps to get there				0.19
Agree a lot	54.2	45.4	8.8	
Agree a little	25.0	31.1	-6.1	
Disagree a little	10.3	12.1	-1.7	
Disagree a lot	10.4	11.4	-1.0	
External Locus of Control				
You have little control over the things that happen to you				0.12
Agree a lot	20.4	26.1	-5.7	
Agree a little	22.6	19.7	3.0	
Disagree a little	27.1	20.5	6.6	
Disagree a lot	29.9	33.7	-3.9	
There is really no way you can solve some of the problems you have				0.74
Agree a lot	28.7	27.4	1.3	
Agree a little	24.5	22.1	2.4	
Disagree a little	20.2	23.9	-3.6	
Disagree a lot	26.6	26.6	0.0	
There is little you can do to change many of the important things in your life				0.44
Agree a lot	26.8	27.6	-0.7	
Agree a little	23.9	19.5	4.5	
Disagree a little	17.1	21.6	-4.5	
Disagree a lot	32.2	31.4	0.8	

	Treatment Group			P-Value
	Observed Mean	Estimated Mean w/o Youth Works	Impact	
You often feel helpless in dealing with the problems of life				0.83
Agree a lot	25.6	28.7	-3.1	
Agree a little	24.3	21.8	2.5	
Disagree a little	19.9	19.6	0.3	
Disagree a lot	30.1	29.9	0.2	
Sometimes you feel like you are being pushed around in life				0.91
Agree a lot	31.7	30.7	1.1	
Agree a little	22.7	23.8	-1.1	
Disagree a little	12.7	14.2	-1.6	
Disagree a lot	32.9	31.3	1.6	
Your job opportunities will be limited by discrimination because of your gender, race, or disability				0.70
Agree a lot	21.7	25.3	-3.5	
Agree a little	18.5	19.8	-1.3	
Disagree a little	18.8	17.6	1.1	
Disagree a lot	41.0	37.3	3.7	

Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the 12-month follow-up survey. The table reports observed means or percentages for the treatment group, estimates of what the treatment group means or percentages would have been in the absence of Youth Works, and regression-adjusted impact estimates (see Chapter II, Section A.4). We measured explanatory variables in the regression model before random assignment using data from the study's baseline survey and SSA administrative records. We calculated all statistics with sample weights to account for interview non-response. The analytic sample includes 389 treatment group youth and 344 control group youth. For the outcomes in this table, survey item non-response resulted in smaller sample sizes that varied by a few observations across outcomes: 316 to 321 treatment group youth and 285 to 290 control group youth.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 level using a chi-square test.

APPENDIX B
THE SSA WAIVERS FOR YTD

An important element of YTD was the modification of selected SSA program rules for project participants. These modifications, or waivers, were designed to encourage and reward the efforts of youth to begin working, increase their earnings, or continue their education.

Student Earned Income Exclusion (SEIE). Under the SEIE, Social Security disregards up to \$1,700 per month of a student's earnings, subject to a cap of \$6,840 for the year (in 2012—the monthly and yearly amounts are adjusted for inflation each year.) Normally, the SEIE applies only to students who are age 21 or younger. For YTD participants, the SEIE applies regardless of age. As long as a YTD participant regularly attends school, he or she is eligible for the SEIE.

Earned Income Exclusion (EIE). For all SSI recipients who work, Social Security disregards \$65 plus half of any earnings over that amount when it determines eligibility for SSI. For YTD participants, Social Security disregards \$65 plus three-fourths of any additional earnings. This waiver allows YTD participants to keep more of their SSI benefits when they work. (The EIE is applied to earnings in addition to all other applicable exclusions, including the SEIE.)

Plan for Achieving Self-Support (PASS). Normally, a PASS must specify a particular employment or self-employment goal, list the steps that will be taken to achieve the goal, and identify the income and/or assets (other than SSI benefits) that will be used to meet the plan's expenses. YTD participants may specify postsecondary education or career exploration as the goal of a PASS.

If Social Security approves a PASS, it disregards the funds used to pursue the plan when it determines eligibility for SSI. Such funds may include, for example wages, SSDI benefits, childhood disability benefits, or deemed parental income. If the individual is eligible for SSI without the PASS, SSI benefits replace all of the funds used for PASS expenses. If the PASS creates eligibility for SSI (which generally conveys eligibility for Medicaid, as well), SSI benefits replace part of the funds used for PASS expenses.

Individual Development Accounts (IDAs). This waiver expands the options for YTD participants to acquire certain kinds of assets. IDAs are trust-like savings accounts. For each dollar of earnings the account holder deposits, a participating nonprofit organization sets aside a matching contribution of 50 cents to four dollars (the average is one dollar). In IDA programs that involve federal funds, a federal match also is set aside. Federally funded IDAs must be used to help buy a home, pay for postsecondary education, or start a small business. All IDA participants undergo financial literacy training.

Under current rules, Social Security deducts account-holder deposits from countable earned income and disregards matching deposits, IDA account balances, and any interest earned by the account when determining SSI eligibility for someone who has a federally funded IDA. For YTD participants, these disregards also apply to IDAs that do not involve federal funds, including those that may be used for purposes other than the purchase of a home, postsecondary education, or a business startup. The IDA may be part of an existing state or local program, or a program established by a YTD project for its participants.

Continuing Disability Review (CDR) or Age-18 Medical Redetermination. YTD participants will receive coverage under Section 301 that will allow for continued benefit eligibility throughout the project, regardless of the outcome of a continuing disability review (CDR) or age-18 medical redetermination. Under existing SSA rules, a CDR is scheduled to determine whether there has been an improvement in a disabling condition. Moreover, when an SSI recipient turns 18, there is a medical redetermination in which the SSI recipient must meet the adult criteria for disability. While this coverage does not eliminate these reviews, YTD participants who are determined ineligible for benefits for medical reasons can continue to receive SSI benefit payments under Section 301.

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