The Social Security Administration's Youth Transition Demonstration Projects: Interim Report on the *Career Transition Program*

December 21, 2012

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MATHEMATICA
Policy Research

Contract Number:
SS00-05-60084

Mathematica Reference Number:
06209.125

Submitted to:
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CONTENTS

III *(continued)*

TABLES

FIGURES

ACRONYMS

BLS = Bureau of Labor Statistics

CDB = Childhood Disability Benefits

CDR = continuing disability review

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

CTP = Career Transition Program

CTS = career transition specialist

DDA = Developmental Disabilities Administration

DI = Social Security Disability Insurance

DORS = (Maryland) Division of Rehabilitation Services

EIE = earned income exclusion

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

GED = general educational development (or general equivalency diploma)

HIPAA = Health Insurance Portability and Accountability Act

IDA = individual development account

IEP = individualized education program

IPS = individualized placement and support

MCPS = Montgomery County Public Schools

MEF = Master Earnings File

MHVP = Mental Health Vocational Program

NBS = National Beneficiary Survey

OLS = ordinary least squares

PASS = plan for achieving self-support

RA = random assignment

RTSE = resource teacher for special education

SED = severe emotional disturbance

SEIE = student earned income exclusion

SLH = St. Luke's House

SNAP = Supplemental Nutrition Assistance Program

SSA = Social Security Administration

SSI = Supplemental Security Income

TANF = Temporary Assistance for Needy Families

TRF = Ticket Research File

TST = transition support teacher

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 the Career Transition Program (CTP), which served high school juniors and seniors, and youth who had recently exited school, in Montgomery County, Maryland. 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 CTP operated and the differences it made in key outcomes for youth. Specifically, the report includes findings from our process analysis of CTP, including a description of the program model, and documentation of how the program 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 expectations for the future.

CTP was well implemented, conformed to the YTD conceptual framework, and provided youth with services to help them graduate from high school, obtain employment, and matriculate into postsecondary education programs. The process analysis showed that CTP enrolled 89 percent of eligible youth in the program and provided services to virtually all of the enrollees. On average, enrollees received 28 hours of services, 36 percent of which were directly related to employment, such as job development. Another 42 percent of service hours were for case management to resolve barriers to employment and education. The impact analysis showed that youth who had been given the opportunity to participate in CTP were more likely to have used employment-promoting services than youth in a randomly selected control group. Nevertheless, we found no impacts of the program on employment during the year following the entry of youth into the evaluation. Neither did we find impacts on income, expectations, or a composite measure of school enrollment or high school completion. We conclude that CTP was no more or less effective than the programs and services available to control group members at improving these outcomes during the follow-up year.

[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 between 800 and 900 youth in each of the six research sites.

We gathered information from a variety of sources to inform the findings in this report. We obtained information about program operations and the service environment through reviews of program 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 CTP's 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 CTP and the other five random assignment YTD projects improved transition outcomes.

The Career Transition Program

CTP began providing employment and education services to youth with severe emotional disturbances (SED) in 1993. During the period of its involvement in the YTD evaluation, from April 2008 through March 2012, CTP was administered by St. Luke's House, Inc. (SLH), a comprehensive community mental health services provider in Montgomery County.[3] The program continued to operate subsequent to its involvement in the YTD evaluation and it remains active as of the writing of this report. SED encompasses conditions such as schizophrenia; personality, mood, conduct, and anxiety disorders; attention deficit disorder; attention deficit hyperactivity disorder; and depression. The program also served youth who had not been formally diagnosed with SED but who had been diagnosed with significant mental illnesses, such as depression, bipolar disorder, and dissociative identity disorder. In contrast to the other five random assignment YTD projects, CTP did not restrict enrollment to SSA disability beneficiaries. Approximately one-fifth of the program's enrollees during the evaluation period had received benefits in the year before they entered the program and many of the other enrollees were at risk of receiving benefits in the future.

CTP sought to increase self-sufficiency by providing enrollees with counseling, linkages to available services, and individualized work experiences. The program had formal partnerships with Montgomery County Public Schools (MCPS), non-public high schools in Montgomery County, and

[2] The YTD projects could opt to serve a segment of the full YTD target age range. CTP exercised this option, choosing to serve high school juniors and seniors, and youth who had exited high school within the last year. This translated into a target age range of 16 to 21 years.

[3] On July 1, 2012, SLH merged with Threshold Services to form St. Luke's House & Threshold Services United, Inc..

the Maryland Division of Rehabilitation Services (DORS). In addition, the CTP staff had informal relationships with a number of agencies that served youth with disabilities, including the local One-Stop Workforce Center, community college, and mental health services agency. To participate in the YTD evaluation, CTP scaled up from serving 50 students per year to serving roughly three times that many. In addition to scaling up, CTP restructured and expanded its management team, fundamentally altered its approach to recruitment, systematized its approach to job development, and increased its capacity to provide benefits planning services.

The vocational director at SLH had ultimate administrative responsibility for CTP as the program director during its involvement in the YTD evaluation. A full-time program manager was responsible for the day-to-day operations of CTP, assisted by two management-level staff, each of whom supervised a team of up to seven career transition specialists (CTSs). The CTSs were the program's principal front-line staff. They enrolled youth who had been randomly assigned to the treatment group in CTP and delivered most program services, including initial assessments, job development, job placement, and job coaching. Additional program staff had more specialized responsibilities. These included a workforce development specialist who was the program's chief liaison to the local business community and a resource to the CTSs on job development, an ETO administrator who coordinated the entry of data on recruitment and services into CTP's management information system, a benefits specialist at SLH who devoted one-fourth of her time to counseling CTP participants on disability and other benefits, and a recruitment specialist who coordinated the community outreach efforts of management-level staff for the purpose of recruiting youth into the evaluation.

CTP was unique among the projects that participated in the YTD random assignment evaluation in that it was directly responsible for identifying eligible youth and recruiting them into the evaluation. This distinction arose from the fact that the other projects served only youth who were current or recent disability beneficiaries, whereas CTP served youth who had been diagnosed with SED or other mental illnesses without regard for their beneficiary status. Its principal means of recruitment was presentations to special education students in public and private high schools, the parents and teachers of such students, and various providers of youth services. Those presentations highlighted CTP's employment services. After a youth provided CTP with signed consent to participate in the evaluation, Mathematica attempted to conduct a baseline interview with him or her and, upon successful completion of the interview, randomly assigned the youth to the evaluation's treatment or control group at approximately an 11-to-10 ratio, resulting in 422 treatment cases and 383 control cases.

At the time of random assignment, the average age of the youth in the sample that was the basis for our analysis of the impacts of CTP was 17.7 years; 98 percent were between the ages of 16 and 21, inclusive. The analytic sample was 68 percent male, 41 percent black, and 23 percent Hispanic (of any race). These youth were generally in good health, as just 12 percent reported in the baseline interview that their health was only fair or poor. Seventy-eight percent of the youth were enrolled in secondary or postsecondary education programs at the time of random assignment. Nearly three-quarters of them had worked for pay at some point in their lives, with 55 percent having done so during the 12 months immediately preceding random assignment. Only 22 percent of the youth in the analytic sample had received SSA benefits during that time period.

The CTSs reached out to members of the treatment group and sought to enroll them in CTP. They obtained signed application forms for 374 of the treatment group members, which meant that they were formally enrolled in the program. The initial enrollment was in April 2008 and the final in early January 2011. CTP's involvement in the YTD evaluation ended in March 2012.

Implementation Findings for CTP

CTP delivered at least some services to virtually every youth who enrolled in the program during the evaluation period, and the intensity of the services was high. Our analysis of data from ETO revealed that at least 98 percent of participating youth received each of the following four types of services: employment-related, education-related, benefits planning, and case management. CTP delivered these services quickly: almost all participants received their first dosage of services on the day of their enrollment in the program and the average elapsed time between enrollment and the second service contact was 19 days. During the initial 15 months following random assignment, the average CTP participant received a total of 72 service contacts from program staff. The average cumulative duration of those contacts was 28 hours, of which 12 hours were for case management, 10 hours were for employment-related services, 5 hours were for education-related services, and one hour was for benefits planning services.

Competitive paid employment for its participants was CTP's primary objective, with a secondary objective of promoting their educational progress. Each participant was matched with a CTS to develop an individualized plan specifying his or her transition goals for employment and education and the services that would promote the attainment of those goals. Work-based experiences, such as informational interviews and visits to job sites, were used both to refine those goals and as stepping stones to competitive paid employment. The program supported the development and attainment of education goals that were well integrated with employment objectives. Once a participant obtained competitive employment, often through the job development and placement efforts of CTP staff, the program provided employment supports, such as job coaching. At virtually any time during their involvement in CTP, participants could receive counseling on Social Security and other benefits and be linked to other resources in the community. The program used its extensive relationships with other service providers in Montgomery County to ensure that participants had access to the supports and services they needed to be successful, but which the program itself may not have been well situated to deliver directly. CTP staff provided follow-along services to youth as needed for up to two years after the youth successfully achieved their transition goals.

The implementation analysis identified two notable challenges for CTP during the evaluation period. First, turnover among CTSs was high and, given that there were as many as 14 CTS positions, this meant that vacancies and recruitment for these key front-line staff were an ongoing reality for the program. This turnover had the potential to weaken the CTS-participant relationships central to the CTP program model. CTP management anticipated the high turnover and filled vacant CTS positions quickly. Our discussions with participants and staff did not reveal obvious negative ramifications of the turnover; however, it may have subtly constrained the effectiveness of the CTSs. The second challenge had to do with the transition from a small program that relied on the guiding hand of an active program manager and several seasoned front-line staff to ensure consistency in program services, to a much larger program that was more reliant on formal written procedures. The development of those written procedures was staff driven. It is possible that a management-driven process might have yielded more comprehensive results on a shorter schedule, thus providing the CTSs with more timely guidance on the performance of their duties.

As noted, CTP collaborated extensively with other service providers in Montgomery County to provide a comprehensive set of services to program participants. This can be viewed as an acknowledgment of the value of the services offered by those other organizations. Youth not participating in CTP, including members of the evaluation's control group, could access those services. Most notably, MCPS provided a transition support teacher to every public high school in

the county. Furthermore, during the course of the evaluation, the school district added five new staff members who served as vocational rehabilitation counselors for students with disabilities. During the evaluation, both of these categories of school staff tended to focus their efforts on students who did not have access to CTP. Additionally, DORS had dedicated youth counselors, and young adults accounted for a third of the agency's cases and successful job placements. While no other agency or program in Montgomery County provided SED youth with the same range of services as CTP, a resource-rich environment meant that there were many available service options for youth with disabilities in the county, as well as many partnership opportunities for CTP.

First- Year Impact Findings for CTP

We estimated the impacts of CTP 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 program's impacts in the year following random assignment.

Impacts on the Use of Services

Consistent with the YTD conceptual framework, CTP increased the use of *employment-promoting services* by youth with disabilities. Seventy-six percent 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 program, 54 percent of these youth would have used any such service. Thus, the impact of CTP was a 22 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), career counseling (12 percentage points), and benefits counseling (10 percentage points).

CTP also increased participation in non-employment services, such as help getting into an education or training program, by 12 percentage points (Table ES.1). Considering all types of services, 90 percent of treatment group members reported having used any employment or non-employment service. In the absence of CTP, we estimated that 77 percent of them would have used any service. CTP thus increased the share of youth using any service by 13 percentage points.

Impacts on Paid Employment and Other Key Outcomes

Although CTP led to increased participation in employment-promoting services and services more broadly defined, we did not find any significant impacts on the primary outcomes in the domains of paid employment, educational progress, youth income, and attitudes and expectations (Table ES.2).

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 53 percent of treatment group youth worked for pay at some time during the year, but we estimated that this outcome would have been essentially the same in the absence of CTP. We also found no impact of the program on total earnings during the year. In summary, although CTP increased the receipt of employment-promoting services, that did not translate into impacts on paid employment within the first year of program experience.

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

	Treatment Group				
	Observed Mean	Est. Mean w/o CTP	Impact		P-Value
Domain: Employment- Promoting Services					
Primary outcome: used any employment-promoting service	**76.0**	**54.0**	**22.0**	***	**0.00**
Used employment-promoting services:					
Career counseling	48.5	36.3	12.2	***	0.00
Support for resume writing and job search	65.3	34.1	31.2	***	0.00
Job shadowing, apprenticeships/internships	11.8	10.4	1.4		0.59
Other employment-focused services (basic skills training, computer classes, problem solving, and social skills training)	2.8	2.0	0.9		0.52
Counseling on SSA benefits and work incentives	19.2	9.7	9.5	***	0.00
Additional Service- Use Outcomes					
Used any non-employment service	84.4	72.9	11.5	***	0.00
Used any service (employment or non-employment)	89.5	76.6	12.8	***	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 CTP, 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 344 were members of the treatment group and 295 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.

As discussed above, CTP provided substantial education-related services to virtually all of the youth who participated in the program. However, those services did not translate into an impact on the primary outcome in the domain of *educational progress*. We estimated that 91 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, but that CTP was not a significant determinant of that percentage. Because most evaluation enrollees were engaged in education programs at the time of random assignment, this outcome measure may have been defined too broadly to capture an impact of the program on this population. When we analyzed a more narrowly defined supplementary outcome, enrollment in a postsecondary education program during the year following random assignment, we found a positive impact of eight percentage points.

In the domain of *youth income*, we found that CTP had no impact on the primary outcome: total youth income from earnings and SSA benefits (combined) during the year following random assignment. We also found no impacts on two supplementary outcomes in this domain: whether a youth received any SSA benefits during the year following random assignment and the total amount of benefits received during that year.

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

	Treatment Group			
	Observed Mean	Est. Mean w/o CTP	Impact	P-Value
Domain: Paid Employment				
Primary outcome: ever employed in paid job	**53.4**	**57.5**	**- 4.2**	**0.29**
Total earnings[a, b]	$2,591	$2,938	-$346	0.33
Domain: Educational Progress				
Primary outcome: ever enrolled in school, or completed high school by the end of the year	**91.3**	**90.1**	**1.2**	**0.60**
Enrollment in postsecondary education	28.6	20.7	7.9 **	0.02
Domain: Youth Income				
Primary outcome: total income (earnings and SSA benefits)[a, b, c]	**$4,239**	**$4,625**	**- $386**	**0.31**
Any SSA benefit receipt	25.5	24.9	0.6	0.72
Total SSA benefit amount[c]	$1,627	$1,696	-$68	0.65
Domain: Attitudes and Expectations				
Primary outcome: youth agrees that personal goals include working and earning enough to stop receiving Social Security benefits	**81.6**	**83.9**	**- 2.3**	**0.49**

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 CTP, 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 4 who died during the year following random assignment), of whom 419 were members of the treatment group and 382 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 344 were members of the treatment group and 295 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.

[a]For 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 9.4 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.

[b]The average includes youth who were not employed during the year following random assignment.

[c]The average includes youth who received no SSA benefits 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.

Finally, we found that CTP had no impact on the primary outcome in the domain of *attitudes and expectations*. Table ES.2 shows that 82 percent of treatment group youth agreed that their personal goals included working and earning enough to stop receiving disability benefits. However, we estimated that this proportion essentially would have been the same in the absence of the program. When we expanded the analysis in this domain to include supplementary measures, such as expectations for future education and independent living, we again found no impacts of the program.

Conclusion

CTP significantly increased the receipt of employment-promoting services by treatment group members relative to what they would have experienced in the absence of the program. However, those services were no more or less effective than the non-CTP services available to control group members at improving employment and most other evaluation outcomes during the year following random assignment. We speculate that two factors may have contributed to this result. First, the youth recruited into the evaluation may not have had consistently large barriers to employment. Second, the services available to control group youth in Montgomery County during the period of the evaluation were relatively strong, such that they may have rivaled CTP services in effectiveness, at least for the evaluation enrollees.

CTP did not target Social Security disability beneficiaries, as reflected in the fact that only one-fifth of the evaluation enrollees had received benefits in the year prior to random assignment. While some of the non-beneficiaries may have been sufficiently disabled to qualify for benefits if their family resources had not exceeded allowable limits, others probably would have been found ineligible due to the insufficient severity of their disabilities. Thus, it may be that the evaluation enrollees in Montgomery County had less severe disabilities on average than their counterparts in the other YTD evaluation sites, where the interventions did target beneficiaries. Furthermore, while recruiting youth into the evaluation, CTP staff stressed that those who did enroll would have a chance to participate in a program that would help them obtain jobs. Given this recruiting pitch, it is likely that youth who already were motivated to work enrolled in the evaluation. Baseline statistics support this explanation, as 55 percent of the youth in the analytic sample had worked for pay in the year prior to random assignment.

Significant rehabilitation and employment services were available to youth with disabilities in Montgomery County through agencies and programs other than CTP. As noted above, MCPS maintained a transition support teacher in each of the county's public high schools. The existence of CTP and its expansion during the evaluation period may have allowed those teachers to focus their efforts and provide more services to CTP non-participants than would have been possible in the absence of the program. Also, during the period of the evaluation, MCPS hired employment specialists who intentionally focused their efforts on non-CTP youth. In addition, DORS provided relatively robust services to Maryland youth with disabilities.

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 CTP still were receiving program 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. 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 CTP, 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. 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 transitioning to employment and independence 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 CTP 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

[4] In all sites other than Montgomery County, Maryland, 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). As discussed below, the YTD project in Montgomery County did not target SSA disability beneficiaries exclusively.

[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).

report, we present the first set of findings for the Career Transition Program (CTP) YTD project in Montgomery County, Maryland. We provide both a detailed explanation of the CTP intervention and an in-depth discussion of how this program was implemented, including its fidelity to the intended demonstration model. We also provide estimates of the impacts of the program 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 CTP. 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

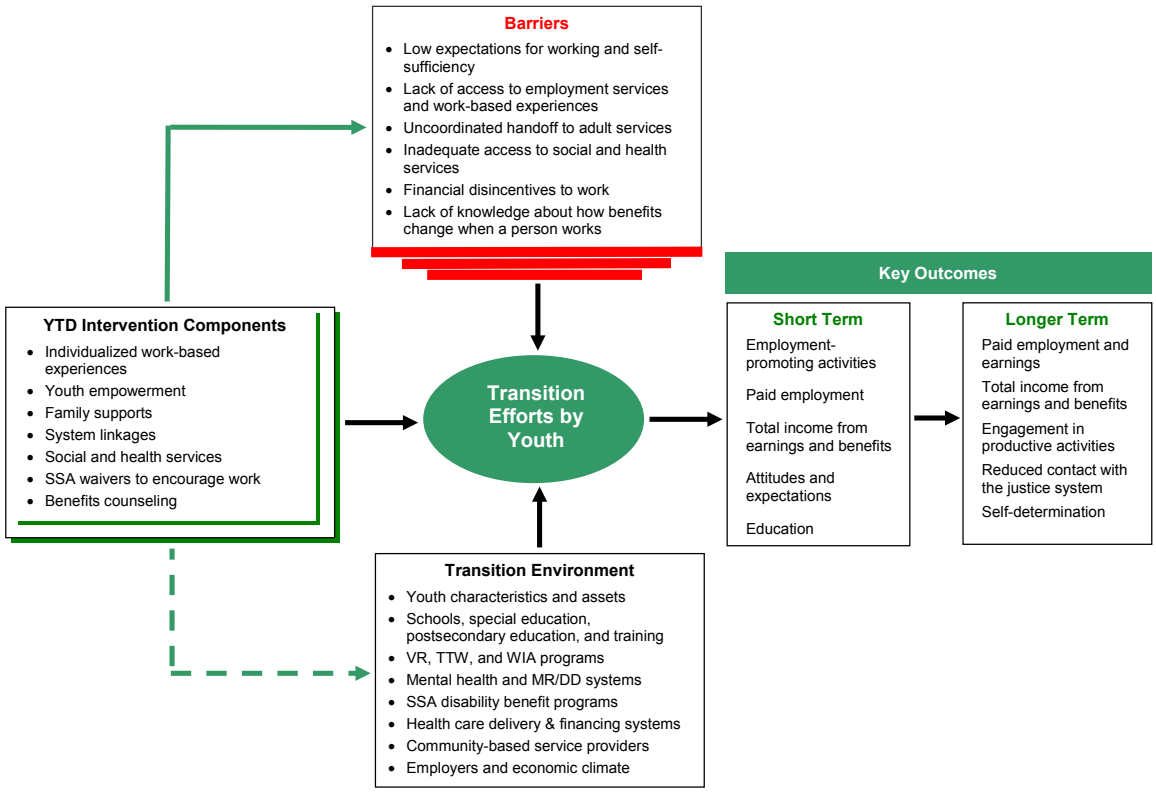
The YTD evaluation is testing whether the provision of services and new work incentives to youth with disabilities can help young people overcome the barriers they face during their transition to adulthood. Many youth with disabilities, particularly those whose impairments are sufficiently severe to 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.

[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



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 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 potential 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 CTP, 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.[7] 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

[7] 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.

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.[8] 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 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 Resources Development Foundation, Inc. in West Virginia.[9] 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.

[8] 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).

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

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 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. The Career Transition Program

CTP, which began in 1993, is administered by St. Luke's House, Inc. (SLH), a comprehensive community mental health services provider in Montgomery County, Maryland. CTP works with youth who have been diagnosed with severe emotional disturbance (SED). SED is an umbrella term that includes conditions such as schizophrenia; personality, mood, conduct, and anxiety disorders; attention deficit disorder; attention deficit hyperactivity disorder; and depression. SED can result in an inability to build or maintain satisfactory interpersonal relationships with peers and teachers, and inappropriate types of behaviors or feelings, thereby adversely affecting a student's educational performance.[10] CTP also works with youth who have not been formally diagnosed with SED but who have been diagnosed with significant mental illnesses, such as depression, bipolar disorder, and dissociative identity disorder. While it was participating in the YTD evaluation, CTP's target population was youth in Montgomery County, ages 16 through 21, who were high school juniors and seniors or had exited school in the last 12 months. In contrast to the other five random assignment YTD projects, CTP did not restrict enrollment to disability beneficiaries; however, many of its enrollees were at risk of receiving benefits in the future.[11]

CTP's mission is to enable its participants to graduate from high school, provide them with competitive employment experiences, and help them matriculate into postsecondary education programs if they are interested in doing so. CTP seeks to increase self-sufficiency by providing participants with counseling, linkages to available services, and individualized work experiences. CTP has formal partnerships with Montgomery County Public Schools (MCPS), non-public high schools in Montgomery County, and the Maryland Division of Rehabilitation Services (DORS). In addition, the CTP staff have informal relationships with a number of agencies that serve youth with disabilities, including the local One-Stop Workforce Center, community college, and mental health services agency. To participate in the YTD evaluation, CTP scaled up from serving 50 students per

[10] As defined in federal regulations, youth with emotional disturbance may exhibit one or more of the following conditions: an inability to learn that cannot be explained by intellectual, sensory, or health factors; an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; inappropriate types of behavior or feelings under normal circumstances; a general pervasive mood of unhappiness or depression; or a tendency to develop physical symptoms or fears associated with personal or school problems (Federal Register 1999).

[11] Prior to CTP's selection into the YTD random assignment evaluation, Dr. Ellen Fabian, an Associate Professor and Director of Rehabilitation Counseling Program in the Department of Counseling & Personnel Services, College of Education, University of Maryland at College Park, conducted a case file review of CTP participants on behalf of the evaluation team. Dr. Fabian determined that it was likely that, absent CTP services, many of the youth would end up on the Social Security disability rolls at some point in the future.

year to serving roughly three times that many. In addition to scaling up, CTP restructured and expanded its management team, fundamentally altered its approach to recruitment, systematized its approach to job development, and increased its capacity to provide benefits planning services. Throughout its participation in the evaluation, the program retained its long-standing commitment to helping its participants rapidly obtain paid competitive employment.

The process for recruiting youth into the YTD evaluation in Montgomery County was different from that used in the other five random assignment evaluation sites, in that CTP, rather than Mathematica, was responsible for recruitment. CTP's recruitment effort for YTD began in April 2008 and ended in January 2011. The program worked with referral sources, primarily MCPS, to schedule and conduct group and individual presentations on the YTD evaluation and CTP services to youth and/or their families. CTP also educated potential referral sources about the study eligibility requirements so they would know which of their clients to refer. CTP's recruitment effort ended with the signing of an evaluation consent form by a youth or, if the youth was a minor, by the youth's parent or guardian. The program forwarded contact information on the individual to Mathematica, which then conducted the evaluation's baseline survey with the youth and randomly assigned him or her to the evaluation's treatment and control groups. Mathematica informed CTP of each assignment to the treatment group, providing updated contact information on the youth and selected information from the baseline survey.

Following a youth's random assignment to the treatment group, career transition specialists (CTSs) at CTP reached out to conduct initial interviews with the youth and important adults in the youth's life. These interviews assessed the youth's goals, strengths, and needed supports. A youth interview was a requirement for enrollment in CTP (for minors, a parent or guardian interview also was required). Upon completion of the interview(s), a treatment group youth officially became a CTP enrollee (also referred to as a CTP participant). The first step after enrollment was to assign a CTS based on interests and compatibilities. The CTS then worked to build rapport and gain the youth's trust. CTP services began with a process that included several formal assessments and goal setting to develop a person-centered plan (an individualized plan for achieving self-identified goals; see Chapter III for a description of the person-centered planning process). Once an employment goal was identified, the CTS and the participant began to pursue either competitive paid employment or work-based experiences, such as job site visits and work trials. For participants who became employed, the CTSs provided ongoing supports, such as job coaching. They also provided education supports, information about public benefits, and comprehensive case management, including referrals for additional services that CTP could not provide directly. A benefits specialist at SLH provided benefits planning services to CTP participants who were disability beneficiaries and other participants in need of more intensive assistance with their benefits than the CTSs could provide. Participants who achieved their transition goals (which often included enrollment in postsecondary education in addition to attainment of paid employment) and graduated from high school were placed in "follow along" services for up to two years. CTP expected most of its participants to make this transition after receiving core services for about one year. During the follow-along period, participants were eligible for all CTP services, but their contact with the CTSs was typically less frequent than it had been when they were receiving core services.

In Chapter III, we provide a fuller description of CTP, including the intended sequence of services for a participant, the roles of the CTP staff members and their partners, and the services that participants actually received from CTP.

D. Research Objectives for this Report

In this interim report, we examine the services that CTP provided as a YTD project, 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 CTP. 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 program activities, the intensity of services received, and challenges faced by the program.

Building on the process analysis, we examine whether CTP improved short-run outcomes for youth 12 months after random assignment. If the program succeeded in engaging youth in services, we would expect that youth randomly selected to have the opportunity to participate in CTP (treatment group members) would have higher levels of service use than youth ineligible for CTP (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 CTP on receipt of such services. We also would expect some of the CTP participants who were disability beneficiaries to take advantage 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 projects 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.

CTP was among a subset of YTD projects that also provided education services, including support for completing high school, such as coordinating meetings between families and educators for youth who were struggling with academics. For participants who identified an interest in postsecondary education, the CTSs helped them navigate college and financial aid applications and study for standardized tests required for college enrollment. For youth enrolled in college, CTP helped arrange for transportation, tutoring, and support services. Since education services were an important component of the CTP 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 CTP was effective in improving the short-term outcomes of those youth offered program 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, CTP was expected to promote work and improve other outcomes for youth. If CTP 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.[12]

[12] 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."[13] 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.[14] 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 CTP 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, CTP 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.

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

[14] 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 in 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.** CTP had a secondary goal of improving educational outcomes. 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.[15]
- **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.** CTP sought to promote independence and self-sufficiency among participants through identification of goals and person-centered planning. Thus, CTP was expected to improve outcomes related to youths' attitudes and beliefs about themselves. For consistency with the other YTD sites, 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." For CTP, the relevance of this primary outcome is low relative to the other YTD projects because many of the youth in the CTP evaluation did not receive SSA benefits. Supplementary outcomes in this domain may provide more useful information about CTP's impacts on attitudes and expectations.
- **Exploratory analysis: training and productive activity.** As a supplementary analysis, we explored whether CTP 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.

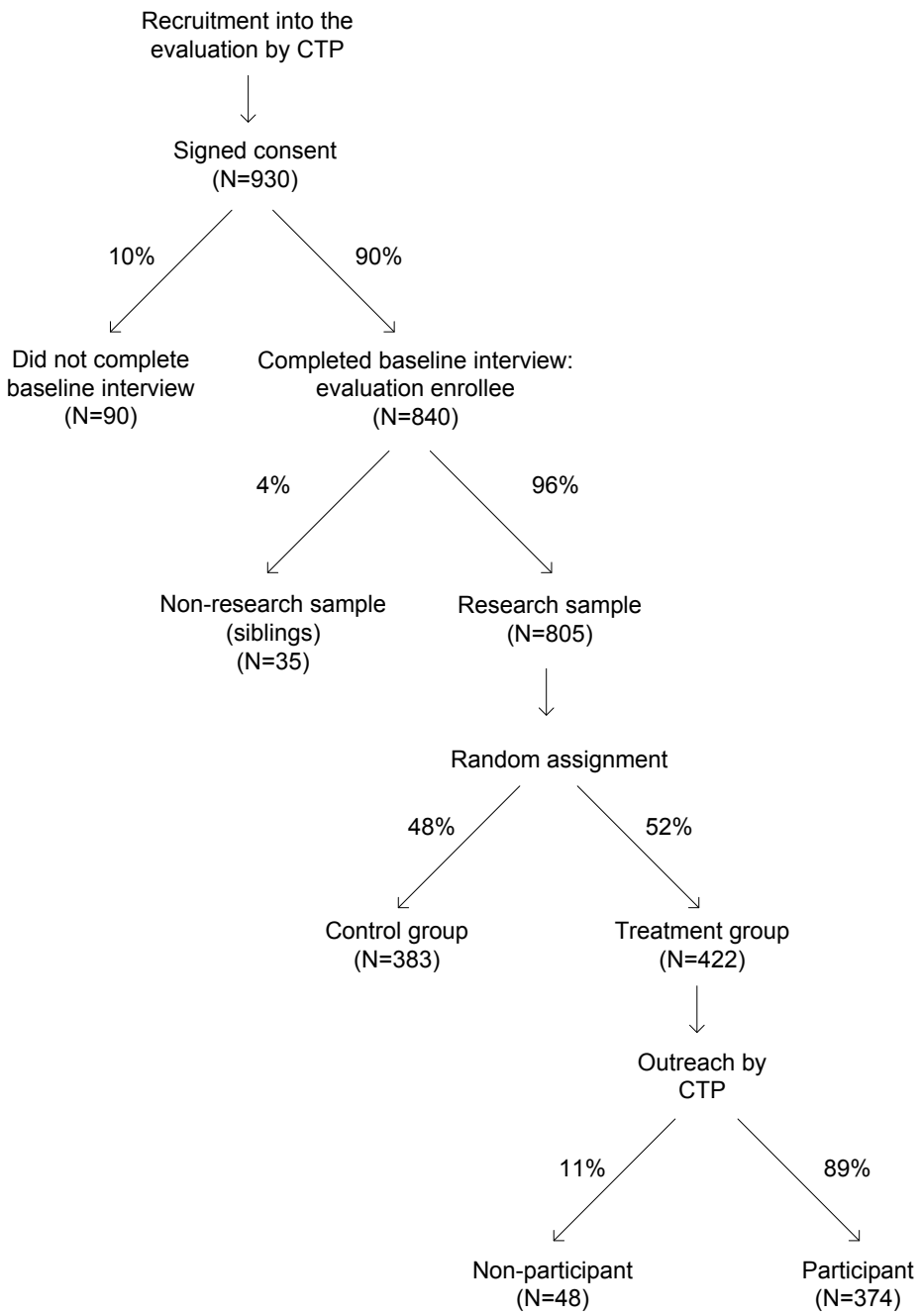
2. Sample Selection and Recruitment

CTP targeted youth in Montgomery County diagnosed with SED or similar disabilities who were high school juniors and seniors, as well as those who recently had exited school. Unlike the other YTD projects, CTP directly recruited youth into the evaluation, in partnership with MCPS and other sources of youth referrals. Chapter III provides a description of the recruitment process.

As a result of its recruitment effort, CTP received signed evaluation consent forms from 930 eligible youth during the period April 2008 to December 2010 (Figure II.1). About two-thirds of the youth were male, almost half were under age 18, and just over 30 percent had earnings in the prior

[15] 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.

Figure II.1. Intake Flow Diagram for CTP



year (Appendix A, Table A.1). Mathematica followed up with those youth to complete the evaluation's baseline survey: 840 of them completed the survey and were enrolled in the evaluation.[16] There were no statistically significant differences in gender, age, and prior earnings between those who completed the baseline survey and those who did not. However, it is important to understand that the youth who enrolled in the evaluation did so through a process of self-selection and thus may not have been representative of all youth in CTP's target population. For example, the youth who enrolled may have been more motivated to work than those who did not. Regardless, the impact estimates presented in this report could not be biased by baseline differences between evaluation enrollees and non-enrollees because both the treatment and control groups on which the impact estimates are based included exclusively youth who had enrolled in the evaluation.

Of the 840 youth enrolled in the evaluation, 805 were randomly assigned: 422 to a treatment group whose members were eligible to enroll in CTP and 383 to a control group. The remaining 35 youth who provided written consent and completed the baseline survey had siblings who were already in the evaluation. These youth automatically were assigned to the same groups (27 treatment and 8 control) as their siblings and were not part of the research sample for the CTP evaluation. Youth who were assigned to the control group could request individualized counseling sessions (one per youth) from CTP. During the sessions, the youth were informed of other resources in the community for which they might be eligible and received a printed resource guide. Approximately ten percent (37) of the control group members received this counseling.

Following random assignment, CTP was responsible for enrolling treatment group members in the program and providing them with services. In Chapter III, we provide a detailed description of the enrollment effort. Program staff ultimately enrolled 374 (89 percent) of the randomly assigned treatment group members as participants in CTP, completing the final enrollment on January 3, 2011. Throughout this report, we use the term "participants" to refer to these youth in the treatment group who participated in CTP services.

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 after 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).[17] 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 April 2008 through December 2010. The survey consistently collected data on

[16] CTP provided Mathematica with contact information for youth with signed consent forms. Youth were considered "enrolled" in the evaluation once they signed a consent form agreeing to participate in the evaluation and completed the baseline survey.

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

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 March 2012 for 344 of the 422 youth in the treatment group and 295 of the 383 youth in the control group (response rates of 82 percent and 77 percent, respectively). The overall response rate, excluding four youth who were deceased at the time of the follow-up survey, was 80 percent.[18] The follow-up survey gathered information on outcomes for the year following random assignment that may have been affected by participation in CTP, 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 (Hildebrand et al. 2010).[19] 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.[20] For other sites, we used information from SSA administrative records on gender, age, language, primary disabling condition, and representative payee type in analyses of baseline characteristics and as control variables in regression models. But for the Montgomery County site, where most youth in the evaluation were not SSA beneficiaries, we were not able to use SSA administrative records. We did use information on gender and age from administrative forms provided by CTP.

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[18] 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).

[19] 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.

[20] 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.

Analytic Sample. We treated as our main sample for the interim impact analysis the 639 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.[21] 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 44 characteristics. (We report 31 characteristics in Table II.2 and the rest in Appendix A, Table A.2.[22]) We found that the two groups were highly similar with respect to most characteristics, including demographics, education, past employment, health status, expectations about the future, and whether they received SSA disability benefits. However, we did find differences between the two groups. Treatment group youth were more likely than control group youth to report that they were living with two parents or in an institutional setting, their fathers had completed high school, and they decide how to spend their own money. Treatment group youth were less likely than control group youth to receive family assistance and have a mother who was currently employed. Treatment group youth also received a lower amount of SSA benefits in the year before random assignment.[23]

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 44 baseline characteristics we investigated, we would expect about two to be statistically different at the five percent significance level or lower, and about four characteristics to be statistically different at the ten percent significance level or lower. We found statistically significant differences for two characteristics at the five percent significance level and for four additional characteristics at the ten percent significance level.

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

[21] The full research sample for the impact analysis of outcomes measured in administrative records consisted of the 805 youth who enrolled in the evaluation and were randomly assigned to treatment or control status, less four youth who had died as of the one-year anniversary of their random assignment, for a total of 801 youth (419 treatment and 382 control youth).

[22] 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.

[23] 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 805 youth randomly assigned to the treatment or control groups, including the four youth who died during the year following random assignment. In general, the patterns were largely similar to those shown in Table II.2; however, we found statistically significant differences between treatment and control group members for only four characteristics in the research sample versus six in the analytic sample.

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

	All	Treatment	Control	Difference		P-Value
Baseline Survey Data						
Demographic Characteristics						
Race						0.52
White[a]	40.0	41.4	38.4	3.0		
Black	41.0	42.2	39.7	2.5		
American Indian/AK/HI/Pacific Islander	1.6	1.4	1.8	-0.4		
Asian	4.5	4.4	4.6	-0.3		
Other or unknown	12.9	10.6	15.4	-4.8		
Hispanic	22.7	22.5	22.9	-0.4		0.90
Primarily speaks English at home	86.7	85.8	87.7	-1.9		0.50
Education						
School Attendance						0.69
Does not attend school[a]	22.2	23.7	20.6	3.1		
Attends regular high school	54.2	53.8	54.6	-0.8		
Attends special high school	13.5	12.1	15.0	-2.9		
Attends other school	10.1	10.4	9.9	0.5		
Employment						
Received job training in last year	36.3	35.0	37.8	-2.8		0.49
Worked as volunteer in last year	14.9	14.5	15.4	-0.9		0.76
Worked for pay in last year[a]	55.4	57.7	52.8	5.0		0.23
Worked for pay in last month	26.6	26.4	26.9	-0.5		0.89
Never worked for pay at baseline	26.4	25.8	27.0	-1.3		0.73
Living Arrangements and Household Composition						
Living Arrangements[a]					*	0.10
Two-parent family	45.5	47.0	44.0	3.0		
Single-parent family	41.3	38.7	44.1	-5.3		
Group home	2.3	2.2	2.4	-0.1		
Other institution	5.4	7.6	3.0	4.6		
Lives alone or with friends	5.5	4.5	6.6	-2.1		
Average number of people in household	4.1	4.0	4.1	-0.1		0.57
Lives with others with disabilities	27.3	29.0	25.4	3.6		0.36
Family Socioeconomic Status						
Annual Income						0.80
Less than $10,000	16.5	16.1	17.1	-1.0		
$10,000–$24,999	16.9	16.1	17.8	-1.8		
$25,000 or more	66.5	67.9	65.1	2.8		
Public Assistance						
Receives TANF/family assistance[a]	4.1	2.2	6.2	-3.9	**	0.02
Parents' Education						
Mother high school graduate[a]	79.3	77.4	81.4	-4.0		0.25
Father high school graduate[a]	74.7	78.0	71.3	6.7	*	0.09
Parents' Employment Status						
Mother currently employed[a]	69.7	66.2	73.6	-7.4	*	0.07
Father currently employed	75.4	76.6	74.2	2.4		0.55
Self-Reported Health Status[a]						0.47
Excellent	28.0	26.8	29.2	-2.4		
Very good/good	60.3	62.6	57.9	4.7		
Fair/poor	11.7	10.6	12.9	-2.3		
Assistance						
Help with personal care needs[a]	1.9	1.6	2.3	-0.7		0.53
Expectations About the Future						
Expects to live independently (w/ or w/o help)[a]	79.5	79.3	79.7	-0.4		0.92
Expects to continue education[a]	94.8	94.4	95.2	-0.8		0.67
Expects to work at least part-time for pay[a]	98.1	98.3	97.9	0.4		0.71
Independent Activities and Decision Making						
Decides how to spend own money (most/some of the time)	95.4	96.7	93.8	2.9	*	0.10
Decides how to spend free time (most/some of the time)	97.4	97.0	98.0	-1.0		0.45

	All	Treatment	Control	Difference		P-Value
Administrative Data						
Demographic Characteristics						
Male[a]	67.6	69.0	66.0	3.0		0.45
Age in Years[a]						0.96
14–17	44.3	44.7	43.9	0.8		
18–21	54.4	54.1	54.7	-0.6		
22–25	1.3	1.2	1.4	-0.2		
Average age (years)	17.7	17.7	17.8	-0.1		0.39
Benefits in Year Before Month of RA						
Received SSA benefits[a]	22.4	20.0	25.0	-5.2		0.15
Amount of SSA benefits ($)	1,402	1,164	1,665	-502	*	0.05
Earnings in year before year of RA ($)	978	1,229	685	544		0.18
Sample Size	**639**	**344**	**295**			

Sources: YTD baseline survey and 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.

[a] We included these characteristics in the regression models for the impact analysis. In addition, the regression models include an indicator for cohort of 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.

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 CTP.

The impact estimates address the policy question: "What were the effects of CTP on eligible youth who were interested in the program 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 program services and the effects of CTP 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 CTP 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 15 distinct variables or sets of related variables to control for baseline characteristics believed to be correlated with the outcomes of interest.[24] 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); (2) variables that could be used to target intervention services to youth

[24] 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 random assignment prior to October 2009. To keep Table II.2 brief, we present this and additional baseline characteristics in Table A.2 of Appendix A.

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.[25]

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 CTP, 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 CTP." Where we observe significant program impacts and want to describe their magnitudes in proportional terms, we use the estimated treatment group means in the absence of CTP as our base. For all outcome measures, the estimated treatment group means in the absence of CTP do not differ substantially from the estimated control group means.[26]

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 CTP.

5. Estimating Subgroup Impacts

In addition to the impacts of CTP on outcomes for all eligible youth, we were interested in estimating whether the program 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 (639 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

[25] We excluded from the regression model two variables with statistically significant treatment-control differences in Table II.2. We excluded the amount of SSA benefits received in the year prior to random assignment because the amount is highly correlated with the measure of whether youth received benefits in that year (a variable included in the regression model because of its conceptual importance as a potential determinant of youth outcomes). We excluded the independent activity "decides how to spend money" 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: decides how to spend free time (Table II.2), makes snacks or sandwiches, rides public transportation alone, and picks clothes to wear. (Table A.2).

[26] 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.

those with work experience. In addition to these three subgroups identified in our design report, for CTP, we also conducted the impact analysis by whether the youth received SSA disability benefits in the year prior to random assignment. 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.

6. Other Analytic Considerations

As noted, the response rate to the 12-month follow-up survey was high and fairly similar for the treatment and control groups (82 and 77 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 be white, be attending school, have completed high school, have received special education, have received job training in the year prior to random assignment, be living with both parents, and have family income of $10,000 or more (Table A.7). Respondents were less likely than non-respondents to report excellent health, expect to live independently, make snacks or sandwiches, and ride public transportation alone. 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 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 80 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 four 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," "mother currently employed," and "youth expects to live independently."

Table II.3. Sample Size by Subgroup

	Number	Percentage of Sample
Benefit Receipt		
Received SSA disability benefits in year prior to random assignment	140	21.9
Did not receive SSA disability benefits in year prior to random assignment	499	78.1
Age		
Under age 18 at baseline	287	44.9
Age 18 or over at baseline	352	55.1
School Attendance		
In school at baseline	511	80.0
Not in school at baseline	128	20.0
Paid Work Experience		
Worked for pay in year prior to random assignment	364	57.1
Did not work for pay in year prior to random assignment	274	42.9
Total	**639**	**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 paid work experience, numbers do not total 639 due to missing information on prior paid work experience for one youth in the treatment group.

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.[27] 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 CTP 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 CTP and the local context and service environment in which CTP operated. In

[27] 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 9.4 percent of observations had missing data. The only exceptions were the availability of health insurance benefits on the primary job (15 percent of observation had missing data), paid vacation or sick leave benefits on the primary job (14 percent had missing data), and expectations of future employment (13 percent had missing data for the youth response and 33 percent had missing data for the parent response).

addition, we examined the evaluation recruitment process, the program enrollment process, program implementation, service utilization, and youth satisfaction with services. Below, we describe our 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 CTP 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 CTP 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 Montgomery County 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 CTP 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, CTP staff at SLH vs. staff of other agencies participating in the program, such as MCPS); 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 program and obtaining quantitative data primarily from ETO. Program document reviews and ongoing communications with program management also informed the analysis.

The analysis of CTP's implementation relied primarily on data collected during site visits. The evaluation team assigned to CTP conducted three visits to Montgomery County to observe program activities and engage the staff and partners in discussions about program implementation. The purpose of the first visit, in November 2008, was to conduct an early assessment of CTP during its

first few months as a YTD evaluation site (Manno et al. 2009). The second visit, in November 2009, was made to gather data on program operations. During the third visit, in January 2011, evaluation staff gathered updated data on program operations and also gathered data about the program from partner organizations. During each of these later visits, the evaluation team conducted individual and group interviews with CTP staff and reviewed participant case files. In addition, during the 2011 visit, the evaluation team conducted four focus group discussions with CTP participants and their families. Three of the groups were made up of youth and one was made up of parents. Finally, the evaluation team also engaged in periodic telephone calls (weekly during the first two years of CTP's participation in the evaluation and biweekly thereafter) with key CTP staff and reviewed program 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 CTP implement the core employment-focused components and integrate them with the broader program; it delivered other technical assistance as needed. The evaluation team met regularly with TransCen to learn about program-specific issues and challenges. Information obtained from these meetings also fed into the process analysis and helped the evaluation team understand CTP's successes and challenges.

The process analysis relied heavily on quantitative data from the CTP 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 program enrollment activities and service utilization came from ETO. CTP staff members used ETO to record their outreach efforts related to enrolling treatment group members as participants in CTP[28] 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 program 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 program 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 CTP 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 CTP (89 percent of all treatment group

[28] ETO was not used for recording information on CTP activities related to recruiting youth into the evaluation.

[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 Manno et al. 2009 for information on the quality of ETO data for CTP approximately six months after the start of program operations under the YTD evaluation.) 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.

youth). We had 15 months of ETO data available (through April 2012). As part of the process analysis, we also assessed the use of ETO by program 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 CTP. 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 program staff at the time of service delivery, whereas the follow-up 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 CTP 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 CTP, whereas ETO captured CTP services only.

We used data from the baseline survey to provide information on the characteristics of the youth the program intended to serve, allowing us to develop useful descriptions of the target population and those who enrolled in program services. We compared the baseline characteristics of treatment group youth who participated in CTP with the baseline characteristics of treatment group youth who were offered the opportunity to receive program 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 program services. Table II.4 summarizes the key sources of data for the process analysis of CTP.

Table II.4. Data Sources for the Process Analysis

Methodology	Time Period	Number of Observations	Nature of Information
Site visits: CTP staff interviews	11/2008 11/2009 1/2011	9 staff, 7 managers 14 staff, 6 managers 11 staff, 8 managers	CTP service delivery
Site visits: partner interviews	11/2009 1/2011	6 staff and managers of partner organizations 14 staff and managers of partner organizations	Other services in the county; partnership with CTP
Site visits: focus groups	1/2011	24 CTP participants; 9 parents of participants	Services received and satisfaction
Efforts-to-Outcomes (ETO)	15 months after RA	422 treatment group members	CTP enrollment efforts and results
Efforts-to-Outcomes (ETO)	15 months after RA	374 CTP participants	Service efforts
YTD baseline survey	12 months before RA	422 treatment cases	Background information
YTD 12-month survey	12 months after RA	314 CTP participants who responded to the survey	Satisfaction with CTP services
SSA administrative records	12 months before month of RA	422 treatment cases	Benefits
SSA administrative records	Year before year of RA	422 treatment cases	Earnings
SSA administrative records	12 months after RA	374 CTP participants	Use of SSA waivers and work incentives

[a]Two 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.

RA = random assignment

III. IMPLEMENTATION OF CTP

The initial sections of this chapter provide an overview of the sponsoring and partner organizations for CTP and descriptions of the program's service environment, management and staffing plan, and services. Later sections present findings from field observations and the program's management information system, ETO, to assess program implementation. The chapter concludes with a discussion of lessons learned from the implementation of CTP that may be applicable to other current or future projects providing employment-related services to youth with disabilities.

A. Overview of the Sponsoring Organization and Its Partners

During the period of its involvement in the YTD evaluation, CTP operated within St. Luke's House, a comprehensive mental health provider in Montgomery County, Maryland.[30] SLH was founded in 1971 by members of St. Luke's Episcopal Church in Bethesda, Maryland to address the needs of patients in state psychiatric hospitals who had few supports available to them upon their release from the hospitals. Shortly thereafter, SLH was established as an independent, nonsectarian agency and a 501(c)(3) nonprofit organization licensed by the Montgomery County Department of Health and Human Services and the Maryland Mental Hygiene Administration. Originally known primarily for residential programs and psychiatric rehabilitation, SLH grew to provide comprehensive mental health services, including evidence-based supported employment, life skills training, vocational rehabilitation, and recreation and socialization activities. While CTP was involved in the YTD evaluation, SLH was serving approximately 800 individuals at any given time. CTP was the only SLH program that focused on youth and young adults; all of its other programs were for adults.

CTP initially was developed in a partnership between SLH, Montgomery County Public Schools (MCPS), and TransCen, Inc., under a 1993-1996 grant from the U.S. Department of Education.[31] SLH is considered a regional leader in the implementation of evidence-based supported employment through the individualized placement and support (IPS) model, and has been an active participant in the Johnson & Johnson - Dartmouth Community Mental Health Program and study.[32] The design of CTP reflects this experience with supported employment as well as the principles of IPS.

CTP is distinctive in that it combines mental health, educational, and career/vocational supports for transitioning youth, whereas other programs generally provide less comprehensive services. Its mission is to enable its participants to graduate from high school, provide them with competitive employment experiences, and help them matriculate into postsecondary education programs if they are interested in doing so. Although other programs for transition-age youth with disabilities do exist in Montgomery County, they do not cover the entire county, do not focus strictly on youth with SED, or do not provide as comprehensive a set of services.

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[30] On July 1, 2012, SLH merged with Threshold Services to form St. Luke's House & Threshold Services United, Inc.. As of the writing of this report, this organization continues to operate CTP, albeit on a smaller scale than during the program's involvement in the YTD evaluation.

[31] Within the Department of Education, the Office of Special Education and Rehabilitation Services and the Office of Special Education Programs provided the funding for the CTP start-up grant.

[32] For information about IPS and the Johnson & Johnson - Dartmouth Community Mental Health Program, see http://www.dartmouth.edu/~ips/page3/page3.html.

From its inception in 1993 until its participation in the YTD random assignment evaluation starting in 2008, CTP served approximately 50 students with SED each year. To satisfy the enrollment requirements of the YTD evaluation, CTP expanded its capacity to serve up to three times as many youth at one time as it had served in the past.[33] Although staffing was increased, the CTP philosophy and service model under YTD remained virtually unchanged. The youth served by CTP had histories of significant and persistent maladaptive or inappropriate behaviors and were limited in their abilities to participate successfully in school, employment, social relationships, and community living. They were often in serious danger of dropping out of school. CTP worked with eligible youth without regard for the extent of their disabilities or social challenges.

Starting in July 2007, SLH implemented CTP as a YTD pilot project to demonstrate its ability to recruit and enroll youth in a random assignment context and deliver a larger volume of services than previously. During the six-month pilot period, CTP enrolled and served 31 youth, while refining its management structure for the full demonstration, building capacity for job development, and increasing the focus on benefits planning. CTP was one of three YTD pilot projects selected by SSA for full implementation from April 2008 through March 2012.[34] Although CTP was well-known as a provider of transition services and for utilizing evidence-based practices, it had never been evaluated in a rigorous and comprehensive manner. CTP was of particular interest as a YTD project because it offered the possibility of studying the efficacy of an intervention for youth who were at risk of becoming Social Security disability beneficiaries.[35]

CTP had formal and informal partnerships with local and state agencies, which it expanded and strengthened for the YTD evaluation. It had formal partnerships, based on memoranda of understandings or shared service agreements, with the following organizations: (1) MCPS, including the Transition Unit; (2) Montgomery County non-public high schools, whose special education programs provided services to SED youth; and (3) the Maryland Division of Rehabilitation Services (DORS). The management of CTP believed that these partners were critical sources of supports for program participants in their transition to work and postsecondary education.

In addition to the formal partners, the management and staff of CTP had informal relationships with a number of agencies that served youth with disabilities. These relationships were strengthened over the course of the YTD evaluation to support CTP services. The informal partners included the following:

- Montgomery Works, the local One-Stop Workforce Center
- Montgomery College, a local community college that many CTP participants attended after high school graduation
- The Montgomery County Mental Health Core Services Agency, which oversees county mental health supports and authorizations
- Benefits InfoSource, the local Work Incentives Planning and Assistance (WIPA) program that provides benefits counseling to people who receive SSI or DI

[33] To ensure adequate statistical power to detect impacts of interventions, the YTD evaluation required participating projects to serve approximately 400 youth over a period of between two-and-a-half and three years.

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

[35] The other five random assignment YTD projects targeted youth who were already disability beneficiaries.

- The Housing Opportunity Commission of Montgomery County, which provides rental and other housing assistance to low-income individuals and families
- The Federation of Families, which serves families with children who have developmental disabilities

TransCen, Inc., under subcontract to Mathematica, provided training and technical assistance to all of the YTD projects, including CTP. Because TransCen was one of the founding partners of CTP, it had a strong familiarity with the program model. TransCen trained or arranged for training for program staff on benefits planning, individualized and customized employment services, and job development services. In conjunction with Mathematica, TransCen also provided technical assistance on recruitment. It delivered training and technical assistance through annual YTD conferences, site visits, monthly conference calls with staff from all of the YTD projects, and telephone calls directly with CTP staff.

B. Local Context and Infrastructure

1. County Socioeconomic Characteristics

Montgomery County, Maryland, a suburban and urban county that abuts Washington, D.C., constitutes CTP's service delivery area. The county is home to many government workers; slightly more than 22 percent of employed county residents are federal, state, or local government employees. With a median household income in 2010 of $89,155 (more than 178 percent of the national median), Montgomery County is one of the highest-income counties in the United States (Table III.1). Several public schools in Montgomery County have been cited as being among the best in the country.[36] Evidence of the county's largely urban and suburban character is provided by the high percentage of the population that uses public transportation (15.1 percent, more than three times the national average). The diversity of the county's population is reflected in the large proportion of residents who speak languages other than English in their homes (39 percent, roughly twice the national average). Further evidence of the county's diversity is provided by the racial and ethnic makeup of the MCPS student body, which is 35 percent white, 25 percent Hispanic, 21 percent African American, 14 percent Asian, and 5 percent other or multi-racial/multi-ethnic.[37]

Montgomery County's relative affluence and economic vitality is documented in Table III.1. The proportion of residents under the age of 18 who are SSI beneficiaries is less than a third of the national average (0.5 percent versus 1.7 percent). The proportion of residents living below the poverty line is 7.7 percent, approximately half the national rate. A high proportion of county residents over age 25 have at least a bachelor's degree (56.5 percent, compared with 28.2 percent nationally). Finally, the county's unemployment rate for the year 2010 was well below the national rate (5.8 percent versus 9.6 percent).

[36] Montgomery County has been cited consistently as having some of the top public high schools in the D.C. area and in the country: http://www.montgomeryschoolsmd.org/press/index.aspx?page=showrelease&id=2968. According to a 2011 survey of MCPS high school youth, 91 percent of graduating seniors were planning to attend college either full or part time. MCPS is also a well-funded school system, with an average expenditure per pupil of more than $15,000, second highest in the state. Furthermore, MCPS appears to be committed to serving youth with disabilities, as it has the highest expenditure for special education services in the state.

[37] More information can be found at http://marylandpublicschools.org/NR/rdonlyres/0C24833A-9CBE-4C09-9010-B7BD88F4B1E0/31190/Fact_Book_2010_2011_1.pdf.

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

	Montgomery County	Maryland	United States
Demographic and Economic Characteristics			
Population (number)	971,777	5,773,552	308,745,538
Population density (number per square mile)[a]	1978.2	594.8	87.4
Median annual household income ($)	89,155	68,854	50,046
Residents below the federal poverty level	7.7	9.9	15.3
Residents with disabilities below the federal poverty level[b]	13.4	16.8	21.8
Language other than English spoken at home	39.3	16.5	20.6
High school graduate, over age 25[c]	90.6	88.1	85.6
Bachelor's degree or higher, over age 25	56.5	36.1	28.2
Unemployment rate, 2010	5.8	7.8	9.6
Percentage of employed population in manufacturing[d]	3.0	5.3	10.4
Percentage of employed population in services[d]	14.9	16.7	18.0
Public transportation use[e]	15.1	8.6	4.9
SSI Beneficiaries			
Number under 18 years old	1,167	16,950	1,277,109
Percentage of population under age 18	0.5	1.3	1.7
Number age 18 and older	11,664	90,686	6,831,266
Percentage of population age 18 and older	1.6	2.1	2.9
Other Disability Beneficiaries (all ages)			
Number of recipients of Childhood Disability Benefits[f]	NA	13,321	949,200
Percentage of total population	NA	0.2	0.3
Number of SSI/DI concurrent beneficiaries	3,243	29,793	2,697,963
Percentage of total population	0.3	0.5	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.

[a]Population density calculations as of December 2010.

[b]All residents with disabilities constitute the denominator for this statistic.

[c]Includes high school equivalency.

[d]These measures refer to civilian workers age 16 and older.

[e]The percentage of all workers, age 16 and over, who use public transportation (excluding taxicabs) to travel to work.

[f]Published data on the number of recipients of Childhood Disability Benefits are not available at the county level.

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

NA = not available.

2. Existing Services for People with Disabilities

Notwithstanding the national economic recession that officially began in December 2007, Montgomery County was a resource-rich area for youth with disabilities during the time of CTP's participation in the YTD evaluation. However, despite the county's many resources, there were no other programs that provided this population with comprehensive services comparable to those offered by CTP. Youth who were not CTP clients would have had to navigate multiple systems to achieve the same supports and would likely not have had the strong peer-mentor relationships that CTP participants typically had with their Career Transition Specialists (CTSs).

The key county resources for youth with disabilities are described below:

- **Montgomery County Public Schools.** Transition support teachers (TSTs) in the Transition Unit of MCPS instruct and advise students with disabilities on making effective transitions from school to postsecondary education, training, employment, and adult services. Many of these students also receive services from another set of teachers outside of the Transition Unit; these are the resource teachers for special education (RTSEs). Furthermore, during the period of CTP's involvement in the YTD evaluation, MCPS had five employment specialists who were in-house vocational rehabilitation counselors for students with disabilities. They typically served students with disabilities who were not participating in CTP. Eligible students can also participate in several programs offered by MCPS, such as The Bridge Program and Learning for Independence, which were designed to improve the academic experiences of youth with disabilities and prepare them for life after high school.[38] Despite these resources and programs for students with disabilities, MCPS faces capacity constraints that limit its ability to serve this segment of its student body. CTP complements or augments those services while also reducing the demand for some MCPS services by CTP participants.[39]
- **Montgomery County non-public schools.** The Maryland State Department of Education licenses 18 non-public special education schools in Montgomery County, a number of which have high school programs that serve youth who meet the eligibility criteria for CTP and from which CTP recruits participants. In addition to standard academic curricula, these schools may provide supports such as experiential learning, transition services, case management, and therapeutic services for both students and families.
- **The Maryland Department of Rehabilitation Services.** Predating the expansion in CTP, DORS made a large commitment to serving Maryland youth with disabilities by allocating one-third of its staff for that purpose. The agency achieves outcomes for youth that are proportional to its allocation of staff, as young adults account for nearly 35 percent of its successful case closures. CTP leveraged DORS resources to enhance the services it provided to participants. Staff from DORS attended individualized education program (IEP) meetings for CTP participants, provided job leads, offered training opportunities, and authorized funds for the purchase of equipment or services that advanced participants' employment goals. During the period of CTP's participation in the YTD evaluation, DORS operated under an order of selection mandate,[40] so only

[38] For information about the Bridge Program and Learning for Independence, see http://www.montgomeryschoolsmd.org/departments/specialed/resources/services/ServicesHigh.pdf and http://www.montgomeryschoolsmd.org/departments/specialed/parents/services/schoolage-all-levels.aspx#lfi.

[39] As noted, the existence of CTP allowed the MCPS employment specialists to focus their services on youth with disabilities who either were not offered positions in CTP or did not participate in the program for other reasons. This may have permitted those staff to provide stronger services to non-CTP students than would have been possible if the program had not expanded during its involvement in the YTD evaluation. More broadly, CTP may have allowed MCPS to devote more resources of various types to students with disabilities who were not participating in the program.

[40] Under federal law, if a state vocational rehabilitation agency does not have the funds to serve all eligible individuals, it can establish fair criteria through which to choose those individuals it will serve first. An order of selection plan essentially creates a waiting list for services, and the plan must give the highest priority for services to those with the most significant disabilities. As of this writing, the vocational rehabilitation agencies in more than 40 states, including Maryland, are operating under orders of selection.

people who were SSI or DI beneficiaries, or who could demonstrate equivalent disabilities, received DORS services immediately. Others went on a waiting list. However, in September 2009, DORS and SLH entered into a memorandum of understanding that designated a DORS counselor to work with CTP. In principle, this allowed CTP youth to bypass normal waiting lists to ensure that they could receive services in a timely manner. In practice, there were still significant time lags for some CTP participants in accessing to DORS services, due to delays by the DORS counselor in preparing their individualized plans for employment.

- **The Montgomery County Mental Health Core Services Agency.** This local mental health authority provides referrals to county and state mental health service providers, authorizations for services, technical assistance in difficult cases, crisis management, and alternative resources for hard-to-serve clients. Based on their diagnoses, approximately 25 percent of CTP participants were eligible for these services.
- **Montgomery Works.** The Montgomery County One-Stop Workforce Center helps county residents enter or reenter the workforce and helps local employers satisfy their staffing requirements. Among its services is the Youth with Disabilities Project, a partnership between Montgomery Works, TransCen, and MCPS to provide youth with new skills, work experiences, and job opportunities. Montgomery Works also partners with other entities to provide youth with access to work-readiness training, career counseling, and summer employment. Montgomery Works and SLH have a long history of collaborating to meet the needs of One-Stop customers with mental health problems. CTP helped its participants to access One-Stop services.
- **Montgomery College.** Montgomery County's community college offers a wide range of credit-bearing courses, in addition to remedial courses designed to help students improve their scores on the Accuplacer[41] placement tests to qualify for credit-bearing courses. Montgomery College has an Office of Disability Support that focuses on the needs of students with disabilities. CTP helped its participants to navigate the bureaucracy of Montgomery College and other postsecondary education systems, including placement testing, financial aid, campus life, and disability services.
- **Benefits InfoSource.** Montgomery County's WIPA program provides training, technical assistance, and one-on-one benefits counseling to disability beneficiaries. CTP promoted access to this resource for its participants who were receiving SSI or DI benefits.

3. Assessment of the Service Environment

As described above, Montgomery County is resource rich and has a large number of programs designed to support CTP participants and others like them. However, there is no agency or program in the county, other than CTP, that focuses specifically on the needs of SED youth. Also, while mental health, employment, educational, and other services are available elsewhere in the county, CTP coordinated and integrated these services within its program and, in the case of DORS, helped CTP youth bypass normal waiting lists. Youth that CTP typically served may not have had the resources to access and coordinate these various services without CTP's help. Nevertheless, given

[41] The Accuplacer is a computerized, self-paced placement test designed to provide placement and advising information for students entering college. Most Maryland community colleges use the Accuplacer to identify what, if any, remedial courses a student might need before enrolling in college credit courses.

the commitment by DORS to serve youth, and MCPS's ongoing effort to improve its services for youth with disabilities (as evidenced by its hiring of five employment specialists), significant resources and services were potentially available to youth who did not have access to CTP.

C. Organization and Staffing of CTP

Before its involvement in the YTD evaluation, CTP was staffed by four CTSs, who worked with program participants to help them develop and achieve vocational and educational goals, and one CTS supervisor. Starting several months prior to the April 2008 commencement of enrollment activities for the evaluation, CTP greatly expanded the number of staff positions and aggressively recruited and hired individuals to fill them. At the program's maximum capacity in late 2010 and early 2011, there were 14 CTSs and 2 CTS supervisors, organized into two service teams of equal size that served roughly the northern and southern halves of Montgomery County. In addition, immediately prior to and during its involvement in the evaluation, CTP significantly expanded its management team and created and filled several new front-line staff positions, as discussed below.

1. The CTP Management Team

The individual who was the vocational director at SLH (and who became the president and chief executive officer in 2011) served as the CTP **program director**, with responsibility for contractual relationships, administrative functions, and reporting requirements. The program director provided a strong program vision for CTP and ensured that the program remained consistent with evidence-based supported employment. He negotiated formal agreements with Mathematica and DORS, and participated in CTP's outreach and recruitment efforts. The program director supervised the CTP **program manager**, who had general responsibility for the day-to-day operation of the program, including the hiring and training of staff, recruitment of youth, and delivery and documentation of services. She also had both supervisory and front-line responsibilities for recruiting youth into the evaluation. The program manager supervised the two CTS supervisors, a benefits specialist, a workforce development specialist, a recruitment specialist, and the administrator of the program's ETO management information system.

The two **CTS supervisors** were directly responsible for hiring, training, and supervising the CTS teams. Over the evaluation period, four different individuals served as supervisors due to turnover in both of the supervisor positions, in April 2009 and December 2010. All of the individuals who held these positions previously had worked as CTSs. The supervisors maintained their own caseloads, although small, so as to remain close to the realities of CTP service delivery. They were instrumental in youth recruitment activities and conducted one-hour personalized counseling sessions with control group youth who requested them.

Two other management staff supported CTP's operations, and both of these positions were created for CTP's participation in the YTD evaluation. An **ETO administrator** coordinated the entry of data on recruitment and services into CTP's management information system. She trained CTP staff on entering data into ETO and using the system to generate reports. She also directly entered data for some staff, monitored data quality, and used the system to produce management reports. During the first year of the evaluation period, this individual also had significant recruitment responsibilities; she organized and conducted many of the recruitment presentations to youth. As CTP refined and expanded its recruitment activities, other staff (described below) were brought in to perform these functions.

A **workforce development specialist** was CTP's liaison to the business community and the adult employment programs at SLH. The individual holding this position attended community business development meetings, such as those held by the Chamber of Commerce. She also trained and mentored CTSs on job development, responded to inquiries from the business community, facilitated work trials and job placements, provided quality assurance for CTP services to employers, was CTP's point of contact with Montgomery Works, and carried a small CTP caseload so as to remain in touch with program participants and their needs. This position was first filled in October 2008 by an individual who divided her time equally between workforce development and recruitment. CTP hired a new full-time workforce development specialist in May 2009, who remained in that job through June 2011; after that, a part-time member of the CTP staff filled this role.

2. CTP Front-Line Staff

Two teams of up to seven **career transition specialists** provided services directly to CTP participants. One team served the southern part of Montgomery County out of SLH's headquarters in Bethesda; the other served the northern half of the county out of a satellite office in Gaithersburg. The CTSs were responsible for the enrollment of treatment group members in CTP and the delivery of most program services, such as assessments, job development, job placement, and job coaching.[42] When the program was operating at full capacity, the average caseload for a CTS was approximately 15 active participants.[43] The staffing plan for CTP's participation in the YTD evaluation initially called for it to have just 12 CTSs at peak capacity, but the number of CTSs expanded to 14 by June 2010 as management adjusted the staffing plan in response to the enrollment of a large number of high school juniors in the program. Juniors required a longer service-delivery window, which in turn required more staff. The CTSs had weekly team-specific staff meetings run by the respective supervisors. Other CTP management staff frequently attended those meetings. Early in the evaluation period there was little formal cross-team communication, except between the supervisors, but such communication increased after the turnover in staffing of the supervisor positions reached 100 percent in 2010.

The CTS positions were filled primarily by recent college graduates with academic majors in disciplines such as psychology, sociology, criminology, rehabilitation, and family science/human services. These were often the first professional jobs for these individuals. The management of CTP preferred to fill the CTS positions with recent graduates because they believed those individuals could develop strong relationships with participants and learn the CTP model without exhibiting too much resistance to it because of a lack of previous experiences with other employment programs. Furthermore, the compensation for CTSs was fairly low, which made the job less attractive to individuals with significant professional experience. These factors had contributed to frequent departures of CTSs from their positions even before the program's involvement in the YTD evaluation. Management anticipated that staff would remain in these positions for 18 to 24 months,

[42] During the first months of CTP's participation in the YTD evaluation, some CTSs assisted with the recruitment of youth into the evaluation, but when CTP expanded its recruitment team and hired a recruitment specialist, they stopped performing this role.

[43] CTP conducted rolling enrollment; hence, the aggregate caseload always included participants who required different levels of services, ranging from active job placement to less active follow-along support. Therefore, individual CTSs did not serve the same 15 active participants for extended periods or at the same intensity throughout the project, but focused on different participants at different times based upon the youths' service needs. Additionally, high turnover among CTSs required frequent rebalancing of caseloads.

which proved to be the case, and quickly filled vacancies when they arose. All CTSs received formal, structured training from CTP and SLH on performing their jobs. In addition, the CTS supervisors, ETO site administrator, and workforce development specialist provided them with informal training and ongoing support. Finally, peer-to-peer mentoring among the CTSs was extensive and critical to their development. In effect, high turnover in the CTS positions was built into the CTP program design, as reflected in the rapid filling of CTS vacancies and the multifaceted approach to training new CTSs. Our focus group discussions with participants and interviews with CTP staff revealed little evidence that turnover among the CTSs adversely affected the delivery of services.[44]

A **benefits specialist** at SLH devoted 25 percent of her full-time employment to ensuring that CTP participants and their families had the information they needed to make good decisions about the disability and other benefits that they were receiving, or for which they may have been eligible. She accomplished this both directly, by delivering benefits planning services to participants, and indirectly, by providing the CTSs with training, technical assistance, and quality assurance related to their performance of benefits planning functions. She attended most of the weekly CTS team meetings. She was also CTP's point of contact with the local SSA field office, the Area Work Incentives Coordinator, and Benefits InfoSource.

In response to challenges encountered in recruiting youth into the evaluation, the CTP staffing plan was revised to include a **recruitment specialist** position. This position was initially filled in October 2008 on a half-time basis by an individual who also served as CTP's workforce development specialist. A full-time recruitment specialist was hired in mid-2009. The recruitment specialist was responsible for organizing and coordinating CTP's recruitment team,[45] scheduling and conducting presentations to youth, following up with potentially eligible youth, gathering signed consent forms for enrollment in the evaluation, and developing strategies for increasing the number of consents received. The recruitment specialist also assisted the CTSs with enrolling treatment group members in CTP. To leverage the time of the recruitment specialist, a **recruitment assistant** position in CTP was created and filled in January 2010. Both of these positions were eliminated in November 2010, by which time the program had nearly reached its recruitment goal.

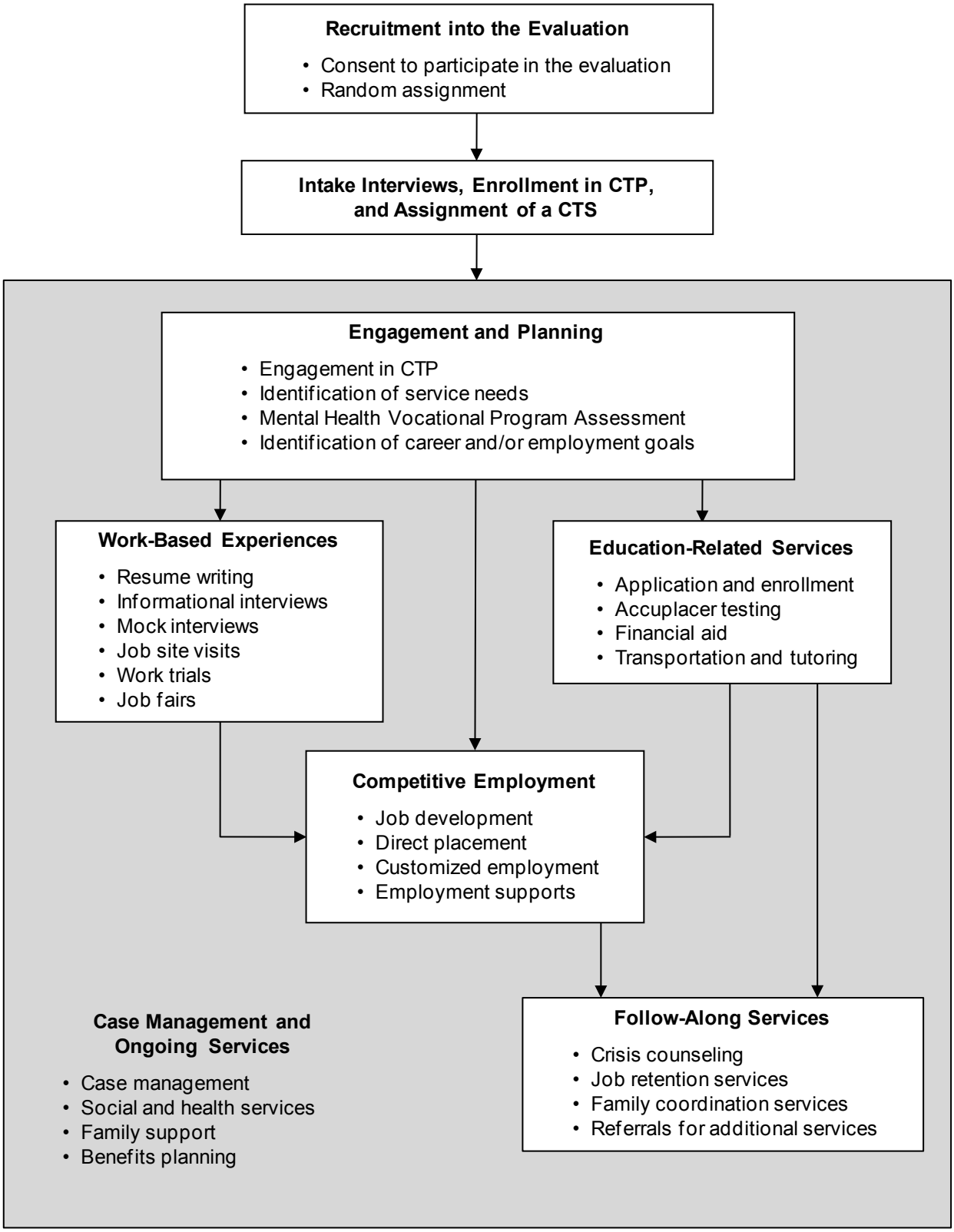
D. CTP Services

In this section, we describe the services that CTP provided to youth with disabilities in Montgomery County. Competitive paid employment for its participants was CTP's primary objective, with a secondary objective of promoting their educational attainment. Figure III.1 shows the flow of program services as planned for CTP. Each participant was matched with a CTS to develop an individualized plan specifying his or her goals for employment and education and the services that would promote the attainment of those goals. Work-based experiences, such as informational interviews, visits to job sites, and internships, were used both to refine those goals and as stepping stones to competitive paid employment. The program supported the development and attainment of education goals that were well-integrated with employment objectives. Once a participant obtained competitive employment, often through the job development and placement efforts of CTP staff, the program provided employment supports, such as job coaching. At virtually any time during their involvement in CTP, participants could receive counseling on Social Security and other benefits and be linked to other resources in the community. CTP staff provided

[44] Section G of this chapter provides additional discussion of the effects of high turnover among the CTSs.

[45] In addition to the recruitment specialist, the CTP recruitment team included the project director, project manager, CTS supervisors, and a recruitment assistant. On occasion, the team was expanded to include selected CTSs.

Figure III.1. Participant Flow Through the Career Transition Program



follow-along services to youth as needed for up to two years after they successfully achieved their transition goals.

Because CTP services were highly individualized, they were not necessarily provided in a standard sequence. For example, CTP may have needed to arrange emergency housing for a participant to avoid potential homelessness before conducting assessments and developing a transition plan. CTP management monitored participant progress relative to benchmarks to ensure that each participant continued to make progress toward his or her transition goals.

Before its involvement in the YTD evaluation, CTP operated on the basis of largely unwritten protocols, with close management of the small number of CTSs and good communication among those staff. This operational model proved to be inadequate as the program expanded during the evaluation phase. The much larger front-line staff necessitated the development of more written protocols, which occurred organically over time. Some of the staff whose tenure with the program predated its participation in the evaluation were concerned that CTP might become an excessively rules-bound program. Notably, the program manager shared this concern. However, many of the staff who were newly hired into CTS positions during the evaluation phase, as well as the second generation of CTS supervisors, were uneasy with the lack of written protocols and the resultant high degree of improvisation the job required. The CTSs began to develop their own tools and approaches, which they shared with each other in staff meetings. The supervisors took ideas from the staff meetings and developed them into formal written protocols. The program manager, with her well-informed intervention ideas and extensive knowledge of services available in the county, remained a valuable resource to the CTSs, but as they developed their own protocols, they gradually decreased their reliance on the program manager's expertise. This organic and "bottom-up" approach to protocol development allowed CTP management to focus on ensuring that the staff adhered to the program's larger vision and mission.

In the remainder of this section, we expand on the services provided by CTP.

1. Recruitment into the Evaluation

As previously noted, CTP was unique among the projects that participated in the YTD random assignment evaluation in that it was largely responsible for identifying eligible youth and recruiting them into the evaluation. This distinction arose from the fact that the other projects served only youth who were current or recent disability beneficiaries, whereas CTP served youth who had been diagnosed with SED, without regard for their beneficiary status. Mathematica conducted recruitment in the other evaluation sites but in Montgomery County limited its involvement with recruitment to supporting the efforts of CTP. In Section E of this chapter, we provide a detailed discussion of CTP's experiences in recruiting youth into the evaluation. On several occasions, CTP management shared with the evaluation team its assessment that it was challenging to find a proper balance between recruitment activities and the delivery of services while simultaneously scaling up to a larger program.

After a youth provided CTP with signed consent to participate in the evaluation, Mathematica attempted to conduct a baseline interview with him or her and, upon successful completion of the interview, randomly assigned the youth to the evaluation's treatment or control groups.

2. Enrollment in CTP

Mathematica uploaded contact information and selected data from the baseline survey into ETO for each youth it assigned to the treatment group and then notified CTP of the existence of a new case in the system. The ETO administrator at CTP informed the CTS supervisors of the new case. They designated a CTS to conduct an intake interview with the youth, which was required before he or she could be enrolled in CTP. Interviews might also be conducted with the referral source (typically the youth's TST at MCPS or a therapist) and a parent or guardian.[46] These latter interviews were generally not mandatory before enrollment; however, if the youth was a minor, the parent or guardian interview was required. The interviews identified the youth's goals, strengths, and the areas in which the youth might need support to accomplish his or her goals. Multiple forms were completed during the youth's intake interview, including Health Insurance Portability and Accountability Act (HIPAA) consent, a CTP client agreement, and releases to allow information to be shared with entities such as DORS, employers, MCPS, a parent, SSA, a therapist, or other organizations or individuals involved in the youth's life. The releases gave CTP the authority to assist the participant and communicate with those entities on his or her behalf.

Once the youth interview had been completed and the forms had been signed, the youth was considered to be enrolled in the program. CTP staff then initiated a service record for him or her in ETO.[47] This signaled to the evaluation team that the youth had enrolled in the program and therefore could begin receiving the applicable SSA waivers for YTD if he or she was a disability beneficiary. The CTS who conducted the intake interview(s) presented that information in a weekly meeting of the relevant CTS team, after which the CTS supervisor assigned the case to the member of the team who had the greatest potential to develop a strong rapport with the youth. Mutual interests and compatible personalities typically were the most important considerations in this assignment, but sometimes the assignment was made primarily on the basis of gender or participant service needs and staff expertise.[48]

3. Engagement and Planning

Strong relationships between participants and their CTS are central to the CTP program model. The high turnover among the CTS during the evaluation period did not preclude them from developing strong relationships with participants. The first step in engaging a new participant in CTP was for the assigned CTS to gain the youth's trust. Youth with SED often have difficulties in making and sustaining interpersonal relationships (Federal Register 1999). For this reason, the CTS arranged to meet the participant at a location of the youth's choosing and carefully gauged the best approach for engaging the youth. The purpose of the initial meeting was to build rapport and begin gathering information that would inform the development of a person-centered plan for the youth. The meeting might consist of a one-on-one basketball game, chatting over coffee, or another activity of the youth's choosing. The engagement process could entail a number of meetings over the course of a month; all the while, the CTS was learning about the youth's strengths, interests, goals, and service needs.

[46] Until November 2008, all interviews deemed necessary had to be completed before a youth could be considered to be enrolled in CTP. After that date, only the youth interview (plus the parent or guardian interview if the youth was a minor) was required before enrollment. This change was made, in part, to accelerate the enrollment process.

[47] In this report, we refer to CTP enrollees as "participants."

[48] For example, one CTS had a caseload that included a large proportion of youth with mental illnesses, while another had a caseload that included a number of youth who were involved in the criminal justice system.

CTP did not use a single "person-centered plan" to guide program services. Instead, it relied on several formal tools to identify and structure services for each individual participant. The CTS formally summarized information gathered from initial interviews in a "service needs planning grid." This grid encompassed residential, vocational, social, educational, physical and mental health, and financial domains, among others. The participant's barriers, service needs, and available resources were recorded on the grid. This information was updated approximately every six months. The planning grid was not shared with the youth.

Also during the initial month following enrollment, the CTS worked with the participant to complete the Mental Health Vocational Program (MHVP), a two-part employment assessment that follows evidence-based best practices for supported employment. Part A of the MHVP, which was completed as an interview with the participant, captured information about the participant's work history, current accommodations, initial employment goals, and thoughts about the future. It also captured the strengths, interests, and skills that the participant would bring to a job, as well as the supports he or she would need to maintain a job. Part B summarized information about the participant that had been given by the youth and important people in his or her life. Part B also included the CTS's observations about the participant, covering such topics as strengths, barriers, appearance, punctuality, and communication skills. Here the CTS specified the plan for working with the participant during the post-engagement period.

During this same timeframe, the CTS helped the participant to establish short- and long-term goals that would guide him or her to a successful transition. Typical goals included, but were not limited to, employment and education objectives.[49] The goals, as well as the associated actions required of the participant, the CTS, and others, were captured in a "goal planning sheet." The service needs planning grid and the MHVP informed this process. Both the participant and the CTS signed the completed goal planning sheet, which served as a roadmap for ongoing service delivery. The CTS reviewed this document with the participant at least every six months and updated it as necessary.

4. Work-Based Experiences and Competitive Employment

The CTP program model combined a rapid-employment approach to service delivery with a philosophy that everyone can work and that employment is essential to good mental health and long-term independence. Consistent with the principles of evidence-based supported employment, the program sought to secure jobs for youth as quickly as possible, while addressing their behavioral or social issues concurrently with the job search or following employment.[50] The CTSs had primary responsibility for providing employment services to CTP participants. However, the workforce development specialist assisted in making connections with employers and solving employment-related problems. After an employment goal had been identified during the planning process, the CTS began working on presentation skills with the participant through resume development, mock

[49] Graduating from high school, obtaining an internship, getting a job, enrolling in college, attending classes regularly, maintaining a specific grade point average, getting a driver's license, taking travel training, opening a bank account, and enhancing job skills were common short-term goals. Attending a four-year college, earning a specific degree, and obtaining full-time employment were common long-term goals.

[50] The key principles of evidence-based supported employment can be found at http://www.dartmouth.edu/~ips/page16/page121/page157/files/se_principles.pdf. Evidence-based supported employment has a strong evidence base and in randomized controlled trials has shown to be an effective vocational program for adults in the community mental health system (Bond 2004).

interviews, and instruction on work-appropriate behavior and appearance. Subsequently, the CTS pursued either competitive employment for the participant or work-based experiences, such as informational interviews, job site visits, and work trials. As necessary, the CTS provided job coaching during such experiences.

Either immediately following the planning stage, or after one or more work-based experiences, the CTS worked with a participant to identify and apply for competitive paid employment consistent with the youth's goals and abilities. CTP's philosophy in this regard was that fostering the youth's sense of ownership of the job search process and matching his or her skills, abilities, and interests with potential jobs were critical to subsequent job satisfaction and retention. It was the participant's decision whether to disclose to a potential employer the existence of a disability and his or her participation in CTP. Customized employment was available to a participant whose skills and interests were not congruent with standard existing jobs.[51] As necessary, the CTS or workforce development specialist would negotiate a customized job for a participant with a prospective employer. Once a participant was employed, the CTS provided flexible, ongoing employment supports, such as job coaching, for as long as the youth continued to participate in CTP. The CTS would also help the participant obtain extended and additional supports through referrals to DORS and the Montgomery County Mental Health Core Services Agency.

Mathematica prepared monthly reports, based on ETO data, that presented statistics on the employment outcomes of CTP participants. The management of CTP met monthly with the evaluation team and SSA to discuss these reports, the last of which (for March 2012) showed that 71 percent of CTP participants had been employed in paid competitive jobs at some time during their involvement in the program.

SLH and CTP shared the philosophy that employers were their clients and it was important to understand their businesses and help them meet their staffing needs. However, the CTSs and CTP management told us that the development of employer relationships was an area of discomfort for the CTSs. In general, the CTSs found it easier to relate to youth than to employers because they had had little experience with the latter. Therefore CTP put considerable effort into helping the CTSs work successfully with employers. The CTSs, supported by the workforce development specialist, were expected to develop relationships with both individual employers and organized groups of employers, such as Chambers of Commerce and Rotary Clubs. Working though the Chambers of Commerce, the CTP program director arranged for business leaders to serve as mentors for CTSs, helping them to broaden their employer contacts and develop job leads. CTP also designed a training program on job development for CTSs. Among the topics covered were the importance of job development to the success of CTP, strategies for working with employers, and tips on what to say when introducing participants to prospective employers. Every week, CTSs were required to spend at least eight hours on job development and contact at least one new employer. All job development contacts, including both initial and follow-up contacts with a given employer, were recorded in a Microsoft Access database that ultimately contained information on more than 260 employers. Starting in 2011, CTP staff could use their smartphones to interface with this database

[51] The U.S. Department of Labor, Office of Disability Employment Policy (2009), defines customized employment as "a process for individualizing the employment relationship between a job seeker or an employee and an employer in ways that meet the needs of both. It is based on a match between the unique strengths, needs, and interests of the job candidate with a disability, and the identified business needs of the employer or the self-employment business chosen by the candidate."

via Google Apps, allowing for more informed decision making regarding employers and jobs in the field.

5. Education-Related Services

Although CTP's primary mission was to help participating youth find competitive paid employment, education-related services were an important component of the program. Most youth in the program, and in Montgomery County in general, had a goal of obtaining postsecondary education. For CTP participants who identified a postsecondary education goal during the engagement and planning process, the CTSs provided appropriate support. Often, this entailed helping them to complete high school and matriculate at Montgomery College. As necessary, they would conduct family meetings for youth who were struggling academically, help youth study for the standardized tests that some colleges require for admission, assist with college and financial aid applications, and arrange for Accuplacer testing. After participants had matriculated, the CTSs could provide or arrange for transportation and tutoring. They also helped these youth to connect with college offices of disability support services, which provide accommodations (such as extra time for taking tests, class note takers, assistive technology, and interpreters) to help students with disabilities succeed academically.

6. Case Management and Ongoing Services

Case management services constituted a time-intensive core component of CTP. These services were intended to resolve issues that might impede a youth's ability to work or attend school. The CTSs performed a wide range of general case management functions, which included meeting with and coordinating the efforts of multiple service providers, resolving housing problems, and arranging transportation to work or school. The CTSs also helped youth to navigate bureaucracies to achieve very specific objectives, such as obtaining a driver's license or a copy of a birth certificate.

Many CTP participants required social and health services beyond those that the CTSs could deliver directly to help them succeed in the classroom, in the community, and on the job. The CTSs arranged for such services through referrals either to in-house programs at SLH or to formal and informal partner organizations. SLH specializes in mental health services, such as medication management, therapy for mental health and substance abuse problems, and help in developing independent living skills. The CTSs provided referrals to community resources for additional career exploration, postsecondary education support, housing assistance, and other supports. CTP had an extensive network of partners in Montgomery County (identified in Section A, above), and referrals to these partners complemented and extended the services provided directly by CTP staff.

Family support was not a core component of CTP; however, program staff did try to maximize the likelihood that the families of CTP participants would support the transition efforts of their youth. The CTSs reached out to parents and other family members to inform them about the program and allay any concerns they might have had about it. They also sought to educate parents on how their children's disabilities might affect their education, employment, and daily living. Family support most often was provided through one-on-one counseling by the CTSs but also occurred via newsletters, social events, and peer counseling by family members of youth who had already achieved key transition goals. However, in the end, the primary job of the CTSs was to serve the participants themselves, not their families.

Because few of the youth it served received disability benefits, CTP had not provided formal benefits planning services prior to its involvement in the YTD evaluation. However, benefits planning services were a key component of the YTD conceptual framework, as shown in Figure I.1; consequently, SLH and CTP developed the capacity to provide such services after the program was selected to be a YTD project. Benefits planning services in CTP were designed to help participants understand how benefits, including the SSA waivers for YTD, can be a bridge to long-term economic independence and how work might impact the benefits they receive. All CTSs were expected to be able to provide basic information on a broad range of benefits. They referred their participants to the SLH benefits specialist for assistance with more complex benefit issues, especially those involving disability benefits.

Benefits planning services at CTP were adapted according to beneficiary status. During a benefits overview provided to virtually all participants, the CTSs would discuss a variety of benefits, including disability benefits, Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF), rental assistance, health insurance, and financial aid for education. The CTSs also discussed budgeting and financial literacy with participants. The benefits specialist met with the participants who were receiving disability benefits, requested and reviewed SSA benefits planning queries for them, and provided them with individualized benefits analysis and advisement, including advice on the use of the waivers for YTD. The benefits specialist, in conjunction with the CTSs, also assisted participants and their families with the SSI application process for those who demonstrated a clear need.

7. Follow-Along Services

Upon achieving his or her transition goals, which typically included securing a competitive paid job and/or matriculating in a postsecondary education program, a CTP participant typically was ready to be placed in "follow-along" services. A youth's demonstrated ability to function well in the absence of day-to-day contact with his or her CTS and the existence of linkages with necessary supportive services external to CTP were benchmarks that signaled readiness for assignment to this status. It was expected that most participants would be ready for follow-along services about a year after enrolling in CTP, but not before graduating from high school. Participants in this status remained eligible for all CTP services, but most often received crisis counseling, job retention services, and referrals to SLH and other providers for additional services. CTP provided up to two years of follow-along services to participants. During that time, their contact with the program was significantly less frequent than when they were involved in core program services.

E. Recruitment and Enrollment

The efforts to recruit youth into the evaluation of CTP and enroll members of the evaluation's treatment group in program services began in April 2008 and ended in early January 2011, about three months behind schedule. As a result of these efforts, 840 youth signed a form giving their consent to participate in the evaluation and completed the required baseline interview with Mathematica, and 422 of them were randomly assigned to the evaluation's treatment group.[52] CTP staff enrolled 374, or 89 percent of these youth, in program services.

[52] In addition, 27 of the youth who satisfied the conditions for inclusion in the evaluation were intentionally assigned to treatment status because they were siblings of other treatment group members. Such youth were not part of the evaluation's research sample and were not included in the analysis. CTP enrolled 26 of these youth in program services.

1. Recruiting Youth into the Evaluation

During its participation in the YTD evaluation, CTP's target population consisted of high school students in Montgomery County, ages 16 to 21 years old, who had been diagnosed with SED and were either in their last two years of high school or had graduated or left school within the past year. CTP also recruited youth who had not been formally diagnosed with SED but were classified by either MCPS or the public mental health system as having significant mental illnesses, such as depression, bipolar disorder, schizophrenia, dissociative identity disorder, or ADHD. Eligible youth could be attending either public or non-public schools. The receipt of disability benefits was not a CTP eligibility requirement, in contrast to the other projects participating in the YTD random assignment evaluation.

CTP did not fundamentally alter its target population criteria for the evaluation; however, it may have loosened its interpretation of those criteria to meet the challenge of recruiting 840 youth into the study. During the evaluation period, the program ended up serving some youth who, in addition to exhibiting SED characteristics, also had Asperger's syndrome or were eligible for Developmental Disabilities Administration (DDA) services. CTP had had little experience with such youth. Although program management trained the staff on these new subpopulations and their related issues, both management and staff reported that the level of that training was below what was provided for CTP's traditional target population of youth with SED. The CTSs reported that, overall, the new subpopulations did not exhibit substantially different service needs than the traditional population.

CTP's recruitment effort was tied to the MCPS calendar. The prime months for contacting students and obtaining their signed consent to participate in the evaluation were September and October and February through May. CTP worked with referral sources, primarily MCPS teachers (TSTs and RTSEs), to educate them about the program and the evaluation, and schedule and conduct group and individual presentations to youth and/or their families. There were few opportunities for such presentations during holidays, school vacations, and inclement weather; however, the staff of CTP viewed these as good times to follow up with youth regarding outstanding consent forms and encourage those who had consented to complete the baseline interview.

The CTP recruitment materials, including a PowerPoint presentation, emphasized the assistance that the program could provide youth in finding jobs and continuing their education. The recruitment pitch may have been especially attractive to youth with strong interests in obtaining employment, and it is possible that youth who were less interested in work were less likely to join the study.

Recruitment was a major challenge for CTP, requiring repeated adjustments to strategies and staffing during the first 18 months of the program's involvement in the YTD evaluation. The CTP program manager and ETO coordinator conducted almost all recruitment during the first six months of the evaluation. However, they fell well short of achieving the program's monthly recruitment goals during that period, as CTP management had underestimated the effort that would be required to meet those goals. Furthermore, due to security concerns at MCPS, CTP staff were prohibited from collecting contact information directly from students during presentations. This meant that CTP had to rely on MCPS to follow up with students who did not provide signed consent during the presentations. That follow-up was spotty and slow. This particular issue was resolved favorably, but only after several months of weak recruiting results in the spring of 2008. Nevertheless, the continuation of disappointing recruiting results in the fall of 2008 led CTP to reorganize its approach to recruitment, assigning substantial recruiting responsibilities to the

program director and the CTS coordinators in addition to the program manager and ETO coordinator, and hiring a recruitment specialist to coordinate their work. CTP also expanded its outreach to potential referral sources to include additional public and non-public schools, as well as DORS, therapists, psychiatrists, and community organizations such as the Maryland Multicultural Youth Center/Latin American Youth Center. Beginning in March 2009, TransCen and Mathematica took a more active role in supporting the CTP recruitment team to achieve greater penetration of the target population, sharpen the recruitment materials and "pitch," and assist in making presentations. These adjustments yielded higher monthly numbers of signed consent forms starting in the spring of 2009; however, the slow start of recruitment and the persistence of recruitment challenges through the first year of the evaluation were the primary reasons why CTP's enrollment period had to be extended by three months.

As configured for YTD, ETO did not capture the recruitment efforts of CTP staff. CTP management estimated that the time spent recruiting youth into the evaluation exceeded the time spent enrolling treatment group members in program services (discussed immediately below) by 50 percent or more. The CTSs had few recruitment responsibilities, so it is possible that direct services to participants were not diminished by the greater-than-anticipated recruitment effort, except that the CTS supervisors reported being so busy with recruitment that it impinged on the time they had to oversee the delivery of services.

2. Enrolling Treatment Group Members in Program Services

The CTSs were primarily responsible for enrolling members of the evaluation's treatment group in program services and achieved notable success. Of the 422 youth who had been randomly assigned to the treatment group, 374 (89 percent) enrolled in CTP.[53] The CTSs recorded their enrollment efforts in ETO. As reported in Table III.2, the ETO data show that they made a total of more than 2,100 enrollment contacts, or approximately 5 contacts per youth. On average, they made 4.6 contacts with youth who eventually enrolled ("participants") and 8 contacts with those who did not ("non-participants"). However, the duration of contacts with participants was longer than those with non-participants (an average of 8.5 minutes per contact versus 5.8 minutes). For both groups, the average amount of time spent on enrollment efforts was about three-quarters of an hour per youth. The enrollment effort lasted more than an hour for slightly more than one-fifth of the treatment group members. About two-thirds of the enrollment contacts were made by telephone; the remaining contacts were made in person and by other modalities, such as email and text messaging (results not shown). The majority (61 percent) of the in-person contacts were home visits.

At several times during CTP's 34-month enrollment period, the program management implemented a policy of intentionally slowing down efforts to enroll treatment group members in services. This allowed the CTSs to concentrate on delivering services to their existing caseloads rather than dividing their efforts between serving current participants and enrolling new ones. This policy is reflected in the statistics on the duration efforts, as reported in the bottom part of Table III.2. At 24 days, the average elapsed time between random assignment and the first attempted contact for enrollment purposes among all treatment group members was rather lengthy.

[53] CTP successfully enrolled 400 (89 percent) of the 449 treatment group members in program services, thus achieving the enrollment target specified in its memorandum of understanding with Mathematica. Among the total enrollees, 374 had been randomly assigned to the treatment group and 26 had been deliberately assigned. In the text and Table III.4, we report program enrollment results for just the 374 youth who had been randomly assigned to the treatment group.

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

	All	Participants	Non-Participants	Difference		P-Value
Staff Enrollment Efforts						
Number of outreach contacts						
Total	2,107	1,721	386			
Average per youth	5.0	4.6	8.0	-3.4	***	0.00
Median per youth	4.0	4.0	6.5			
Staff time per contact						
Average (minutes)	8.0	8.5	5.8	2.7	***	0.00
Median (minutes)	5.0	5.0	5.0			
Staff time per youth						
Distribution of hours (%)						0.97
Less than 1	78.2	78.3	77.1	1.3		
1 to less than 3	19.2	19.0	20.8	-1.8		
3 to less than 5	2.4	2.4	2.1	0.3		
5 or more	0.2	0.3	0.0	0.3		
Average (hours)	0.7	0.7	0.8	-0.1		0.31
Median (hours)	0.3	0.3	0.5			
Duration of Enrollment Efforts						
Number of days from random assignment to first attempted contact						
Distribution of days (%)					***	0.01
1 to 3	7.8	8.3	4.2	4.1		
4 to 7	11.6	12.0	8.3	3.7		
8 to 14	21.1	22.5	10.4	12.0		
15 to 30	32.7	32.9	31.3	1.6		
31 to 60	20.9	19.8	29.2	-9.4		
61 or more	5.9	4.5	16.7	-12.1		
Average (days)	23.7	22.3	34.3	-12.0	***	0.01
Median (days)	17.0	17.0	28.0			
Number of days from first attempted contact to enrollment in CTP						
Distribution of days (%)						
1 to 7	n.a.	3.5	n.a.			
8 to 14	n.a.	9.9	n.a.			
15 to 30	n.a.	34.0	n.a.			
31 to 60	n.a.	30.2	n.a.			
61 or more	n.a.	22.5	n.a.			
Average (days)	n.a.	28.3	n.a.			
Median (days)	n.a.	10.0	n.a.			
Number of days from random assignment to enrollment in CTP						
Average (days)	n.a.	49.6	n.a.			
Median (days)	n.a.	32.5	n.a.			
Sample Size	**422**	**374**	**48**			

Source: The CTP ETO management information system.

Note: The sample includes all youth who were randomly assigned to treatment group for the evaluation of CTP. Random assignment began on April 9, 2008 and ended on January 3, 2011. The first treatment group member enrolled in CTP on April 16, 2008; the last enrolled on January 3, 2011.

*/**/*** The difference between participants and non-participants 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.

More than one-fourth of initial contacts occurred more than a month after random assignment. On average, non-participants were first contacted 12 days later than participants, suggesting that either non-participants were more difficult to contact or slower enrollment efforts reduced the likelihood of enrollment. Significant lags also occurred between the initial enrollment contact and actual enrollment in CTP, exceeding two months for more than one-fifth of participants. The entire recruitment process—from random assignment to initial contact to enrollment in program services—took 50 days on average for those members of the treatment group who eventually did enroll in CTP.[54]

3. Characteristics of CTP Participants and Non-Participants

While CTP participants (the 374 youth who had agreed to enter the study, were randomly assigned to the treatment group, and enrolled in the program) and non-participants (the 48 youth who had agreed to enter the study, were randomly assigned to the treatment group, but did not enroll in the program) were similar at baseline in many respects, there were some statistically significant differences. Table III.3 shows that participants were less likely than non-participants to be Hispanic (21 percent compared with 33 percent). Also, participants were more likely than non-participants to have been living in two-parent families and less likely to have been living in institutions. Finally, participants were more likely to have a higher socioeconomic status: the family incomes of participants were higher than those of non-participants, and 79 percent of participants had mothers who were high school graduates, compared with just 64 percent of non-participants. Otherwise, the participants and non-participants were similar at baseline, with no statistically significant differences based on race, gender, age, use of English at home, school attendance, employment history, self-reported health status, expectations about the future, receipt and amount of disability benefits, or earnings in the prior year.

F. Receipt of CTP 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 program 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 (except those related to benefits planning). We did, however, include email contacts and contacts made on the day of a youth's enrollment in CTP, as services were often initiated then. The tables presented in this section summarize findings from the analysis of the ETO data, as well as administrative data on the use of work incentives and waivers in the SSA disability benefit programs.

CTP staff were expected to enter into ETO any service provided to or on behalf of a program participant, as well as the time spent during the service contact. The staff were trained on how to enter services into ETO, with specific instructions to separately record each type of service provided during one contact. For example, if a CTS discussed education options with a youth for 20 minutes

[54] In one of the other five random assignment YTD sites, the enrollment process also took about 50 days per enrollee, on average. Considerably less time was required in the remaining four sites. The average elapsed time between random assignment and enrollment was about 36 days in two of those sites and 25 days in two others.

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

	All	Participants	Non-Participants	Difference		P-Value
Baseline Survey Data						
Demographic Characteristics						
Race						0.21
White	41.5	43.0	29.2	13.9		
Black	41.5	40.6	47.9	-7.3		
HI/Pacific/Am Ind/AK	1.4	1.1	4.2	-3.1		
Asian	4.3	4.3	4.2	0.1		
Other or unknown	11.4	11.0	14.6	-3.6		
Hispanic	22.3	20.9	33.3	-12.4	*	0.05
Primarily speaks English at home	86.5	86.9	83.3	3.6		0.50
School Attendance						0.32
Does not attend school	24.6	23.1	35.6	-12.4		
Attends regular high school	54.4	55.1	48.9	6.3		
Attends special high school	11.4	11.7	8.9	2.8		
Attends other school	9.6	10.0	6.7	3.3		
Employment						
Received job training in last year	33.2	32.6	37.5	-4.9		0.50
Worked as a volunteer in last year	14.1	14.0	14.6	-0.6		0.92
Worked for pay in last year	58.7	59.2	54.2	5.1		0.50
Worked for pay in last month	28.3	29.1	21.3	7.9		0.26
Never worked for pay	25.7	25.2	29.2	-4.0		0.55
Living Arrangements					**	0.03
Two-parent family	46.3	47.6	36.2	11.4		
Single-parent family	39.4	39.8	36.2	3.7		
Group home	1.4	1.6	0.0	1.6		
Other institution	7.1	5.9	17.0	-11.1		
Lives alone or with friends	5.7	5.1	10.6	-5.6		
Family Socioeconomic Status						
Annual income					**	0.01
Less than $10,000	16.6	14.6	33.3	-18.8		
$10,000 – $24,999	16.3	16.7	12.8	3.9		
$25,000 or more	67.1	68.7	53.8	14.9		
Mother is a high school graduate	77.6	79.0	63.6	15.4	**	0.04
Self- Reported Health Status						0.52
Excellent	25.8	25.4	29.2	-3.8		
Very good/good	63.3	63.1	64.6	-1.5		
Fair/poor	10.9	11.5	6.3	5.2		
Expectations About the Future						
Expects to live independently (w/ or w/o help)	81.5	80.8	87.0	-6.1		0.32
Expects to continue education	95.4	95.6	93.6	2.0		0.53
Expects to work at least part-time for pay	98.5	98.6	97.9	0.8		0.68
Administrative Data						
Demographic Characteristics						
Male	67.3	67.4	66.7	0.7		0.92
Average age (years)	17.7	17.7	17.6	0.1		0.78
Benefits in Year Before Month of RA						
Received SSA benefits	20.1	21.1	12.5	8.6		0.16
Amount of SSA benefits	$1,189	$1,252	$697	$554		0.21
Earnings in Year Before Year of RA	$1,274	$1,284	$1,189	$95		0.92
Sample Size	**422**	**374**	**48**			

Sources: The baseline survey for the YTD evaluation, SSA program administrative files, and 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.

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.[55] 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. Also, as noted previously, recruitment efforts were not recorded in ETO. Moreover, although CTP staff received extensive training on ETO, and the management team monitored the quality of data entered, the staff may not have input complete data on the services provided to or for specific youth.[56] The ETO data analyzed here thus may not fully reflect the intensity of services provided.

1. Types of Services Received

Nearly all participants in CTP received at least one contact from the program for each of four types 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 the specific listed services. For example, "other education-related service" might include a consultation about an individual participant between a CTS and an instructor or official at Montgomery College. A review of ETO data revealed that some CTSs used the "other" categories frequently, such as when they could not easily determine how to classify a service contact, or as a catch-all for additional services they provided while delivering a specific primary service.

a. Benefits Planning Services

CTP strove to provide all participants with planning services pertaining to the benefits (including non-SSA benefits) they were receiving or for which they might be eligible. The CTSs delivered basic information about benefits to all participants, while the SLH benefits specialist delivered in-depth benefits planning services to those participants who had more complex benefits issues.

Consistent with CTP's benefits planning philosophy, Table III.4 shows that 98 percent of the youth who participated in the program received some type of benefits planning service. Ninety-four percent received discussions of non-SSA benefits, such as TANF, SNAP, rental assistance, and state Medicaid waiver services. In addition, 89 percent received a benefits overview, during which the CTS briefly described those benefits relevant to their particular situations. This might include SSA disability benefits as well as the special waivers for YTD. The evaluation team's interviews with the CTSs revealed that the latter were uncertain as to the distinction between the benefits overview and benefits assessment categories in ETO, so it is likely that some of them may have entered their discussions of basic benefits into either of these categories. The CTS interviews, along with focus group discussions with participants, indicated that all of these services were "light touch" and did

[55] While some CTSs entered their service hours directly into ETO, others provided the ETO administrator with notes on their hours and she entered them into ETO. The ETO administrator was especially involved before a staff member was cleared by SSA for access to ETO.

[56] CTP 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 had the effect of intensifying the attention of CTP 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 CTP Services (percentages)

	CTP Participants
Any CTP Service	99.5
Any Benefits Planning Service	97.9
Discussions of non-SSA benefits and work incentives (e.g., TANF and SNAP)	94.1
Benefits overview	89.0
Benefits analysis and advisement	17.1
Benefits assessment	9.6
Additional discussions of YTD waivers (beyond general overview)[a]	1.1
Additional discussions of non-YTD SSA work incentives (beyond general overview)	0.5
Other (completion of intake interview, discussions with youth/family regarding benefits and waivers)	27.3
Any Employment-Related Service	99.5
Direct employment services[b]	92.2
Career exploration and job search	88.0
Employment training	43.0
Other (discussions with youth/family regarding employment, reminders of upcoming meetings)	93.9
Any Education-Related Service	99.5
Education counseling and academic advisement	76.7
Assistance with accommodations or student support services	35.3
Registration or enrollment assistance	30.2
Accessing financial aid	16.8
Preparing for or attending IEP or transition meetings	15.8
Academic retention services (help to remain in school)	14.2
Other (tutoring, discussions with youth/family regarding education status, communications with education providers)	86.1
Any Case Management Service	99.5
General check-in	96.5
Person-centered planning[c]	58.8
Mental health	48.7
Vocational rehabilitation	47.6
Transportation	42.2
Life skills	33.4
Family support	24.1
Housing	20.6
Case reviews	13.9
Legal information	12.6
Juvenile justice	10.4
Other (attempted contacts—voicemail, discussions of employment opportunities)	82.9
Sample Size	**374**

Source: The CTP 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 374 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 a benefits assessment.

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

[c]Person-centered plans were developed for 90 percent of CTP participants; however, due to omissions in entering data in ETO, the associated person-centered planning services were not recorded for some of those participants.

not require a lot of time, a finding confirmed by ETO data on service intensity, as discussed in Section F.3.

When selected participants met with the SLH benefits specialist for an in-depth review of their benefits—specifically on how those benefits would be affected by employment and support long-term independence—the contact was recorded in ETO as "benefits analysis and advisement." Following that meeting, the benefits specialist prepared an individualized written benefits plan, which she provided to both the youth and his or her CTS. This service was intended primarily for current disability beneficiaries. It is likely that only a small number of other participants received it, either to address complex state benefit issues or assess a youth's eligibility for disability benefits. Table III.4 shows that 17 percent of CTP participants received benefits analysis and advisement, whereas 21 percent had received Social Security disability benefits during the year prior to random assignment (Table III.3). The difference between these two percentages may be due to participants/beneficiaries not obtaining paid jobs and hence having little need for this more intensive benefits planning service.

The provision of assistance in accessing SSA's standard work incentives and the waivers for YTD was an important component of the program's benefits planning services for participants who were disability beneficiaries. (Appendix B provides descriptions of the SSA waivers for YTD.) Table III.5 shows the percentages of all CTP participants and those participants who were disability beneficiaries at baseline who used the work incentives and waivers in the first 12 months after random assignment. Most of the work incentives and waivers (the sole exception being Section 301) were triggered by earned income; just ten percent of beneficiary participants, or four percent of all CTP participants, reported any earnings to SSA in this period.[57] Among all CTP participants, the most frequently used work incentive was the EIE. Three percent of all participants used the waiver version of the EIE. One percent used the SEIE and Section 301. Only one of the 374 participants used the PASS work incentive and none used the IDA work incentive. Among the participants who were beneficiaries at baseline, six percent used Section 301 and five percent each used the EIE and SEIE. None of these youth used the PASS or IDA work incentives.[58]

b. Employment-Related Services

Virtually all CTP participants received employment-related services from the program, and the most common such services were those that promoted rapid entry into paid jobs. Table III.4 shows that more than 99 percent of participants received some type of employment service. About nine in ten participants received direct employment services, such as the development of work experiences, job placement, job coaching, and post-placement follow-up to improve job retention. Nearly the same proportion received career exploration and job search services, which included career planning, resume writing, and mock interviewing. Focus group discussions with participants revealed that most appreciated the advice and assessments regarding jobs and careers they had received from their CTSs.

[57] Disability beneficiaries with earned income are required to report it on a monthly basis to SSA, which uses those reports to determine their monthly benefit amounts. Most CTP participants were not disability beneficiaries and therefore had no reason to report any earnings they may have had to SSA.

[58] Some CTP participants who were not disability beneficiaries at baseline became beneficiaries during the ensuing 12 months. Their reported earnings and waiver use are reflected in the "All" column of Table III.5 but not in the "Disability Beneficiaries at Baseline" column.

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

	CTP Participants	
	All[a]	Disability Beneficiaries at Baseline
Reported any earnings to SSA	3.7	10.1
Used any SSA work incentive (standard or waiver)	5.6	15.2
Used SEIE (standard or waiver)	1.3	5.1
Standard only	1.3	5.1
Waiver only	0.0	0.0
Used EIE (waiver only)	3.2	5.1
Used PASS (standard or waiver)	0.3	0.0
Standard only	0.0	0.0
Waiver only	0.3	0.0
Used IDA (standard or waiver)	0.0	0.0
Used Section 301 waiver	1.3	6.3
Sample Size	**374**	**79**

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

[a]The statistics reported for all CTP participants reflect reported earnings and the use of work incentives by those who were disability beneficiaries at baseline as well as those who became beneficiaries during the ensuing 12 months.

SEIE = student earned income exclusion
EIE = earned income exclusion
PASS = plan for achieving self-support
IDA = individual development account

Employment training, covering such topics as soft skills and occupation-specific skills, was less prominent among CTP's employment-related services. Forty-three percent of participants received this service. This relatively small proportion is consistent with CTP's adherence to the principles of supported employment, which emphasize rapid attachment to work once an individual has decided upon the type of work he or she would like.

The focus group discussions with CTP participants enriched our understanding of the program's employment-related services. These youth told us that their CTSs had helped them prepare for job interviews, supported them in obtaining references from previous employers, transported them to interviews, and made sure they took the necessary follow-up steps after interviews. Almost all of the focus group participants indicated that they had been employed at some point after entering the program; however, only a third of them reported that their CTSs had helped them find work. Few of the youth in the focus groups viewed their jobs as having been closely related to their career interests, but many recognized the general life lessons and exposure to work culture that the jobs had provided.

Our interviews with the CTSs revealed a new employment-related service of CTP that was introduced and grew in importance over the course of the program's participation in the YTD evaluation. During that period, many service industry employers instituted kiosk-based electronic job application systems, which the CTSs came to regard as a significant potential barrier to employment for youth with disabilities. These kiosk systems often required applicants to answer questions about their emotional status, how they would deal with stressful situations, and how they viewed

themselves as employees. Many CTP participants found these electronic application systems to be daunting, especially those who had attention deficit disorder or concerns about their emotional status. The CTSs provided participants with one-on-one assistance with kiosk-based applications; if a youth requested it, the CTS stood alongside the youth as he or she completed an application. In addition, CTP requested and received technical assistance from TransCen on negotiating alternative application modes with employers.

c. Education-Related Services

Because of the strong supports available at both MCPS and Montgomery College, CTP's education-related services were oriented toward individual counseling and helping participants take full advantage of those available supports. CTP provided education-related services to nearly all (more than 99 percent) of the youth who participated in the program (Table III.4). Around three-quarters of participants received general education counseling and academic advisement, and staff interviews suggest this counseling and advisement was geared toward helping youth finish high school and prepare for postsecondary education, usually at Montgomery College. About one-third (35 percent) received assistance from their CTSs in obtaining academic accommodations or accessing student support services at their schools. For example, the CTSs helped youth who either were attending or thinking about attending Montgomery College to connect with the college's Office of Disability Support Services, which provides comprehensive services for students with disabilities. In addition, the CTSs helped 30 percent of participants to enroll in academic programs or register for classes, and 17 percent to access financial aid. They also arranged academic retention services, such as transportation and tutoring, for 14 percent of CTP participants. The CTSs told us that it was much easier for them to provide the services discussed here to participants who were attending Montgomery College than to those who were enrolled in other postsecondary education programs because of CTP's existing relationship with the college's Office of Disability Support Services and their proximity to the college.

The CTSs worked closely with teachers in the Transition Unit at MCPS. The TSTs were the primary source of referrals to CTP, and the CTSs were expected to meet with them to coordinate services for participants who were still in high school. (Caleb's story, below, provides an example of how the CTSs helped participants succeed in high school.)[59] In addition, the CTSs were expected to attend IEP meetings with participants who were enrolled in high school. They told us that they made every effort to do so, but Table III.4 shows that this happened for only 16 percent of participants, despite the fact that nearly two-thirds of them were attending high school at baseline (Table III.3). This may be a reflection of a lower than anticipated need for this service, failure of the CTSs to follow through with this service consistently, or possibly an ETO data entry problem.

d. Case Management Services

As highlighted in Section D of this chapter, case management services were a substantial and integral part of CTP. Participants in the program had challenging mental health, social, life skills, and planning needs, many of which could be attributed to their SED and other disabilities. Accordingly, CTP provided case management services to virtually all participants (more than 99 percent, as

[59] Caleb's story (and Jeremy's story on page 56) is presented to illustrate the various services provided by CTP. To ensure that we supplied enough information to present a comprehensive picture of youth experiences, we selected youth who were active participants in CTP. These vignettes thus are not representative of a typical CTP participant's experiences or outcomes.

Caleb's Story

Caleb was living at home when he enrolled in the CTP program at age 21. He had a diagnosis of SED, a history of abuse of over-the-counter medicines, and had been charged as a minor with stealing an automobile. He also had a troubled and complicated education record at MCPS. At the time of his initial meeting with his CTS, Caleb had been out of school for several years and was interested in obtaining a GED. However, after consulting with his CTS, he decided that reenrolling in high school at MCPS would be preferable.

Caleb's return to school was tumultuous. Soon after reenrolling, he began skipping classes. He explained this to his CTS by saying that he felt embarrassed to be still in high school at age 21 and he did not feel welcome there. Caleb and his CTS met with his school counselor in an attempt to address his attendance problem and his feelings underlying it. But shortly after that meeting he was suspended from school twice: first for insubordination and later for refusing to hand over his cell phone to a school authority when asked to do so. The CTS spoke with Caleb about returning to school, explaining, "Either you want to be in school or you don't. If you want to be there, I'll help." Caleb said that he wanted to return to school. The CTS arranged for Caleb to have another meeting with school authorities, which resulted in his readmission. Caleb's school counselor told the CTS that, absent strong support from CTP, the school would not have allowed Caleb to return. When we received our most recent update on Caleb, he was consistently attending his classes with an eye toward graduation. At that time, his CTS described his progress in school as "extremely rewarding."

After enrolling in CTP, Caleb had two short-lived jobs that he found on his own. He subsequently decided to work more closely with his CTS to find employment. Together, they focused on improving his techniques for approaching employers and participating in job interviews. The CTS accompanied him on several initial contacts with employers, but because Caleb was not comfortable with having his counselor next to him during those meetings, the CTS stood off to the side and pretended to be browsing while discreetly listening to the conversations. After each such meeting, the two of them conducted a debriefing, and the CTS provided Caleb with suggestions for improvements. Caleb and his CTS also discussed how further education could improve his job prospects, which led to his decision to return to high school. In addition, Caleb began saving money for a training program that would lead to his obtaining certification in the installation, maintenance, and repair of heating, ventilation, and air conditioning systems. He was not employed when we received our most recent report on his status, due to his return to school full time.

shown in Table III.4). The most common case management service by far was general check-in services, which 96 percent of participants received. This is a generic category of staff contacts with participants or their families to determine how they were doing and whether they were in need of services. Around half of CTP participants received mental health and vocational rehabilitation services. The table also reports that 59 percent of participants received person-centered planning services; however, the research team has determined this understates the proportion of participants who developed person-centered plans by about 30 percentage points.[60] Additionally, around a third

[60] As noted in Section D.3 of this chapter, CTP did not have just one person-centered planning tool, but rather a set of three assessments (the service needs planning grid, MHVP, and goal planning sheet). CTP staff members were instructed to record each completed assessment in ETO and to indicate on the case management screen of ETO when a person-centered plan had been developed. Through our analysis of these multiple types of data entries in ETO, we determined that person-centered plans were developed for 90 percent of CTP participants. Table III.4 reports that 59 percent of participants received person-centered planning services. The discrepancy between these two rates is due to failure by CTP staff to consistently record completed person-centered plans in the ETO case management screen when the underlying assessments had been completed.

of participants received transportation and life skills services. The lack of centrality of family support in the CTP program model is reflected in the finding that only 24 percent of participants received this service. CTP management and staff viewed participants and employers as their main clients, not the families of participants.

Our interviews with the CTSs revealed that they rarely provided case management services outside of the context of helping participants to achieve their employment and education goals. Thus, case management promoted the fundamental objectives of the program rather than diverting attention and resources from those objectives. During those same interviews, the CTSs told us that cell phones were an essential tool for delivering case management services. They used text messaging so they could communicate efficiently with CTP participants in the same medium the latter used with their peers. For example, the CTSs texted reminders to participants to take medication, study for tests, and be on time for job interviews. This technology allowed the CTSs to interact frequently with participants and more quickly establish close one-on-one relationships that were important motivators for the youth.

Jeremy's story, below, provides an example of CTP's use of case management services to prepare a youth for employment.

Jeremy's Story

Jeremy, a 19-year old youth from a Spanish-speaking family in Montgomery County, entered CTP in March 2010. Through the program, he hoped to find a job related to his interest in the culinary arts and eventually to enroll in a culinary school to train to be a chef. Jeremy brought a lot of baggage with him to the program. He had a criminal record for drunk driving and had spent nine months in a facility of the Maryland Department of Juvenile Services. Jeremy was a member of Alcoholics Anonymous and consistently attended meetings.

The CTS to whom Jeremy's case was assigned quickly referred him to the reentry program for ex-offenders at Montgomery Works and accompanied him to an orientation meeting for that program. With the CTS's support, Jeremy participated fully in the reentry program. Meanwhile, his CTS worked with him to refine his employment goals, prepare a resume, and explore the possibility of applying to Montgomery College, where he had once taken courses in business. When Jeremy was in high school, he regarded education as a "joke." But his perspective had changed and he now saw education as a means for gaining the skills he needed to be successful in a career. Jeremy's CTS also introduced him to the employment resources available at SLH, where he attended employment workshops and used computers to search for jobs. He was not employed at the time of our most recent update on his status but was actively looking for employment in the field of culinary arts.

Jeremy had been disengaged and unsure of himself when he entered CTP, but after working with his CTS for a number of months he had become much more willing to take advantage of the resources available to him. In the words of his CTS, Jeremy had moved to "a very different place" and was willing to "jump right into a task." Jeremy himself remarked that he had come to feel more like an adult during his participation in CTP and was seeing things differently. He enjoyed and valued his relationship with his CTS and believed that CTP had provided him with the tools and resources to find a good job.

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

	CTP Participants
Ever Received Service	99.5
Timing of Service Receipt	
Time between enrollment and first service contact	
Average number of days	0.1
Median number of days	0.0
First service contact occurred within:	
30 days of enrollment	100.0
180 days of enrollment	100.0
Average number of days between enrollment and second service contact	18.6
Time between enrollment and second service contact	
Average number of days	18.6
Median number of days	13.0
Second service contact occurred within:	
30 days of enrollment	83.0
180 days of enrollment	100.0
Types of services received during the first service contact[a]	
Benefits planning	92.2
Employment	88.2
Education	86.9
Case management	89.6
Types of services received during the most recent service contact[a]	
Benefits planning	3.5
Employment	34.2
Education	20.1
Case management	92.8
Sample Size	**374**

Source: The CTP ETO management information system.

Notes: We excluded 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 374 CTP participants. We calculated the statistics on the timing of service contacts based on those participants who ever received a first or second contact.

[a]The types of services received are not mutually exclusive, so the percentages add to more than 100.

2. The Timing of Services

CTP staff almost always initiated services for youth simultaneously with their enrollment in the program. Table III.6 shows that the average number of days between enrollment and first service contact was just 0.1 days, and all youth received their first service contact within 30 days of enrollment. Subsequent service contacts also were timely; the median elapsed time between enrollment and the second service contact was 13 days, and 83 percent of second contacts occurred within a month of enrollment. The CTSs told us that participants who did not receive their second service contact within 30 days often were difficult to reach.

CTP generally provided a participant with a diverse set of services during the initial service contact, but the mix of services shifted dramatically over the course of a youth's involvement in the program. The lower part of Table III.6 shows that for approximately nine in ten participants, the initial service contact included each of the four types of services discussed earlier in this section:

benefits planning, employment, education, and case management. Table III.6 also shows the services that participants received during their final contact with CTP in the 15-month post-random assignment observation period for our analysis of ETO data.[61] Most youth (93 percent) received case management services during that contact. Much smaller proportions received employment services (34 percent) and education services (20 percent). Only four percent received benefits planning services. With its strong tilt toward case management, this mix of services during the final contact in the observation period is consistent with the program's design for post-employment follow-along services.

3. The Intensity of Services

The intensity of services provided to enrolled youth by CTP was high, whether measured by the number of service contacts or their cumulative duration. On average, program staff made 72 service contacts of any type per participant, lasting a total of 28 hours (Table III.7).[62, 63] 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 directly involving the youth was 24 hours (results not shown). The average length of a single service contact was 19 minutes; only 12 percent lasted longer than 30 minutes.

Case management and employment services were more intense than other services offered by CTP. Case management accounted for half of all service contacts (37 per participant, on average) and 42 percent of cumulative service time (12 hours per participant, on average), while employment services accounted for a quarter of all service contacts (19 per participant) and 36 percent of cumulative service time (10 hours per participant). Education services accounted for just under one-fifth of all service contacts and cumulative service time. Most participants received only one contact from CTP for benefits planning services; however, about one-fifth of them received four or more such contacts (results not shown), which drove the average number of contacts for that purpose up to three. The average cumulative duration of those contacts was one hour per participant.

CTP delivered most of its services in person. Overall, 65 percent of service contacts were in person, 25 percent were by telephone, and 10 percent were by other means, such as mail, email, and text messaging (results not shown). Case management services were the least likely to be delivered in person, at about 50 percent, while benefits planning, employment, and education services were primarily provided in person, at about 80 percent for each of these types of services.

G. Youth Satisfaction with Services

Although a large proportion of CTP participants did not recall having received services from the program, many of those who did were satisfied with the program as a whole and regarded their

[61] A participant's final service contact with CTP in the 15-month post-random assignment observation period was not necessarily his or her last contact with the program. Recall from Section E.7 that CTP provided participants with two years of follow-along services after they had attained their program goals.

[62] The average duration of services does not include travel time for staff to meet with participants, which was significant.

[63] In Table III.7, the median values for the number of service contacts per participant and the cumulative duration of those contacts are 69 contacts and 26 hours, respectively. These median values do not differ dramatically from the corresponding mean values, indicating that the distributions of service contacts and duration are not highly skewed.

Table III.7. Intensity of CTP Services

	Any CTP Service[a]	Benefits Planning	Employment-Related	Education-Related	Case Management
Ever Received Service (%)	99.5	97.9	99.5	99.5	99.5
Intensity of Service Use					
Number of service contacts per participant					
Average	72.0	3.0	18.8	13.7	36.5
Median	69.0	1.0	17.0	12.0	36.0
Service time per participant					
Average (hours)	28.3	1.0	10.2	5.3	11.8
Median (hours)	26.1	0.3	8.0	3.9	10.1
Service time per contact					
Average (minutes)	18.7	19.5	26.7	20.4	14.4
Median (minutes)	15.0	15.0	20.0	15.0	10.0
Percentage of contacts lasting longer than 30 minutes	12.4	12.6	24.4	12.6	6.8
Sample Size	**374**	**374**	**374**	**374**	**374**

Source: The CTP ETO management information system.

Notes: We excluded 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 374 CTP participants. We calculated the statistics on the intensity of services based on those participants who actually received the services in question.

[a]We capped the "number of service contacts per participant" at one per day per youth for the analysis of any CTP service.

Table III.8. Satisfaction with CTP Services Among Participants (percentages)

	CTP Participants
CTP was "Somewhat Helpful" or "Very Helpful" in Assisting Participant with:	
Gaining information about career opportunities	49.0
Acquiring a job or work-related knowledge and skills	48.5
Developing clearer career goals	46.9
Developing a sense of confidence in abilities	44.3
Working effectively with others	41.9
Understanding self	38.7
Sample Size	**314**
Participant's Overall Experience with CTP	
Very good	26.6
Good	24.7
Fair	9.7
Poor	2.3
Don't know	0.3
Did not recall receiving services	36.4
Usefulness of CTP Services	
Very useful	35.4
Somewhat useful	23.4
Not very useful	2.3
Not at all useful	2.0
Don't know	0.7
Did not recall receiving services	36.4
Sample Size	**308**

Source: YTD 12-month follow-up survey.

Note: This analysis is based on 314 treatment group youth who enrolled in CTP and completed the 12-month interview. In this group, 112 youth did not mention having received CTP services. The analysis of the helpfulness of CTP (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 four and six 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 CTP and the usefulness of CTP services (bottom panel) is smaller because questions on these topics were not asked of six proxy respondents.

specific experiences in it as having been helpful. In Table III.8, we present findings from the evaluation's 12-month follow-up survey on satisfaction with CTP. These corroborate findings from our focus group discussions with participants, during which even those youth who had had multiple CTSs expressed generally positive opinions about CTP. These latter youth told us that the transitions between counselors were smooth and done in a way that they did not greatly disrupt services or negatively impact their relationships with CTP. While staff turnover did not seem to affect the participants' views of CTP services, some parents expressed concern about the staff changes during a parents-only focus group discussion. Participants in the youth focus groups also told us that they had received mostly employment-related services from the program and that the staff had been helpful. However, our sense was that a number of the focus group participants had obtained jobs independently of CTP.

Approximately one-third to one-half of CTP participants felt that each of six specific experiences or services that they may have had or received through the program had been somewhat or very helpful. The values range from 39 percent feeling that the program had helped them

understand themselves to 49 percent feeling that it had provided them with information about career opportunities. For this analysis, the 36 percent of participants who did not recall having received services from CTP were classified with those who did recall the services but did not consider them to have been somewhat or very helpful, on the assumption that those who did not remember the services did not find them to have been helpful.[64] When we exclude these individuals from the analysis, the proportion who rated these experiences highly ranges from 61 to 77 percent.

Just over half (51 percent) of CTP participants reported that their overall experience with the program had been either good or very good, whereas only 2 percent rated their experience as having been poor. A higher proportion of participants, 59 percent, reported that the program services had been somewhat or very useful. Again, only 2 percent had an unambiguously negative opinion of the program, telling us that the services had been not at all useful.

H. Summary and Implementation Lessons

CTP was designed to promote the economic self-sufficiency of youth with severe emotional disturbances and related disabilities, and to assist youth in achieving both educational and employment outcomes. Since its inception, CTP had a strong program vision that did not change substantially over the course of its participation in the YTD evaluation. CTP was committed to rapid, individualized job placements and meeting the employment-related service needs of youth with mental illness or related disabilities. It drew significant lessons from adult Supported Employment programs and applied them to youth with mental health issues. CTP also had a significant focus on assisting youth with finishing high school and achieving academic goals. Because only a small fraction of CTP youth received SSI or DI benefits, benefits counseling played a less important role for this program.

CTP appeared to be a well-managed program with a very engaged program manager and dedicated staff. CTP required little service delivery-related technical assistance and provided the full range of services intended in their original program model. The program changes CTP made during the course of the study further strengthened its existing commitment to supported employment and job development principles. CTP focused on hiring younger staff as CTSs, which made staffing costs more affordable and facilitated the forming of strong bonds between counselors and participants, but meant that the CTSs generally did not stay in their jobs for a long time. CTP management anticipated the high turnover among the CTS, given their young ages, the nature of their work, and their relatively low pay. So the managers developed an effective plan to hire and train replacements rapidly. CTP also made good use of management tools to track both caseloads and program outcomes, very closely monitored both their recruitment and job placement successes, and provided feedback to staff on these issues throughout the program.

CTP was unique among the YTD sites in two ways: (1) it was an existing program that scaled up for the research and (2) it did not serve youth on SSI exclusively. Because recruitment could not be accomplished through the use of SSA lists, CTP was responsible for working with MCPS and other partners to recruit youth into services. CTP management acknowledged that it underestimated the challenges of recruitment and made several shifts in its recruitment strategy over the course of the first half of the program's participation in the YTD evaluation. By adding recruitment-specific

[64] As reported in Table III.4, virtually all CTP participants received some program services. Additional analysis, not shown, indicates that for 90 percent of the participants who did not recall having received services from CTP, at least 11 service contacts were recorded in ETO.

staff, developing a better partnership with MCPS, and receiving technical assistance, CTP eventually met its recruitment goals. Nevertheless, recruitment was an unanticipated drain on CTP resources and may have affected service provision, mainly by reducing the amount of supervision that CTSs received.

CTP's partner organizations praised the program for the services that it provided to youth with disabilities in Montgomery County. The consensus among MCPS, DORS, and other partner staff was that CTP not only provided uniquely personal and intense services to youth, the program also did a good job of coordinating the many existing services in Montgomery County for the youths' benefit. Participants generally were pleased with CTP services, although parent reviews were mixed: some appreciated the strong role models and supports CTP provided, but others were concerned about staff turnover and felt disconnected from the program.

We conclude this chapter by discussing six key implementation lessons and challenges for CTP that the research team identified through the process analysis.

1. **A relatively strong existing service system can provide many opportunities for a program to collaborate with other service providers. However, in this context the differential in services available to program participants versus non-participants may be low.** Montgomery County has a population with relatively high socioeconomic status, a strong and well-funded school system, and a history of collaboration among MCPS, DORS, CTP, and other agencies and programs to serve youth with disabilities. The Transition Unit of MCPS has a significant presence in every public high school in the county. During the course of CTP's participation in the YTD evaluation, the school district added five new staff members who served as vocational rehabilitation counselors, focusing their efforts on students who did not have access to CTP. DORS had dedicated youth counselors, and young adults accounted for a third of the agency's successful case closures. While no other agency or program in Montgomery County provided SED youth with the same range of services as CTP, a resource-rich environment meant that there were many available service options for youth with disabilities in the county, as well as many partnership opportunities for CTP.

2. **Staff turnover need not be a problem if the program design addresses it through a plan for rapid replacement of departing staff and strong training for new staff.** CTP filled its CTS positions with young, recent college graduates at modest salaries instead of older, more experienced workers at higher salaries. Accordingly, staff turnover in these positions was high but fully anticipated by management. Management had protocols in place for rapidly filling vacancies and effectively training new staff. Consequently, high turnover among the CTSs did not appear to have a significant detrimental impact on CTP services.

3. **Scaling up from a small, boutique program to a much larger program with many more participants and staff benefits from leaders who are not only flexible but also maintain a consistent vision for the program.** CTP staff who were with the program prior to its involvement in the YTD evaluation, including the program manager, were concerned about the greater number of written protocols required by a larger program. However, organizing the CTSs, the program's principal front-line staff, into teams that met weekly facilitated their sharing of ideas regarding tools and procedures that would allow them to perform their jobs more effectively. The CTS supervisors took those ideas and formalized them in written protocols. This organic

approach to protocol development meant that CTP's management could concentrate on ensuring continuity in the program's fundamental approach and mission while allowing for the development of necessary tools and procedures at the staff level.

4. **Scaling up a program may result in its serving new subpopulations with which the staff have less experience.** The tripling in size of CTP during its participation in the YTD evaluation necessitated that it engage a larger number of youth with a broader range of disabilities, including youth with Asperger's syndrome and those receiving DDA services. CTP had little background in serving such youth. The program management made efforts to educate staff on these prominent new subpopulations and their related issues, but the level of training was not equivalent to that provided for working with CTP's traditional core population of youth with SED.

5. **Programs that emphasize services to achieve specific outcomes may attract applicants who are highly motivated to achieve those outcomes.** CTP's recruitment pitch emphasized the program's services to support employment and educational advancement. Such services may have been particularly attractive to youth who were already motivated to pursue employment and/or continued education, suggesting that youth without such motivation, but perhaps with an even greater need for the services, may have been less likely to enroll in the evaluation.

6. **Front-line staff in employment-focused interventions may prefer to focus on preparing participants for jobs rather than working with employers to develop job opportunities; however, this tendency can be offset through well-designed policies and tools.** CTP gave its CTSs significant formal training in job development, facilitated peer-to-peer mentoring in this area, established clear numeric goals for employer contacts, provided state-of-the-art electronic tools for managing those contacts, and expanded its staff to include a specialist to manage job development activities. As a result of these steps, the CTSs were significantly invested in job development and employer support despite their reported initial discomfort in working with employers.

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 CTP was to place treatment group youth participating in program services in competitive employment based on their individual interests. As described in Chapter III, CTP fully embraced work-related experiences as the central focus of its services: 92 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 CTP lead to treatment group youths' use of more employment-promoting services than if the program had not been available? In Chapter III, we used data from the CTP's management information system to show that nearly all treatment group youth participating in the program received employment-promoting services from program staff. However, in this chapter, to answer the above question, we use information from survey data collected from both treatment and control group youth approximately 12 months after random assignment.[65] It is important to note that this analysis captures the use of services delivered by CTP and other providers. Because the program provided referrals to local service providers, it could have increased the use of services beyond those provided directly by CTP. On the other hand, CTP services could have displaced some services that other organizations otherwise would have provided.

We found that CTP 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 program also increased the proportion of youth who used non-employment services, particularly discussions about interests and future plans, as well as assistance with enrolling in education and training programs. CTP also had a significant impact on the number of months of overall service use. All of these service-utilization measures cover the period between random assignment and the evaluation's 12-month follow-up survey.

A. CTP Increased the Use of Employment Services

Consistent with the intent of the YTD program model, CTP increased the use of any employment-promoting service by youth with disabilities. Seventy-six percent of treatment group youth reported using any employment-promoting service in the year following random assignment

[65] 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."

(Table IV.1). We estimated that, in the absence of CTP, only 54 percent of these youth would have used any such service. The program had a positive impact of 22 percentage points on the primary outcome measure in the domain of employment-promoting services (reflecting a relative impact of 41 percent). The impact is statistically significant at the one percent level.[66]

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 CTP service model emphasized the provision of employment-promoting services, including direct employment services. Consistent with this model, we found that the program increased the use of support for career counseling (by 12 percentage points, a relative increase of 34 percent); resume writing and job search (by 31 percentage points, a relative increase of 91 percent); and benefits counseling (by 10 percentage points, a relative increase of 98 percent).[67] However, we found that CTP had no impact on participants' use of job-shadowing or other employment-focused services, such as computer classes and social skills training.

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 was about the same, at 75 percent, and the estimated impact remained at 22 percentage points and statistically significant at the one percent level (results not shown in table).

We also examined whether CTP 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 CTP, 73 percent of treatment group youth would have received non-employment services; the program increased the use of these services by 12 percentage points (a relative increase

[66] 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 CTP, 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 CTP" 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.

[67] In Chapter III, Section F, we reported that our analysis of ETO data revealed that CTP delivered benefits planning services to 98 percent of the treatment group youth who participated in the program. The participation rate was 89 percent, so it follows that the program delivered benefits planning services to .89 x 98 = 87 percent of all treatment group members. The difference between this rate, computed from ETO data, and the 19 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 CTP. As reported in Table III.7, CTP provided an average of only one hour of benefits planning services to program participants. These services may not have been remembered by youth when they completed the follow-up survey.

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

	Treatment Group				
	Observed Mean	Estimated Mean w/o CTP	Impact		P-Value
Primary Outcome					
Any Employment-Promoting Service	76.0	54.0	22.0	***	0.00
Supplementary Outcomes					
Employment-Promoting Services					
Career counseling	48.5	36.3	12.2	***	0.00
Support for resume writing and job search activities	65.3	34.1	31.2	***	0.00
Job shadowing, apprenticeship/internship	11.8	10.4	1.4		0.59
Other employment-focused services (basic skills training, computer classes, problem solving, and social skills training)	2.8	2.0	0.9		0.52
Counseling on SSA benefits and work incentives	19.2	9.7	9.5	***	0.00
Non-Employment Services					
Any non-employment service	84.4	72.9	11.5	***	0.00
Discussions about youth's general interests, life, and future plans	76.9	66.3	10.6	***	0.00
Life skills training	33.9	28.6	5.2		0.17
Help getting into an education or training program	38.5	24.2	14.3	***	0.00
Help with accommodations	34.1	29.6	4.6		0.22
Referrals to another agency	3.0	1.7	1.2		0.37
Transportation services	2.1	0.8	1.3		0.23
Health services	8.9	6.7	2.2		0.32
Case management (not otherwise specified)	2.3	0.6	1.7		0.12
Other non-employment services	8.5	3.3	5.2	***	0.01
Overall Service Use					
Any employment or non-employment service	89.5	76.6	12.8	***	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 CTP, 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 344 treatment group youth and 295 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.

of 16 percent). Furthermore, consistent with the CTP service model and its relatively strong emphasis on providing education-related services, we found a large impact on the percentage of youth who reported that they received assistance getting into an education or training program. Thirty-nine percent of treatment group youth reported having such assistance, compared with only 24 percent who would have received the same assistance in the absence of CTP, leading to an impact of 14 percentage points (a relative increase of 59 percent). We also found a substantial impact of CTP on whether youth received discussions of general interests, life, and future plans. This is not surprising, given CTP's emphasis on such discussions as part of the program's engagement and planning activities with new participants. Seventy-seven percent of the treatment

group youth reported having had such discussions, compared with only 66 percent who would have had these discussions in the absence of the intervention, leading to an impact of 11 percentage points (reflecting a relative increase of 16 percent). Additionally, we found that CTP increased the use of other non-employment services by a statistically significant five percentage points.

Finally, we found that CTP increased the share of youth using any service. Looking at overall service use (employment-promoting or non-employment), we found that close to 90 percent of treatment group members used any service at all. In the absence of CTP, 77 percent of them would have used services. The 13 percentage point difference is statistically significant and represents a relative increase of 17 percent. Thus, the program led to an increase in the combined use of employment and non-employment services.

In sum, we found that CTP resulted in greater use of both employment-promoting and non-employment services. In the next chapter, we examine whether the increased services under CTP, 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 CTP on the amount of services used.

B. CTP 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.[68] 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 is the number of months during which a youth reported using services from any provider. We estimated that treatment group members used services for 8.8 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 35 percent (statistically significant at the one percent level). Further analysis suggests that this impact was driven in part by the fact that more treatment group youth used any service, as well as 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 about ten months for the treatment group and under nine 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 program 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).

[68] 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.

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

	Treatment Group				
	Observed Mean	Estimated Mean w/o CTP	Impact		P-Value
Supplementary Outcomes					
Amount of Services Used[a]					
Average number of months of service use[b]	8.8	6.5	2.3	***	0.00
Average number of contacts with providers[b]	106.2	99.4	6.8		0.54
Average number of hours of service[b]	196.2	168.8	27.4		0.38
Average number of providers	2.2	1.9	0.3	**	0.02
Unmet Service Needs (%)					
Any unmet service need	23.5	27.6	-4.1		0.26
Type of unmet service need					
Help finding a job	9.6	9.8	-0.2		0.95
Other employment services	13.1	13.7	-0.6		0.84
Basic skills training	1.9	2.4	-0.5		0.66
Other unmet needs	14.8	15.8	-1.1		0.73

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 CTP, 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 344 treatment group youth and 295 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.

[a]The average values include youth who did not use any (employment or non-employment) services.

[b]For 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 11.3 to 12.5 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.

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 CTP had no impact on the number of hours of services used. Treatment group members used 196 hours of services, on average, and we estimated that they would have used 169 hours in the absence of the program. The estimated impact of 27 hours is not statistically significant.[69] The average number of hours of services treatment group members used may seem

[69] 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 (223 hours) than control group youth (236 hours), but the difference (13 hours) is not statistically significant (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 analysis sample, this finding should not be interpreted as a formal impact estimate.

surprisingly high in light of the finding from the process analysis, which showed that youth participating in CTP received an average of 28 hours of services from the program (Table III.7). One explanation is that the survey-based measure reflects services received from CTP 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.[70] Two additional explanations are (1) the fundamental differences between how CTP 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 Montgomery County, CTP used partners and referrals to meet the needs of its participants, perhaps leading to the expectation that the program would have increased the total number of service providers used. On the other hand, given that the program 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 program could have had the opposite effect on the number of service providers used. We estimated that CTP increased the number of service providers used by youth. On average, treatment group members received services from 2.2 providers (including CTP), and we estimated that they would have used just 1.9 providers had they not had the opportunity to participate in the program (a relative increase of 16 percent). The difference is statistically significant at the five percent level.

Although CTP increased the amount of services used, the program did not reduce the share of youth with unmet service needs. Among youth in the treatment group, 24 percent reported any unmet need (Table IV.2).[71] We estimated that the share would have been about the same in the absence of the program. Furthermore, CTP had no impact on the share of youth reporting unmet need for any specific service, including help finding a job. The result is perhaps not surprising in light of the relatively strong service environment in Montgomery County.

C. CTP Did Not Increase Understanding of the Relationship Between Benefits and Employment

Unlike the five other projects that participated in the YTD random assignment evaluation, CTP targeted youth who mostly were not receiving SSA disability benefits. Because benefits counseling is an integral part of the YTD conceptual framework (Figure I.1), CTP developed benefits counseling services in order to participate in the YTD evaluation. CTP's benefits counseling was designed to help youth understand how benefits could be used as a step toward long-term economic independence, how work might impact any benefits they receive, and how to avoid long-term dependence on SSA disability benefits. Although these issues are potentially salient even for youth not receiving disability benefits, benefits counseling played only a small role in the CTP service model: on average, participants received only one hour of this service (Table III.7). With these facts

[70] 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-five percent of treatment group members and 96 percent of control group members used fewer than 1,000 hours of services. Among these youth, the average amount of services used was 118 hours for those in the treatment group and 111 hours for those in the control group.

[71] 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 CTP 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.

in mind, it is perhaps not surprising that we found no impacts of CTP on understanding of the relationships between employment and benefits, and no impacts on knowledge of specific SSA requirements and work incentives, with the exception of the student earned income exclusion.

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.[72, 73] Fifty-eight percent of treatment group members reported correctly that the entire cash benefit is not lost once work begins, whereas in the absence of CTP, we estimate this would have been 56 percent (Table IV.3). Seventy-four percent of treatment group youth reported correctly that medical insurance is not lost as soon as work commences. In the absence of CTP, we estimate that 71 percent would have understood this relationship correctly. However, these differences are not statistically significant.[74]

In addition to determining whether youth understood the basic principle that all benefits are not lost when they start working, we examined whether CTP increased their awareness of specific SSA requirements and work incentives. Consistent with the absence of a strong emphasis on benefits counseling in CTP, awareness among treatment group youth was relatively low. The 12-month survey asked youth whether they had ever heard of each of the following six requirements or work incentives for disability beneficiaries:[75]

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 less than one-fourth of treatment group members were aware of the CDR/age-18 medical redetermination requirement and each of the five work incentives. We estimated that CTP significantly increased awareness of the SEIE by five percentage points, but had

[72] 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: five percent of records were missing youth responses and 42 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: 82 percent of records were missing youth responses, whereas 42 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.

[73] 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."

[74] Understanding of these relationships was about the same among treatment group youth who had worked for pay in the year following random assignment. Of these youth, 57 percent understood the relationship between work and SSA benefits, and 68 percent understood the relationship between work and medical coverage (not shown).

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

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

	Treatment Group				
	Observed Mean	Estimated Mean w/o CTP	Impact		P-Value
Supplementary Outcomes					
Knowledge of SSA Requirements and Work Incentives					
Understands the relationship between work and SSA benefit receipt	58.0	55.8	2.2		0.60
Understands the relationship between work and medical coverage	73.5	70.6	2.9		0.44
Ever heard of EIE	11.0	10.6	0.4		0.88
Ever heard of SEIE	12.1	6.8	5.3	**	0.02
Ever heard of CDR/age-18 medical redetermination requirement (parent report)	21.6	24.6	-3.0		0.50
Ever heard of PASS	10.6	7.1	3.5		0.14
Ever heard of IDAs (parent report)	6.8	7.1	-0.4		0.89
Ever heard of IDAs (youth report)	8.2	5.8	2.4		0.26
Ever heard of Medicaid-while-working or continued Medicaid eligibility	19.2	17.1	2.1		0.50
Potential Sources of Information on Work and SSA Benefits					
CTP[a]	11.0	0.00	0.00	***	0.00
SSA office	40.7	39.1	1.6		0.69
SSA website	8.6	6.2	2.4		0.26
Friends and family	11.3	17.6	-6.3	**	0.03
Internet	30.9	36.3	-5.4		0.16
Vocational rehabilitation agency	0.5	0.6	-0.1		0.90
Other	18.3	23.9	-5.6		0.11

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 CTP, 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 344 treatment group youth and 295 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.

[a]We were unable to obtain a regression-adjusted impact estimate because no control group member cited CTP 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.

no impact on awareness of the other work incentives or the CDR requirement.[76] Knowledge of SSA requirements and work incentives does not appear to be strongly related to work experience: Among

[76] Awareness of SSA work incentives was roughly similar 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 a 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).

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).[77]

With the exception of CTP itself, the program had little impact on where youth and their parents would turn for information on how working might affect SSA benefits. Eleven percent of treatment group members reported that they viewed CTP 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 program (Table IV.3).[78] We also estimated that the program significantly decreased the percentage of treatment group members who would seek such information from friends and family. Eleven percent of treatment group youth viewed friends and family as potential sources of this information, whereas we estimate that 18 percent would have done so in the absence of the program. The program did not have statistically significant impacts on the shares of youth who would seek information on work and benefits from other sources.

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

The CTP 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 program impacts on the types of providers of transition services—other than CTP—used by youth with disabilities in Montgomery County.

Among youth in the treatment group, 38 percent reported using services from CTP (Table IV.4). Not surprisingly, this is smaller than the share receiving services as recorded in ETO by program staff: 89 percent of treatment youth enrolled in CTP, of whom 99.5 percent used program services (Chapter III, Sections E and F). That the share of treatment group members reporting program 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 CTP was the provider. Table IV.4 reports that, in the absence of CTP, one percent of treatment group would have used CTP services. This seemingly illogical result is explained by the fact that three control group youth reported in the 12-month follow-up survey that they had received CTP services. This may have occurred because all youth in the evaluation were introduced to CTP during the recruitment meetings that took place prior to random assignment. A year later, these three control group members may have recalled those meetings as ones in which they received CTP services.[79]

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[77] Among treatment group youth who had worked following random assignment, 9 percent had heard of the EIE, 12 percent had heard of the SEIE, 12 percent had heard of the PASS, 9 percent had heard of IDAs, and 18 percent had heard of continued Medicaid eligibility. These findings are similar to those reported in Table IV.3 for all treatment group youth. The CDR provides an exception to this pattern. For treatment group youth who worked following random assignment, only 16 percent of their parents reported they had heard of the CDR, compared with 22 percent of the parents of all treatment group youth. The lower awareness of the CDR among the parents of youth who had worked may reflect the fact that these youth were somewhat older. Among youth over 18 who were not SSA beneficiaries at age 18, the CDR is not relevant.

[78] 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.

[79] Control group members could request one-hour individualized counseling sessions from CTP. According to records maintained by CTP, 37 control group members actually requested and received such sessions. However, CTP

(continued)

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

	Treatment Group				
	Observed Mean	Estimated Mean w/o CTP	Impact		P-Value
Supplementary Outcomes					
Type of Service Provider					
CTP	37.5	1.2	36.3	***	0.00
One-Stop Workforce Center	0.8	1.1	-0.4		0.66
Schools or school districts	51.7	55.5	-3.8		0.34
Vocational rehabilitation agency (DORS)	2.7	7.0	-4.3	**	0.01
Work-related, sheltered workshop, employment agency, job training	3.6	7.2	-3.6	*	0.05
SSA office	1.1	1.5	-0.4		0.75
Health services providers	9.9	8.6	1.4		0.56
Other providers primarily serving people with disabilities	12.8	6.8	6.0	**	0.01
All other providers	35.6	27.3	8.3	**	0.03

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 CTP, 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 344 treatment group youth and 295 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 found mixed evidence on the impact of CTP on the use of other service providers. CTP significantly reduced the shares of treatment group youth who reported receiving services from the state vocational rehabilitation agency (DORS) and other work-related service providers. For example, among treatment group youth, three percent reported receiving services from DORS. We estimated that, in the absence of CTP, the share would have been seven percent. The reduction in services received from DORS may have occurred because CTP met these service needs directly or because the agency focused its efforts on youth who were not receiving CTP services (such as those in the control group). On the other hand, CTP increased the share of youth who reported receiving services from two types of "other" providers: (1) it increased the use of other providers that primarily served people with disabilities by six percentage points, and (2) it increased the use of all other providers by eight percentage points. This is likely a result of CTP having provided its participants with referrals for types of services that the program could not provide directly.

We found no impacts of CTP on the use of services from the One-Stop Workforce Center, schools, the local SSA office, or health service providers.

(continued)

had no record of having provided such sessions to the three control group members who reported in the 12-month follow-up survey that they had received services from CTP.

E. Impacts on the Use of Employment Services Varied Depending on Prior Work Experience

Reasonable arguments can be advanced for why the impacts of CTP on the use of employment-promoting services might have been different for some subgroups of youth than others. For example, youth who were receiving SSA disability benefits at baseline might have been less likely to engage in work-related activities; thus, we might expect to observe smaller impacts on their use of employment services. As another example, youth who were 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 baseline measures of receipt of SSA disability benefits, age, school attendance, and work experience.

Overall, we found statistically significant evidence that the estimated impact of CTP on the use of employment services varied for only one of the subgroup pairs considered. Table IV.5 shows that the difference between the impact estimates for youth who worked for pay in the year prior to random assignment (32 percentage points) and for those who did not work in that year (10 percentage points) is statistically significant. This result suggests that CTP had a greater impact on receipt of employment services for youth with work experience, in large part because in the absence of CTP, youth with work experience would have been less likely than those without work experience to receive employment services. Possibly youth with work experience who did not have access to CTP felt they did not need employment services. Consistent with this hypothesis, in the next chapter we report that among youth with baseline work experience, the rate of paid employment during the year following random assignment was fairly high, about 65 percent, without regard for whether they had access to CTP services.

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

	Treatment Group						
	Observed Mean	Estimated Mean w/o CTP	Impact		P-Value	Treatment Group Size	Control Group Size
Benefits Receipt							
Received SSA disability benefits in prior year	75.3	65.6	9.8		0.22	69	65
Did not receive SSA disability benefits in prior year	76.1	50.7	25.4	***	0.00	270	215
(P-value of difference in impacts)					(0.12)		
Age							
Under age 18 at baseline	80.7	57.5	23.3	***	0.00	157	121
Age 18 or over at baseline	72.1	51.2	20.9	***	0.00	182	159
(P-value of difference in impacts)					(0.58)		
School Attendance							
In school at baseline	78.9	59.0	19.9	***	0.00	267	229
Not in school at baseline	65.4	35.5	29.9	***	0.00	72	51
(P-value of difference in impacts)					(0.57)		
Paid Work Experience							
Worked for pay in prior year	77.6	46.1	31.5	***	0.00	200	150
No work for pay in prior year	73.6	63.2	10.3	*	0.08	138	130
(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. 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 CTP, 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

CTP sought to improve economic self-sufficiency and independence among youth diagnosed with SED by providing intensive services, including work-based experiences, as well as the waiver of certain disability program rules for those youth who were receiving SSA disability benefits. 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 CTP on employment, earnings, and job characteristics. In Section D we present estimates of the program'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 CTP had no impact on employment during the initial year after youth enrolled in the evaluation. Despite the fact that youth in the evaluation's treatment group achieved a relatively high rate of paid employment and relatively high average earnings, the program did not make significant differences in these and other employment-related outcomes compared with what these youth would have achieved in the absence of the program.[80] A number of factors may account for these results. CTP's target population consisted of youth whose disabilities were not so severe as to preclude many of them from working, even in the absence of CTP; indeed, 55 percent of the evaluation enrollees had worked for pay during the year before random assignment (Table II.1). In addition, many of the youth in CTP's target population were from families with a relatively high socioeconomic status, which may have provided them with strong family support for employment, useful networks of contacts, and resources to mitigate the implications of their disabilities. Moreover, while many of the youth may not have been in need of intensive services, they nevertheless had access to significant supports through MCPS and DORS. These and possibly additional factors contributed to the result that the employment-promoting services of CTP were not sufficiently robust to generate statistically significant positive impacts on employment and earnings in the year following random assignment. Future analyses under this evaluation may find employment-related impacts of the program that could emerge in later years.

A. CTP Had No Impact on Paid Employment

Maximizing self-sufficiency through work was a central goal of the YTD interventions; consequently, we identified paid employment as a key domain for the analysis of the short-term impacts of CTP 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 more than three-quarters of the youth in the evaluation were students, who would not be expected to work intensely 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 the receipt of services, as CTP emphasized experiences in paid employment.

[80] Among all six YTD projects included in the random assignment evaluation, the treatment group youth in the CTP evaluation had the highest employment rate in paid jobs and the highest average annual earnings in the year following random assignment.

CTP had no significant impact on the share of youth with paid employment during the year following random assignment. Fifty-three percent of the treatment group youth were ever employed in paid jobs during the follow-up period (Table V.1).[81] In the absence of CTP, we estimated that 58 percent of the youth would ever have been employed in paid jobs during that period. The estimated impact of negative four percentage points is not statistically significant at the ten percent level.

To enhance our understanding of the finding of no impact on the primary employment outcome, we conducted supplementary analyses of other employment-related outcomes. Table V.1 presents the 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, CTP had no impact on the share of youth employed in any job (paid or unpaid). Although 59 percent of treatment group youth were ever employed in any job during the year following random assignment, this was four percentage points less than would have been employed in the absence of the intervention; however, the difference is not statistically significant. The prevalence of employment in unpaid jobs was low; only five percent of treatment group youth were ever employed in jobs without pay. The estimated impact of CTP on the share of youth employed in unpaid jobs—one percentage point—is not statistically significant.

CTP also had no 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 29 percent of the 52 weeks (roughly 15 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 CTP, they would have been employed for 31 percent of the 52 weeks. The estimated impact of negative three percentage points on the extent of paid or unpaid employment is not statistically significant. The program also had no significant impacts on the extent of either paid employment only or unpaid employment only. The results in Table V.1 also show that CTP had no statistically significant impact on another measure of the extent of employment—the number of jobs held by youth during the follow-up period.

However, CTP did have a statistically significant, but negative, impact on employment status at the time of the follow-up survey (Table V.1).[82] Youth could have been in any one of four

[81] In Chapter III, Section D.4, we report that our analysis of ETO data revealed that 71 percent of CTP participants were employed in competitive paid jobs at some point during their involvement in the program. When we focus on the year following random assignment, 49 percent of the CTP participants were employed in competitive paid jobs according to ETO records; the rate is 50 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 53 percent rate of paid employment computed for treatment group members from the 12-month survey data (Table V.1) are thus quite similar.

[82] In addition to a negative impact on employment status at the time of the follow-up survey, we found that CTP had negative impacts on employment status and hours of employment in month 12 of the year following random assignment (Figure V.1), which also led to negative impacts on hours of work, earnings, and income in month 12 (Figures V.3, V.4, and VII.1). These results are highly interrelated due to the methodology that we used to construct the outcome measures. Therefore, they should not be interpreted as if they were independent findings. Although these estimated impacts are statistically significant, given the preponderance of evidence related to CTP's impacts on employment related outcomes, we conclude that the program did not have any impact on employment during the year following random assignment. If the negative impacts that appear towards the end of the first year after random assignment were to persist in the subsequent months or years, they would become apparent in our planned impact analysis based on the evaluation's three-year follow up survey.

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

	Treatment Group				
	Observed Mean	Estimated Mean w/o CTP	Impact		P-Value
Primary Outcome					
Ever employed in paid job during first year after random assignment (RA)	53.4	57.5	-4.2		0.29
Supplementary Outcomes					
Employment During the First Year After RA					
Ever employed in any (paid or unpaid) job	58.5	62.6	-4.1		0.29
Ever employed in unpaid job (but not on paid job)	5.1	4.4	0.7		0.69
Extent of Employment During First Year After RA[a]					
Percentage of weeks employed in any (paid or unpaid) job since RA	28.8	31.4	-2.6		0.38
Percentage of weeks employed in paid jobs since RA	26.1	28.9	-2.8		0.32
Percentage of weeks employed in unpaid jobs since RA	1.8	2.2	-0.4		0.73
Employment Status at the Time of the Follow-Up Survey				**	0.04
Employed in paid job	27.6	32.6	-4.9		
Employed in unpaid job	3.3	1.6	1.7		
Not employed, looking for work	15.5	21.1	-5.6		
Not employed, out of the labor force	53.6	44.8	8.8		
Number of Jobs Held During the First Year After RA[a]					
Number of jobs (paid and unpaid)					0.76
0	44.2	41.9	2.3		
1	50.4	53.7	-3.2		
2 or more	5.4	4.4	1.0		
(Average, paid and unpaid)[b]	0.81	0.76	0.05		0.48
Average number of jobs (paid)[b]	0.72	0.69	0.03		0.63
Average number of jobs (unpaid)[b]	0.06	0.07	-0.01		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 CTP, 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 344 treatment group youth and 295 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.

[a]For 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 0.8 percent to 5.6 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.

[b]The average includes youth who were not employed during the year following random assignment.

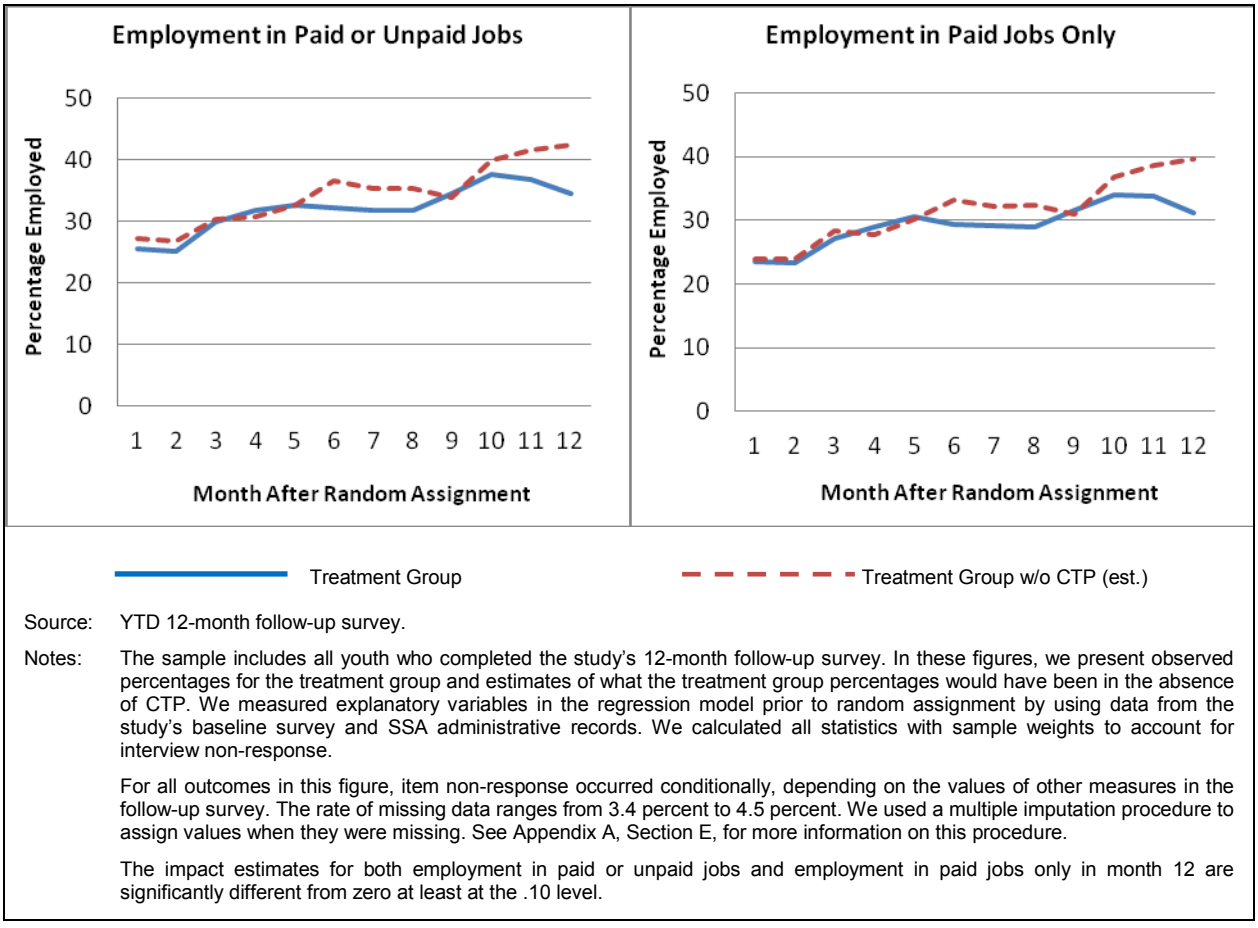
*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level using either a two-tailed t-test or a chi-square test.

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 program, 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 program. CTP reduced the shares of treatment group youth who were in paid jobs or not employed but looking for work, and it increased the share of youth who were out of the labor

force. The increase in the share of youth out of the labor force may indicate that a larger share of treatment group youth comprised students focusing on educational outcomes. (Findings regarding participation in postsecondary education, presented in Chapter VI, Section A of this report, support this possibility.)

CTP had only limited impacts on the timing of employment following random assignment. 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 following random assignment.[83] 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 program. In the figure, the vertical difference between the two plotted employment rates for any month is a graphical representation of the estimated impact. Although the monthly rates of employment in paid or unpaid jobs and in paid jobs only for treatment group youth increased over

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



Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the study's 12-month follow-up survey. In these figures, we present observed percentages for the treatment group and estimates of what the treatment group percentages would have been in the absence of CTP. We measured explanatory variables in the regression model prior to 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.

For all outcomes in this figure, item non-response occurred conditionally, depending on the values of other measures in the follow-up survey. The rate of missing data ranges from 3.4 percent to 4.5 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.

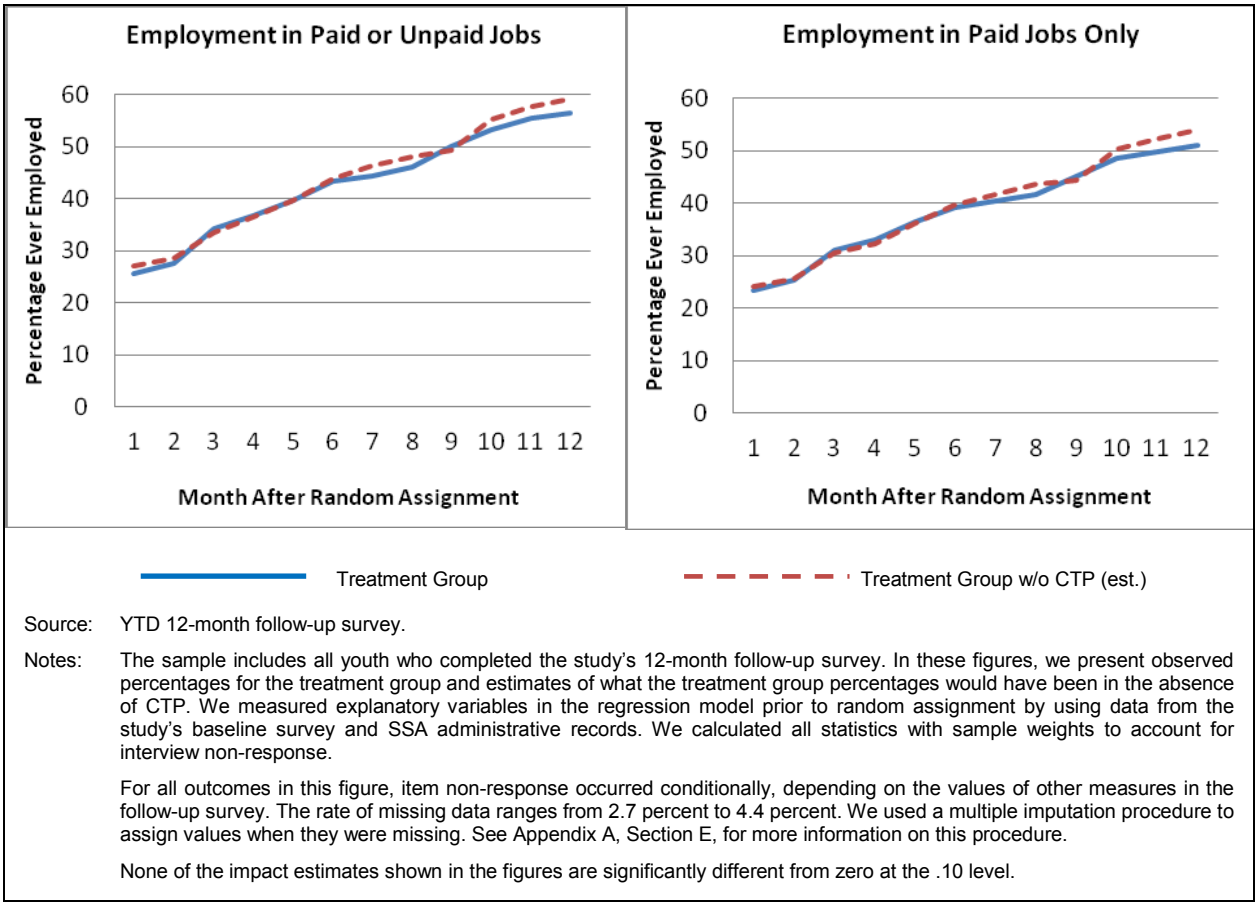
The impact estimates for both employment in paid or unpaid jobs and employment in paid jobs only in month 12 are significantly different from zero at least at the .10 level.

[83] We interviewed 17 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.

time, the rates of employment for treatment group youth were somewhat lower for several months during the year than they would have been in the absence of CTP. However, those differences are not statistically significant for any month except month 12. We conclude that the treatment group youth would have experienced similar employment rates in each month during the year following random assignment even in the absence of CTP.

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. However, the impacts of CTP on cumulative employment rates are not statistically significant for any of the months.[84] We obtained similar results for the cumulative employment rate in paid jobs only. Overall, the evidence suggests that that the intervention did not succeed in changing the trajectory of employment for treatment group youth during the follow-up period.

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



Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the study's 12-month follow-up survey. In these figures, we present observed percentages for the treatment group and estimates of what the treatment group percentages would have been in the absence of CTP. We measured explanatory variables in the regression model prior to 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.

For all outcomes in this figure, item non-response occurred conditionally, depending on the values of other measures in the follow-up survey. The rate of missing data ranges from 2.7 percent to 4.4 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.

None of the impact estimates shown in the figures are significantly different from zero at the .10 level.

[84] 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 (56.5 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 (58.5 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. CTP Had No Impacts on Hours of Work and Earnings

Although we did not find a statistically significant impact on the primary outcome (any paid employment) in the domain of paid employment, we examined supplementary outcomes in this domain to enhance our understanding of the lack of impact. This analysis allowed us to explore whether there was a pattern of impacts on supplementary outcomes that suggests the program may have had an impact in this domain that was not captured by our primary outcome. As discussed in this section, we found no consistent pattern of impacts on several supplementary outcomes capturing hours of work and earned income in the year after random assignment.

We found no impacts of CTP on total hours worked in any (paid or unpaid) job or paid jobs only during the year following random assignment. On average, youth in the treatment group were employed for a total of 335 hours in paid and unpaid jobs and 319 hours in paid jobs only (Table V.2). We found no significant impacts of CTP on these measures, indicating that those youth would have worked about the same number of hours even if they had not had the opportunity to participate in the program. To better understand these findings, we investigated the impact on the distribution of total hours. We found that CTP 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 employed for no more than 260 hours over the year, while increasing the share not employed as well as the share employed for between 260 and 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 5.0 to 8.0 (Figure V.3). These values are low because we included non-workers (with zero hours) in the calculation, and most youth were not working during these months (Figure V.1). We estimated that the average hours worked per week for each of the 12 months following random assignment would not have been significantly different in the absence of CTP. 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. CTP had no statistically significant impact on the average hours worked in paid jobs only for any month in the year following random assignment except month 12.

We estimated that CTP had no impact on average earnings from employment during the year following random assignment (Table V.3). Combining youth reports of their hours and wage rates in each paid job during the follow-up period, we calculated their earnings for the entire year.[85] On average, youth in the treatment group had earnings of $2,591 during the year following random assignment, which was $346 less than our estimate of their earnings absent the intervention; however, this difference is not statistically significant. Furthermore, CTP had no statistically significant impact on the distribution of yearly earnings.

[85] 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).

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

	Treatment Group				
	Observed Mean	Estimated Mean w/o CTP	Impact		P-Value
Supplementary Outcomes					
Total Hours Worked in All Jobs During First Year After Random Assignment					
Total Hours Worked in Paid or Unpaid Jobs				**	0.02
Not employed	43.8	39.6	4.2		
>0 to 260 hours	17.7	26.5	-8.8		
>260 to 1,040 hours	28.2	20.9	7.2		
>1,040 hours	10.4	13.0	-2.7		
(Average total hours all jobs)[a]	334.6	348.5	-13.9		0.73
Total Hours Worked in Paid Jobs				**	0.02
No paid employment	49.4	44.1	5.3		
>0 to 260 hours	14.2	22.9	-8.8		
>260 to 1,040 hours	26.4	19.8	6.6		
>1,040 hours	10.0	13.1	-3.1		
(Average total hours in paid jobs)[a]	319.4	339.8	-20.5		0.61

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 CTP, 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 344 treatment group youth and 295 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 ranges from 5.5 percent to 5.8 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.

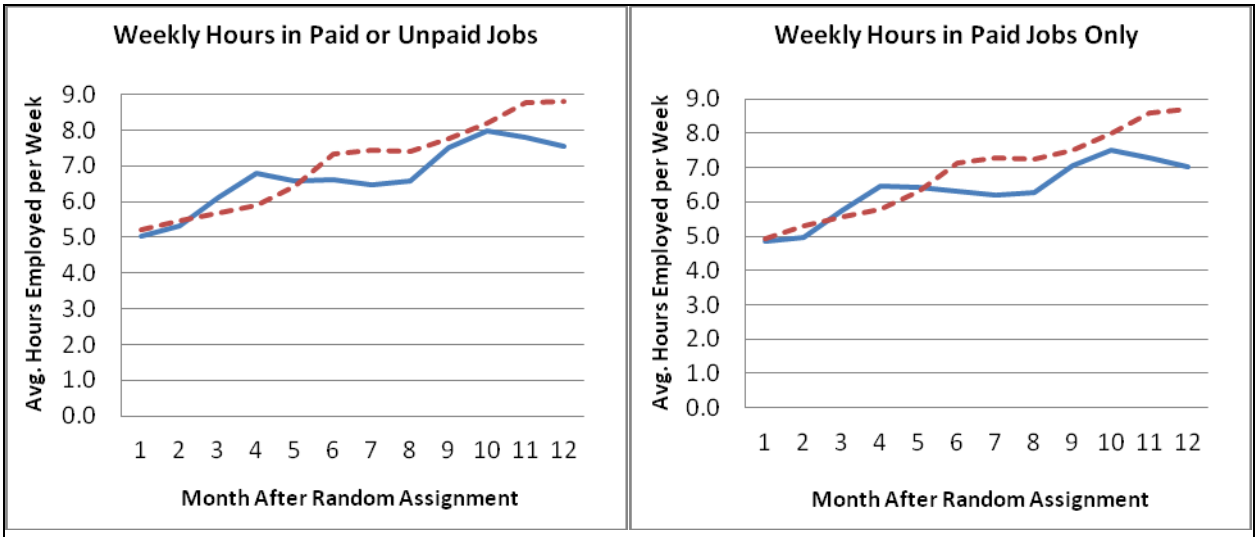
[a]The average includes youth who were not employed during the year following random assignment.

*/**/***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.

Similarly, we found that CTP had no impact on earnings per month worked during the year following random assignment (Table V.3). On average, youth in the treatment group earned $398 per month worked, which was $16 less than our estimate of what their average earnings would have been in the absence of CTP; however, this difference is not statistically significant. We also found no impact on the distribution of earnings per month worked.[86]

[86] 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 months and earned $746 per month worked.

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



Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the study's 12-month follow-up survey. In these figures, we present observed means for the treatment group and estimates of what the treatment group means would have been in the absence of CTP. We measured explanatory variables in the regression model prior to random assignment by 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 figure, item non-response occurred conditionally, depending on the values of other measures in the follow-up survey. The rate of missing data ranges from 5.5 percent to 5.9 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.

The average values of hours of employment include data for youth who were not employed during the indicated months.

In none of the months are the impact estimates for hours worked in paid or unpaid jobs significantly different from zero at the .10 level. In month 12, the impact estimates hours worked in paid jobs only is significantly different from zero at the .10 level.

Figure V.4 presents the estimated average monthly earnings and average cumulative earnings for each month during the year following random assignment.[87] We found that CTP had no statistically significant impacts on these measures for any month, with two exceptions: average monthly earnings for months 7 and 12. The general conclusion that we draw from the results presented in this figure and Table V.3 is that the earnings of treatment group members during the year following random assignment were not affected by the opportunity that they had to participate in CTP.

C. CTP Had No Impacts on Job Characteristics

CTP had little influence on various characteristics of the jobs held by youth in the treatment group. We analyzed its impacts on the characteristics of the primary paid jobs held by youth during

[87] The average cumulative earnings in the 12th month following random assignment for treatment group members in Figure V.4 ($2,510) does not equal the average annual earnings during the year following random assignment in Table V.3 ($2,591). 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.

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

	Treatment Group			
	Observed Mean	Estimated Mean w/o CTP	Impact	P-Value
Supplementary Outcomes				
Earnings During First Year After Random Assignment				
Annual Earnings				0.36
No paid employment	46.6	42.5	4.2	
$1 to $1,000	11.0	16.2	-5.2	
>$1,000 to $5,000	20.4	19.8	0.6	
>$5,000	22.0	21.6	0.4	
(Average earnings) ($)[a]	2,591	2,938	-346	0.33
Earnings Per Month Worked During First Year After Random Assignment				
Earnings per Month Worked				0.53
No paid employment	46.6	42.4	4.2	
$1 to $500	19.2	21.9	-2.7	
>$500	34.2	35.7	-1.6	
(Average earnings per month worked) ($)[a]	398	414	-16	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. 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 CTP, 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 9.4 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.

[a]The average includes youth who were not employed during the year following random assignment.

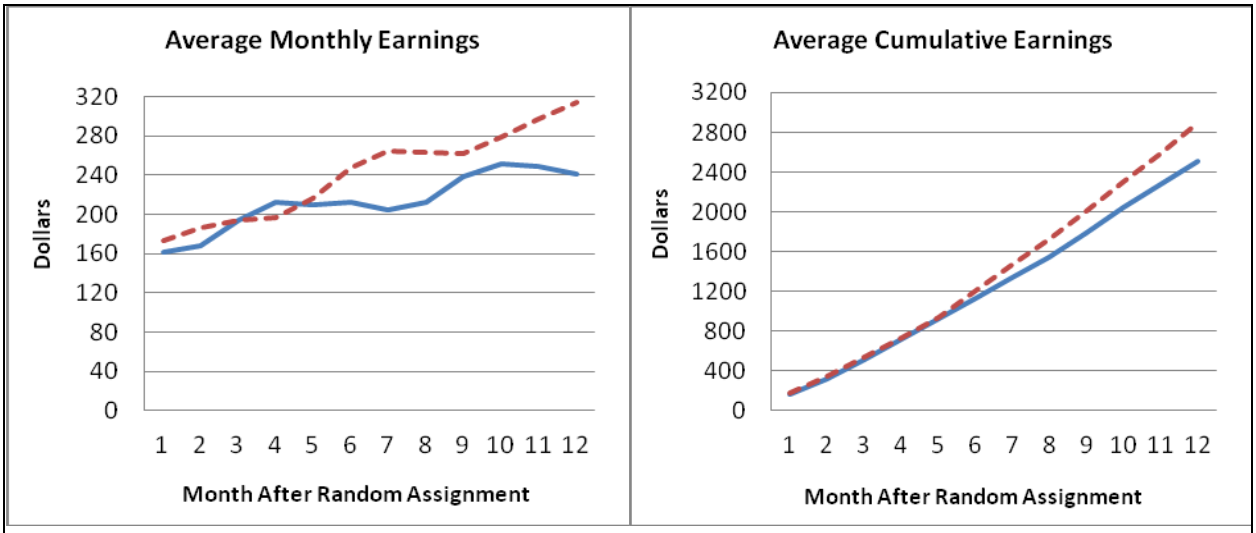
*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level using either a two-tailed t-test or a chi-square test.

the year following random assignment (Table V.4).[88] The characteristics we investigated were job tenure or duration, usual hours worked per week, hourly wage rate, and the availability of health insurance and paid vacation or sick leave benefits—all pertaining to the primary job. We found that, although the program had small impacts on the distributions of job tenure and usual hours worked per week, it did not have any impacts on the average job tenure and average usual hours worked per week. We also found that CTP had no impacts on the other job characteristics we examined.

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

[88] 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.

Figure V.4. Earnings by Month Following Random Assignment



Source: YTD 12-month follow-up survey.

Notes: The sample includes all youth who completed the study's 12-month follow-up survey. In these figures, we present observed means for the treatment group and estimates of what the treatment group means would have been in the absence of CTP. We measured explanatory variables in the regression model prior to random assignment by 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 figure, item non-response occurred conditionally, depending on the values of other measures in the follow-up survey. The rate of missing data ranges from 5.9 percent to 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.

Earnings are measured in 2008 dollars.

The average values of earnings include data for youth who were not employed during the indicated months.

The impact estimates for monthly earnings are significantly different from zero at least at the .10 level in months 7 and 12. The impact estimates for cumulative earnings are statistically significant for none of the months shown in the figure.

period.[89] This maintained the integrity of the evaluation's experimental design and allowed us to generate reliable estimates of whether the program resulted in better jobs for treatment group youth.

As shown in Table V.4, the average tenure in the primary paid job for youth in the treatment group was three months (all averages include values of zero for youth who did not work). We estimated that the average tenure would have been the same even if the youth had not had the opportunity to participate in the program. However, CTP did have a significant impact on the distribution of tenure in the primary job by increasing the shares of youth not employed and employed for at least one month but no more than six months, while reducing the shares employed for no more than one month and more than 11 months. Similarly, we found that CTP had no impact on the average number of hours per week that youth usually worked on their primary jobs, but it did affect the distribution of usual weekly hours. On average, the treatment group youth

[89] 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 CTP 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.

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

	Treatment Group			
	Observed Mean	Estimated Mean w/o CTP	Impact	P-Value
Supplementary Outcomes				
Tenure			*	0.09
Not employed	48.9	43.9	5.0	
1 month or less	3.1	9.4	-6.3	
>1 to 6 months	28.2	23.3	5.0	
>6 to 11 months	10.4	11.1	-0.7	
>11 months	9.3	12.3	-3.0	
(Average months of tenure)[a]	2.8	3.1	-0.3	0.29
Usual Hours Worked per Week			*	0.07
Not employed	46.6	42.2	4.4	
10 hours or less	7.6	13.7	-6.1	
>10 to 20 hours	16.1	18.9	-2.8	
>20 hours	29.7	25.1	4.6	
(Average hours per week)[a]	12.7	12.1	0.6	0.59
Hourly Wage (in 2008 dollars)				0.70
Not employed	46.6	42.4	4.2	
<$7	17.2	18.0	-0.8	
$7 to $9	24.0	24.8	-0.8	
>$9	12.2	14.8	-2.6	
Health Insurance Benefit				0.33
Not employed	46.6	42.4	4.2	
Employed w/o health insurance	38.5	38.4	0.1	
Employed with health insurance	14.9	19.2	-4.3	
Paid Vacation/Sick Leave Benefit				0.15
Not employed	46.6	42.3	4.3	
Employed w/o paid vacation/sick leave	31.6	39.7	-8.1	
Employed with paid vacation/sick leave	21.8	18.0	3.8	

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 CTP, 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 6.6 percent to 14.7 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.

[a]The 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.

usually worked 13 hours per week, and we estimate that they would have worked about the same amount even in the absence of the program. CTP did, however, have a significant impact on the distribution of usual hours worked per week in the primary job by increasing the share of youth who were employed and the share who were employed and usually worked more than 20 hours, while reducing the share who were employed but usually worked for a maximum of 20 hours.

Few treatment group members were employed in primary jobs that provided health insurance benefits (15 percent) or paid vacation or sick leave benefits (22 percent). Our estimates show that CTP had no significant impacts on the availability of health insurance and paid vacation or sick leave benefits on the primary job. The program also had no impact on the hourly wage associated with the primary job.

D. CTP Had No Impact on Employment for Key Subgroups

We investigated whether the impact of CTP on employment varied with the baseline characteristics of youth. Because age, school enrollment status, and prior work experience may strongly influence employment outcomes for transition-age youth, we were particularly interested in subgroups defined by the baseline values of these three characteristics. Accordingly, we estimated employment impacts for youth who were younger than 18 years old when they were randomly assigned versus those 18 or older, for youth who were in school at baseline versus those who were not, and for youth who had worked for pay in the year before random assignment versus those who had not. In addition, because about one-fifth of the youth in the CTP evaluation were receiving SSA disability program benefits, we were interested in assessing whether the impact on employment varied by SSA beneficiary status at baseline. Our thinking was that beneficiaries were likely to have been both more severely disabled and more economically disadvantaged than non-beneficiaries, and therefore may have derived a greater advantage from the program in terms of employment outcomes. Thus, we estimated the employment impact for youth who were SSA beneficiaries at baseline versus those who were not.

We found no significant impact of CTP on the primary outcome measure in the employment domain—the share of youth ever employed in paid jobs during the year after random assignment—for any of the eight subgroups defined by benefit receipt, age, school attendance, and paid work experience at baseline (Table V.5). Furthermore, for each of the subgroup pairs, the impact estimates are not significantly different between the two subgroups.

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 four most common types of jobs, as shown in Table V.6, were bus person or waitperson at food outlets (17 percent), store cashier (15 percent), store stocking clerk (10 percent), and retail sales (also 10 percent). Other frequently reported jobs were janitorial work, office assistant and secretarial tasks, gardening and grounds maintenance, and child care (each of these represented between three and five 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). The three most frequently cited sources by which the ever-employed treatment group youth learned about their primary jobs were the following (results not shown in the table): directly from the employer

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

	Treatment Group					
	Observed Mean	Estimated Mean w/o CTP	Impact	P-Value	Treatment Group Size	Control Group Size
Benefit Receipt						
Received SSA disability benefits in prior year	50.1	45.9	4.2	0.63	70	70
Did not receive SSA disability benefits in prior year	54.2	60.8	-6.6	0.14	274	221
(P-value of difference in impacts)				(0.26)		
Age						
Under age 18 at baseline	49.0	51.6	-2.6	0.67	160	125
Age 18 or over at baseline	56.9	62.4	-5.5	0.30	184	166
(P-value of difference in impacts)				(0.70)		
School Attendance						
In school at baseline	49.8	55.8	-5.9	0.19	270	237
Not in school at baseline	65.8	63.0	2.7	0.76	74	54
(P-value of difference in impacts)				(0.40)		
Paid Work Experience						
Worked for pay in prior year	63.9	65.2	-1.2	0.81	204	157
No work for pay in prior year	39.4	46.8	-7.4	0.23	139	134
(P-value of difference in impacts)				(0.46)		

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 CTP, 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 either a two-tailed t-test.

(29 percent), friends or relatives (25 percent), and a school job placement office (9 percent). Only eight percent of these youth reported that they had learned about their primary jobs through CTP.[90]

The average tenure in the primary job by the ever-employed treatment group members was about five months (results in this paragraph and the next are not shown in the table). The 32 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, not liking the job, returning to school, moving to a new home far away from the job site, finding a better job, and not liking the person in charge. 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 ten percent reported that they had been unhappy.

[90] Among the subset of ever-employed treatment group youth who actually participated in CTP (169 youth), nine percent reported that they had learned about their primary jobs through the program.

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

Treatment Group Youth	Percent
Bus person/waitperson at food outlets	16.8
Store cashier	15.1
Store stocking clerk	9.6
Retail sales	9.5
Janitorial work	5.4
Office assistant and secretarial tasks	4.1
Gardening and grounds maintenance	3.7
Child care	3.4
Sample Size	**184**

Source: YTD 12-month follow-up survey.

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

Among the 47 percent of treatment group members who did not work for pay during the year following random assignment, the three most common reasons given were inability to find the jobs they wanted, not having reliable transportation to and from work, and health problems. 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, ten percent had not been involved in either paid employment or education/training in the year following random assignment and, of those, 44 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 checking job advertisements in a newspaper or on the Internet, asking friends or relatives about jobs, contacting employers directly, and contacting DORS.

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 CTP, provided education services to youth whose goals included attaining additional education. CTP provided support for completing high school, enrolling in postsecondary education, and continuing postsecondary education. The program provided substantial education services: our process analysis of ETO data revealed that CTP delivered education services to nearly every participant and that, on average, participants received an average of five hours of such services (Table III.7).

In light of the age of CTP participants (17.7 years, on average) 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 CTP. Examining the two components of this outcome separately, we found that the program did not have an impact on either school enrollment or high school completion. However, a supplemental analysis revealed that CTP did have a positive impact on the proportion of youth enrolled specifically in postsecondary education programs.

A. CTP Had No Impact on Education Outcomes

Despite its provision of substantial education services, we found that CTP had no impact on education outcomes. Among treatment group members, 91 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 CTP. One reason for the lack of impact may be that the share of youth who were either enrolled in school or had completed high school was quite high even in the absence of CTP (an estimated 90 percent).

Examining the two components of the primary education outcome separately, we found no impact of CTP on school enrollment or high school completion. Seventy-three percent of treatment group youth were enrolled in school in the year following random assignment.[91] We estimated that

[91] 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, 76 percent were enrolled in school at the time of the baseline survey (conducted prior to random assignment). In this same sample, a similar share of treatment group youth—73 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			
	Observed Mean	Estimated Mean w/o CTP	Impact	P-Value
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	91.3	90.1	1.2	0.60
Supplementary Outcomes				
Ever enrolled in school in the year following random assignment	73.4	70.0	3.4	0.31
Completed high school (attained high school diploma/GED/certificate or higher)	51.3	57.1	-5.8	0.13
Type of School Attended				0.19
Did not attend school	26.6	29.7	-3.0	
Elementary/middle/regular high school	30.9	35.6	-4.6	
Special high school for the disabled or home school	11.6	11.5	0.1	
Postsecondary institution	28.6	20.4	8.2	
GED/adult continuing education	2.2	2.9	-0.7	
Intensity of Educational Activity				
Number of Months in School				0.57
None	26.8	30.2	-3.4	
Less than nine months	24.5	22.4	2.0	
Nine to twelve months	48.8	47.4	1.4	

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 CTP, 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 344 treatment group youth and 295 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.

this share would have been about the same in the absence of CTP. Furthermore, 51 percent of treatment group youth had completed high school by the time of the follow-up survey.[92] We also estimated that this share would have been about the same in the absence of CTP.

Twenty-seven percent of the treatment group members were not enrolled in school at some time during the year following random assignment; 31 percent attended an elementary, middle, or regular high school; 12 percent were either home schooled or attended a special high school for the disabled; 29 percent attended a postsecondary institution; and 2 percent attended a GED or adult

[92] The baseline and follow-up surveys used the same question when asking about high school completion. At baseline, 18 percent of the treatment group had completed high school (including having obtained a GED or certificate of completion).

continuing education program.[93] We estimated that CTP had no impact on the distribution of school type. However, given the program's emphasis on supporting youth to enroll in and attend Montgomery College (see Chapter III, Section D.5), it is interesting to note that the program increased the share of youth attending a postsecondary institution by eight percentage points. Although CTP did not have a significant impact on the distribution of school type, a supplementary analysis revealed that the program did have a positive and statistically significant (at the five percent level) impact of eight percentage points on an indicator of enrollment in postsecondary education (result not shown in the table). We found that CTP had no impact on the distribution of the number of months that youth were enrolled in school.[94]

B. CTP Had No Impact on Education for Key Subgroups

The impact of CTP 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 baseline measures of SSA disability benefit receipt, age, school attendance, and paid work experience.

We found no statistically significant impact on the primary measure of educational progress for youth in any subgroup (Table VI.2). In addition, we found no statistically significant difference in the estimated impacts on the primary education outcome within any of the four pairs of subgroups.

We also separately examined the two components of the primary outcome. (Results reported in this paragraph are not shown in the table.) We found a statistically significant impact of CTP on school enrollment for only one subgroup. Among treatment group youth who were not in school at baseline, 42 percent were enrolled in school during the year following random assignment, and we estimated that the share would have been only 23 percent in the absence of CTP. (The impact of 19 percentage points is statistically significant at the five percent level.)[95] We found a statistically significant negative impact of CTP on high school completion for the following three of the eight subgroups:[96]

- For youth who did not receive SSA disability benefits in the year prior to random assignment, 50 percent had completed high school by the time of the follow-up survey, and we estimated that the share would have been seven percentage points higher in the absence of CTP. (The estimated impact is statistically significant at the ten percent level.)

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

[94] 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.

[95] The difference in the estimated impacts of CTP on school enrollment across subgroup pairs is statistically significant only for the pair defined by school attendance at baseline (the difference is statistically significant at the ten percent level).

[96] The difference in the estimated impacts of CTP on high school completion across subgroup pairs is not statistically significant for any pair.

- For youth who were under 18 at baseline, 30 percent had completed high school by the time of the follow-up survey, and we estimated that the share would have been 11 percentage points higher in the absence of CTP. (The estimated impact is statistically significant at the five percent level.)
- Finally, for youth who did not work in the year prior to random assignment, 45 percent had completed high school by the time of the follow-up survey, and we estimated that the share would have been 12 percentage points higher in the absence of CTP. (The estimated impact is statistically significant at the five percent level.)

CTP's negative impact on high school completion for these three subgroups is surprising. One possible explanation is that the program may have provided information, advice, or services that encouraged youth to invest in attaining a high school diploma rather than a certificate of completion, which can be attained more quickly but merely affirms attending four years of high school and does not provide the same options for postsecondary education as does a high school diploma.

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

	Treatment Group					
	Observed Mean	Estimated Mean w/o CTP	Impact	P-Value	Treatment Group Size	Control Group Size
Benefits Receipt						
Received SSA disability benefits in prior year	94.2	92.1	2.1	0.62	69	70
Did not receive SSA disability benefits in prior year	91.8	90.8	1.0	0.68	267	223
(P-value of difference in impacts)				(0.80)		
Age						
Under age 18 at baseline	93.8	92.9	0.9	0.76	155	126
Age 18 or over at baseline	89.3	87.9	1.5	0.67	187	167
(P-value of difference in impacts)				(0.96)		
School Attendance						
In school at baseline	95.0	94.4	0.6	0.80	263	239
Not in school at baseline	78.6	74.7	3.9	0.59	73	54
(P-value of difference in impacts)				(0.83)		
Paid Work Experience						
Worked for pay in prior year	90.6	87.7	2.9	0.36	201	158
No work for pay in prior year	92.3	93.1	-0.9	0.81	134	135
(P-value of difference in impacts)				(0.48)		

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 CTP, 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 for youth who are SSA disability program beneficiaries as a result of the special SSA waivers for YTD participants. Although CTP had no impact on earnings in the short term (as discussed in Chapter V), in principle, the waivers would have allowed the program participants who were disability beneficiaries to retain more of their benefits at most levels of earnings, including zero countable earnings.[97] Through greater benefits, CTP thus could have increased the incomes of some participants during the year following random assignment.

The estimates presented in this chapter show that, for youth in the treatment group, the program did not have any impact on SSA benefits or total income during the year following random assignment. We also found that CTP had no impact on the use of SSA work incentives. In addition, we analyzed the effects of CTP on youth health insurance coverage and receipt of public assistance and found no impacts.

A. CTP Had No Impact on Youth Income

CTP had no 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.[98] The first row of Table VII.1 shows that, on average, youth in the treatment group had total income of $4,239 in the year following random assignment. We estimated that their average total annual income would have been about the same even in the absence of the program.

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 CTP had an impact on the distribution of total income, which is consistent with our finding of no impact on average total income. We found that the share of total income from earnings among treatment group members was 58 percent, and estimated that this share would have been statistically the same in the absence of the program.

CTP had no impact on the total income of youth by month. 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 CTP. The vertical difference between the

[97] 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.

[98] 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).

Table VII.1. Youth Total Income

	Treatment Group			
	Observed Mean	Estimated Mean w/o CTP	Impact	P-Value
Primary Outcome				
Total annual income (earnings and SSA benefits) ($)	4,239	4,625	-386	0.31
Supplementary Outcomes				
Distribution of Total Annual Income (%)				0.72
Less than $5,000	65.8	63.4	2.4	
$5,000 to less than $7,000	13.3	11.9	1.4	
$7,000 to less than $10,000	8.3	9.5	-1.2	
$10,000 or more	12.6	15.1	-2.6	
Percentage of total annual income from earnings	58.1	62.1	-4.0	0.24

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 CTP, 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 344 treatment group youth and 295 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 9.4 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.

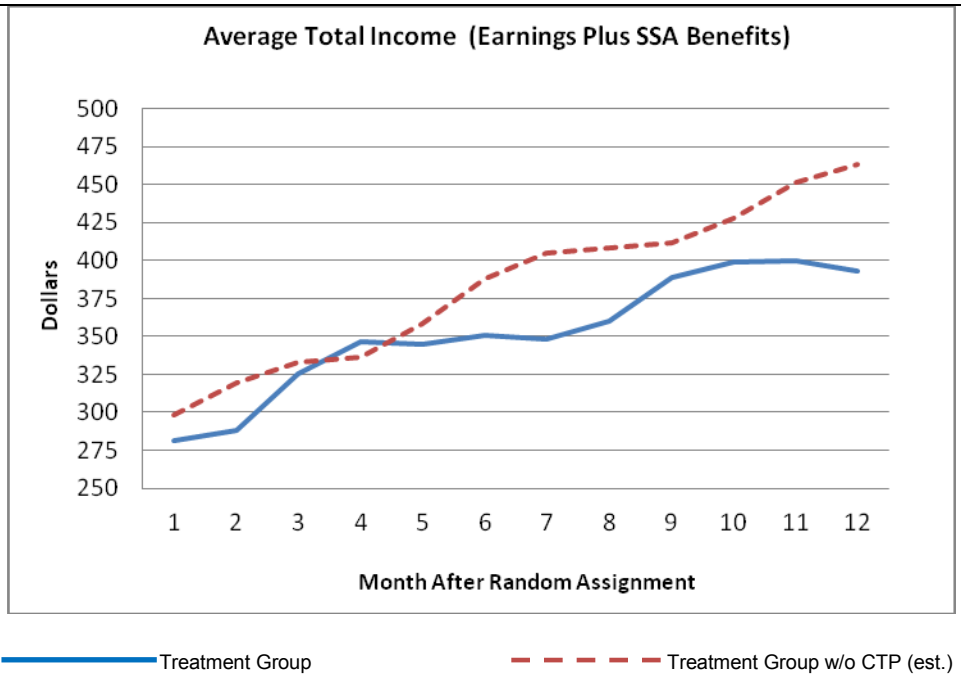
*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level using either a two-tailed t-test or a chi-square test.

plotted timelines for any month represents the estimated impact of the intervention in that month. The impact estimates are not significantly different from zero in any month except month 12. Thus, the preponderance of evidence indicates that the program did not increase the monthly total income of youth during the year following random assignment.

Given the SSA waivers for YTD, we had no expectation that CTP would reduce either the rate of receipt or the average amount of disability benefits in the near term, even if it had increased earnings, which was not the case (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 program had no impact on the share of youth who received any SSA benefits during the year following random assignment. The share of treatment group members who received SSA benefits during the year (26 percent) was low, reflecting the fact that only about one-fifth of them had been on the SSA benefit rolls in the year prior to random assignment (Tables II.2 and A.3).[99] We also show in the

[99] In Appendix A, Figures A.1 and A.2, we provide detailed monthly data on SSA benefit recipiency rates and average benefit amounts for the year before and the year after random assignment, separately for treatment and control group members in the research sample.

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



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 figure presents observed means for the treatment group and estimates of what the treatment group means would have been in the absence of CTP. 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 figure, 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 the monthly earnings measure ranges from 6.1 percent to 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 in the indicated months were included in the computation of the values reported in this figure.

The impact estimate for month 12 is significantly different from zero at the .10 level.

table that treatment group youth received SSA disability program benefits for an average of three months during the year following random assignment. We estimated that the duration of benefit receipt would not have been different in the absence of the program. CTP thus had no impact on the receipt of SSA benefits during the year following random assignment.

We also found that CTP had no impact on either the aggregate amount of disability benefits received by youth during the year following random assignment or the monthly pattern of their benefits. On average, treatment group members received $1,627 in benefits during the follow-up year, and we estimated that their average annual benefit amount would have been about the same in the absence of the program (Table VII.2).[100, 101] To flesh out this finding, we analyzed the

[100] 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.

[101] When we restricted the analysis to youth who had received SSA benefits in the year prior to random assignment, we found that treatment group youth received an average of $6,969 in benefits during the year following random *(continued)*

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

	Treatment Group			
	Observed Mean	Estimated Mean w/o CTP	Impact	P-Value
Supplementary Outcomes				
Receipt of SSA Benefits (SSI, DI, or CDB)				
Any benefit receipt during the year following random assignment	25.5	24.9	0.6	0.72
Number of months of benefit receipt during the year following random assignment[a]	2.8	2.7	0.1	0.53
Annual Benefit Amount				
Distribution of annual benefit amount				0.30
None	74.5	75.1	-0.6	
$1 to $6,500	12.2	13.1	-1.0	
>$6,500 to $8,000	7.9	4.8	3.0	
>$8,000	5.5	7.0	-1.5	
Average annual benefit amount ($)[a]	1,627	1,696	-68	0.65

Source: SSA administrative records.

Notes: The sample includes all youth in the research sample less four 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 CTP, 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 419 treatment group youth and 382 control group youth.

[a]Youth who did not receive benefits during the year following random assignment were included in the computation of the reported values for this outcome measure.

*/**/***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.

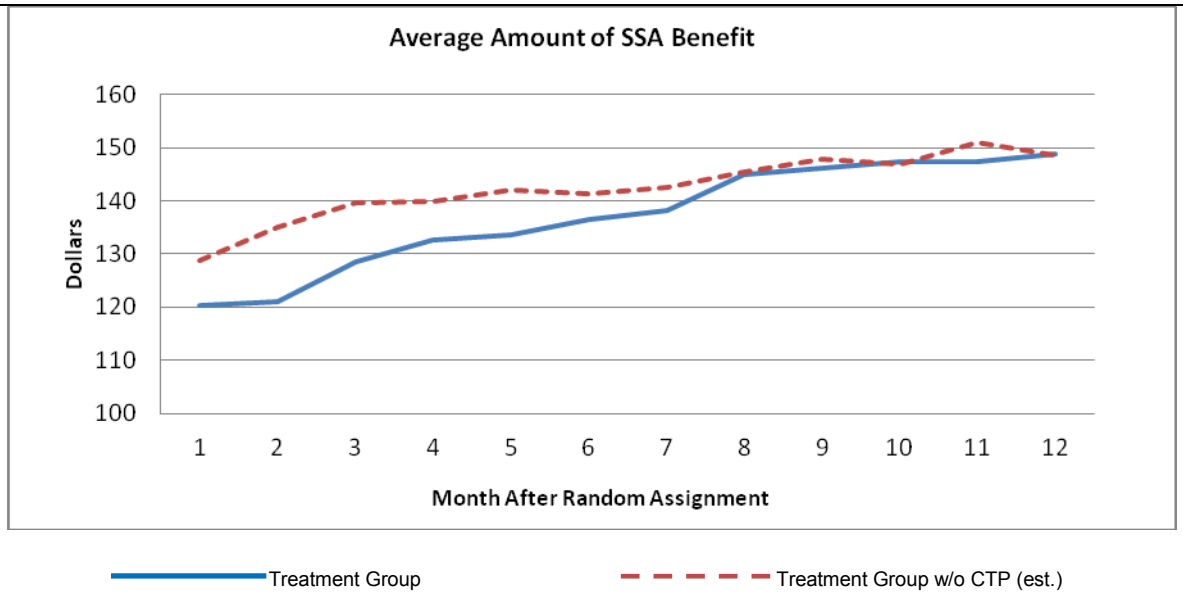
distribution of the annual benefit amount and again found no statistically significant impact of CTP. We also found no impact of CTP on the monthly pattern of benefit amounts. Figure VII.2 depicts the average benefit amount received by youth in each month during the year following random assignment. Impacts are represented in the figure by 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 program. We found that none of the estimated monthly impacts is statistically significant.[102] Thus, on average, the treatment group members would have received similar monthly amounts of SSA disability program benefits even if they had not been given the opportunity to participate in CTP.

(continued)

assignment. We estimated that those youth would have received an average of $7,344 in benefits if they had not been given the opportunity to participate in CTP. The estimated impact of negative $375 is not statistically significant.

[102] During the year prior to random assignment, the difference in the average monthly Social Security benefit amount between the treatment and control groups was small and statistically insignificant for every month except for the twelfth month prior to the month of random assignment (see Appendix A, Section F).

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



Source: SSA administrative records.

Notes: The sample includes all youth in the research sample less four youth identified as deceased at the time of the 12-month follow-up survey. The figure presents observed means for the treatment group and estimates of what the treatment group means would have been in the absence of CTP. We measured explanatory variables in the regression model prior to random assignment using data from the study's baseline survey and SSA administrative records.

Youth who did not receive SSA benefits in the indicated months were included in the computation of the values reported in this figure.

None of the impact estimates shown in the figure is significantly different from zero at the .10 level.

B. CTP Had No Impacts on the Use of SSA Work Incentives

Treatment group youth who enrolled in CTP and were on the disability benefit rolls had the opportunity to use the five SSA waivers for YTD. (See Appendix B for a description of these waivers.) Since each of the waivers enhanced a standard SSA work incentive available to the control group, we were able to analyze the impact of CTP on use of the specific incentives.[103] 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 CTP because the program provided benefits counseling and the waivers were more generous than the standard work 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 CTP did not increase the use of the collective SSA work incentives under consideration during the year following random assignment. Table VII.3 shows that just five percent of treatment group youth used at least one of the five work incentives.[104] We estimated that these

[103] 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 CTP. For these work incentives, we apply the term "use" of SSA work incentives loosely, to indicate that youth were benefitting from them.

[104] We provide statistics on the use of YTD waivers by CTP participants in Table III.5.

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

	Treatment Group			
	Observed Mean	Estimated Mean w/o CTP	Impact	P-Value
Supplementary Outcomes				
Use of SSA Work Incentives				
Used at least one SSA work incentive	5.3	5.4	-0.1	0.95
Used the SEIE	1.2	1.1	0.1	0.89
Used the EIE	3.1	3.7	-0.6	0.62
Used the Section 301 waiver	1.2	1.4	-0.2	0.81
Established a PASS[a]	0.2	0.0	0.2	0.25
Opened an IDA[a]	0.0	0.0	0.0	1.00
Reported any earnings to SSA	3.6	4.2	-0.6	0.63

Source: SSA administrative records.

Notes: The sample includes all youth in the research sample less four 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 CTP, 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 419 treatment group youth and 382 control group youth.

[a]Since 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 would have had a similar rate of use of work incentives if they had not had the opportunity to participate in the program.[105] The five percent rate of use of work incentives by treatment group members appears to be consistent with four percent of them having reported earnings to SSA and one percent having used the Section 301 waiver, which is not contingent on employment or earnings.

When we examined the impacts of CTP separately on the use of each work incentive, we found that the program had no statistically significant impacts on the use of the SEIE, the EIE, or the Section 301 waiver (Table VII.3).[106, 107] We also estimated that the program had no impacts on PASS and IDA take-up rates. The latter incentives are rarely used by the broader SSA beneficiary population. Given that just one-fifth of the treatment group members were on the disability benefit rolls at baseline, it is not surprising that we found no evidence of impacts on the use of work incentives in the full evaluation sample. However, we also estimated impacts on the use of work

[105] 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 CTP. In Table A.9, we provide work incentive impact estimates for both samples.

[106] Among treatment group youth who reported any earnings to SSA, 33 percent used the SEIE, and 67 percent used the EIE. Among control group youth who reported any earnings to SSA, 25 percent used the SEIE, and 69 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.

[107] The percentages of treatment group youth who used the SEIE (one percent) and the EIE (three percent) sum to the percentage who reported earnings to SSA (four percent), suggesting that treatment group youth who reported earnings used one or the other of these work incentives, but not both.

incentives for just those members of the research sample who were beneficiaries at baseline, and we again found no statistically significant impacts (results not shown).

Finally, we examined whether CTP had an impact on the share of youth reporting earnings to SSA. Only those youth who were beneficiaries with more than $65 in earnings (or $85 if they had no unearned income) were required to report their earnings on a monthly basis. As previously noted, four percent of treatment group youth did so. We estimated that the same percentage of these youth would have reported earnings to SSA in the absence of CTP. In other words, the program had no statistically significant impact on the share of youth reporting earnings to SSA.

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

To understand whether CTP 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 50 percent of the treatment group youth were covered by public health insurance (Table VII.4). We estimated that, in the absence of the program, the public health insurance coverage rate would have been 46 percent. The difference between these two rates is not statistically significant, indicating that the program had no impact on public health insurance coverage for youth. We also analyzed 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. Fifty-one percent of the treatment group members were covered by private health insurance, and we estimated that the coverage rate would have been just one percentage point lower in the absence of CTP. This difference is not statistically significant, indicating that the program had no impact on private health insurance coverage for youth.[108]

When we analyzed the share of youth reporting any form of health insurance, we found that 88 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. We also found no significant impact on coverage when we looked at youth who were covered concurrently by *both* public and private health insurance.

CTP had no impact on the receipt of public assistance, despite the fact that the CTSs and benefits specialist tried to connect participants and their families to assistance for which they were eligible. Table VII.4 shows that 23 percent of treatment group members lived in households that received SNAP benefits during the year following random assignment, and 6 percent lived in households that received TANF. We found no statistically significant evidence that the intervention influenced these measures of public assistance receipt.

[108] 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 a significant impact of CTP 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 CTP 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 30 September, 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 CTP 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			
	Observed Mean	Estimated Mean w/o CTP	Impact	P-Value
Supplementary Outcomes				
Youth Health Insurance Coverage				
Public health insurance	50.3	45.7	4.6	0.23
Private health insurance	50.7	50.1	0.6	0.88
Both public and private health insurance	12.0	8.8	3.2	0.22
Either public or private health insurance	87.5	85.3	2.2	0.42
Household Receipt of Public Assistance				
SNAP (food stamps)	23.1	22.4	0.7	0.84
TANF	5.9	6.1	-0.2	0.91

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 CTP, 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 344 treatment group youth and 295 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. CTP Had No Impact on Youth Income for Any Subgroup

Similar to the results for the overall sample, we found that CTP had no significant impact on the primary outcome in the income domain—the amount of total annual income for youth—for any of the subgroups of the target population we considered (Table VII.5). We estimated impacts of CTP on youth total income for the same subgroup pairs as in our analyses of the other outcome domains, defined by baseline values of SSA beneficiary status, age, school attendance, and paid work experience. Table VII.5 shows that we found no statistically significant evidence of impacts on youth income for any of these subgroups. Furthermore, we found no statistically significant differences in the estimated impacts within any of the four pairs of subgroups.

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

	Treatment Group					
	Observed Mean	Estimated Mean w/o CTP	Impact	P-Value	Treatment Group Size	Control Group Size
Benefit Receipt						
Received SSA disability benefits in prior year	9,123	9,188	-65	0.94	70	70
Did not receive SSA disability benefits in prior year	3,020	3,443	-423	0.29	274	225
(P-value of difference in impacts)				(0.69)		
Age						
Under age 18 at baseline	2,990	3,047	-57	0.90	160	127
Age 18 or over at baseline	5,249	5,825	-576	0.28	184	168
(P-value of difference in impacts)				(0.47)		
School Attendance						
In school at baseline	4,040	4,509	-469	0.26	270	241
Not in school at baseline	4,934	4,777	157	0.84	74	54
(P-value of difference in impacts)				(0.48)		
Paid Work Experience						
Worked for pay in prior year	5,166	5,368	-202	0.71	204	160
No work for pay in prior year	3,007	3,453	-446	0.33	139	135
(P-value of difference in impacts)				(0.73)		

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 CTP, 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 5.1 percent to 12.6 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

CTP, 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. CTP in particular sought to promote independence and self-sufficiency among participants through employment experiences. The program's service model featured highly individualized services centered around a personalized plan for achieving the participant's employment, educational, and career goals.

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. For consistency with the other YTD evaluation sites, we used this same primary outcome for CTP. However, the interpretation of impact estimates for this outcome is less clear in this case because most of the youth in the CTP evaluation were not receiving SSA disability benefits. This limitation of the primary outcome is offset by the supplementary outcomes in this domain, which include additional measures of youth expectations and self-determination. In addition, if CTP 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 in this domain thus also include measures of independence and social interactions.

We might expect attitudes and expectations to be more malleable and subject to influence by CTP than many of the other outcome measures considered in this report. In particular, employment and income might be slow to respond to the intervention, given that almost half of the youth in the analytic sample were under age 18 at baseline, and more than three-quarters of them were attending school. Finding positive impacts on attitudes and expectations could foreshadow positive impacts on these and perhaps other outcomes in the longer run.

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.[109] 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

[109] 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).

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. However, as we showed in Chapter IV, CTP did not improve understanding that the entire cash benefit and medical insurance would not be lost once work begins (Table IV.3).

Although CTP 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. We also found no pattern of impacts on the supplementary outcomes in this domain. We caution that the lack of estimated impacts may reflect the limited relevancy for this YTD site of the primary outcome and the difficulty of measuring the supplementary outcomes precisely.

A. CTP Had No Impact 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." [110] 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.[111]

We found no impact on goals for future work and earnings. Among youth in the treatment group, 82 percent agreed with the statement that their goals included working and earning enough to stop receiving disability benefits (Table VIII.1).[112] In the absence of CTP, we estimated that 84 percent of youth would have agreed with the statement. The estimated impact of negative two percentage points is not statistically significant. Given that nearly 80 percent of youth in the analytic sample were not receiving SSA disability benefits at baseline, it is not clear what they intended when they responded that they agreed with the statement that their goals included "earning enough to stop receiving Social Security disability benefits." Because the impact estimate is not statistically significant, we conclude that there is no evidence of an unintentional negative impact on this outcome measure. However, the lack of an impact may reflect a combination of a positive impact on some youth, an unintended negative impact on others, and confusion about how to interpret the survey question.

[110] 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 CTP on the share of youth responding "agree a lot" or on the distribution of responses across all four categories.

[111] 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.

[112] Information on plans for the future and self-efficacy was missing for a fairly large share of cases—roughly 8 to 14 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: three 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.

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

	Treatment Group			
	Observed Mean	Estimated Mean w/o CTP	Impact	P-Value
Primary Outcome				
Youth agrees that personal goals include working and earning enough to stop receiving Social Security disability benefits	81.6	83.9	-2.3	0.49
Supplementary Outcomes				
Plans and Goals for the Next Five Years				
Plans to go further in school, youth response	89.8	86.7	3.1	0.30
Plans to go further in school, parent response	92.4	90.3	2.0	0.51
Expectations for Employment, Youth Response[a]				0.45
Working for pay at the time of the follow-up survey	27.5	32.5	-5.1	
Plans to start working for pay	70.6	63.6	7.1	
No plans to start working for pay	1.9	3.9	-2.0	
Expectations for Employment, Parent Response[a]				0.25
Working for pay at the time of the follow-up survey	27.5	32.7	-5.2	
Plans to start working for pay	70.9	63.9	7.0	
No plans to start working for pay	1.6	3.4	-1.8	
Plans to live on own (with or without help), youth response	83.5	85.6	-2.1	0.45
Plans to live on own (with or without help), parent response	62.9	54.3	8.5	0.12
Internal locus of control (4-point index)[b]	3.4	3.5	-0.1 *	0.09
External locus of control (4-point index)[b]	3.0	3.0	0.0	0.67

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 CTP, 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 344 treatment group youth and 295 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.

[a]For 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 13 percent for youth responses on employment expectations and 33 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.

[b]See 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.

We also found no effects of CTP 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). At baseline, 94 percent of treatment group youth reported that they planned to go further in school in the next five years (Table II.2).[113] In the follow-up survey, a

[113] 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 *(continued)*

similar share, 90 percent, reported that they planned to go further in school (Table VIII.1). We estimated that CTP had no statistically significant impact on educational goals. The absence of an impact, despite CTP's emphasis on education, might have been due to the very large proportion of treatment group members who would have had plans for further schooling even in the absence of the program (87 percent). This left little margin for the program to influence this measure. Similarly, the proportion of treatment group members who would have had no plans to work for pay in the absence of CTP was so low (four percent) that it is not surprising that the intervention did not significantly reduce that proportion. The share of treatment group members with no plans to work for pay over the next five years was two percent (identical to the share at baseline). Finally, 84 percent of treatment group youth planned to live independently in the next five years, with or without help (slightly larger than the 79 percent share at baseline). We estimated that this share would have been about the same in the absence of CTP. In addition, we found no impacts of CTP on parent responses about youth plans for schooling, working for pay, or living independently.

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 3.4 on a scale of 1 to 4, and we estimated that, in the absence of CTP, the average would have been 3.5. The estimated impact of negative 0.1 is very small and statistically significant only at the ten percent level. 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 3.0, also on a scale of 1 to 4. We estimated that these youth would have had essentially the same average value of this index even if they had not been given the opportunity to participate in CTP.[114]

The findings of no impact of CTP on the primary outcome in this domain and only one relatively small impact on the eight supplementary outcomes indicate that the program did not substantially affect the expectations, plans, or self-efficacy of youth.

(continued)

working full time about plans for work. For this reason, for comparison between baseline and follow-up, we examined the share with 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).

[114] Appendix A, Section H, presents separate impact estimates for each of the 11 questions used to create the two indices. These additional impact estimates are consistent with the findings reported here that CTP had little or no impact on either the internal or external locus of control. We found a statistically significant impact for only one of the 11 measures: CTP increased the share of youth who responded that they "agree a little" with the statement "you often feel helpless in dealing with the problems of life" and reduced the share of youth who said that they "disagree a little" with this statement.

B. CTP Had No 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. However, the previous finding of no impact of CTP on self-efficacy suggests that the program was unlikely to have had impacts on these additional measures.

Consistent with our finding of no impact on self-efficacy, we also found no statistically significant impacts of CTP on independent activities, decision making, or social interactions (Table VIII.2).[115] We found that 97 percent of treatment group youth made snacks on their own, 85 percent rode public transportation alone, and 99 percent picked the clothes they wore each day. Ninety-five percent of treatment group members decided how to spend their own money, and 96 percent decided how to spend their free time. Seventy-eight percent of treatment group youth 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 CTP.[116]

C. CTP Had an Impact on Goals for Future Work and Earnings for Only One Subgroup

Although CTP 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 CTP on the primary outcome measure in this domain for the four pairs of subgroups of the target population, defined by baseline measures of SSA disability benefit receipt, age, school attendance, and paid work experience.

We found that CTP had a differential impact on youth who were not attending school at baseline compared with youth who were attending school (Table VIII.3). Among youth who were not attending school at baseline, we estimated that CTP reduced by 16 percentage points the share with a goal of working and earning enough to stop receiving Social Security disability benefits (the estimated impact is statistically significant at the five percent level). Among youth who were attending school at baseline, CTP had no impact on the share with this goal. The difference in the

[115] 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 CTP on the full distribution of responses. The results were consistent with the conclusions reported in the text.

[116] 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 four percentage points of the follow-up level.

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

	Treatment Group			
	Observed Mean	Estimated Mean w/o CTP	Impact	P-Value
Supplementary Outcomes				
Independent Activities and Decision Making				
Makes snacks or sandwiches (most/some of the time)	96.6	97.3	-0.6	0.65
Rides public transportation alone (most/some of the time)	85.1	82.5	2.6	0.39
Picks clothes to wear (most/some of the time)	98.9	97.6	1.2	0.30
Decides to spend own money (most/some of the time)	94.6	92.8	1.7	0.40
Decides how to spend free time (most/some of the time)	96.3	97.6	-1.3	0.38
Social Interactions				
Gets together with friends (often or sometimes)	78.4	83.4	-5.0	0.12

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 CTP, 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 344 treatment group youth and 295 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.

estimated impacts between these two groups is statistically significant at the five percent level. This suggests that CTP may have had an unintended negative impact on youth who were not attending school at baseline.

For the other subgroups, we found no impacts of CTP on the primary outcome in this domain and no difference in the estimated impacts between the groups in each subgroup pair. Interestingly, even among treatment group youth who did not receive SSA disability benefits in the year before random assignment, 84 percent agreed that their goals included "working and earning enough to stop receiving Social Security disability benefits."

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

	Treatment Group						
	Observed Mean	Estimated Mean w/o CTP	Impact		P-Value	Treatment Group Size	Control Group Size
Benefits Receipt							
Received SSA disability benefits in prior year	71.2	70.2	0.9		0.91	58	59
Did not receive SSA disability benefits in prior year	84.0	87.1	-3.2		0.36	244	101
(P-value of difference in impacts)					(0.54)		
Age							
Under age 18 at baseline	82.3	83.6	-1.3		0.79	143	104
Age 18 or over at baseline	81.1	84.2	-3.1		0.49	159	146
(P-value of difference in impacts)					(0.80)		
School Attendance							
In school at baseline	82.0	80.9	1.1		0.77	241	206
Not in school at baseline	80.3	96.1	-15.8	**	0.02	61	44
(P-value of difference in impacts)				**	(0.02)		
Paid Work Experience							
Worked for pay in prior year	81.5	83.6	-2.1		0.63	176	135
No work for pay in prior year	81.7	84.5	-2.8		0.59	125	115
(P-value of difference in impacts)					(0.91)		

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 CTP, 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 CTP, did not emphasize training as either a service input or an outcome. However, CTP may have promoted training indirectly through its support for developing and pursuing life goals and emphasis on self-sufficiency. Specifically, some youth may have been motivated to obtain training as an important step on the path to those CTP objectives. Because of the importance of training for future employment and earnings and the potential for CTP to have influenced such training, we explore the program's impact 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 CTP 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 program, we found that CTP had no impact on youth participation in training. We also found no impact of CTP on participation in productive activities, which is not surprising given the program's lack of statistically significant impacts on education and employment.

A. CTP Had No Impact on Participation in Training

Although CTP 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, four percent, was enrolled in a training program during the year following random assignment (Table IX.1).[117] We estimated that the share enrolled would have been about the same in the absence of CTP.

[117] At baseline, 35 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 CTP services as "training," CTP 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			
	Observed Mean	Estimated Mean w/o CTP	Impact	P-Value
Supplementary Outcomes				
Enrollment in Training				
Ever enrolled in a training program in the year following random assignment	3.5	3.7	-0.2	0.90
Intensity of Training				
Number of Months in a Training Program				0.89
None	96.5	96.1	0.4	
Less than nine months	2.4	3.0	-0.6	
Nine to twelve months	1.1	1.0	0.2	
(Average number of months in a training program)	0.2	0.2	0.1	0.51

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 CTP, 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 344 treatment group youth and 295 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 only a small fraction of a 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 CTP. Additionally, the distribution of months of enrollment in training was unaffected by the intervention.[118]

B. CTP Had No Impact on Participation in Productive Activities

In our second exploratory analysis, we estimated the impact of CTP on a composite measure of participation in productive activities—specifically, participation in education, training, and paid and unpaid employment.[119] Youth who participated in any of these activities during the year following

[118] 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.

[119] 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.

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 CTP had no impact on the composite measure of participation in productive activities. A large share of treatment group members, 90 percent, did participate in productive activities during the year following random assignment (Table IX.2);[120] however, we estimated that the share would have been essentially the same in the absence of CTP.[121]

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

	Treatment Group			
	Observed Mean	Estimated Mean w/o CTP	Impact	P-Value
Supplementary Outcomes				
Ever participated in school, training, unpaid employment, or paid employment in the year after random assignment	90.3	90.0	0.3	0.91

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 CTP, 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 344 treatment group youth and 295 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.

[120] The overall level of productive activity is high, in part because 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 over three-quarters of treatment group youth were enrolled in school at baseline (Table II.2).

[121] We found no statistically significant impacts on participation in productive activities for any of the eight subgroups defined by baseline measures of SSA benefit receipt, age, school attendance, and prior work experience. Furthermore, the differences in estimated impacts between the subgroup pairs are statistically significant for only one pair. For the pair defined by school attendance, a negative and not statistically significant impact for youth attending school at baseline is different (at the ten percent significance level) from a positive and not statistically significant impact for youth not attending school at baseline.

X. CONCLUSION

In this report, we present findings from a process analysis and a random assignment impact analysis of the Career Transition Program, the YTD project in Montgomery County, Maryland. CTP served high school juniors and seniors and recent graduates ages 16 through 21 who had been diagnosed with SED or other significant mental illnesses. Through the process analysis, we learned that the services delivered by CTP conformed to the YTD program model and focused on person-centered planning, employment, high school completion and enrollment in postsecondary education, and case management. The program enrolled 89 percent of the 422 youth who had been randomly assigned by Mathematica to the evaluation's treatment group. Furthermore, the program delivered at least some services to virtually all of the enrolled youth. On average, the enrollees received 28 hours of services, of which more than a third were employment-related services (including activities such as the development of work experiences, job placement, and job coaching), and another 40 percent were case management services to resolve barriers to employment and education.

We estimated the impacts of CTP 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 CTP increased by 22 percentage points the proportion of treatment group youth who received any employment-promoting services, such as career counseling and support for resume preparation and job search activities. However, the intervention had no significant impacts on the primary outcome measures in the domains of paid employment, educational progress, youth income, and attitudes and expectations during the year following random assignment. When we expanded the analysis to include supplementary outcome measures in these domains, we did find a statistically significant positive impact of eight percentage points on enrollment in postsecondary education programs.

Our broad conclusion from the process and impact analyses is that, while CTP significantly increased the receipt of employment-promoting services by treatment group members relative to what they would have experienced in the absence of the program, those services were no more or less effective than the non-CTP services available to control group members at improving

employment and most other evaluation outcomes during the year following random assignment. We speculate that two factors may have contributed to this result. First, the youth recruited into the evaluation may not have had consistently large barriers to employment and thus may have been able to achieve equally good outcomes without the benefit of CTP services. Second, the services available to control group youth in Montgomery County during the period of the evaluation were relatively strong, such that they may have rivaled CTP services in effectiveness, at least for the evaluation enrollees.

Unlike the other five random assignment YTD evaluation projects, CTP did not target Social Security disability beneficiaries exclusively; only 22 percent of the youth in the analytic sample for the CTP evaluation had received benefits in the year prior to random assignment. While some of the non-beneficiaries may have been sufficiently disabled to qualify for benefits if their family resources had not exceeded allowable limits, others probably would have been found ineligible due to the insufficient severity of their disabilities. Thus, it may be that the evaluation enrollees in Montgomery County had less severe disabilities on average than their counterparts in the other evaluation sites. Furthermore, while recruiting youth into the evaluation, CTP staff stressed that those who did enroll would have a chance to participate in a program that would help them obtain jobs. Given this recruiting pitch, it is likely that youth who already were motivated to work enrolled in the evaluation. Baseline statistics support this explanation, as 55 percent of the youth in the evaluation's analytic sample had worked for pay in the year prior to random assignment—a much larger share than in the other evaluation sites, where baseline employment rates ranged from 18 to 35 percent. Treatment group members in Montgomery County were employed at about the same rate in the year following random assignment as in the year prior to random assignment.

Significant rehabilitation and employment services were available to youth with disabilities in Montgomery County through the public school system, the state vocational rehabilitation agency, and other service providers. The services available to control group members may actually have been strengthened by the presence of CTP. Through its Transition Unit, MCPS placed a transition support teacher in each of the county's public high schools. The existence of CTP and its expansion during the evaluation period may have allowed those teachers to focus their efforts and provide more services to CTP non-participants than would have been possible in the absence of the program. Also, during the period of the evaluation, MCPS hired five employment specialists who intentionally focused their efforts on non-CTP youth. In addition, DORS provided relatively robust services to Maryland youth with disabilities: one-third of its rehabilitation counselors were devoted to serving youth, and one-third of the agency's successful case closures were for youth.

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 CTP still were receiving program 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 CTP 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

For the other five sites, youth in the relevant target population were randomly selected from the SSA roles for recruitment into the evaluation. In these sites, we were able to use administrative data from SSA to compare the characteristics of youth who enrolled in the evaluation with youth who were selected into the sample but did not enroll in the evaluation. In contrast, youth in the CTP target population in Montgomery County were recruited into the evaluation by CTP (see Chapter III). We do not have information on the underlying sample population for CTP.

For CTP, we were able to examine some basic characteristics for all youth who provided CTP with consent to be enrolled in the evaluation. We obtained gender and age information from CTP forms. We obtained earnings information from SSA administrative records.[122] Among youth who consented to be in the evaluation, we compared the characteristics of those who completed the baseline survey (evaluation enrollees) and those who did not complete the baseline survey (evaluation non-enrollees). Table A.1 shows that among youth who provided consent to enroll in the evaluation, 67 percent were male, about half were under age 18, and just over 30 percent had earnings in the prior year. There were no statistically significant differences in these characteristics between baseline survey completers (who were enrolled in the evaluation) and non-completers (who were not enrolled in the evaluation).[123] Although there were no statistically significant differences in these characteristics between completers and non-completers, youth who chose to enroll in the evaluation were self-selected and may not have been representative of all youth in the CTP target population. For example, youth who chose to enroll may have been those who are more motivated to work in the future. Regardless, the impact estimates are not affected by baseline differences between evaluation enrollees and non-enrollees because both treatment and control groups include exclusively youth who enrolled in the evaluation.

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: 30.5 percent overall (based on administrative records, Table A.1). However, this employment rate is similar to rates

[122] 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 typically occurred within a day or two of the baseline interview date.

[123] In addition, we found no statistically significant differences between completers and non-completers in employment and earnings two 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.

Table A.1. Characteristics, by Completion of Baseline Survey (percentages, unless otherwise noted)

	All	Completers	Non-Completers	Difference	P-Value
Administrative Data					
Demographic Characteristics					
Male	66.9	66.4	71.1	-4.7	0.37
Age in Years					0.62
14–17	48.2	48.6	44.4	4.1	
18–21	50.4	49.9	55.6	-5.7	
22–25	1.4	1.5	0.0	1.5	
Average age (years)	17.7	17.7	17.7	-0.1	0.64
Earnings in Year Before Year of RA					
Positive earnings	30.5	29.9	36.7	0.1	0.18
Amount of earnings ($)	814	819	762	57	0.90
Sample Size	930	840	90		

Sources: Administrative records. Gender and age are from CTP administrative forms. Earnings are measured in the MEF.

Notes: The table includes all youth who provided CTP with consent to enroll in the evaluation. The completers include all youth who completed the baseline survey, including 35 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.

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).[124]

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.[125]

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.[126] We found that the two groups were highly similar at baseline,

[124] We found similar employment rates for YTD youth in most of the other evaluation sites (31 percent in the overall samples [enrollees plus non-enrollees] for the Erie County, New York, and Colorado sites; 23-25 percent for the West Virginia and Miami-Dade County, Florida, sites). 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 in that YTD project.

[125] 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).

[126] 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					0.50
9th grade or less	7.2	7.1	7.4	-0.2	
10th or 11th grade	42.0	42.8	41.1	1.7	
12th grade	48.4	47.1	49.8	-2.7	
College or technical school	1.1	2.1	0.0	2.1	
Other	1.3	0.8	1.7	-0.9	
High school diploma, GED, or certificate of completion	17.6	17.6	17.6	0.0	0.99
Ever received special education	75.5	76.3	74.6	1.7	0.63
Health Insurance Coverage					
Covered by public health insurance	46.6	48.0	45.0	3.0	0.48
Covered by private health insurance	50.4	47.5	53.6	-6.1	0.15
Covered by either public or private health insurance	6.8	6.4	7.3	-0.8	0.69
Covered by both public and private health insurance	88.9	88.2	89.6	-1.4	0.60
Family Socioeconomic Status					
Public Assistance					
SNAP (food stamps)	18.7	18.6	18.9	-0.2	0.94
Assistance					
Reading, hearing, speaking, or walking aids	6.5	7.3	5.6	1.7	0.40
Independent Activities and Decision Making					
Makes snacks or sandwiches (most/some of the time)	96.5	96.3	96.8	-0.5	0.75
Rides public transportation alone (most/some of the time)	81.3	81.5	81.0	0.6	0.86
Picks clothes to wear (most/some of the time)	98.8	98.4	99.3	-1.0	0.28
Implementation Phase					
Random assignment before October 1, 2009	51.2	51.9	50.5	1.4	0.74
Sample Size	639	344	295		

Sources: YTD baseline survey and 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.

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 to decide how to spend their own money. Treatment group youth were less likely to be receiving family assistance and have a mother who was currently employed. Unlike the analytic sample, in the research sample we found that treatment group youth were somewhat more likely have attained some college or post-secondary education. In the research sample (but not the analytic sample), we found no difference in the share of youth whose father had completed high school, in the distribution of living arrangements, and in the amount of SSA benefits received in the year prior to random assignment.

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						0.26
White	40.2	41.5	38.7	2.7		
Black	39.9	41.5	38.2	3.2		
American Indian/AK/HI/Pacific Islander	1.4	1.4	1.3	0.1		
Asian	4.6	4.3	5.0	-0.7		
Other or unknown	13.9	11.4	16.8	-5.4		
Hispanic	23.2	22.3	24.1	-1.8		0.56
Primarily speaks English at home	86.7	86.5	86.9	-0.5		0.85
Education						
School Attendance						0.52
Does not attend school	23.0	24.6	21.2	3.3		
Attends regular high school	54.7	54.4	55.0	-0.5		
Attends special high school	12.8	11.4	14.4	-3.1		
Attends other school	9.5	9.6	9.3	0.3		
Attainment—Highest Grade Completed					*	0.07
9th grade or less	6.5	6.2	6.9	-0.7		
10th or 11th grade	43.2	43.2	43.1	0.0		
12th grade	47.4	46.5	48.3	-1.8		
College or technical school	1.8	3.1	0.3	2.8		
Other	1.2	1.0	1.4	-0.4		
Employment						
Received job training in last year	34.9	33.2	36.8	-3.7		0.28
Worked as volunteer in last year	14.6	14.1	15.1	-1.1		0.67
Worked for pay in last year	56.5	58.7	54.0	4.6		0.19
Worked for pay in last month	27.9	28.3	27.4	0.9		0.79
Never worked for pay at baseline	25.9	25.7	26.1	-0.5		0.88
Living Arrangements and Household Composition						
Living Arrangements						0.22
Two-parent family	45.2	46.3	44.0	2.3		
Single-parent family	41.3	39.4	43.5	-4.0		
Group home	1.9	1.4	2.4	-0.9		
Other institution	5.6	7.1	3.9	3.2		
Lives alone or with friends	6.0	5.7	6.3	-0.6		
Average number of people in household	4.1	4.1	4.1	0.0		0.87
Lives with others with disabilities	27.5	28.8	26.1	2.7		0.41
Family Socioeconomic Status						
Annual Income						0.95
Less than $10,000	16.9	16.6	17.3	-0.8		
$10,000–$24,999	16.5	16.3	16.7	-0.4		
$25,000 or more	66.6	67.1	65.9	1.2		
Public Assistance						
Receives TANF/family assistance	3.7	2.5	5.0	-2.5	*	0.07
Parents' Education						
Mother high school graduate	79.4	77.6	81.4	-3.7		0.22
Father high school graduate	77.3	79.6	74.7	4.9		0.17
Parents' Employment Status						
Mother currently employed	70.8	67.5	74.4	-6.9	**	0.05
Father currently employed	78.2	76.3	80.4	-4.1		0.25
Self-Reported Health Status						0.38
Excellent	27.6	25.8	29.5	-3.7		
Very good/good	61.0	63.3	58.5	4.8		
Fair/poor	11.4	10.9	12.0	-1.1		
Assistance						
Help with personal care needs	2.1	1.7	2.6	-1.0		0.35
Expectations About the Future						
Expects to live independently (w/ or w/o help)	80.4	81.5	79.2	2.3		0.42
Expects to continue education	95.3	95.4	95.1	0.3		0.84
Expects to work at least part-time for pay	98.2	98.5	97.8	0.7		0.45

	All	Treatment	Control	Difference		P-Value
Independent Activities and Decision Making						
Decides how to spend own money (most/some of the time)	95.5	96.9	94.0	2.9	**	0.05
Decides how to spend free time (most/some of the time)	97.1	97.2	97.1	0.0		0.98
Administrative Data						
Demographic Characteristics						
Male	67.1	67.3	66.8	0.5		0.89
Age in Years						0.91
14–17	46.3	46.4	46.2	0.2		
18–21	52.2	51.9	52.5	-0.6		
22–25	1.5	1.7	1.3	0.4		
Average age (years)	17.7	17.7	17.7	-0.1		0.51
Benefits in Year Before Month of RA						
Received SSA benefits	21.1	20.1	22.2	-2.1		0.48
Amount of SSA Benefits ($)	1,353	1,189	1,534	-346		0.12
Earnings in Year Before Year of RA ($)	1,040	1,274	782	491		0.15
Sample Size	805	422	383			

Sources: YTD baseline survey and administrative records.

Notes: The research sample consists of respondents and non-respondents to the 12-month survey, including the four youth who were deceased at the time of the survey. The table includes all of the main baseline characteristics (all of those included in Table II.2). The table also includes one additional baseline characteristic for which the difference between the treatment and control group is statistically significant at the .10 level (educational attainment). 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.

The degree of difference between the treatment and control groups is about what we would expect due to chance. For example, of the 44 baseline characteristics we investigated, we would expect about four to be statistically different at the ten percent significance level or lower.[127] We found six statistically significant differences at this level in the analytic sample and four such differences in the research sample.

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, and multinomial logistic regression for categorical variables.[128] The regression adjustments control

[127] The 44 baseline characteristics that we investigated for the research sample include the 32 shown in Table A.3 plus 12 additional characteristics for which results are not shown. In the research sample, there are no significant treatment-control differences for any of the 12 additional characteristics. For the analytic sample, as reported in Table A.2, we investigated 13 additional characteristics beyond those included in Table II.2 and found no significant treatment-control differences. For the research sample, we investigated the same 13 additional characteristics. However, one of those characteristics, educational attainment, does have a statistically significant treatment-control difference in the research sample and it is therefore included in Table A.3.

[128] 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

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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.[129]

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 CTP analytic sample is only slightly unbalanced (54 percent treatment group) and so should not introduce issues with respect to regression-based standard errors.

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

Characteristic	Control Variables
Demographic	Male Age: less than 18 years Race: white
Education and employment	Enrolled in school at baseline Worked for pay in year prior to random assignment
Disability benefit	Received SSA disability benefit in prior year
Health	Self-reported health status: good/very good/excellent Requires help with personal care needs
Family resources	Living arrangement: two-parent family, single-parent family (reference: does not live with either parent) Receives TANF/family assistance High school graduate mother High school graduate father Mother currently employed
Expectations	Expects to live independently
Program-specific factors	Randomly assigned before October 1, 2009

Notes: All control variables are categorical. For variables with more than two categories, the table shows the reference category in parentheses.

(continued)
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.

[129] 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 CTP is largely the same as the model used for the interim analysis of the other sites. For CTP, because a majority of the youth in the evaluation did not receive SSA disability benefits, we included a control for receipt of SSA disability benefits at baseline (without distinguishing between SSI and other benefits) and we did not have administrative data on primary disabling condition or duration of disability. For CTP, we added three indicators due to statistically significant baseline differences between the treatment and control groups in the analytic sample: receives TANF/family assistance, high school graduate father, and mother currently employed.

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.[130] This provides a reference mean (or percentage) for the outcome for youth who had the opportunity to participate in CTP. We also report the estimated mean (or percentage) for the treatment group in the absence of CTP. 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 CTP (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 CTP. In Table A.5, we provide the simple mean impact estimates for all outcomes.

[130] 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 two percent of observations the value of the 98th percentile.

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

	Treatment Group			Control Group			Unadjusted		
Outcome	N	Mean	Standard Deviation	N	Mean	Standard Deviation	Impact (Treatment -Control)		P-Value
Service Utilization Domain									
Received any employment-promoting service	339	76.0	47.4	280	55.0	57.0	20.9	***	0.00
Received career counseling	338	48.5	55.4	279	37.7	55.6	10.8	**	0.01
Support for resume writing and job search activities	338	65.3	52.8	279	34.5	54.5	30.8	***	0.00
Job shadowing, apprenticeship/internship	335	11.8	35.8	280	10.5	35.1	1.3		0.62
Received other employment-focused services (basic skills training, computer classes, problem solving, and social skills training)	334	2.8	18.5	279	2.0	16.0	0.9		0.52
Received counseling on SSA benefits and work incentives	334	19.2	43.7	279	12.8	38.3	6.5	**	0.04
Received other (non-employment) services	339	84.4	40.3	282	73.6	50.5	10.8	***	0.00
Received services related to discussion about youth's general interest, life, and future plans	338	76.9	46.8	281	66.5	54.1	10.4	***	0.01
Received life skills training	336	33.9	52.5	280	28.5	51.8	5.3		0.18
Received help getting into a school or training program	337	38.5	54.0	279	24.3	49.2	14.2	***	0.00
Received help with accommodations	336	34.1	52.6	280	30.9	53.0	3.2		0.42
Received referrals to other agencies	334	3.0	18.9	279	1.5	13.9	1.5		0.24
Received transportation services	334	2.1	15.9	279	1.3	12.8	0.8		0.46
Received health services	334	8.9	31.6	279	7.1	29.4	1.8		0.44
Received case management services	334	2.3	16.7	279	0.6	8.9	1.7		0.11
Other non-employment services	334	8.5	30.9	279	3.8	22.0	4.6	**	0.03
Received any employment or non-employment service	339	89.5	34.1	283	77.3	47.9	12.1	***	0.00
Months of service (average)[a]	310	8.8	4.5	257	6.5	5.5	2.3	***	0.00
Number of contacts with providers (average)[a]	309	106.2	125.3	257	103.3	147.8	2.9		0.80
Hours of service (average)[a]	305	196.2	359.0	254	175.8	315.3	20.3		0.53
Number of providers (average)	338	2.2	1.7	280	2.0	1.9	0.3	*	0.07
Any unmet service need	337	23.5	47.0	290	29.1	51.9	-5.5		0.14
Unmet service need: help finding a job	337	9.6	32.7	290	11.0	35.8	-1.4		0.59
Unmet service need: other employment services	337	13.1	37.4	290	14.9	40.7	-1.8		0.54
Unmet service need: basic skills training	337	1.9	15.0	290	2.6	18.2	-0.7		0.55
Unmet service need: other	337	14.8	39.3	290	17.0	42.9	-2.2		0.47
Understands working does not stop Social Security benefits immediately	336	58.0	54.7	290	56.9	56.6	1.1		0.80

	Treatment Group			Control Group			Unadjusted		
Outcome	N	Mean	Standard Deviation	N	Mean	Standard Deviation	Impact (Treatment -Control)		P-Value
Understands working does not stop medical coverage immediately	336	73.5	49.0	290	70.3	52.2	3.1		0.41
Ever heard of EIE	336	11.0	34.7	290	10.2	34.6	0.7		0.77
Ever heard of SEIE	336	12.1	36.2	290	6.2	27.6	5.9	**	0.02
Ever heard of CDR/Age-18 medical redetermination	195	21.6	45.7	173	26.0	49.5	-4.4		0.35
Ever heard of PASS	336	10.6	34.1	290	7.9	30.7	2.7		0.27
Ever heard of IDA (parent report)	195	6.8	27.9	173	6.6	28.0	0.2		0.95
Ever heard of IDA (youth report)	325	8.2	30.5	280	5.7	26.6	2.5		0.26
Ever heard of Medicaid-while-working or continued Medicaid eligibility	336	19.2	43.7	290	17.2	43.2	2.0		0.55
Potential source of information on work and benefits: CTP	335	11.0	34.7	290	0.0	0.0	11.0	***	0.00
Potential source of information on work and benefits: Social Security office	335	40.7	54.5	290	40.6	56.1	0.2		0.97
Potential source of information on work and benefits: Social Security website	335	8.6	31.1	290	6.0	27.1	2.6		0.24
Potential source of information on work and benefits: Friends and family	335	11.3	35.1	290	16.3	42.2	-5.0	*	0.08
Potential source of information on work and benefits: Internet	335	30.9	51.3	290	35.3	54.6	-4.4		0.27
Potential source of information on work and benefits: Vocational rehabilitation agency	335	0.5	8.1	290	0.8	10.5	-0.3		0.66
Potential source of information on work and benefits: Benefits planner	335	0.0	0.0	290	0.0	0.0	0.0		0.00
Potential source of information on work and benefits: Other	335	18.3	42.9	290	23.8	48.7	-5.5		0.11
Type of service provider: CTP	324	37.5	53.7	276	0.9	10.9	36.6	***	0.00
Type of service provider: One-Stop Workforce Center	324	0.8	9.8	276	1.3	13.1	-0.5		0.54
Type of service provider: Schools or school districts	324	51.7	55.4	276	57.1	56.8	-5.4		0.21
Type of service provider: Vocational rehabilitation agency	324	2.7	17.9	276	7.1	29.5	-4.4	**	0.02
Type of service provider: Work-related, sheltered workshop, employment agency, job training	324	3.6	20.6	276	7.8	30.8	-4.2	**	0.03
Type of service provider: Social Security Administration office	324	1.1	11.7	276	3.0	19.6	-1.9		0.12
Type of service provider: Health services providers	324	9.9	33.2	276	8.8	32.5	1.1		0.65
Type of service provider: Other providers serving primarily people with disabilities	324	12.8	37.1	276	7.0	29.2	5.8	**	0.03
Type of service provider: All other providers	324	35.6	53.1	276	26.3	50.5	9.3	**	0.02

	Treatment Group			Control Group			Unadjusted	
Outcome	N	Mean	Standard Deviation	N	Mean	Standard Deviation	Impact (Treatment -Control)	P-Value
Employment Domain								
Ever employed on paid jobs	344	53.4	55.3	291	54.0	56.9	-0.6	0.88
Ever employed on any (paid or unpaid) job	344	58.5	54.7	294	59.3	56.1	-0.9	0.83
Ever employed on unpaid jobs (but not on paid jobs)	344	5.1	24.4	291	4.9	24.8	0.2	0.93
Percentage of weeks since RA employed on any (paid or unpaid) jobs[a]	338	28.8	36.5	284	30.3	40.4	-1.5	0.64
Percentage of weeks since RA employed on paid jobs[a]	339	26.1	35.3	283	27.2	39.2	-1.1	0.71
Percentage of weeks since RA employed on unpaid jobs[a]	343	1.8	12.3	291	2.7	16.1	-0.9	0.43
Employment status at time of survey	342			291				0.17
Employed on paid job		27.6			30.9		-3.3	
Employed on unpaid job		3.3			2.4		0.8	
Not employed, looking for work		15.5			21.0		-5.5	
Not employed, out of the work force		53.6			45.7		7.9	
Number of jobs (paid and unpaid)[a]	328			275				0.78
0		44.2			44.0		0.2	
1		50.4			52.1		-1.7	
2 or more		5.4			3.9		1.5	
Number of jobs (average, paid and unpaid)[a]	328	0.8	0.9	275	0.7	0.8	0.1	0.26
Number of paid jobs (average)[a]	330	0.7	0.9	275	0.6	0.8	0.1	0.28
Number of unpaid jobs (average)[a]	342	0.1	0.3	291	0.1	0.4	0.0	0.60
Employment rate on paid and unpaid jobs, by month after RA: Month 1[a]	335	25.7	44.3	277	25.7	42.9	0.1	0.99
Employment rate on paid and unpaid jobs, by month after RA: Month 2[a]	334	25.2	42.6	277	25.7	44.6	-0.5	0.89
Employment rate on paid and unpaid jobs, by month after RA: Month 3[a]	335	29.9	47.0	277	29.7	47.9	0.3	0.95
Employment rate on paid and unpaid jobs, by month after RA: Month 4[a]	336	31.8	48.1	277	30.2	49.1	1.6	0.68
Employment rate on paid and unpaid jobs, by month after RA: Month 5[a]	336	32.6	48.7	278	32.0	48.9	0.6	0.87
Employment rate on paid and unpaid jobs, by month after RA: Month 6[a]	336	32.3	47.7	279	35.8	51.0	-3.6	0.37
Employment rate on paid and unpaid jobs, by month after RA: Month 7[a]	336	31.9	46.5	281	34.6	49.7	-2.7	0.50
Employment rate on paid and unpaid jobs, by month after RA: Month 8[a]	335	31.9	48.6	281	34.5	49.5	-2.6	0.52

	Treatment Group			Control Group			Unadjusted	
Outcome	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]	335	34.6	49.7	279	33.1	48.9	1.5	0.72
Employment rate on paid and unpaid jobs, by month after RA: Month 10[a]	334	37.7	50.4	281	39.1	51.6	-1.4	0.73
Employment rate on paid and unpaid jobs, by month after RA: Month 11[a]	335	36.9	49.5	281	40.2	51.9	-3.4	0.42
Employment rate on paid and unpaid jobs, by month after RA: Month 12[a]	334	34.5	49.7	281	40.9	52.2	-6.4	0.12
Employment rate on paid jobs, by month after RA: Month 1[a]	334	23.6	42.6	277	22.0	41.9	1.6	0.65
Employment rate on paid jobs, by month after RA: Month 2[a]	333	23.3	41.8	277	22.6	41.0	0.7	0.84
Employment rate on paid jobs, by month after RA: Month 3[a]	334	27.2	44.7	277	27.4	46.8	-0.2	0.96
Employment rate on paid jobs, by month after RA: Month 4[a]	335	28.9	45.3	277	26.7	42.2	2.2	0.57
Employment rate on paid jobs, by month after RA: Month 5[a]	335	30.5	47.0	278	29.1	48.2	1.4	0.72
Employment rate on paid jobs, by month after RA: Month 6[a]	335	29.5	45.6	278	32.0	49.1	-2.5	0.52
Employment rate on paid jobs, by month after RA: Month 7[a]	335	29.1	45.4	280	31.0	48.2	-1.9	0.62
Employment rate on paid jobs, by month after RA: Month 8[a]	334	29.1	46.7	280	31.0	48.1	-2.0	0.61
Employment rate on paid jobs, by month after RA: Month 9[a]	334	31.5	48.2	278	29.7	48.0	1.8	0.64
Employment rate on paid jobs, by month after RA: Month 10[a]	333	34.1	48.6	280	35.2	50.2	-1.2	0.77
Employment rate on paid jobs, by month after RA: Month 11[a]	334	33.7	49.4	280	36.6	49.6	-2.9	0.48
Employment rate on paid jobs, by month after RA: Month 12[a]	333	31.2	45.2	280	37.5	50.5	-6.3	0.13
Cumulative employment rate on paid and unpaid jobs, by month following RA: Month 1[a]	335	25.5	43.9	277	25.4	42.8	0.1	0.98
Cumulative employment rate on paid and unpaid jobs, by month following RA: Month 2[a]	335	27.6	44.9	277	27.3	45.7	0.4	0.92
Cumulative employment rate on paid and unpaid jobs, by month following RA: Month 3[a]	335	34.3	49.1	277	32.2	48.2	2.1	0.60
Cumulative employment rate on paid and unpaid jobs, by month following RA: Month 4[a]	336	36.8	50.1	277	34.9	50.0	1.9	0.64
Cumulative employment rate on paid and unpaid jobs, by month following RA: Month 5[a]	336	39.7	50.5	278	38.1	51.1	1.6	0.71
Cumulative employment rate on paid and unpaid jobs, by month following RA: Month 6[a]	336	43.3	51.4	279	42.4	51.1	0.9	0.82
Cumulative employment rate on paid and unpaid jobs, by month following RA: Month 7[a]	337	44.5	51.6	281	44.7	52.0	-0.2	0.95

	Treatment Group			Control Group			Unadjusted		
Outcome	N	Mean	Standard Deviation	N	Mean	Standard Deviation	Impact (Treatment -Control)		P-Value
Cumulative employment rate o paid and unpaid jobs, by month following RA: Month 8[a]	337	46.1	51.8	n282	46.4	51.3	-0.4		0.93
Cumulative employment rate on paid and unpaid jobs, by month following RA: Month 9[a]	337	50.0	52.0	282	47.5	52.5	2.5		0.56
Cumulative employment rate on paid and unpaid jobs, by month following RA: Month 10[a]	337	53.3	51.9	284	53.3	52.8	0.0		0.99
Cumulative employment rate on paid and unpaid jobs, by month following RA: Month 11[a]	338	55.4	51.7	284	55.6	52.6	-0.2		0.95
Cumulative employment rate on paid and unpaid jobs, by month following RA: Month 12[a]	338	56.5	51.6	284	56.8	52.4	-0.4		0.93
Cumulative employment rate on paid jobs, by month following RA: Month 1[a]	334	23.5	41.5	277	22.1	41.1	1.4		0.70
Cumulative employment rate on paid jobs, by month following RA: Month 2[a]	334	25.5	44.2	277	24.0	42.9	1.5		0.68
Cumulative employment rate on paid jobs, by month following RA: Month 3[a]	334	31.1	46.4	277	29.1	48.4	2.0		0.60
Cumulative employment rate on paid jobs, by month following RA: Month 4[a]	335	33.0	47.9	277	30.6	47.5	2.4		0.54
Cumulative employment rate on paid jobs, by month following RA: Month 5[a]	335	36.4	48.6	278	34.2	50.2	2.2		0.59
Cumulative employment rate on paid jobs, by month following RA: Month 6[a]	335	39.2	49.6	278	37.8	50.3	1.5		0.73
Cumulative employment rate on paid jobs, by month following RA: Month 7[a]	336	40.5	50.7	280	40.1	51.8	0.4		0.92
Cumulative employment rate on paid jobs, by month following RA: Month 8[a]	336	41.7	50.8	281	41.9	51.1	-0.3		0.95
Cumulative employment rate on paid jobs, by month following RA: Month 9[a]	336	45.1	51.5	281	42.6	51.8	2.4		0.57
Cumulative employment rate on paid jobs, by month following RA: Month 10[a]	336	48.6	52.0	283	48.1	53.0	0.5		0.90
Cumulative employment rate on paid jobs, by month following RA: Month 11[a]	337	49.9	51.9	283	50.1	53.0	-0.2		0.96
Cumulative employment rate on paid jobs, by month following RA: Month 12[a]	337	51.1	52.0	283	51.5	53.0	-0.3		0.94
Total hours worked on paid and unpaid jobs[a]	328			274				**	0.02
Not employed		43.8			41.7		2.1		
>0 to 260 hours		17.7			26.5		-8.9		
>260 to 1,040 hours		28.2			19.3		8.8		
>1,040 hours		10.4			12.4		-2.1		
Total hours worked on paid and unpaid jobs (average)[a]	328	334.6	481.4	274	322.5	538.7	12.2		0.77

	Treatment Group			Control Group			Unadjusted		
Outcome	N	Mean	Standard Deviation	N	Mean	Standard Deviation	Impact (Treatment -Control)		P-Value
Total hours worked on paid jobs[a]	330			274				**	0.02
No paid employment		49.4			46.6		2.8		
>0 to 260 hours		14.2			22.7		-8.5		
>260 to 1,040 hours		26.4			18.2		8.2		
>1,040 hours		10.0			12.5		-2.5		
Total hours worked on paid jobs (average)[a]	330	319.4	481.4	274	311.0	540.9	8.4		0.84
Average hours worked per week in paid or unpaid jobs, by month following RA: Month 1[a]	327	5.0	10.4	274	4.6	10.4	0.5		0.58
Average hours worked per week in paid or unpaid jobs, by month following RA: Month 2[a]	327	5.3	10.2	274	4.9	10.3	0.4		0.63
Average hours worked per week in paid or unpaid jobs, by month following RA: Month 3[a]	327	6.1	11.2	274	5.2	10.8	0.9		0.32
Average hours worked per week in paid or unpaid jobs, by month following RA: Month 4[a]	327	6.8	12.0	274	5.5	11.2	1.3		0.18
Average hours worked per week in paid or unpaid jobs, by month following RA: Month 5[a]	327	6.6	11.6	274	6.0	11.4	0.6		0.53
Average hours worked per week in paid or unpaid jobs, by month following RA: Month 6[a]	327	6.6	11.5	274	6.8	12.6	-0.2		0.85
Average hours worked per week in paid or unpaid jobs, by month following RA: Month 7[a]	327	6.5	11.3	274	6.9	12.5	-0.4		0.69
Average hours worked per week in paid or unpaid jobs, by month following RA: Month 8[a]	327	6.6	11.9	274	6.9	12.9	-0.3		0.75
Average hours worked per week in paid or unpaid jobs, by month following RA: Month 9[a]	327	7.5	13.7	274	7.3	13.4	0.2		0.83
Average hours worked per week in paid or unpaid jobs, by month following RA: Month 10[a]	327	8.0	14.3	274	7.6	13.5	0.4		0.71
Average hours worked per week in paid or unpaid jobs, by month following RA: Month 11[a]	327	7.8	13.9	274	8.1	13.9	-0.3		0.82
Average hours worked per week in paid or unpaid jobs, by month following RA: Month 12[a]	327	7.5	13.7	274	8.1	13.7	-0.5		0.63
Average hours worked per week in paid jobs, by month following RA: Month 1[a]	330	4.8	10.3	274	4.3	10.0	0.6		0.49
Average hours worked per week in paid jobs, by month following RA: Month 2[a]	330	5.0	10.5	274	4.7	10.6	0.3		0.73
Average hours worked per week in paid jobs, by month following RA: Month 3[a]	330	5.7	11.0	274	5.1	10.8	0.7		0.44
Average hours worked per week in paid jobs, by month following RA: Month 4[a]	330	6.5	12.1	274	5.4	11.2	1.1		0.24
Average hours worked per week in paid jobs, by month following RA: Month 5[a]	330	6.4	11.4	274	5.8	11.7	0.6		0.53

	Treatment Group			Control Group			Unadjusted	
Outcome	N	Mean	Standard Deviation	N	Mean	Standard Deviation	Impact (Treatment -Control)	P-Value
Average hours worked per week in paid jobs, by month following RA: Month 6[a]	330	6.3	11.5	274	6.5	12.5	-0.2	0.81
Average hours worked per week in paid jobs, by month following RA: Month 7[a]	330	6.2	11.2	274	6.7	12.5	-0.5	0.61
Average hours worked per week in paid jobs, by month following RA: Month 8[a]	330	6.3	11.9	274	6.7	12.8	-0.4	0.68
Average hours worked per week in paid jobs, by month following RA: Month 9[a]	330	7.1	13.3	274	7.0	13.4	0.1	0.92
Average hours worked per week in paid jobs, by month following RA: Month 10[a]	330	7.5	14.0	274	7.4	13.7	0.2	0.89
Average hours worked per week in paid jobs, by month following RA: Month 11[a]	330	7.3	13.8	274	7.8	13.8	-0.5	0.65
Average hours worked per week in paid jobs, by month following RA: Month 12[a]	330	7.0	13.2	274	7.9	13.8	-0.9	0.42
Annual earnings[a]	315			264				0.43
No paid employment		46.6			45.4		1.2	
$1 to $1,000		11.0			15.9		-4.9	
>$1,000 to $5,000		20.4			19.0		1.4	
>5,000		22.0			19.7		2.3	
Annual earnings (average, $)[a]	315	2,591	3,975	264	2,692	4,884	-100.2	0.79
Earnings per month worked [a]	315			264				0.78
No paid employment		46.6			45.4		1.2	
$1 to $500		19.2			21.6		-2.4	
>$500		34.2			33.0		1.2	
Earnings per working month (average, $)[a]	315	398	522	264	383	524	15.7	0.72
Average monthly earnings, by month following RA: Month 1 ($)[a]	329	162	352	271	150	381	11.2	0.71
Average monthly earnings, by month following RA: Month 2 ($)[a]	329	168	366	271	165	410	3.0	0.92
Average monthly earnings, by month following RA: Month 3 ($)[a]	327	194	394	270	177	395	17.3	0.60
Average monthly earnings, by month following RA: Month 4 ($)[a]	327	212	414	269	182	397	30.2	0.37
Average monthly earnings, by month following RA: Month 5 ($)[a]	327	210	393	269	197	420	12.3	0.71
Average monthly earnings, by month following RA: Month 6 ($)[a]	328	212	394	269	227	461	-14.9	0.68
Average monthly earnings, by month following RA: Month 7 ($)[a]	329	205	393	270	243	485	-37.6	0.30
Average monthly earnings, by month following RA: Month 8 ($)[a]	328	212	409	270	244	497	-32.1	0.39

	Treatment Group			Control Group			Unadjusted		
Outcome	N	Mean	Standard Deviation	N	Mean	Standard Deviation	Impact (Treatment -Control)		P-Value
Average monthly earnings, by month following RA: Month 9 ($)[a]	326	239	469	270	244	485	-5.0		0.90
Average monthly earnings, by month following RA: Month 10 ($)[a]	328	251	472	269	256	496	-5.2		0.90
Average monthly earnings, by month following RA: Month 11 ($)[a]	327	249	490	269	270	493	-21.2		0.60
Average monthly earnings, by month following RA: Month 12 ($)[a]	326	241	488	270	285	506	-43.7		0.29
Cumulative earnings, by month following RA: Month 1 ($)[a]	329	162	359	271	151	377	10.7		0.73
Cumulative earnings, by month following RA: Month 2 ($)[a]	329	323	703	271	307	740	15.5		0.79
Cumulative earnings, by month following RA: Month 3 ($)[a]	329	510	1,039	271	477	1,118	33.1		0.71
Cumulative earnings, by month following RA: Month 4 ($)[a]	329	716	1,371	271	657	1,510	59.3		0.62
Cumulative earnings, by month following RA: Month 5 ($)[a]	329	920	1,723	271	850	1,864	70.2		0.63
Cumulative earnings, by month following RA: Month 6 ($)[a]	329	1,137	2,058	271	1,089	2,350	47.8		0.79
Cumulative earnings, by month following RA: Month 7 ($)[a]	329	1,337	2,388	271	1,333	2,735	3.6		0.99
Cumulative earnings, by month following RA: Month 8 ($)[a]	329	1,549	2,710	271	1,574	3,206	-25.1		0.92
Cumulative earnings, by month following RA: Month 9 ($)[a]	329	1,787	3,029	271	1,843	3,645	-56.8		0.84
Cumulative earnings, by month following RA: Month 10 ($)[a]	330	2,041	3,367	271	2,116	4,171	-75.4		0.81
Cumulative earnings, by month following RA: Month 11 ($)[a]	330	2,281	3,673	271	2,373	4,566	-91.6		0.79
Cumulative earnings, by month following RA: Month 12 ($)[a]	330	2,510	4,046	271	2,647	5,023	-136.7		0.71
Tenure on primary job[a]	326			271				**	0.04
Not employed		48.9			46.6		2.3		
1 month or less		3.1			8.9		-5.8		
>1 month to 6 months		28.2			22.0		6.3		
>6 months to 11 months		10.4			11.1		-0.7		
>11 months		9.3			11.4		-2.1		
Months of tenure (average)[a]	326	2.8	3.9	271	3.0	4.5	-0.2		0.64
Usual hours per week on primary job[a]	323			268				**	0.04
Not employed		46.6			45.4		1.2		
10 hours or less		7.6			13.7		-6.2		
>10 hours to 20 hours		16.1			18.7		-2.7		
>20 hours		29.7			22.1		7.6		
Hours per week on primary job (average)[a]	323	12.7	15.2	268	11.2	14.4	1.6		0.21

	Treatment Group			Control Group			Unadjusted	
Outcome	N	Mean	Standard Deviation	N	Mean	Standard Deviation	Impact (Treatment -Control)	P-Value
Hourly wage rate on primary job[a]	315			264				0.97
Not employed		46.6			45.4		1.2	
Less than $7		17.2			17.0		0.2	
$7 to $9		24.0			23.9		0.1	
>$9		12.2			13.6		-1.4	
Health insurance coverage on primary job[a]	297			248				0.67
Not employed		46.6			45.4		1.2	
Employed without health insurance		38.5			36.7		1.8	
Employed with health insurance		14.9			17.9		-3.0	
Paid vacation/sick leave on primary job[a]	306			245				0.27
Not employed		46.6			45.4		1.2	
Employed w/o paid vacation/sick leave		31.6			37.7		-6.1	
Employed with paid vacation/sick leave		21.8			16.9		4.9	
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	336	91.3	31.2	293	90.7	33.2	0.7	0.78
Ever enrolled in school	338	73.4	49.0	292	71.3	51.7	2.1	0.58
High school diploma/GED/certificate or higher	344	51.3	55.4	295	56.7	56.5	-5.4	0.19
Type of School Attended	338			292				0.36
Did not attend		26.6			28.7		-2.1	
Elementary/middle/								
regular high school		30.9			35.2		-4.3	
Special school for the disabled or home school		11.6			12.5		-0.8	
Postsecondary institution		28.6			21.1		7.5	
GED/Adult continuing education		2.2			2.5		-0.3	
Number of months in school	336			291				0.85
None		26.8			28.8		-2.0	
<Nine months		24.5			24.6		-0.1	
Nine or more months		48.8			46.7		2.1	
Income Domain								
Annual income from earnings and SSA benefits (average, $)[a]	315	4,239	5,157	264	4,723	5,596	-484.3	0.27
Distribution of total annual income[a]	315			264				0.74
<$5,000		65.8			62.7		3.1	
$5,000 to <$7,000		13.3			12.3		1.0	
$7,000 to <$10,000		8.3			10.0		-1.7	
$10,000 or more		12.6			14.9		-2.4	
Percentage of total annual income from earnings[a]	315	58.1	48.6	264	56.7	50.4	1.4	0.74

	Treatment Group			Control Group			Unadjusted	
Outcome	N	Mean	Standard Deviation	N	Mean	Standard Deviation	Impact (Treatment -Control)	P-Value
Youth income, by month following RA: Month 1 ($)[a]	329	281	445	271	306	461	-24.7	0.50
Youth income, by month following RA: Month 2 ($)[a]	329	288	455	271	328	484	-39.3	0.30
Youth income, by month following RA: Month 3 ($)[a]	327	325	484	270	344	485	-18.3	0.64
Youth income, by month following RA: Month 4 ($)[a]	327	347	498	269	349	487	-2.1	0.96
Youth income, by month following RA: Month 5 ($)[a]	327	345	473	269	366	482	-21.4	0.58
Youth income, by month following RA: Month 6 ($)[a]	328	351	477	269	396	514	-44.9	0.27
Youth income, by month following RA: Month 7 ($)[a]	329	348	498	270	411	527	-62.6	0.13
Youth income, by month following RA: Month 8 ($)[a]	328	360	538	270	417	538	-57.7	0.19
Youth income, by month following RA: Month 9 ($)[a]	326	389	593	270	421	535	-31.9	0.48
Youth income, by month following RA: Month 10 ($)[a]	328	399	553	269	434	550	-35.4	0.43
Youth income, by month following RA: Month 11 ($)[a]	327	400	558	269	454	546	-54.1	0.23
Youth income, by month following RA: Month 12 ($)[a]	326	393	548	270	465	539	-71.5	0.11
Any benefit receipt during the year following RA[b]	419	25.5	43.7	382	26.4	44.2	-0.9	0.77
Number of months of benefit receipt during the year following RA (average)[b]	419	2.8	498.0	382	2.9	500.3	-0.1	0.79
Distribution of annual benefit amount[b]	419			382				0.78
None		74.5			73.6		0.9	
$1 to $6,500		12.2			13.4		-1.2	
>$6,500 to $8,000		7.9			6.5		1.3	
>$8,000		5.5			6.5		-1.1	
Annual benefit amount (average, $)[b]	419	1,627	3,312	382	1,821	3,719	-193.7	0.44
SSA benefit amount, by month following RA: Month 1($)[b]	419	120	266	382	141	306	-20.2	0.32
SSA benefit amount, by month following RA: Month 2 ($)[b]	419	121	265	382	146	311	-24.8	0.22
SSA benefit amount, by month following RA: Month 3 ($)[b]	419	129	275	382	150	315	-21.6	0.30
SSA benefit amount, by month following RA: Month 4 ($)[b]	419	133	281	382	150	315	-17.2	0.42
SSA benefit amount, by month following RA: Month 5 ($)[b]	419	134	282	382	152	315	-18.3	0.39
SSA benefit amount, by month following RA: Month 6 ($)[b]	419	137	286	382	152	318	-15.6	0.47
SSA benefit amount, by month following RA: Month 7 ($)[b]	419	138	290	382	151	316	-13.0	0.55
SSA benefit amount, by month following RA: Month 8 ($)[b]	419	145	295	382	155	319	-10.4	0.63
SSA benefit amount, by month following RA: Month 9 ($)[b]	419	146	296	382	157	321	-11.1	0.61
SSA benefit amount, by month following RA: Month 10 ($)[b]	419	147	295	382	157	320	-9.9	0.65

	Treatment Group			Control Group			Unadjusted	
Outcome	N	Mean	Standard Deviation	N	Mean	Standard Deviation	Impact (Treatment -Control)	P-Value
SSA benefit amount, by month following RA: Month 11($)[b]	419	147	287	382	163	325	-15.2	0.48
SSA benefit amount, by month following RA: Month 12 ($)[b]	419	149	288	382	160	319	-10.9	0.61
Used at least one SSA work incentive[b]	419	5.3	22.3	382	5.5	22.8	-0.2	0.88
Used the SEIE[b]	419	1.2	10.9	382	1.0	10.2	0.1	0.85
Used the EIE[b]	419	3.1	17.4	382	3.4	18.2	-0.3	0.81
Used the Section 301 waiver[b]	419	1.2	10.9	382	1.6	12.5	-0.4	0.65
Established a PASS[b]	419	0.2	4.9	382	0.0	0.0	0.2	0.34
Opened an IDA[b]	419	0.0	0.0	382	0.0	0.0	0.0	0.00
Reported any earnings to SSA[b]	419	3.6	18.6	382	4.2	20.1	-0.6	0.66
Public health insurance coverage	320	50.3	55.3	283	47.2	56.9	3.1	0.47
Private health insurance	319	50.7	55.2	279	49.4	56.8	1.3	0.76
Covered by both public and private health insurance	312	12.0	35.9	275	10.3	34.5	1.7	0.53
Either public or private health insurance	326	87.5	36.5	283	85.7	39.9	1.8	0.53
Household receipt of SNAP	313	23.1	46.5	269	22.9	47.9	0.2	0.95
Household receipt of TANF	309	5.9	25.9	265	7.3	29.7	-1.5	0.50
Attitudes and Expectations Domain								
Youth agrees that personal goals include working and earning enough to stop receiving Social Security benefits	302	81.6	42.7	250	82.7	43.2	-1.1	0.76
Plans to go further in school, youth response	314	89.8	33.5	272	86.4	39.0	3.3	0.24
Plans to go further in school, parent response	188	92.4	29.5	167	90.8	32.8	1.6	0.61
Expectations for employment, youth response[a]	295			258				0.16
Working for pay at the time of the follow-up survey		27.5			30.5		-3.0	
Plans to start working for pay		70.6			64.9		5.8	
No plans to start working for pay		1.9			4.6		-2.7	
Expectations for employment, parent response[a]	223			205				0.15
Working for pay at the time of the follow-up survey		27.5			30.5		-3.0	
Plans to start working for pay		70.9			64.9		6.0	
No plans to start working for pay		1.6			4.6		-3.0	
Plans to live on own (with or without help), youth response	312	83.5	41.0	275	85.8	39.8	-2.3	0.47
Plans to live on own (with or without help), parent response	180	62.9	53.8	161	54.4	56.2	8.5	0.13

Outcome	Treatment Group N	Treatment Group Mean	Treatment Group Standard Deviation	Control Group N	Control Group Mean	Control Group Standard Deviation	Unadjusted Impact (Treatment -Control)	Unadjusted P-Value
Internal locus of control (average of index)	316	3.4	58.9	268	3.5	57.2	-0.1	0.20
External locus of control (average of index)	315	3.0	78.5	268	3.0	81.8	0.0	0.65
Makes snacks or sandwiches (most/some of the time)	332	96.6	19.9	292	97.5	17.7	-0.9	0.53
Rides public transportation alone (most/some of the time)	332	85.1	39.4	292	82.4	43.5	2.6	0.40
Picks clothes to wear (most/some of the time)	332	98.9	11.8	291	97.2	18.9	1.7	0.15
Decides to spend own money (most/some of the time)	332	94.6	25.1	292	92.7	29.7	1.9	0.37
Decides how to spend free time (most/some of the time)	331	96.3	20.9	292	97.5	17.8	-1.2	0.42
Gets together with friends often or sometimes	331	78.4	45.5	288	82.2	43.5	-3.8	0.26
Exploratory Analysis								
Ever enrolled in training in the year following RA	338	3.5	20.4	294	4.1	22.7	-0.6	0.71
Number of months in a training program	338			294				0.80
None		96.5			95.9		0.6	
<Nine months		2.4			3.3		-0.8	
Nine or more months		1.1			0.9		0.2	
Number of months in a training program (average)	338	0.2	1.6	294	0.2	1.3	0.1	0.51
Participated in any productive activity	342	90.3	32.9	294	89.6	34.8	0.6	0.80
Analytic Sample Size	344			295				
Research Sample Size	419			382				

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.

[a]Indicates outcome measures for which we used a multiple imputation procedure for missing information. See Section E of this appendix.

[b]Indicates 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.

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 21 to 22 percentage points (statistically significant at the one percent level). For all other primary outcomes, the estimated impacts do not differ statistically from zero and are similar in magnitude.

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	20.9	***	0.00	22.0	***	0.00
Ever employed on a paid job during first year after random assignment	-0.6		0.88	-4.2		0.29
Ever enrolled in school in the year following random assignment or completed high school by the time of the 12-month follow-up survey	0.7		0.78	1.2		0.60
Total annual income (earnings and SSA benefits, $)[a]	-100		0.79	-386		0.31
Youth agrees that personal goals include working and earning enough to stop receiving Social Security benefits	-1.1		0.76	-2.3		0.49

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 344 treatment group youth and 295 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.

[a]For this outcome, item non-response occurred conditionally, depending on values of other measures in the follow-up survey. The rate of missing data is 9.4 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 be white; be attending school; have completed high school; have received special education; have received job training in the year prior to random assignment; be living with both parents; and have family income of $10,000 or more. Respondents were less likely than non-respondents to report excellent health, to expect to live independently, to make snacks or sandwiches, and to ride public transportation alone (Table A.7).

Only 21 percent of youth received SSA benefits during the year before random assignment. Respondents were about as likely as non-respondents to have received benefits in the year before random assignment. However, respondents were more likely to have received benefits in the year following random assignment (Table A.8). One reason for this difference is that youth who were no longer receiving benefits were more difficult to locate through 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 found that the estimated impact of CTP on benefit receipt did not differ between the respondent sample and the

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					***	0.00
White	40.1	43.4	27.2	16.3		
Black	40.0	37.6	49.4	-11.8		
American Indian/AK/HI/Pacific Islander	1.4	1.4	1.2	0.2		
Asian	4.6	4.9	3.7	1.2		
Other or unknown	13.9	12.7	18.5	-5.8		
Hispanic	23.2	22.9	24.1	-1.2		0.76
Primarily speaks English at home	86.6	86.5	87.0	-0.5		0.87
Education						
School Attendance					**	0.03
Does not attend school	22.8	21.4	28.8	-7.4		
Attends regular high school	54.8	54.3	56.8	-2.6		
Attends special high school	12.9	13.7	9.6	4.1		
Attends other school	9.5	10.7	4.8	5.9		
HS diploma, GED, or certificate of completion	17.5	18.7	13.0	5.7	*	0.09
Ever received special education	71.9	75.4	58.1	17.3	***	0.00
Employment						
Received job training in last year	34.7	36.4	28.0	8.5	**	0.04
Worked as a volunteer in last year	14.5	14.2	16.0	-1.9		0.54
Worked for pay in last year	56.5	57.1	54.3	2.7		0.53
Worked for pay in last month	27.9	27.6	29.0	-1.4		0.72
Never worked for pay at baseline	25.9	25.2	28.4	-3.2		0.41
Living Arrangements and Household Composition						
Living Arrangements					***	0.01
Two-parent family	45.1	47.7	34.4	13.4		
Single-parent family	41.4	39.9	47.5	-7.6		
Group home	1.9	2.2	0.6	1.6		
Other institution	5.6	4.9	8.8	-3.9		
Lives alone or with friends	6.0	5.3	8.8	-3.4		
Average number of people in household	4.1	4.1	4.2	-0.2		0.27
Lives with others with disabilities	27.5	27.3	28.2	-0.9		0.84
Family Socioeconomic Status						
Annual Income Level					***	0.01
Less than $10,000	17.0	15.2	25.2	-10.0		
$10,000 – $24,999	16.6	17.9	10.6	7.4		
$25,000 or more	66.4	66.8	64.2	2.6		
Receives TANF/family assistance	3.7	3.8	3.3	0.4		0.79
Parents' Education						
Mother high school graduate	79.5	78.6	84.5	-5.9		0.16
Father high school graduate	76.0	75.5	81.6	-6.1		0.34
Parents' Employment Status						
Mother currently employed	70.6	69.8	74.3	-4.5		0.34
Father currently employed	78.0	77.9	78.8	-1.0		0.87
Self-Reported Health Status					*	0.07
Excellent	27.6	25.8	34.6	-8.7		
Very good/good	60.9	62.1	56.2	6.0		
Fair/poor	11.5	12.1	9.3	2.8		
Assistance						
Help with personal care needs	2.1	2.2	1.9	0.3		0.79
Expectations About the Future						
Expects to live independently (w/ or w/o help)	80.5	78.7	87.2	-8.4	**	0.02
Expects to continue education	95.2	94.7	97.5	-2.8		0.14
Expects to work at least part-time for pay	98.2	97.9	99.4	-1.5		0.21

	All	Respondents	Non-Respondents	Difference		P-Value
Independent Activities and Decision Making						
Makes snacks or sandwiches (most/some of the time)	97.1	96.6	99.4	-2.8	*	0.05
Rides public transportation alone (most/some of the time)	82.9	80.9	90.7	-9.9	***	0.00
Decides how to spend own money (most/some of the time)	95.5	95.3	96.3	-1.0		0.58
Decides how to spend own free time (most/some of the time)	97.1	97.5	95.7	1.8		0.22
Administrative Data						
Demographic Characteristics						
Male	67.0	67.8	64.2	3.6		0.39
Age in Years						0.19
14–17	46.4	44.9	52.5	-7.6		
18–21	52.1	53.7	45.7	8.0		
22–25	1.5	1.4	1.9	-0.4		
Average age (years)	17.7	17.7	17.6	0.2		0.21
Benefits in Year Before Month of RA						
Received SSA benefits	21.0	21.9	17.3	4.6		0.20
Amount of SSA Benefits ($)	1,339	1,388	1,144	245		0.38
Earnings in year before year of RA ($)	1,034	978	1,256	-279		0.51
Sample Size	801	639	162			

Sources: YTD baseline survey and 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 four 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.

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	21.0	21.9	17.3	4.6		0.20
Any SSA benefits in year after month of random assignment	26.0	27.5	19.8	7.8	**	0.04
Benefit Amount ($)						
SSA benefits in year before month of random assignment	1,339	1,388	1,144	245		0.38
SSA benefits in year after month of random assignment	1,720	1,800	1,401	399		0.20
Sample Size	801	639	162			

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 four research sample youth who were deceased at the time of the 12-month survey.

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

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 school attendance, living arrangement, and lives with others with disabilities. Additional characteristics for the control group included self reported health status, mother's education, public or private health insurance receipt, father's employment, expects to continue education, high school diploma or GED, decided how to spend free time at least some of the time, and picked clothes to wear at least some of the time. For the treatment group, additional characteristics included age, race, father's education, income level, SNAP (food stamp) receipt, and mother's employment.

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 four variables with a larger share of missing observations, we used dummy variables to indicate that the information was missing: mother completed high school (8 percent missing), father completed high school (21 percent missing), mother currently employed (9 percent missing) and youth expects to live independently

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				Treatment Group			
	Observed Mean	Estimated Mean w/o CTP	Impact	P-Value	Observed Mean	Estimated Mean w/o CTP	Impact	P-Value
Receipt of SSA Benefits (SSI, DI, or CDB)								
Any SSA benefits	25.8	25.6	0.3	0.89	25.5	24.9	0.6	0.72
Number of months of benefit receipt during the year following random assignment	2.9	2.7	0.1	0.51	2.8	2.7	0.1	0.53
Benefit Amount				0.29				0.40
Distribution of annual benefit amount	52.9	54.7	-1.9		55.1	57.0	-1.9	
None	21.3	16.0	5.3		19.3	18.0	1.3	
$1 to $6,500	12.1	14.6	-2.5		12.2	13.2	-1.0	
>$6,500 to $8,000	8.9	7.1	1.8		7.9	4.8	3.0	
>$8,000	4.8	7.6	-2.7		5.5	7.0	-1.5	
Annual benefit amount ($)	1,648	1,673	-26	0.88	1,627	1,696	-68	0.65
Use of SSA Work Incentives								
Used at least one SSA work incentive	5.7	5.0	0.7	0.71	5.3	5.4	-0.1	0.95
Used the EIE	3.6	3.1	0.5	0.74	3.1	3.7	-0.6	0.62
Used the SEIE	1.2	1.3	-0.1	0.89	1.2	1.1	0.1	0.89
Used the Section 301 waiver	1.2	1.7	-0.4	0.72	1.2	1.4	-0.2	0.81
Established a PASS[a]	0.8	0.0	0.8	0.14	0.2	0.0	0.2	0.25
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 CTP, 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 344 treatment group youth and 295 control group youth. The full randomly assigned sample (also referred to as the research sample) includes 419 treatment group youth and 382 control group youth. This analysis does not include four 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.

[a]The 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.

(6 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 9.4 percent of observations had missing data. The only exceptions were availability of health insurance benefits on the primary job (15 percent missing), paid vacation or sick leave benefits on the primary job (14 percent missing), and future employment expectations (13 percent were missing the youth response, and 33 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).[131]

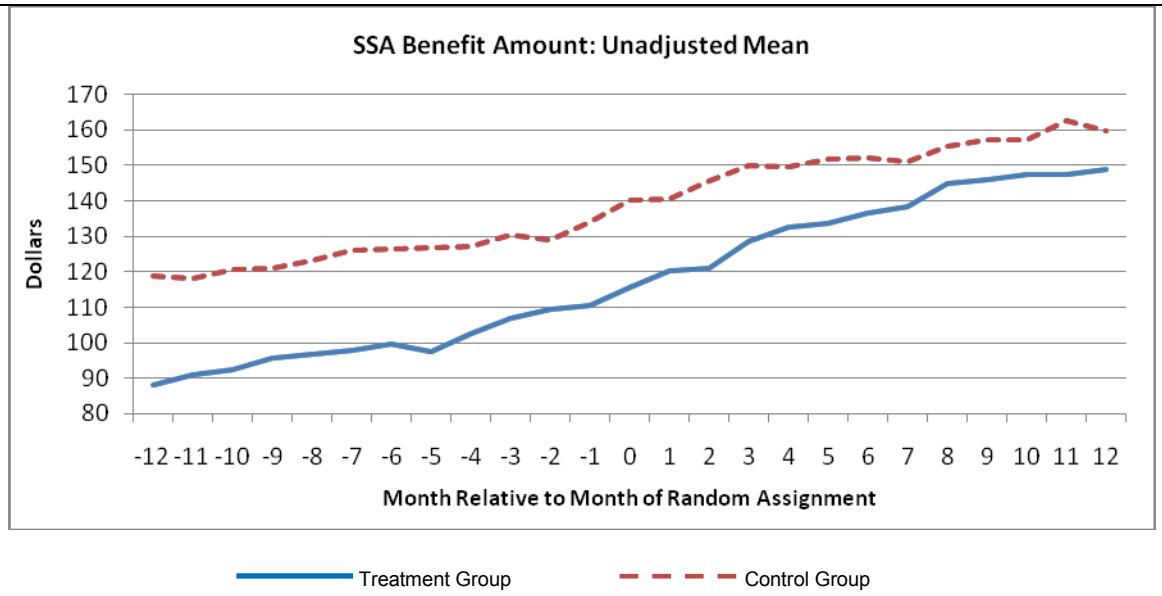
F. Monthly SSA Benefits Before and After Random Assignment

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 except the 12th month before random assignment.

[131] 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.

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



Source: SSA administrative records.

Notes: The analysis includes all youth who were randomly assigned, with the exception of four youth who were deceased at the time of the 12-month survey. The figure presents observed means for the treatment and control groups.

The estimated difference between the treatment and control groups for month -12 is statistically different from zero at the .10 level.

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	88	119	-31	*	0.10
11 months before	91	118	-27		0.15
10 months before	93	121	-28		0.13
9 months before	96	121	-26		0.17
8 months before	97	123	-26		0.16
7 months before	98	126	-28		0.14
6 months before	100	127	-27		0.16
5 months before	98	127	-30		0.12
4 months before	103	127	-25		0.20
3 months before	107	131	-24		0.23
2 months before	109	129	-20		0.31
1 month before	110	134	-24		0.23
Month of random assignment	116	140	-24		0.23
1 month after	120	141	-20		0.32
2 months after	121	146	-25		0.22
3 months after	129	150	-22		0.30
4 months after	133	150	-17		0.42
5 months after	134	152	-18		0.39
6 months after	137	152	-16		0.47
7 months after	138	151	-13		0.55
8 months after	145	155	-10		0.63
9 months after	146	157	-11		0.61
10 months after	147	157	-10		0.65
11 months after	147	163	-15		0.48
12 months after	149	160	-11		0.61
Sample Size	419	382			

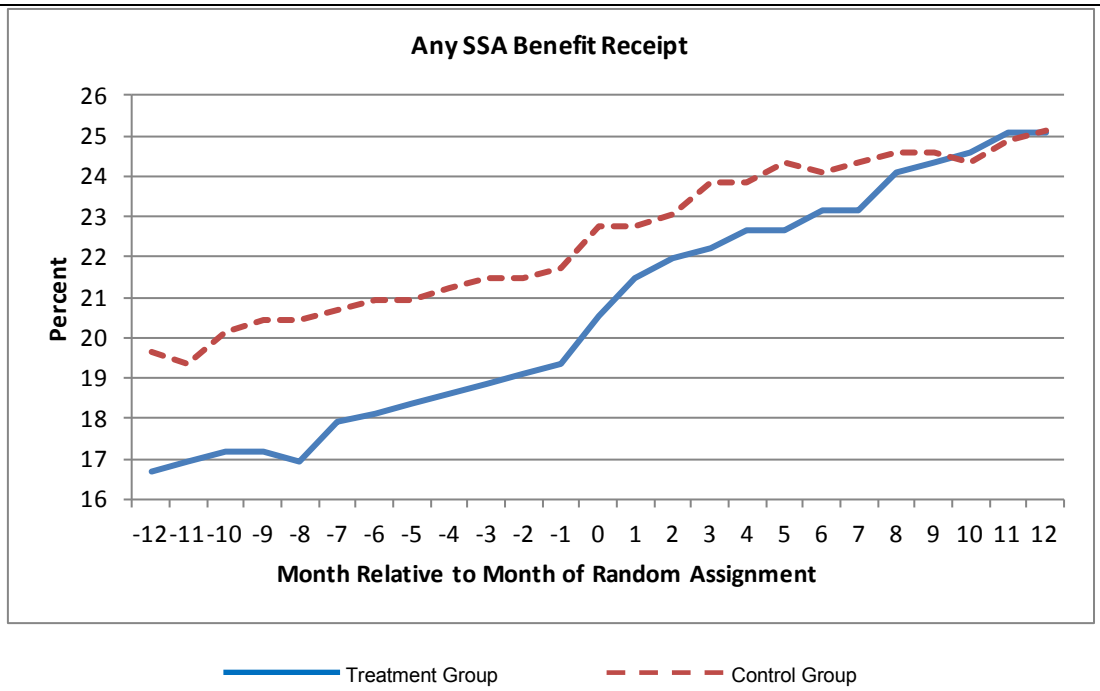
Source: SSA administrative records.

Notes: The analysis includes all youth who were randomly assigned, with the exception of four 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



Source: SSA administrative records.

Notes: The analysis includes all youth who were randomly assigned, with the exception of four youth who were deceased at the time of the 12-month survey. The figure presents observed percentages for the treatment and control groups.

None of the estimated differences between the treatment and control groups are significantly different from zero at the .10 level.

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 program 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 CTP on the primary outcomes for the following four exploratory subgroup pairs:[132]

- **Enrollment cohort.** Impacts may differ between early and later cohorts because program services differ over time (attributable, for example, to differences in staff experience or staff turnover) and because other conditions differ over time (for example, job availability in the local labor market). To divide the sample somewhat evenly, we

[132] For other sites, we also examined subgroup pairs defined by duration on SSA benefits and primary disabling condition. For CTP, we do not have these characteristics for most youth because the source is administrative data for youth who received SSA disability benefits (who make up only a small share of youth in the CTP evaluation).

considered youth randomly assigned before October 1, 2009, as the early cohort. The early cohort comprised 52 percent of youth. [133]

- **Time between consent and baseline survey.** To examine whether impacts differed for youth who may have been harder-to-enroll in the evaluation, we estimated impacts separately for youth who completed the baseline survey within seven days of providing consent to enroll in the evaluation and those who completed the baseline survey more than seven days after providing consent to enroll in the evaluation. The youth who enrolled in seven days or less made up 50 percent of the sample.
- **Two-parent family.** To examine whether impacts differed by socioeconomic status, we estimated separate impacts for those who lived with both parents (48 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 (8 percent missing), and the lack of balance in the sample if divided by mother's education (only 22 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, 57 percent of respondents completed the survey by the 13th month after random assignment; the remaining 43 percent completed the survey in a later month.[134] To examine whether the timing of the follow-up survey affected impact estimates, we estimated separate impact estimates for youth interviewed by the 13th month 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 one case (out of a total of 20) for which the difference in impacts between the subgroup pairs is statistically significant. Among youth who completed the survey by the 13th month after random assignment relative to youth who completed the survey after the 13th month, the findings suggest that CTP may have had larger impacts on use of employment services. The results suggest that youth who were quicker to respond to the follow-up survey were those for whom the impact of CTP on employment services was larger. However, given that we have conducted 20 tests of the exploratory subgroup pairs (four subgroups for each of five primary outcomes), we would have expected to find about two statistically significant differences attributable to chance.

[133] We set the cut-off date between the early and later cohorts to yield relatively balanced shares of youth in each cohort. 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: enrollment cohort, time between consent and baseline survey, and time between random assignment and the 12-month follow-up survey.

[134] The earliest completion occurred at 11.3 months; 69 percent of youth completed by the end of the 14th month, 93 percent of youth completed by the end of the 20th month, and the latest completion occurred at month 28.8.

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

	Treatment Group						
	Observed Mean	Estimated Mean w/o CTP	Impact		P-Value	Treatment Group Size	Control Group Size
Enrollment Cohort							
Before October 1, 2009	79.3	55.6	23.7	***	0.00	179	144
On or after October 1, 2009	72.3	52.1	20.2	***	0.53	160	136
(P-value of difference in impacts)					(0.51)		
Time Between Consent and Baseline Survey							
Seven days or less	78.5	51.3	27.3	***	0.89	171	135
More than seven days	73.4	56.4	17.0	***	0.00	168	145
(P-value of difference in impacts)					(0.18)		
Two-Parent Family							
Lives with both parents	77.2	58.1	19.1	***	0.90	165	128
Does not live with both parents	74.8	50.5	24.3	***	0.00	174	152
(P-value of difference in impacts)					(0.64)		
Time Between Random Assignment and Follow-Up Survey							
Completed survey by 13th month	84.6	57.8	26.8	***	0.00	204	151
Completed survey after 13th month	63.8	49.0	14.9	**	0.97	135	129
(P-value of difference in impacts)				**	(0.04)		

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 CTP, 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					
	Observed Mean	Estimated Mean w/o CTP	Impact	P-Value	Treatment Group Size	Control Group Size
Enrollment Cohort						
Before October 1, 2009	53.6	61.2	-7.5	0.17	180	150
On or after October 1, 2009	53.1	53.8	-0.7	0.47	164	141
(P-value of difference in impacts)				(0.39)		
Time Between Consent and Baseline Survey						
Seven days or less	54.6	58.2	-3.6	0.42	174	141
More than seven days	52.2	56.9	-4.7	0.40	170	150
(P-value of difference in impacts)				(0.89)		
Two-Parent Family						
Lives with both parents	53.0	57.0	-4.1	0.36	168	135
Does not live with both parents	53.8	58.0	-4.2	0.45	176	156
(P-value of difference in impacts)				(0.99)		
Time Between Random Assignment and Follow-Up Survey						
Completed survey by 13th month	53.8	54.0	-0.2	0.97	206	157
Completed survey after 13th month	52.8	61.4	-8.7	0.61	138	134
(P-value of difference in impacts)				(0.30)		

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

	Treatment Group					
	Observed Mean	Estimated Mean w/o CTP	Impact	P-Value	Treatment Group Size	Control Group Size
Enrollment Cohort						
Before October 1, 2009	91.7	91.4	0.3	0.93	176	151
On or after October 1, 2009	91.0	88.8	2.2	0.00	160	142
(P-value of difference in impacts)				(0.74)		
Time Between Consent and Baseline Survey						
Seven days or less	91.4	92.3	-0.9	0.00	171	141
More than seven days	91.2	88.2	3.0	0.40	165	152
(P-value of difference in impacts)				(0.45)		
Two-Parent Family						
Lives with both parents	93.5	93.7	-0.2	0.02	166	135
Does not live with both parents	89.4	87.0	2.4	0.53	170	158
(P-value of difference in impacts)				(0.66)		
Time Between Random Assignment and Follow-Up Survey						
Completed survey by 13th month	95.7	92.2	3.5	0.13	200	152
Completed survey after 13th month	84.8	86.0	-1.3	0.00	130	133
(P-value of difference in impacts)				(0.20)		

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 CTP, 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.14. Impact on Income, for Additional Subgroups ($)

	Treatment Group					
	Observed Mean	Estimated Mean w/o CTP	Impact	P-Value	Treatment Group Size	Control Group Size
Enrollment Cohort						
Before October 1, 2009	4,498	4,691	-193	0.70	167	133
On or after October 1, 2009	3,960	4,455	-495	0.35	148	131
(P-value of difference in impacts)				(0.68)		
Time Between Consent and Baseline Survey						
Seven days or less	4,290	4,453	-163	0.75	158	123
More than seven days	4,188	4,706	-518	0.32	157	141
(P-value of difference in impacts)				(0.63)		
Two-Parent Family						
Lives with both parents	3,950	4,204	-254	0.62	153	123
Does not live with both parents	4,495	4,914	-419	0.42	162	141
(P-value of difference in impacts)				(0.82)		
Time Between Random Assignment and Follow-Up Survey						
Completed survey by 13th month	4,244	4,186	57	0.90	187	147
Completed survey after 13th month	4,233	4,978	-745	0.21	128	117
(P-value of difference in impacts)				(0.29)		

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

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 CTP, 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 7.5 percent to 11.4 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					
	Observed Mean	Estimated Mean w/o CTP	Impact	P-Value	Treatment Group Size	Control Group Size
Enrollment Cohort						
Before October 1, 2009	81.2	82.4	-1.2	0.79	157	131
On or after October 1, 2009	82.1	85.6	-3.5	0.00	145	119
(P-value of difference in impacts)				(0.71)		
Time Between Consent and Baseline Survey						
Seven days or less	81.5	85.1	-3.5	0.00	157	125
More than seven days	81.8	82.8	-1.1	0.83	145	125
(P-value of difference in impacts)				(0.70)		
Two-Parent Family						
Lives with both parents	79.2	83.9	-4.8	0.00	151	114
Does not live with both parents	84.0	84.2	-0.2	0.96	151	136
(P-value of difference in impacts)				(0.53)		
Time Between Random Assignment and Follow-Up Survey						
Completed survey by 13th month	84.7	88.0	-3.2	0.40	189	139
Completed survey after 13th month	76.8	79.7	-2.9	0.00	113	111
(P-value of difference in impacts)				(0.83)		

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 CTP, 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.

H. Additional Self- Efficacy Outcomes

In Chapter VIII, we reported a very small negative impact of CTP on the internal locus of control and no statistically significant impact of CTP 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."[135]

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 CTP 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 3.4, and we estimated that, in the absence of CTP, the average would have been 3.5. The difference (0.1) is statistically significant at the ten 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.

[135] 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 3.0. 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 CTP.

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, we found no impact of CTP on 10 of the 11 measures. The one exception: The results suggest that CTP may have increased the share of youth who responded that they agree a little with the statement, "You often feel helpless in dealing with the problems of life," and decreased the share who responded that they disagree a little with this statement (the impact estimate is significant at the five percent level). However, given that we have conducted 11 tests, we would have expected to find about one statistically significant difference attributable to chance (at the ten percent level). In summary, we found no pattern of impacts of CTP on measures of self efficacy.

Table A.16. Self- Efficacy (percentages)

	Treatment Group			
	Observed Mean	Estimated Mean w/o CTP	Impact	P-Value
Supplementary Outcomes				
Internal Locus of Control				
What happens to you in the future mostly depends on you				0.22
Agree a lot	78.7	81.7	-3.0	
Agree a little	15.4	10.1	5.3	
Disagree a little	4.0	5.3	-1.4	
Disagree a lot	2.0	2.8	-0.9	
You can do just about anything you really set your mind to				0.11
Agree a lot	72.8	80.8	-8.0	
Agree a little	19.5	13.2	6.2	
Disagree a little	4.0	4.0	0.0	
Disagree a lot	3.8	2.0	1.7	
You tell other people how you feel when they upset you or hurt your feelings				0.10
Agree a lot	44.3	53.4	-9.1	
Agree a little	27.4	26.0	1.4	
Disagree a little	14.8	9.9	5.0	
Disagree a lot	13.5	10.7	2.7	
You know how to get the information you need				0.23
Agree a lot	60.1	58.2	2.0	
Agree a little	23.7	28.0	-4.3	
Disagree a little	11.9	7.8	4.1	
Disagree a lot	4.2	6.1	-1.8	
You have a good sense of the path you want to take in life and the steps to get there				0.54
Agree a lot	56.3	56.3	0.0	
Agree a little	25.3	29.0	-3.7	
Disagree a little	9.9	9.0	1.0	
Disagree a lot	8.5	5.7	2.7	
External Locus of Control				
You have little control over the things that happen to you				0.13
Agree a lot	11.1	11.0	0.2	
Agree a little	21.4	14.4	7.0	
Disagree a little	25.7	25.4	0.3	
Disagree a lot	41.8	49.3	-7.5	
There is really no way you can solve some of the problems you have				0.67
Agree a lot	13.3	15.3	-2.0	
Agree a little	16.8	13.7	3.1	
Disagree a little	22.8	21.4	1.4	
Disagree a lot	47.0	49.5	-2.5	
There is little you can do to change many of the important things in your life				0.88
Agree a lot	14.7	15.6	-0.9	
Agree a little	15.2	16.4	-1.2	
Disagree a little	22.9	20.2	2.8	
Disagree a lot	47.2	47.9	-0.7	

	Treatment Group				
	Observed Mean	Estimated Mean w/o CTP	Impact		P-Value
You often feel helpless in dealing with the problems of life				**	0.04
Agree a lot	15.5	16.1	-0.6		
Agree a little	25.7	18.3	7.3		
Disagree a little	14.0	22.4	-8.4		
Disagree a lot	44.8	43.1	1.6		
Sometimes you feel like you are being pushed around in life					0.58
Agree a lot	18.6	14.3	4.4		
Agree a little	23.5	25.2	-1.8		
Disagree a little	16.7	16.0	0.6		
Disagree a lot	41.3	44.5	-3.2		
Your job opportunities will be limited by discrimination because of your gender, race, or disability					0.13
Agree a lot	9.5	16.0	-6.4		
Agree a little	14.7	10.9	3.8		
Disagree a little	22.2	23.1	-0.9		
Disagree a lot	53.6	50.0	3.5		

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 CTP, 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 344 treatment group youth and 295 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: 313 to 316 treatment group youth and 265 to 269 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.

APPENDIX C

COMMENTS ON THIS REPORT PROVIDED BY ST. LUKE'S HOUSE & THRESHOLD SERVICES UNITED, INC.

ST. LUKE'S HOUSE
THRESHOLD SERVICES
UNITED

Memorandum

To: Thomas M. Fraker

From: Kathy Bridgeman, Program Manager & Anne Peyer, Vocational Director

Subject: CTP Perspectives

Date: November 28th, 2012

While the interim report does not show measurable impacts at this time CTP has been predicated on the fact that in the longitudinal studies on youth employment that students who have a work experience paid or unpaid in the course of their secondary education experience are five times as likely to be employed at the age of 25. We anticipate that this will hold true for our YTD cohort.

- During the study CTP surpassed our goal of 70% paid competitive work.
- The youth we serve are primarily just exiting high school and are developmentally appropriately trying on jobs and work experiences as most youth are at this stage.
- 45% of participants continued on to post secondary placements and as such adjusted hours or limited work to the summer or cut out work altogether to focus on education.
- Over the course of the first 18 months of the study recruitment and enrollment of study participants required much more effort than had been anticipated. This underestimated task took resources from the direct services and may have impacted our early participants.

Possible impacts on service environment that may have increased the support available for the Control cohort as noted in the report:

- Due to the expansion of CTP services the other resources were able to serve more of the control group thus increasing access to resources.
- At the time of the study MCPS also was able to expand its cadre of staff with Employment Specialists to serve the youth in the control group.
- Montgomery County is a service rich environment; one of the agreements required by MCPS to agree to the random assignment was the resource manual and availability of a consultation session for students randomized to control. While the sessions were not often attended the resource manuals were provided.

We look forward to the 2014 analysis of results where we anticipate the outcomes to reflect the impact of services over the longer term. We hope further analysis of longitudinal data may be possible as our participants move into young adulthood and the workforce.

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