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The Social Security Administration's Youth Transition Demonstration Projects:

Evaluation Design Report

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GLOSSARY OF ACRONYMS

AWIC	area work incentive coordinator
BH	Benjamini-Hochberg
BJS	Bureau of Justice Statistics
BOCES	Board of Cooperative Education Services
CBO	Congressional Budget Office
CDB	childhood disability benefits
CDR	continuing disability review
C-ME	Community-Minded Enterprises
CMS	Centers for Medicare & Medicaid Services
CPI-W	consumer price index for urban wage earners and clerical workers
CPS	Current Population Survey
CTP	Career Transition Program
CUNY	City University of New York
DI	Social Security Disability Insurance
DOL	Department of Labor
DPN	disability program navigator
DRI	Disabilities Research Institute
DVR	Division of Vocational Rehabilitation (Vermont)
EIE	earned income exclusion
EN	employment network
ETO	Efforts-to-Outcomes
GDP	gross domestic product
HRDF	Human Resources Development Foundation

IADL	instrumental activities of daily living
IDA	individual development account
IDEA	Individuals with Disabilities Education Act of 1975
IEP	individualized education program
IPE	individualized plan for employment
IPS	individual placement and support
ITT	intent to treat
MCPS	Montgomery County Public Schools
MDI	minimum detectable impact
MIS	management information system
MOU	memorandum of understanding
MR/DD	mental retardation/developmental disorder (or disability)
MYTI	Mississippi Youth Transition Innovation
NASET	National Alliance for Secondary Education and Transition
NCWD/Y	National Collaborative on Workforce and Disability for Youth
NLS	Neighborhood Legal Services
NLSY	National Longitudinal Survey of Youth
NLTS-2	National Longitudinal Transition Study-2
NSCF	National Survey of SSI Children and Families
OLS	ordinary least squares
OMRDD	Office of Mental Retardation and Developmental Disabilities
PASS	plan for achieving self-support
RSA	Rehabilitation Services Administration
SED	severe emotional disturbances
SEIE	student earned income exclusion
SER	summary earnings record
SGA	substantial gainful activity
SPI	State Partnership Initiative
SSA	Social Security Administration
SSI	Supplemental Security Income
STETS	Structured Training and Employment Transitional Services
SVRA	state vocational rehabilitation agency
TA	technical assistance
TANF	Temporary Assistance for Needy Families

TETD	Transitional Employment Training Demonstration
TOT	treatment on the treated
TRF	ticket research file
TTW	Ticket to Work
TWG	technical working group
VR	vocational rehabilitation
WIA	Workforce Investment Act of 1998
WINS	Work Incentive Network of Supports
WIPA	Work Incentives Planning and Assistance
WVUCED	West Virginia University Center for Excellence in Disabilities
YCDR	youth continuing disability review
YTD	Youth Transition Demonstration

CHAPTER I

INTRODUCTION TO THE YOUTH TRANSITION DEMONSTRATION EVALUATION

The transition to adulthood for youth with disabilities, particularly those receiving Supplemental Security Income (SSI) or other disability program benefits, can be difficult. In addition to the host of issues facing all transition-age youth, those with disabilities face special issues related to health, social isolation, service needs, and lack of access to supports. These challenges complicate their planning for future education and work and often lead to poor educational and employment outcomes, high risk of dependency, and a lifetime of poverty.

The public cost of child dependence on SSI is quite large. In April 2005, approximately 776,000 youth 14 to 25 years old were receiving SSI benefits totaling more than $340 million each month. Many additional youth receive Childhood Disability Benefits (CDB) payments or Social Security Disability Insurance (DI) benefits. Furthermore, thousands of youth whose applications for disability benefits have been denied are at high risk of receiving benefits in the future, if they do not successfully transition to a productive adult life. This group includes youth whose disabilities are currently not severe but who have a prognosis for decreasing functioning over time, as well as youth who are ineligible due to deemed parental income but who might be eligible if they were to move out of their parents' households after reaching age 18.

Recognizing the importance of service intervention at this critical juncture in youths' lives, the Social Security Administration (SSA) initiated the Youth Transition Demonstration (YTD) evaluation. Focusing on youth of transition age, SSA is providing the funding to develop and rigorously evaluate promising strategies to help youth with disabilities become as economically self-sufficient as possible as they transition from school to work. Hallmark features of the YTD evaluation include (1) strong, policy-relevant demonstration projects that serve large numbers of youth with disabilities; and (2) a rigorous evaluation design based on random assignment.

A. THE POLICY IMPORTANCE OF THE YTD INITIATIVE

The YTD initiative is the centerpiece for policy development with respect to transition for youth with disabilities; it gives SSA and the disability community an extremely valuable opportunity to identify effective practices for helping youth with disabilities make the transition from school to adult life. In this initiative, SSA has targeted a critical subgroup of youth with disabilities—those ages 14 through 25 who are either receiving SSI, DI, or CDB or are at risk for receiving such benefits. Interventions to improve the outcomes for this group are highly relevant and important to disability policy, for the following reasons.

First, the costs to SSA from benefits payments to these youth over their lifetime are extremely high. For youth who enter the disability rolls when they are younger than 18, the average duration of their first disability benefit spell is about 11 years, and the average total duration of all their disability spells will be almost 27 years (Rupp and Scott 1996). At the 2009 federal monthly payment amount of $674, the net present value in current dollars of a 27-year SSI stay is approximately $150,000 (using a 3 percent discount rate), which does not include the even higher costs of concurrent participation in the Medicaid program. Thus, effective interventions for youth beneficiaries, even interventions that produce only modest impacts, could substantially shorten the average duration of dependency and thereby create savings for SSA and other government agencies.

Second, the costs of an unsuccessful transition are very high for the youth themselves, their families, and society. These costs include the effects of long-term dependency and lifelong poverty on the quality of life for youth with disabilities. Research suggests successful interventions can improve youths' life quality by helping them prepare for careers, build self-esteem, increase self-knowledge, and reduce career indecision (Hughes and Karp 2004; Lapan et al. 1997). Furthermore, greater self-sufficiency among youth with disabilities could reduce the support they require from their parents and open up opportunities for parents to be more successful financially. An intervention like YTD therefore offers the potential to generate financial benefits for the youth and their families, and for society as a whole, by improving the employment outcomes, as well as the quality of life, of some of the nation's most vulnerable youth.

Third, among all disability beneficiaries, youth are a particularly promising target population. The adolescent years are an auspicious time to intervene—before youth become fully entrenched in dependency. For example, youth with disabilities may willingly—even eagerly—consider employment options because most of their nondisabled peers are working. Furthermore, the lifetime economic advantage of work over dependency may be high for youth because they have many years ahead of them when they potentially could work.

Finally, as described in the next section, rigorous evaluation research has shown that strong employment-focused interventions can be effective in improving economic outcomes for youth with disabilities. In particular, providing strong, customized employment supports, complemented by additional supports can improve employment and earnings among youth.

For the reasons mentioned above, YTD is a very strong and imaginative demonstration. It is providing SSA with a valuable opportunity to identify program components and strategies that can show successful employment and earnings outcomes for youth.[1] The demonstration is doing this by supporting and testing a multisite study with a variety of interventions, all with a strong focus on employment, and with considerable leveraging of community services, as well as waivers to help youth keep more benefits and provide them with incentives to obtain and retain employment. The demonstration is a first attempt to identify strong programs that are larger than typical programs that serve youth with disabilities, so that these interventions could eventually be replicated in a broader context. By testing a variety of service delivery models on the target population of youth with disabilities combined with the offer of SSA waivers, this demonstration provides a unique opportunity to learn about effective programs to increase employment and earnings for youth with disabilities, and eventually reduce their reliance on SSA disability benefits.

This report presents a detailed, comprehensive design for the YTD evaluation.[2] The rest of this chapter summarizes the lessons from the relevant research literature (Section B), provides the conceptual framework underlying the YTD initiative (Section C), and discusses the broad demonstration and evaluation design parameters (Section D). The chapter concludes with a road map to the rest of the report.

B. LESSONS FROM RELEVANT RESEARCH LITERATURE

The challenge facing YTD projects is to develop interventions to serve youth who face multiple potential barriers to self-sufficiency and poor adult outcomes. Research literature examining the transition of youth with disabilities can provide useful information in designing and implementing the YTD demonstration projects, as well as context for the likely outcomes that may be expected from the YTD evaluation. Below, we summarize lessons from previous evaluations targeted to youth, with a specific focus on projects whose target populations are similar to YTD youth. In addition, we end the section with a brief summary of recommendations from the National Alliance for Secondary Education and Transition, which represent a set of best practices for serving YTD youth with disabilities. These lessons and best practices feed into the YTD logic model, which is presented in Section C.

1. Lessons from Demonstration Research

The lessons from the relevant literature we summarize below are drawn from the following types of studies:

[1] Throughout this report, when we refer to YTD interventions, we are including both services provided to the youth and SSA waivers that are part of the interventions.

[2] SSA has contracted with Mathematica Policy Research, Inc. (Mathematica) to develop and evaluate YTD. Mathematica has teamed with subcontractors MDRC, and TransCen, Inc., to carry out this research.

Random Assignment Demonstration Projects for Youth with Disabilities. The two most notable studies are the U.S. Department of Labor's Structured Training and Employment Transitional Services (STETS) demonstration, and SSA's Transitional Employment Training Demonstration (TETD). The STETS demonstration was the seminal random assignment study of transitional employment services targeted to youth ages 18 to 24 who had IQ scores between 40 and 80. The intervention consisted of three phases of work interventions: an introductory work exposure period, followed by actual employment with on-the-job training (or supported employment), and, finally, postemployment followup and job supports. TETD provided transitional employment services to SSI beneficiaries between ages 18 and 40 who had been diagnosed with mental retardation. The TETD intervention focused on competitive employment through five core services: (1) outreach to the identified target population, (2) SSI benefit protection through waivers, (3) placement in competitive employment, (4) on-the-job training, and (5) postemployment and job retention services.

Nonexperimental Studies of Youth with Disabilities. Smaller-scale demonstration projects that share some similarities to YTD because of their target population and emphasis on employment services provide some insights on possible key intervention components. The most notable are two nonexperimental studies of SSA-funded initiatives: (1) the youth continuing disability review (YCDR) project, which assisted child SSI recipients ages 15 and 16 in obtaining the information and services they needed to transition successfully to work; and (2) Opening Doors to the Future, which provided, in the context of the health care system, an array of transition services guided by the principle of youth self-determination.

Random Assignment Studies of Employment Supports for SSA Beneficiaries and Other Adults with Disabilities. More recent demonstration projects that focused on adults with disabilities, including those with mental impairments, are (1) SSA-funded experimental evaluations of the State Partnership Initiative (SPI), which promoted employment and economic self-sufficiency among disability beneficiaries through benefits counseling and care coordination services to adult and, in some areas, child SSI recipients; and (2) Project Network, which tested the provision of case management as a means of promoting employment among SSI and DI beneficiaries. We also include in our lessons findings from the evaluation of the individual placement and support (IPS) model, for people with psychiatric impairments, which includes intervention components that focus on competitive employment, consumer choice, rapid job search, and the integration of health and rehabilitation supports.

Random Assignment Studies of Other Harder-to-Employ Youth. The findings from a number of other studies targeted to harder-to-employ youth provide additional insights on key intervention components. These studies include evaluations of programs to promote employment among transition-age youth, such as Upward Bound, Job Corps, Urban Youth, Conservation Corps, Center for Employment Training, and the Quantum Opportunity Program.

- ***Transitional employment supports can improve employment outcomes for people with disabilities.***

The findings from the STETS and TETD evaluations provide evidence that transitional employment supports that emphasize competitive employment can improve employment outcomes for youth with disabilities. For instance, at 22 months after enrollment, youth who received STETS were more likely to be employed in competitive jobs than to be in sheltered workshops (31 percent versus 19 percent of the control group) (Kerachsky and Thornton 1987). In addition, youth who had exposure to actual work sites fared much better than those whose training experiences involved standardized tests or sheltered workshops (Bangser 1985). The findings from TETD show that, six years after enrollment, treatment group members had employment rates of 51 percent compared with 42 percent for control group members. TETD also increased earnings by 72 percent (from $5,974 to $10,256), or an average of $714 per year (Decker and Thornton 1995; Thornton 2003).

The evaluation findings from STETS and TETD are consistent with descriptive, nonrandomized studies that indicate early exposure to employment and training experiences results in long-term employment outcomes. Youth who participate in occupational education and special education in integrated settings are more likely to be competitively employed than youth who have not participated in such activities (Blackorby and Wagner 1996; Luecking and Fabian 2000; Mooney and Scholl 2004).

However, the provision of transitional employment supports alone is not necessarily enough to move the youth to self-sufficiency. The TETD demonstration, which had large relative impacts on earnings, resulted in an absolute increase in annual earnings of only $714, which would not be enough to offset an annual SSI benefit of approximately $6,000. This experience is also consistent with other evaluations of youth that found that other government-sponsored training programs have had minimal impacts on overall average earnings of participants (Greenberg et al. 2003).

- ***Customized employment supports for career development are most effective in promoting employment outcomes and program retention.***

The findings from the TETD evaluation and several supported-employment demonstrations indicate that tailoring employment services to meet the individual needs of the participant for career development was the most effective overall approach. In TETD, Decker and Thornton (1995) found that impacts on employment and earnings were largest in projects that (1) placed people in potentially permanent jobs as soon as possible, (2) matched jobs and participants carefully, and (3) were flexible in response to individual client needs. In contrast, projects that employed standard approaches across all youth had much smaller effects. More recently, supported-employment interventions for people with psychiatric impairments have emphasized the importance of customizing employment supports for career growth (Becker and Drake 2003). According to Bond et al. (1997), 58 percent of supported-employment clients obtained competitive employment over 12 to 18 months, compared with 21 percent of clients in the control groups. The positive impacts on employment for people with mental impairments that were found in the evaluations of

TETD and the supported-employment projects are encouraging for the YTD projects, given the large representation of such individuals in the YTD target population.

Findings from evaluations of other youth programs have also emphasized the important role that customizing supports to obtain the youth's trust can have in increasing the likelihood of successful outcomes. Ivry and Doolittle (2003) found that the mixed findings from earlier youth programs, such as the Job Training Partnership Act, reflect characteristics of the population served rather than the intervention. For example, youth enrolled in transition programs leave at high rates and may not benefit from the intervention because they participate intermittently. Consequently, many interventions were not providing youth with an adequate dosage of services. Ivry and Doolittle found that the most successful programs include resources that meet the individual needs of an at-risk youth, acknowledge the youth's life circumstances, and provide services that start early in the youth's life and continue through the transition to adulthood.

- ***To be effective, supports must account for the fragmentation of existing services.***

The process findings from SSA's recently completed YCDR and Opening Doors projects indicate a need to coordinate intervention services with other youth services, particularly school and health services. In evaluating YCDR, Maximus (2002) found that many youth were falling between the cracks of service systems and, furthermore, a substantial minority were involved with the juvenile justice system. As a lesson for future interventions, they advocated taking a more holistic approach in coordinating efforts to inform school system administrators, teachers, service providers, and employers about the special SSA program rules before delivering employment services. In evaluating the Opening Doors Project, Schuyler and White (2005) found the lack of coordination with health supports led to health deterioration and difficulties obtaining other supports. They found the Opening Doors Project had its most success when youth were able to have an integrated set of medical supports and social supports.

These findings are consistent with other initiatives for youth with disabilities that suggest that no one agency can "do it all" (Johnson et al. 2002), indicating a need for YTD projects to collaborate with other agencies. Functional linkages among schools, adult disability services, vocational rehabilitation (VR) programs, workforce investment programs, and other human services and community agencies are necessary elements of effective transition for these youth.

- ***Benefits counseling is a necessary, but not sufficient, support.***

A recurring lesson from SSA demonstrations (both random assignment and non-random assignment) is the need to ensure that participants have a good understanding of program rules. While SSA tries to make beneficiaries throughout the nation aware of this requirement as part of its Work Incentives Planning and Assistance (WIPA) program, additional supports are often needed in demonstration projects, particularly those like YTD that involve waivers. Gaylord et al. (2002) noted that much of the intended value of waivers

can be undone if beneficiaries fail to report their earnings to SSA in a timely fashion and, as a result, find themselves in an overpayment situation.

However, the experience from the SPI demonstration indicates that benefits counseling alone will not move beneficiaries into self-sufficiency. Peikes et al. (2005) found that, while beneficiaries who received benefits counseling were more likely to work, they did so at a lower level of earnings. They suggested that the benefits counseling on its own might prompt some to keep their earnings below the threshold that would put them at risk of losing their benefits. The fact that YTD offers waivers that provide greater incentive to find employment suggests that benefits counseling will need to be an important component of the interventions; however, great emphasis should also be placed on the delivery of employment supports to promote employment outcomes.

- ***The provision of employment supports has not led to a reduction in benefit receipt in any SSA demonstration project for children or adults.***

Despite some success in promoting employment, none of the aforementioned projects demonstrated an ability to reduce SSA benefit receipt. Even with the largest impacts on earnings, the TETD evaluation showed only small reductions in benefits amounts. Thornton (1998) found that SSI payments fell by approximately 5 percent, even though the impacts on earnings were about 72 percent. This is because, even with large impacts on earnings, the absolute levels of earnings remained low, and were not large enough to get individuals off benefits. The lack of impacts on benefit receipt is also consistent with other SSA demonstration projects targeting adults with disabilities, including SPI and Project Network (Peikes et al. 2005; Kornfeld and Rupp 2000). In large part, the lack of impacts on program benefits likely reflects the relatively small changes in earnings relative to annual SSA benefit amounts.

2. Efforts to Identify Best Practices

Despite the limited number of rigorously evaluated demonstration projects involving youth and young adults with disabilities, recent efforts have attempted to synthesize "what works" based on the experiences of researchers and practitioners across a range of interventions. The National Alliance for Secondary Education and Transition (NASET), consisting of over 30 national advocacy groups, professional organizations, and education associations, conducted a thorough review of research on what youth need to succeed as they make the transition from secondary education. Based on this research synthesis, NASET produced a set of standards and indicators as a structure for identifying critical needs for all youth, including those with disabilities (National Alliance for Secondary Education and Transition 2005).

Building on the NASET structure, the National Collaborative on Workforce and Disability for Youth (NCWD/Y) conducted an extensive review of research, demonstration projects, and acknowledged effective practices in serving youth with disabilities. From this review, NCWD/Y 2005 developed the *Guideposts for Success* for use by practitioners and policymakers in conceptualizing optimum service delivery for youth with disabilities. The

Guideposts for Success included five areas slightly reconstituted from the NASET document: (1) school-based preparatory experiences, (2) career preparation and work-based experiences, (3) youth development and leadership, (4) connecting activities, and (5) family involvement and supports.

We developed the conceptual framework underlying the YTD initiative based on (1) relevant findings from previous interventions that focused on youth with disabilities; (2) the NCWD/Y guideposts; (3) SSA's goals for the YTD interventions, including the importance of waivers and benefits counseling for YTD youth; and (4) input on the key parameters and outcomes for the YTD interventions from the evaluation's technical working group (TWG).[3] The conceptual framework for the YTD initiative is introduced in the following section, as are the core components of YTD interventions. The latter are discussed in detail in Chapter IV.

C. THE CONCEPTUAL FRAMEWORK UNDERLYING THE YTD INITIATIVE

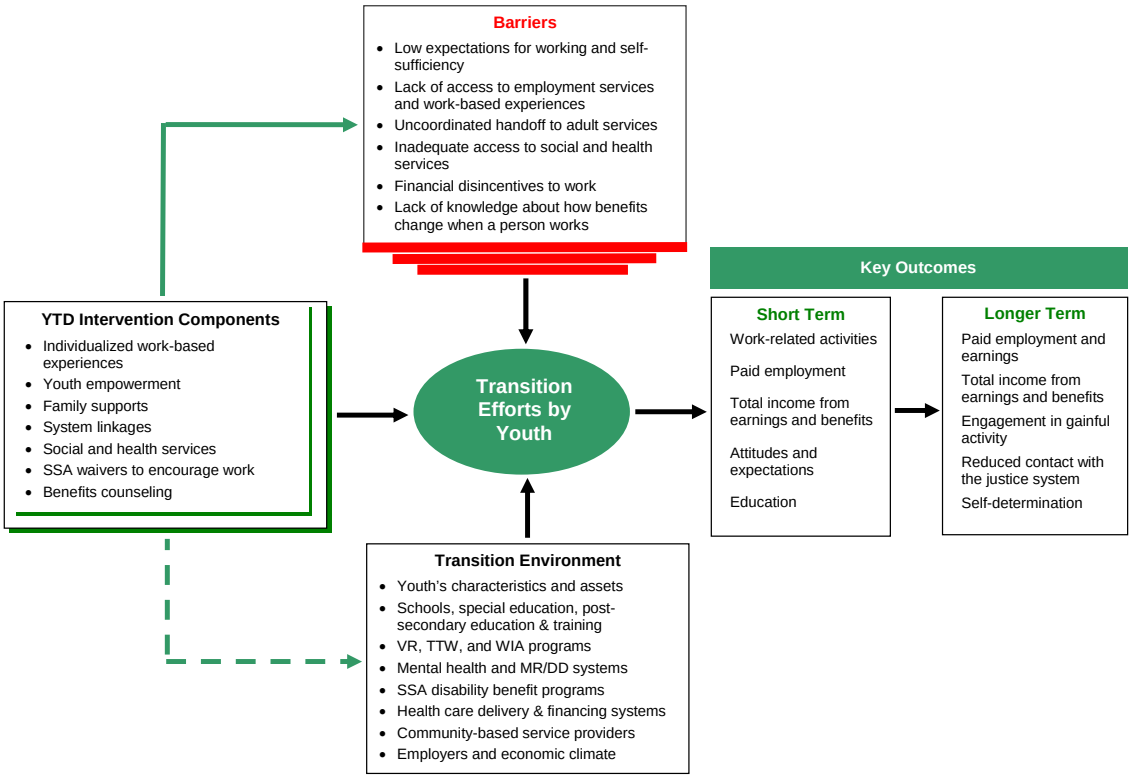
Our approach to the YTD evaluation is grounded in our understanding of the existing literature, as well as the system of support and services for youth with disabilities. Figure I.1 presents a conceptual framework for understanding the potential role of the YTD interventions in helping targeted youth have successful transition outcomes.

Youth with disabilities face many barriers that can affect their transition. Some of these barriers come from the specific nature of a youth's disability and health condition, while others arise because of a poor fit between the youth and his or her environment. These barriers, listed in the conceptual model, can be summarized as follows:

- ***Low individual, family, and societal expectations about working and self-sufficiency.*** Social and self-perceptions of disability can lead to isolation and diminished expectations by family members, teachers, and employers. Youth whose disabilities are visible may be marginalized by peers and may seek entry into communities that embrace their disabilities. For example, hearing-impaired youth may move from "a family of origin to a family of choice" (Valentine and Skelton 2007). Parents, teachers, social workers, and other adults who are important in a youth's life often have diminished expectations for youth with disabilities, especially concerning employment (Betz and Redcay 2005). Youth who internalize these expectations can be disruptive in social settings, including the classroom. This can inhibit their educational progress and even lead to school suspensions and involvement with the legal system (Loprest and Wittenburg 2005).

[3]The TWG consists of nine individuals from diverse backgrounds and includes experts in evaluation design and measures, school-to-work transition, and the provision of services to youth with disabilities. It meets approximately every 18 months with the evaluation team and SSA to review the status of the evaluation and provide advice on its design and execution.

Figure I.1. Conceptual Framework for SSA's Youth Transition Demonstration Projects



YTD-eligible youth, particularly those receiving SSI benefits, may also face more severe challenges in accessing services because of their low family incomes. SSI is income conditioned, and average household income for child SSI beneficiaries, ages 14 to 23, is just above the poverty line (Loprest and Wittenburg 2005). These low incomes would limit the parents' capacity to privately purchase services, such as schooling and training, and make them dependent on publicly provided services. In addition, their low family incomes may expose youth to other risk factors, such as poor neighborhoods, higher crime rates, and family instability. Parents also have a greater need to work and may therefore be less able to provide extra supports and advocacy.

- ***Lack of access to employment services and work-based experiences.*** The service environment to provide employment services for youth with disabilities is not strong. There are problems in aligning provider incentives for service delivery with the best interests for the youth, particularly regarding employment. This issue is especially problematic for youth with mental impairments, who make up a large fraction of child SSI cases. Wehman et al. (2002) found that, despite the success of supported-employment programs in promoting employment, most youth remain in segregated settings; for every one person working in integrated settings through supported employment, 4.5 people remain in segregated settings. In addition, service providers often are not

rewarded for understanding the other types of supports that might be available to the youth, which can lead to conflicting messages about the importance of work activities. For example, Hill (2002) found that service providers often do not fully understand the work incentives available to SSI beneficiaries, and this limits their ability to coordinate the provision of employment supports to this population.

- ***Uncoordinated handoff to adult services.*** Youth with disabilities may have to deal with school support systems that have significant gaps in services and are missing critical linkages to adult services. Many youth do not get information from their schools on how to access needed services. A recent study (U.S. Government Accountability Office 2006) found that a substantial number of youth and families reported problems identifying, and learning how to ask for, specific accommodations they need to succeed in school and the workplace. The problem of accessing necessary resources is compounded by a lack of coordination between school- and adult-based services as youth leave secondary school (Luecking and Certo 2003; U.S. Government Accountability Office 2006; Wittenburg et al. 2002).

- ***Concerns about health and access to health care.*** Youth with disabilities may need to divert time and resources from other activities to allow them to deal with health-related problems or overcome environmental barriers (Betz and Redcay 2005). Health problems may include alleviating health complications and limitations in functioning, medication adherence, dealing with medication side effects, having the time needed to get care, and preventing disease relapse. Problematic access to health care (for example, delays, poor quality, inadequate insurance coverage, provider discontinuities) can both exacerbate the problems stemming from impairments and force youth into spending disproportionate amounts of time getting care. When youth with disabilities want to obtain education, training, or employment, they may encounter access barriers or lack of accommodations that make it more challenging for them. In some instances, youth may not be able to get the training in a form that they can absorb; in others, programs may exclude youth with certain disabilities, such as severe mental retardation.

- ***Attraction of a small but steady income.*** Youth who receive SSA disability benefits may restrict their employment and earnings to avoid jeopardizing those benefits. A youth's benefit check is an important source of income for many families and provides a link to health insurance through Medicaid (for SSI) and Medicare (for DI and CDB). Earnings or improvements in medical conditions can result in termination of benefits. The SSI program requires that all child beneficiaries have their benefits redetermined at age 18, and approximately one-third of them are determined ineligible for adult benefits (Loprest and Wittenburg 2005). Hence, young beneficiaries' decisions regarding employment, schooling, rehabilitation, and even health care may reflect their perceptions regarding what they must do to maintain their cash benefits and health

insurance. Such thinking and behavior can be major barriers to successful transition to work.

- ***Lack of knowledge about how benefits change when a person works.*** SSA offers SSI beneficiaries several work incentives, including the earned-income exclusion, the student earned-income exclusion (SEIE), and the plan for achieving self-support (PASS). DI and CDB beneficiaries get other incentives. Unfortunately, few beneficiaries use these incentives, because (1) they are unaware of them; or (2) they fear that employment would result in their losing benefits, even with the work incentives. Loprest and Wittenburg (2005) found that only one in five child beneficiaries ages 14 through 17 had heard of or discussed any of the SSA work incentives.

The YTD interventions are intended to provide services and financial incentives directly to youth with disabilities and their families. These are designed to reduce some of the most widespread and persistent barriers to success and thereby improve the effectiveness of the youths' transition efforts. The key components of the interventions—the services and incentives—are listed in the conceptual model and are described briefly below and in more detail in Chapter IV:

- ***Individualized work-based experiences*** address several barriers listed in the framework, including low expectations, lack of access to employment services and work-based experiences, and disincentives to work.

- ***Youth empowerment*** and ***family supports*** are designed to help youth make more informed choices and are expected to address the issue of low expectations.

- Services that facilitate ***system linkages*** are expected to help address some of the current gaps in the handoff of youth to the adult services and to make the transition seem more seamless from the perspective of the youth and his or her family.

- Referral to, or provision of, a comprehensive array of ***social and health services***—commonly referred to as "case management" or "care coordination"—can help youth address a wide range of mental and physical health issues, social skills deficits, and personal and family challenges and thereby facilitate their success in the classroom, in the community, and on the job.

- ***SSA waivers for YTD*** will allow youth to retain disability benefits and health insurance in the short term while they work or participate in work-based experiences. This will encourage them to explore whether they can achieve higher levels of economic success through employment rather than relying exclusively on SSA disability programs.

- ***Benefits counseling***, a strong component of each YTD project, will inform youth and their families about standard SSA work incentives, as well as the waivers for YTD, and remove confusion on benefit-related issues. This should help the youth make better employment choices for the future.

The YTD intervention components are designed to directly serve youth and help them address the barriers described above. However, these components are being delivered in the existing transition environment and the projects will, to varying degrees, leverage services available in their communities. While system change is not a goal of this initiative, the design and delivery of YTD services will take place in the context of the existing service system, and the services available in the community may influence the service delivery approach. Furthermore, the YTD projects may be able to break down some of the artificial institutional barriers that youth face, thereby leading the system to function for the youth as if the components were better integrated.

If the interventions help participating youth overcome personal and systemic barriers that stand in the way of their success in life, then we would expect to observe better outcomes for youth who are selected into the YTD projects than for those who have access only to the status quo services and incentives that the existing system provides. In the short term, the interventions will help youth gain work-related experiences, use SSA work incentives, progress toward educational goals, and enrich their lives with more social interactions. In the longer term, it is anticipated that the YTD interventions will have an enduring impact on participating youth, ultimately leading them to secure and maintain paid, competitive employment (as opposed to volunteer activities or employment in a sheltered workshop), increase their earnings and income, reduce their reliance on disability benefits, and realize a greater degree of independent living.

D. THE YTD INTERVENTIONS AND EVALUATION

SSA has envisioned a strong and successful demonstration and evaluation as part of the YTD initiative. The study includes identifying and nurturing YTD interventions that are grounded in best practices and are promising program models to test. It also includes a comprehensive multisite evaluation based on a rigorous random assignment design with large sample sizes and diverse outcome measures.

1. The YTD Interventions

The initial goal of YTD is to identify, develop, and implement promising interventions that address the barriers and service gaps that youth with disabilities face in the current system. The interventions should include service components designed to help youth with disabilities become as economically self-sufficient as possible as they transition from school to work. In addition to directly delivering well-designed services to youth with disabilities, SSA's vision for the demonstration projects is that they deliver better-coordinated services that will help the youth experience a more integrated service delivery system and enable a smoother transition to adulthood.

The selection and development of promising interventions involves defining the components of strong program models and then identifying and selecting projects that currently deliver (or, with enhancement, could deliver) interventions based on those components. Three critical components of this process are: (1) careful analysis of the strengths and weaknesses of potential YTD projects, (2) determination of what new components or changes in existing components are needed, and (3) delivery of technical assistance (TA) to the projects to help them implement strong interventions that can be rigorously evaluated.

We drew the core components for strong YTD interventions from the existing research literature on youth with disabilities, lessons from previous interventions, SSA's priorities for the evaluation, and input from the project's TWG. Most notably, we adopted and refined the *Guideposts for Success* developed by NCWD/Y (National Collaborative on Workforce and Disability for Youth 2005).

Beyond the provision of services to youth, the YTD interventions include SSA waivers of disability program regulations. The waivers exclude $3 for every $4 of earned income from the SSI benefit calculation, expand eligibility for the SEIE, broaden the allowable PASS goals, and expand options to establish individual development accounts (IDAs). They are intended to encourage youth to initiate or increase their work activity, continue their education, and accumulate assets. Similarly, a (Section 301) rule change regarding the age 18 redetermination provides an incentive for YTD participants to engage in work and other program activities during an extended transition period. It delays the cessation of SSI benefits stemming from a negative continuing disability review for as long as a youth is participating in a YTD project. The waivers complement the employment focus of YTD project services, thereby ensuring that SSA rules do not deter work-based experiences. To ensure that youth understand the waivers, and SSA work incentives more broadly, a key project component is benefits counseling for youth and families.

The goal of the YTD evaluation is to identify six strong projects, in which random assignment can be implemented, to be part of the national impact study. The selection process for the projects took place in two phases. In 2006, based on the recommendations of the evaluation team, SSA selected for random assignment implementation three of the seven original organizations that it had provided funding to in 2003 to develop and implement YTD projects. Also in 2006, the evaluation team conducted a nationwide search for potential new YTD projects that were either operating strong transition programs or had the capacity to do so, and could also participate in the national impact study. That search resulted in five projects being selected in fall 2006 to run pilot programs in 2007. Based on the recommendations of the evaluation team, SSA selected, in November 2007, three of these projects to fully implement their interventions and participate in the national impact study using a random assignment design. The criteria for these selection decisions are described in detail in Chapter IV.

Several of the projects are implementing new or substantially redesigned interventions for youth with disabilities, and they may require TA to do so successfully. Some of these projects have served the YTD target population on a smaller scale with interventions that

may have included some, but not all, of the recommended components. Others have served substantially different populations and therefore need to establish more of the recommended YTD components. Because SSA wants to ensure that all the projects deliver strong services, it is providing funding through the evaluation contract for a TA provider, TransCen, Inc., to help the projects design and implement services and to ensure that all the recommended components are included in the projects' service approaches.

2. The YTD Evaluation

While SSA is the catalyst for change in this policy initiative, that agency alone cannot address all the issues related to youth transition. Effective design and coordination of services, especially on a wider scale than the demonstration projects, will require the buy-in of many organizations with different funding sources and constituencies. To gain the cooperation of diverse service providers in reforming services for youth with disabilities after this evaluation is completed, this landmark study has a rigorous evaluation design and other features that should convince other agencies and stakeholders to view the research findings as both definitive and as a clear road map for implementing effective services. Key features of the evaluation include:

- ***Use of a rigorous random assignment design.*** Because of the importance of estimating YTD impacts as accurately as possible, SSA has sponsored an evaluation using a random assignment design in which eligible youth are assigned at random to a treatment group or a control group. Youth in the treatment group may receive YTD services as well as the SSA waivers, while youth in the control group may receive only those services available in their communities independent of the YTD initiative. Given this experimental design, it will be possible to confidently attribute differences in outcomes between the two groups to the effects of the YTD interventions. Such a design is a powerful evaluation tool that can provide credible and convincing estimates of program effects (Orr 1999).

- ***Large multisite study.*** SSA has specified that the impact study will include six projects in different locations with strong interventions that can be rigorously evaluated. All the projects will focus on work-based experiences and benefits counseling. In addition, all treatment group youth in the projects will benefit from the SSA waivers. The projects will also include the other key components identified in the YTD conceptual model, but they may place different levels of emphasis on those components and, more important, may take different approaches to delivering services related to each of the components. The projects also may target slightly different populations, within the broad parameters specified by SSA. This multisite study, in which projects take somewhat different approaches to service delivery and serve different subsets of the target population, will provide valuable lessons for future replication and for scaling up.

- ***Large sample sizes and enrollments compared with many programs that serve youth with disabilities.*** The evaluation sample for each project will include approximately 880 youth enrolled in the study over a two- to three-year period, with about 480 of those to be randomly assigned to the treatment group. These sample sizes are large compared with most existing programs that serve youth with disabilities. Before being selected into the impact study, projects must show that they have the potential to meet these enrollment goals. This demonstration will provide valuable lessons for future program replication on how existing smaller projects can scale up to serve larger numbers of youth with disabilities.

- ***Data collected for treatment and control youth from a variety of sources.*** Outcomes will be measured through both administrative and survey data that will be collected on youth in the treatment and control groups over a three- to four-year follow-up period. Outcomes will include a variety of measures that will be important to SSA and to outside groups. In addition, detailed information will be gathered on services that youth receive as part of the YTD evaluation, as well as other qualitative data and program cost data.

- ***Comprehensive evaluation.*** The impact study is a key component of the comprehensive YTD evaluation that also includes a process analysis, a cost analysis, and a benefit-cost analysis. The impact analysis will examine the differences that the YTD projects make in employment, earnings, income, educational attainment, and other measures of well-being among the transition-age youth enrolled in the evaluation. The process analysis will document the nature of each YTD project, including how the services were delivered, the extent to which the services were used, and the implementation successes and challenges. The cost analysis will provide a comprehensive documentation of the costs of implementing the YTD projects. The benefit-cost analysis will assess whether the projects' benefits outweigh their costs from the perspectives of a variety of stakeholders, including SSA, the federal government, the YTD participants, and society as a whole.

- ***Strong external advisory group representing various perspectives.*** The YTD evaluation has an external advisory group that meets annually with SSA and the evaluation team. The advisory group consists of nine individuals from diverse backgrounds and includes experts in evaluation design and measures, school-to-work transition, and the provision of services to youth with disabilities. These individuals are employed by universities, independent research organizations, human services providers, and federal agencies other than SSA. The advisory group members, along with SSA staff, provide the evaluation team with sound advice on the evaluation, program design, and related topics.

E. GUIDE TO THE REST OF THIS REPORT

The next two chapters of this report set the context for the YTD interventions. Chapter II provides a brief background on the characteristics of the YTD target population. Chapter III sets the service context for the YTD interventions, describes the regular and special education systems and how they interact with adult services, and discusses the employment programs and health care and support systems available to youth with disabilities. Chapter IV describes the core components of strong YTD interventions and provides details on our processes for selecting projects into the random assignment impact study. Chapter V describes the sample design and random assignment process, including the sample size requirements for the evaluation. Chapters VI through IX present our plans for conducting the process, cost, impact, and benefit-cost analyses. Finally, Chapter X summarizes the evaluation timeline and reports.

CHAPTER II

YOUTH TARGETED BY YTD AND THE CHALLENGES THEY FACE

This chapter describes the population that SSA is targeting for YTD services and documents the challenges confronting youth with disabilities as they try to successfully transition to adulthood. It demonstrates the need for services and other supports for these youth, which, if well designed and implemented, could have lifelong positive impacts on their self-sufficiency. Section A presents information on the YTD target population and briefly highlights its characteristics. Section B summarizes actual transition outcomes for youth similar to those targeted by YTD, focusing on employment, education and training, and social outcomes.

A. THE YTD TARGET POPULATION

The population eligible for YTD is made up of youth ages 14 through 25 who are either SSA disability beneficiaries or are at substantial risk of receiving these benefits in the future. Within these broad parameters, each individual YTD project is free to target a specific population that is consistent with its intervention design and is expected to yield an adequate sample size for the evaluation. For example, while the YTD-eligible population includes 14- and 15-year-olds, most projects are targeting youth age 16 and older.[4] In addition, some projects with school-based interventions are targeting youth under age 22, while other projects not tied to schools are targeting a broader age range of in-school and out-of-school youth. Nearly all youth participating in the YTD projects are Supplemental Security Income (SSI) beneficiaries. This has important implications, given the unique characteristics of these beneficiaries and the incentives created by the rules governing SSI eligibility and benefit amounts.[5]

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[4] Tables IV.1 and IV.2 in Chapter IV describe the target population in each of the YTD projects.

[5] All but one of the projects are using lists of SSI beneficiaries provided by SSA to identify their target populations. The one exception is the Montgomery County, Maryland, project, which is recruiting youth who have been identified by their school systems as being severely emotionally disturbed, or have other significant mental illnesses.

1. SSA Disability Beneficiaries

The SSA disability population eligible for YTD includes child SSI beneficiaries, young adult SSI beneficiaries, Social Security Disability Insurance (DI) beneficiaries, and Childhood Disability Benefits (CDB) beneficiaries who are between ages 14 and 25. SSI is a means-tested program for which children and adults are eligible, DI beneficiaries must meet earnings eligibility requirements, and CDB beneficiaries must have parents who are Social Security beneficiaries (Table II.1).

The eligibility requirements vary across the child and adult programs, but all of them have much more restrictive disability eligibility criteria than other programs that serve youth with disabilities, such as special education programs. To qualify for child SSI benefits, a youth must be under age 18 and have a medical impairment that results in a severe functional limitation and is expected to either last at least 12 months or result in death. To qualify for adult SSI and DI benefits, a person must have a condition that prevents substantial gainful employment and is expected to either last at least 12 months or result in death. Those who meet SSA's strict eligibility requirements for these programs receive cash benefits and, in most cases, health care coverage through Medicaid (for SSI) or Medicare (for DI and CDB).[6] Program rules for maintaining eligibility vary, but beneficiaries risk losing their cash benefits and health care coverage if their earnings exceed a certain threshold or if they experience a medical improvement. The programs do offer some protections to let beneficiaries try work without losing benefits and retain health care coverage if they exit due to work.

Among youth ages 16 through 25, the SSI population is much larger than the populations of beneficiaries under other SSA disability programs. In this age range nationwide, there are approximately 725,000 SSI beneficiaries (209,000 children and 517,000 adults) and approximately 130,000 youth in the DI and CDB populations (56,680 and 72,050, respectively).[7]

2. At-Risk Youth

In addition to young SSA disability beneficiaries, the YTD target population includes youth at substantial risk of receiving these benefits in the future. YTD projects that wanted to serve the at-risk population could develop their own definitions of that population in conjunction with SSA. While defining at-risk youth is conceptually intuitive, in practice, identifying such youth at risk of going on the rolls in the future can be challenging.

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[6] SSI beneficiaries are categorically eligible in most states for Medicaid, while DI and CDB beneficiaries are eligible for Medicare after a 29-month waiting period.

[7] We calculated the sample sizes for these populations using published statistics from SSA (2006). The child and adult SSI sample size was estimated using statistics from Table 7.E3; the DI sample size was calculated using statistics from Table 5.A1.2; and the CDB sample size was calculated using statistics from Table 5.A1.4.

Table II.1. Program Descriptions, Benefits, and Population Sizes for the YTD Target Population

Target Population	Description	Benefits	Average Cash Benefit	Est. National Population (2004)
Child Supplemental Security Income (SSI) (ages 15 to 17)	Means-tested transfer program for youth who have a medically determinable physical or mental impairment that results in marked and severe functional limitations, and that can be expected to result in death or that has lasted or can be expected to last for a continuous period of not less than 12 months.	Cash, linkages to Medicaid	$506[a] (youth under 18)	209,635[b]
Adult SSI (ages 18 to 25)	Means-tested transfer program for adults who have medically determined disability expected to last at least 12 months or result in death and who are unable to engage in substantial gainful activity (SGA), which was defined as earnings above $810 in 2004 for all nonblind disability applicants.	Cash, linkages to Medicaid	Data not available	517,101[b]
Social Security Disability Insurance (DI) (under age 25)	Federal program for insured workers with disabilities who have medically determined disability expected to last at least 12 months or result in death and who are unable to engage in SGA.	Cash, linkages to Medicare	$376-523[c]	56,680[c]
Childhood Disability Benefits (CDB) (under age 25)	Program for qualifying children of deceased workers or SSA disability or retirement beneficiaries who have a disabling condition with an onset before age 22.	Cash, linkages to Medicare	$498 - 503[d]	72,050[d]
At-Risk Population (ages 16 to 25)	Of the random assignment projects, only two of the projects include youth who are at risk of becoming SSA disability beneficiaries. The Spokane project served youth whose applications for disability benefits had been denied, and the Montgomery County, Maryland, project serves youth with severe emotional disturbances who are enrolled in special education programs, regardless of their connection to SSA programs.	None	$0	120,000-230,000[e]

[a]SSA, Annual Statistical Supplemental, 2005 Table 7.A1. Number reflects both federal payments and state supplements.

[b]SSA, Annual Statistical Supplemental, 2005 Table 7.E3.

[c]SSA, Annual Statistical Supplemental, 2005 Table 5.A1.2.

[d]SSA, Annual Statistical Supplemental, 2005 Table 5.A1.4.

[e]The lower-bound estimate of 120,000 at-risk youth is based on the number of denied SSI beneficiaries ages 16 to 25 from Table 4 in SSA (2006), which we interpolated based on the number of rejected applicants between ages 13 and 17. The upper-bound estimate of 230,000 youth is based on the number of youth with severe emotional disturbances in special education programs, which we estimated based on Table 1 from SRI International (2000).

Two projects that were piloting their interventions as part of the second phase of identifying projects for the random assignment evaluation served at-risk youth, and each took a different approach to identifying this group. The Spokane project included youth who applied for disability benefits in the past but whose applications were denied either because the disability was not severe enough or because family income was too high.[8] The thinking behind this approach was that these individuals are likely to successfully reapply for benefits if their disabilities worsen or their family incomes fall. The second approach, taken by the project in Montgomery County, Maryland, was to target youth with a specific disability that puts them at significant risk of going on the disability rolls in the future. This project exclusively targets youth who are participating in special education programs and have been classified by a school system as having severe emotional disturbances (SED) or other significant mental illness. We estimate that the size of the at-risk population nationwide is between 120,000 and 230,000 youth, based on the definitions of *at-risk* used by the Spokane and Montgomery County pilot projects.[9]

3. Distinguishing Characteristics of SSI Beneficiaries

SSI beneficiaries dominate the YTD target population and constitute a strong majority of the youth actually enrolled in all but one of the projects. Given the distribution of impairments among youth SSI beneficiaries, it is likely that most YTD youth will have some type of mental disorder. According to SSA (2006), approximately 80 percent of SSI beneficiaries ages 16 to 24 have been diagnosed with a mental disorder, with an even split between youth with mental retardation and other mental disorders (for example, affective disorders).

Many eligible young child SSI beneficiaries have distinguishing demographic and family characteristics that could influence their transition to adulthood. Relative to youth without disabilities, child SSI beneficiaries are disproportionately male, nonwhite, and more likely to live in a single-parent family. Data from the National Survey of SSI Children and Families (NSCF) show that 64 percent of SSI youth under age 17 were male, 53 percent were nonwhite, and 59 percent were in one-parent households (Rupp et al. 2006). In comparison, national estimates from the 2000 Census indicate that 51 percent of all youth under age 17 (with and without disabilities) were male, 31 percent were nonwhite, and 27 percent were in one-parent households (U.S. Census Bureau 2001, 2004).

[8] The Spokane project also targeted current disability beneficiaries.

[9] The lower-bound estimate of 120,000 at-risk youth is based on the number of denied SSI beneficiaries ages 16 to 25 from Table 4 in SSA (2006), which we interpolated based on the number of rejected applicants between ages 13 and 17. The upper-bound estimate of 230,000 youth is based on the number of youth with severe emotional disturbances in special education programs, which we estimated based on Table 1 from SRI International (2000).

B. POOR TRANSITION OUTCOMES FOR YOUTH WITH SEVERE DISABILITIES

As discussed in Chapter I, youth with disabilities, especially the more severely disabled youth who make up the YTD-eligible population, face unique barriers that could result in their making poor choices that compromise their ability to complete successful transitions. Underinvestment in human capital and poor social development are foremost among the problematic transition outcomes for young adults with severe disabilities. These outcomes may have serious implications, limiting youth with severe disabilities to long-term dependence on SSA disability benefits. As the conceptual framework in Chapter I shows, the YTD interventions are intended to improve outcomes for young adults by addressing barriers to successful transition through employment-focused support services and work incentives.

To provide an approximation of the outcomes that could be expected for YTD-eligible youth without the interventions, we summarize findings from existing research on the transition outcomes of former child SSI beneficiaries and other youth with disabilities. Our summary draws on descriptive findings from Loprest and Wittenburg (2007), who used data from the NSCF to track the human capital development and social experiences outcomes for a group of youth between ages 19 and 23 who had been child SSI recipients.[10] We also draw on findings from research on special education programs to examine outcomes not covered in the Loprest and Wittenburg analysis but relevant to the YTD evaluation. When feasible, we compare outcomes for current and former beneficiaries with outcomes for youth in general to highlight the poor results for youth in the YTD target population.[11] The findings underscore the need for intervention services and waivers as well as beneficiary education for youth with severe disabilities.

1. Underinvestment in Human Capital

Most young adults who received SSI benefits as children are not engaged in any human capital development activity, such as continued schooling, participation in VR services, or employment. This is true whether or not these individuals left the disability rolls following the age 18 redetermination or remained on them. Loprest and Wittenburg (2007) used data from the NSCF to examine schooling, employment, and rehabilitation outcomes of former child SSI recipients who were eligible for SSI prior to age 18 (Table II.2). They also compare outcomes of former child SSI recipients who remained on SSI, defined as receiving benefits after age 18, and were off SSI for any reason after age 18 to examine differences in

[10] The NSCF, conducted in 2001–2002, captured the characteristics and transition experiences of current and former child SSI recipients ages 14 to 23. The NSCF survey sample includes children and young adults who received SSI benefits in either December 1996 or December 2001.

[11] Because the data on outcomes are derived from different sources and, in some cases, different age ranges, some caution must be used in drawing conclusions based on the differences in the point estimates. Nonetheless, because the magnitudes of the differences are generally very large, we are confident that these comparisons underscore the problems that YTD-eligible youth face.

Table II.2. Investment in Human Capital by Former Child SSI Beneficiaries and by All Youth (in Percentages)

Characteristic	All Youth Age 16 and Older	Former Child SSI Beneficiaries, Ages 19 to 23[b]		
		All	On SSI[c]	Off SSI[d]
Schooling				
In school or graduated[a]	89.1	61.5	65.0	51.8
Dropped out/out of school	10.9	38.5	35.0	48.2
Employed				
2000 employment rate (ages 19 to 23)	n.a.	21.6	14.5	41.4
2006 employment rate (ages 20 to 24)	68.5	n.a.	n.a.	n.a.
Other Activities				
Graduated high school; enrolled in postsecondary education	41.0	6.3	7.0	4.4
Ever participated in VR	n.a.	13.1	15.0	7.6
Inactive: not participating in education or VR and not employed	n.a.	57.3	59.3	51.7

Sources: Data on former child SSI beneficiaries are from Loprest and Wittenburg (2007), who generated estimates using the 2001 NSCF. The age range and data for all youth are taken from several sources. Average monthly employment rates of young adults ages 20 to 24 during calendar year 2006 are based on calculations using data from the CPS [http://www.bls.gov/data/ home.htm]. Dropout rates are based on findings from Kaufman et al. (2001) using national data from the 2000 CPS on young adults ages 16 to 24. Wagner et al. (2006) generated estimates of postsecondary enrollment for youth ages 19 to 23 using data from the 2000 NLSY.

Notes: Loprest and Wittenburg (2007) defined former child SSI beneficiaries as youth who received benefits in 1996 and who were between ages 19 and 23 at the time of the survey (in calendar year 2000).

[a]Includes youth who are in school or who have graduated from secondary school.

[b]Includes respondents from a 1996 cohort of child SSI recipients age 19 to 23 in calendar year 2000**.**

[c]Includes former child SSI recipients who were receiving adult SSI benefits after age 18.

[d]Includes former child SSI recipients who were not receiving adult SSI benefits after age 18.

n.a. = not available.

subgroup outcomes after the age 18 redetermination.[12] To illustrate the underinvestment in outcomes relative to other youth, we present comparisons of similar human capital activities of all youth in the same approximate age ranges, including data from the Current Population Survey (CPS) and published statistics on dropout and postsecondary enrollment rates from

[12] Loprest and Wittenburg selected a sample of former child SSI recipients who were between ages 19 and 23 in 2000, but who received child SSI benefits in 1996. These young people were between ages 14 and 18 in 1996. Loprest and Wittenburg divided their sample into two subgroups: (1) those still on SSI at the time of the interview ("on SSI"); and (2) those not on SSI at the time of the interview but who left the program or lost benefits at age 18, around the time of redetermination ("off SSI"). They identify current SSI status using information on SSI receipt in the month of the NSCF interview.

Kaufman et al. (2001) and Wagner et al. (2006).[13] Because the data on outcomes are derived from different sources and, in some cases, different age ranges, some caution must be used in drawing conclusions based on the differences in the point estimates. Nonetheless, because the magnitudes of the differences are generally very large, we are confident that these comparisons underscore the problems that YTD-eligible youth face.

School dropout rates are high among former child SSI beneficiaries; among all former child SSI recipients, 39 percent do not have a high school diploma and are not currently attending school in the post-transition period when they are between ages 19 and 23 (Table II.2). In comparison, Kaufman et al. (2001) found that 11 percent of all young adults ages 16 to 24 had dropped out of school and not received a diploma. Hence, a major concern is that many child SSI recipients appear to be cutting short their investment in human capital through formal education, especially in comparison to all youth in similar age ranges.

Former child SSI beneficiaries are employed at a much lower rate between ages 19 and 23 than young adults in general—about 22 percent, compared with a 69 percent employment rate for all adults ages 20 to 24. At just 15 percent, the employment rate for former child SSI beneficiaries who remain on SSI as adults is especially low. This reflects a combination of the severe impairment characteristics of this group, SSI financial rules that encourage maintaining SSI eligibility, and limited availability of other supports. In contrast, child SSI beneficiaries who exited the SSI rolls after age 18 were employed at a much higher rate—41 percent. This is not surprising, because these individuals must find alternative sources of income to offset their loss of child SSI benefits. Nonetheless, even this rate is substantially lower than the 69 percent employment rate for all adults ages 20 to 24.

The rate of enrollment in postsecondary education programs is very low among young adults who received SSI benefits as children. Just 6 percent of former child SSI beneficiaries are enrolled in some form of postsecondary education after graduating from high school, compared with 41 percent of all youth ages 18 to 23. The rate of postsecondary enrollment among former child beneficiaries has remained low despite growth over the past decade in the absolute number of former special education students who are enrolled in postsecondary education (Wagner et al. 2006).

Few young adults who are current or former SSI beneficiaries have ever received services from a state VR agency. As Table II.2 shows, Loprest and Wittenburg (2007) find that only 13 percent of former child SSI beneficiaries have ever participated in VR services, with higher rates among those who remain on SSI than for those who are off SSI (15 versus

[13] The age range and data for all youth are taken from several sources. Average monthly employment rates of young adults ages 20 to 24 during calendar year 2006 are based on calculations using data from the CPS [http://www.bls.gov/data/ home.htm]. Dropout rates are based on findings from Kaufman et al. (2001) using national data from the 2000 CPS on young adults ages 16 to 24. Wagner et al. (2006) generated estimates of postsecondary enrollment for youth ages 19 to 23 using data from the 2000 National Longitudinal Survey of Youth (NLSY).

8 percent). As discussed more fully in Chapter III, the low rates of participation are in part due to the lack of coordination between school systems and VR systems, which results in the delay of VR services for most youth until after age 18.

Overall, most young adults who received SSI benefits as children are not engaged in any formal activities that would increase their human capital and thereby improve their employment opportunities, earnings capacity, and prospects for independent living. Table II.2 shows that 57 percent of former child SSI beneficiaries ages 19 to 23 are not enrolled in education programs, are not receiving VR services, and are not employed. These findings suggest that YTD interventions could address a critical unmet need of young SSI beneficiaries by helping them develop and implement transition plans for human capital development following their 18th birthday.

2. Poor Social Development

Many youth with severe disabilities reach adulthood without having developed a full set of conventional social skills. This may be manifested in many ways, including social isolation and involvement with the legal system. Wagner et al. (2006) report that special education students are more likely than other youth to experience social difficulties, including difficulties starting conversations, interacting in social situations, avoiding trouble, and controlling their tempers. They also note that one of five youth with disabilities never join group activities without being told to do so. Almost one-fifth of former child SSI beneficiaries have been arrested, including 32 percent of former beneficiaries off SSI after age 18 (Loprest and Wittenburg 2005). These findings are consistent with high incarceration rates more generally among youth with disabilities relative to other youth. A recent report by the National Council on Disability (2003) indicates that 30 to 50 percent of incarcerated youth have disabilities that could qualify them for special education services.

3. Long-Term Implications of Transition Outcomes

The relatively poor human capital and social outcomes for youth with severe disabilities have important implications for their ability to become self-sufficient adults. Currently, most young adults who received SSI benefits as children are not investing in their human capital through work, rehabilitation, or education. Therefore, they are at high risk for a lifetime of dependency on disability benefits and Medicaid. The social development of many of these individuals has been limited, which may result in social isolation and involvement with the legal system in the short run and may further increase the risk of dependency in the long run. To be successful in helping youth with severe disabilities improve their currently poor outcomes both in the short run and the long run, the YTD projects must address the many barriers these youth face.

CHAPTER III

PROGRAM CONTEXT FOR THE YTD EVALUATION

Youth with disabilities must make their transition to adulthood in a service system that is a fragmented patchwork of programs that often fails to provide adequate support for that transition. For example, programs that serve youth often are not the same ones that serve adults, and, as youth reach the age threshold of adulthood, they often do not receive enough help accessing adult supports. In addition, the adult service system itself includes many programs and mixed incentives for work, and providers often do not make systematic efforts to share information about those whom they serve or ways to improve access for youth with disabilities.

The YTD evaluation is not intended to address all the barriers youth with disabilities confront—some of these barriers require more ambitious systemic changes that go beyond the scope and capacity of this project to remedy. Instead, the evaluation is focusing on addressing those barriers most likely to have more immediate and tangible effects on employment. Nonetheless, it is useful to briefly describe the service environment and the program context for youth with disabilities in which the YTD projects will be operating, and, to some extent, from which they will try to leverage services. Describing this environment also provides background for understanding the service context for youth in the control group (that is, it provides a sense of the counterfactual in the random assignment evaluation).

We first describe the education system and the opportunities that it offers to youth with disabilities, including special education services and postsecondary education programs (Section A). We then describe the adult service system that the youth will move into, including employment programs (Section B) and health insurance programs (Section C) available to youth leaving school. Finally, Section D discusses some issues in the current program context and their implications for the design of the YTD interventions.

A. THE EDUCATION SYSTEM

While most YTD projects are not directly linked to school systems, several of them do target youth who are in school. Although the projects do not plan to become involved with system change related to the education system, some background on the education context for these youth is still useful.

1. Special Education and the Role of the Individualized Education Program

Through mandates from the Individuals with Disabilities Education Act of 1975 (IDEA), states must provide special education services to eligible youth with disabilities through an individualized education program (IEP). States must identify, locate, and evaluate all children with disabilities who need special education and related services.[14] Eligible youth work with a team of stakeholders to develop their IEP. These stakeholders generally include teachers, parents, school administrators, and related services personnel. The IEP (1) is tailored to meet the specific needs of each individual child, (2) allows a youth to access appropriate services while in school, and (3) formally defines services the school system will provide to an individual student. For transition-age youth, a key component of the IEP is transition planning, which outlines plans to move from school to adult life and provides a coordinated set of activities supporting the youth's movement to adult living, learning, and employment.

Youth and family involvement is considered critical in developing an IEP. Considerable evidence exists, however, that youth and families often are not involved in this process, and their lack of involvement could compromise the effectiveness of these services. Mason et al. (2004) found that youth involved in developing their IEPs were more likely to achieve their goals, improve academic skills, develop self-advocacy and communication skills, and gain better employment. However, they also found that only about half the students attended their IEP planning sessions, and those who attended often did not participate. Another concern is that some youth with disabilities do not receive an IEP because their parents or school do not identify them as having a disability. For example, approximately one-fourth of child SSI beneficiaries ages 14 to 17 did not report any participation in special education programs (Loprest and Wittenburg 2005). Hence, some portion of youth with disabilities might not be receiving needed special educational services.

The youth empowerment and family supports components of the YTD interventions can help youth and their families become aware of the importance of their (1) participating

[14] Most of these efforts are coordinated through "Child Find" activities. Child Find is a system that supports public awareness activities and screening designed to locate, identify, and refer as early as possible all children with disabilities and their families who need IDEA services: http://www.childfindidea.org/. Parents can call the Child Find system and ask that their child be evaluated. Alternatively, a school professional might ask that the child be evaluated for a disability after getting the consent of a parent. After a child is identified as potentially eligible for IDEA services, the child undergoes an evaluation. Parents and a group of qualified professionals review these evaluations. Professionals, with the input of parents, make the eventual eligibility decision, though parents may ask for a hearing to challenge the decision.

in the IEP development process, and (2) self-advocating for services and accommodations they might be entitled to and benefit from.

2. Postsecondary Education Programs

Increasingly, jobs and careers that are meaningful and pay a living wage are available only to those who successfully complete some sort of postsecondary educational program. A stronger positive correlation exists between level of education and rate of employment for youth with disabilities than is found in the general population (Stodden 2002). Although there has been an overall increase in the percentage of youth with disabilities who attend postsecondary school, increasing from 15 percent in 1987 to 32 percent in 2003 (Newman 2005), few youth on SSI do so. Furthermore, students with disabilities are more likely than students without disabilities to enroll in two-year institutions seeking a certificate, associate's degree, or no degree and less likely to enroll in four-year institutions (Horn and Nevill 2006).

Youth with disabilities face barriers in postsecondary school that their peers without disabilities often do not encounter. In postsecondary school, youth with disabilities experience "low expectations and negative attitudes on the part of counselors and faculty, lack of role models who are successful in postsecondary settings, lack of coordinated educational supports and services, and difficulties obtaining and balancing related support services such as transportation, health, and living arrangements" (National Center for the Study of Postsecondary Educational Supports 2002). Students with disabilities also face barriers because of the inconsistent range and types of supports at postsecondary institutions, which frequently are offered in a nonindividualized, uncoordinated manner. Finding funding for postsecondary education is an additional barrier, because people with disabilities may be ineligible for financial aid (especially if getting aid requires that students attend school full-time or participate in work-study programs) and may be passed over for performance-based scholarships (because they may perform poorly on standardized tests despite having high academic ability).

The main focus of YTD is employment and work-based experiences for youth with disabilities. However, most of the projects also help youth to transition to postsecondary education if, over the course of their participation in YTD services, further education emerges as a component of their transition plan.

B. Adult Employment Programs

After a youth with a disability leaves high school, the structured set of services and supports provided through the IEP disappears. Although some students with developmental disabilities or mental illness may receive vocational support through state Mental Retardation and Developmental Disabilities (MR/DD) systems, most youth will not have access to such supports. Adult employment programs—VR, Ticket to Work (TTW), and the One-Stop Workforce Center system—include many services that are unconnected, have conflicting goals and incentives, and do not focus on youth. In this section, we examine publicly funded employment programs that primarily serve adults but are potentially available to youth with disabilities making the transition from school to work. In practice,

few youth under age 18 access these employment programs, which complicates the handoff to adult services.

1. VR Programs

State Vocational Rehabilitation Agencies (SVRAs) operate with funding from the U.S. Department of Education Rehabilitation Services Administration (RSA). Federal funding for Title I of the Rehabilitation Act, along with state matches and other appropriations, supports rehabilitation services that help clients identify and reach their vocational goals as outlined in the Individualized Plan for Employment (IPE). SSA provides additional funding to SVRAs for disability beneficiaries who maintain nine months of employment above the substantial gainful activity (SGA) level. However, because few beneficiaries are able to achieve these outcomes, less than 15 percent of disability beneficiaries who find employment qualify toward these goals. SVRA services include, but are not limited to, assessment and evaluation, educational and medical services, job placement, and assistive technology. In many cases, the SVRA counselors purchase services for their clients through a network of community rehabilitation programs that provide evaluation, placement, and follow-up services.

VR programs offer a variety of employment services, but youth with disabilities may have limited access to them. Title I of the Rehabilitation Act specifies that rehabilitation agencies should begin working with students on making the transition to higher education or employment at age 16. However, many youth do not receive these services until well after high school, when they are less likely to promote a successful transition. Only 13 percent of SSI beneficiaries ages 19 to 23 report ever receiving VR services (Loprest and Wittenburg 2005).

2. TTW Program

SSA initiated the TTW program in 2001 to help SSI and DI beneficiaries over age 18 find gainful employment that would enable them to leave the benefit rolls. SSA beneficiaries receive tickets they can assign to participating providers, called employment networks (ENs), for training and employment assistance. SSA pays ENs according to one of two schedules over a period of five years or longer. For the EN to receive the maximum payment under either schedule, the beneficiary must return to work and leave the rolls for at least 60 months. In effect, the EN receives a portion of program savings for helping beneficiaries move off benefits.

While TTW provides employment supports for disability beneficiaries, participation by providers and beneficiaries is low. Only about 68 percent of counties across the U.S. contain an EN that has accepted a ticket, and few of these ENs cater to youth with disabilities. In fact, an EN may not accept a ticket from youth under age 18. Many organizations have been discouraged from participating as ENs by the complex payment structure, extensive paperwork requirements, and the need for up-front capital to purchase training, equipment, and other services to make beneficiaries employable. Most tickets, in fact, are assigned to SVRAs. Furthermore, TTW does not address most of the SSI and DI

work disincentives for beneficiaries. Beneficiaries who redeem their tickets, receive training, and find employment still face the same DI earnings cliff and sharp reductions in SSI benefits as they did before TTW (Stapleton et al. 2006). Consequently, demand for services through TTW is low—less than two percent of those eligible have assigned their tickets. Although youth ages 18 to 24 are more likely than older beneficiaries to participate in TTW, those who receive only SSI are less likely to participate than those who receive DI or those who receive both SSI and DI. A primary reason is that payments to ENs for assisting SSI beneficiaries are lower than for DI beneficiaries.

3. One-Stop Workforce Centers

The Workforce Investment Act of 1998 (WIA) established a system of 3,000 One-Stop Workforce Centers across the United States that integrate many employment and training programs (including SVRAs). One-Stops typically serve a large number of youth, and youth under age 22 constitute about one-third of all individuals exiting the program. While the One-Stops constitute a potential resource for YTD participants, these youth may face barriers in using One-Stop services. Although, over time, the One-Stop system has increased its capacity to address the needs of people with disabilities, often using grant or other special funding, it serves relatively few people with disabilities.[15] In fiscal year 2002, about 46,000 people with disabilities (about eight percent of people served) exited the One-Stop system. Although DOL does not track receipt of One-Stop services by SSA disability beneficiaries, Holcomb and Barnow (2004) estimated that fewer than 2,400 people who exited the system were SSI or DI beneficiaries.

Disability beneficiaries face several barriers to receiving One-Stop services. These barriers include (1) the requirement that participants use resource materials (including computer job banks and printed materials) on their own, making it difficult to identify and serve people with special needs; (2) automatic referral of people with disabilities to the SVRA, without adequate assessment of appropriateness for traditional One-Stop services; (3) physical and access problems; and (4) time and dollar limits on job-training funds, making it more difficult to serve people whose needs may be more expensive. DOL has also established performance standards (placing the most people in jobs at the least cost) that may discourage One-Stops from serving people with disabilities (Holcomb and Barnow 2004).

4. Community-Based Programs

Most employment programs that specifically serve adults with disabilities are run by local private nonprofit agencies. The types of rehabilitation services and employment opportunities these agencies provide include day care, facility-based employment, supported

[15] In 2003, SSA and the U.S. Department of Labor (DOL) jointly created a grant program to fund DPNs to make access to relevant systems and supports easier. In addition, DOL's Customized Employment Grant Program, initiated in 2001, provides job carving, self-employment, job restructuring, and other specialized employment services to people with severe disabilities who generally are not served by the One-Stops.

employment, and competitive employment. Despite the development of federal and state policies to promote employment in integrated settings, community rehabilitation providers continue to rely heavily on sheltered or segregated employment (Kregel and Dean 2002). The number of people in these programs has remained steady or risen during the past decade, as has the number of people on waiting lists who are receiving no employment services at all because of budgetary limitations and system capacity issues (Butterworth and Gilmore 2000). To counter these trends, more recent employment initiatives for adults with disabilities emphasize work in competitive settings, reflecting the success of supported employment, customized employment, and self-employment models.

The YTD intervention, with a strong focus on work-based experiences and competitive employment, as well as job development, will assist youth with supported and customized employment and, more generally, will help them become more integrated in their communities. Furthermore, the YTD projects may assist youth in accessing vocational and employment supports that may be available through VR agencies, One-Stop Centers, and other programs or agencies.

C. HEALTH INSURANCE PROGRAMS

We begin this section by discussing issues in health insurance coverage that youth with disabilities may confront as they attain age 18. We then describe the Medicaid and Medicare programs, the two largest publicly funded health care systems for people with disabilities.

1. Health Insurance Coverage Issues for Youth in Transition

Most youth with disabilities continue to have access to health care and health support services as they leave school, but care and payment options may change after a youth turns 18. For example, the type of health insurance may change when youth reach age 18, and some youth may become uninsured. About 84 percent of children with disabilities ages 15 to 18 have health insurance: 38 percent have public insurance, 34 percent have private insurance, and 13 have both public and private insurance. In contrast, only about 74 percent of young adults ages 19 to 29 with disabilities are insured, and they rely more on public insurance: 40 percent have public insurance, 24 percent have private insurance, and 10 percent have both types (O'Day et al. 2007). Child SSI beneficiaries and children with parental coverage are most at risk for losing health insurance coverage at age 18. The SSA waivers for YTD participants and the Section 301 rule change regarding the age 18 redetermination should mitigate the disruptions in health insurance coverage that youth with disabilities often experience around age 18.

2. Medicaid Program

Medicaid is the largest provider of means-tested health benefits for youth with disabilities, covering 8.6 million people with disabilities at a cost of $92 billion in 2003 (Goodman et al. 2007). It is widely viewed as the most comprehensive health insurance for people with disabilities because of its broad coverage of mental health services, long-term care, personal assistance, durable medical equipment, and other services. Medicaid's value is

that it covers items—such as personal assistance and assistive technology—not available from most private coverage.

Although substantial work incentives have been included in the Medicaid program during the last few years, Medicaid eligibility requirements can still be a disincentive to work. The Medicaid While Working (Section 1619(b)) provision enables SSI recipients who become ineligible for a cash benefit because of earned income to retain their eligibility for Medicaid until their earnings are considered sufficient to replace the value of certain benefits. This amount varies from state to state, from as low as approximately $23,000 to as high as $52,000 in 2007, with an average of about $35,000. However, the SSI asset rules still apply; to be eligible for these provisions, a beneficiary must have limited assets of under $2,000. In addition to these income and asset limitations, a lack of awareness of this provision, both on the part of beneficiaries and Medicaid staff, as well as beneficiaries' fear that they will lose their SSI and Medicaid, causes beneficiaries not to work or to limit their earnings. SSA's generous earnings waivers for YTD participants, as well as the Section 301 rule change that ensures continuation of SSI benefits to YTD youth after the age 18 redetermination, should counter the work disincentives that Medicaid eligibility requirements might impose.

Other initiatives, most notably the Medicaid buy-in programs (authorized by the Balanced Budget Act of 1997 and the Ticket to Work and Work Incentives Improvement Act of 1999) have tried to break the link between public health insurance eligibility and employment, but they have had only moderate success (Goodman and Livermore 2004). Nonetheless, the buy-in program may be a useful tool for some YTD projects (particularly those targeting youth who are at high risk of receiving disability benefits in the future) and for individual YTD participants as they approach the end of their waiver period.

3. Medicare Program

Medicare covers approximately 6 million disabled beneficiaries, and the program is closely tied to receipt of DI. Thus, Medicare provides health insurance coverage for people with a prior attachment to the workforce and who have met the SSA definition of disability. Medicare may cover youth with disabilities if a parent or guardian is covered and the youth is unmarried and earns under the SGA level of $900. If transition-age youth who are eligible for Medicare through a parent or guardian also receive an SSI payment, they are eligible for Medicaid as well.

Medicare's focus on treating illness and improving functioning precludes providing (1) rehabilitation services to maintain functioning, (2) personal assistance services, and (3) adaptive equipment. This makes retention of Medicaid services a priority for many youth with disabilities. Those whose earnings are high enough to lose their SSI supplement but low enough to retain DI benefits risk losing their Medicaid coverage. Youth in this situation may choose not to work to avoid Medicaid loss and to avoid the need to keep track of the complex work incentives under both programs. Again, the YTD waivers and Section 301 rule change that allow youth to retain their SSI status, and hence Medicaid eligibility, should reduce these disincentives.

D. ISSUES IN THE CURRENT SERVICE SYSTEM AND RELEVANCE FOR YTD

The earlier sections of this chapter focused on the program context in which the youth targeted for YTD services will be making their transition to adulthood and the program context in which the YTD projects will operate. Of course, the actual context and services available will vary by locality and will provide different opportunities and challenges for the YTD projects. Some YTD projects will provide virtually all of the required services directly to youth, while others will leverage the resources available in their communities. In designing their services, however, the YTD projects should recognize some of the deficits in the current system and ensure that these shortcomings do not pose barriers to the youths' transitions to adulthood. This section identifies important issues for youth with disabilities in the existing service system and suggests how they are likely to influence the services YTD projects provide.

- ***Employment experiences of youth with disabilities vary considerably by type of impairment.***

Transition services and activities, including functionally oriented school curricula and community-based work experiences, contribute significantly to employment success after a student leaves school. Research suggests that paid work in community settings—especially in the last two years of school—leads to the greatest employment success after school. According to data from the National Longitudinal Transitional Study-2 (NLTS-2), many youth with disabilities do get some employment experience, but the extent to which this happens varies by type of disability. According to parents' reports, just over half of all youth ages 13 to 17 with a disability worked in regular paid employment at some time during a year, and about 22 percent were employed at a given point in time. Youth with learning disabilities, emotional disturbances, and other health impairments were most likely to be employed (50 to 60 percent). However, youth with severe disabilities that would more likely qualify them for SSI had lower employment rates. Fifteen percent of youth with autism, one-fourth with multiple disabilities, and one-third of youth with mental retardation worked in the year (Wagner, Cadwallader, and Marder 2003). Youth from poorer families were less likely to be employed than youth from families with greater income. Given the lower rates of employment among youth likely to be on SSI, it will be important for YTD projects serving in-school youth to incorporate a progression of work-based experiences into the transition process. These experiences include career exploration, job shadowing, volunteer work, internships, apprenticeships, and paid employment.

- ***IEPs are inconsistently applied, and lack of student involvement or follow-through may further hamper transition efforts.***

IEPs vary in substance and tend to be particularly limited for lower-income youth, who may be less involved in developing their IEPs and may have less effective advocates. Transition planning to coordinate adult programs to support work and independence should be a major component of the IEP, but frequently it is not. Many young adults with disabilities still experience poor postschool integration and low levels of independent living and community participation. Because IEPs have such important implications for the

quality of school-based planning for the transition to adult services, coordination with school systems and involvement with the IEP process can be important components of YTD services for projects serving in-school youth.

Another pervasive problem is lack of student involvement in their IEPs. As mentioned earlier, youth involved in developing their IEPs are more likely to achieve goals, improve academic skills, develop self-advocacy and communication skills, and gain better employment. YTD projects that work with in-school youth could enhance transition planning by promoting youth empowerment. By helping youth acquire the knowledge and skills to effectively plan and advocate for their own choices in employment, education, living arrangements, and peer and family relationships, YTD projects can provide youth with the opportunities to make informed life choices and encourage their autonomy and independence.

- ***An uncoordinated handoff to adult services creates difficulties for transition youth in accessing these services.***

Publicly supported education services are an entitlement for youth with disabilities until they receive a diploma or turn age 22. In most states, services cease upon attainment of one of those milestones, which means that youth must then enter the adult support system. The transition is problematic for many youth, because access to adult services is not an entitlement and is based on specific eligibility criteria and/or available resources. Despite the existence of transition components in some IEPs, the handoff from school programs to adult support services is not coordinated and thus can potentially create difficulties in accessing those services. Long waiting lists for these services are common, and transitioning youth typically are placed at the bottom of the lists, making their access to services highly uncertain once they leave school. Furthermore, some of the other programs in which these individuals might participate as young adults, such as housing assistance and food stamps, include strong work disincentives that further complicate and hinder transitions into employment. Given the wide-ranging service needs of youth with disabilities, it will be important for YTD projects to develop creative collaborations with key organizations to address these needs and to help the youth move easily from the youth system to the adult one.

- ***Finding and paying for adequate health care can be a major impediment to employment and independence.***

People with disabilities need a health care system designed to address long-term functional limitations and provide services that address the effects of those limitations on the quality of their lives. Youth with disabilities are likely to face significant barriers accessing and paying for health care when they leave school. Barriers include (1) access to health insurance, (2) work disincentives built into Medicaid eligibility, (3) limitations on eligibility for and availability of Medicaid waiver services, and (4) difficulty finding adult care providers knowledgeable about specific health conditions. As mentioned earlier, the YTD earnings waivers should enable youth to retain SSI eligibility and to maintain Medicaid coverage when they become employed. Furthermore, some YTD projects may be able to

help participants with complex health care needs coordinate between medical and social services systems. For all youth, YTD projects can help assess social and health service needs, and either offer services directly or refer the youth to an agency that can provide the required service.

CHAPTER IV

CORE COMPONENTS OF YTD INTERVENTIONS AND SELECTION OF PROJECTS FOR THE NATIONAL IMPACT STUDY

The challenge for YTD projects is to develop strong interventions to serve a heterogeneous population of youth who face many barriers to self-sufficiency and often have poor outcomes upon reaching young adulthood. To be successful, the demonstration projects must address key barriers that most youth with disabilities face. The projects also must be able to operate effectively in areas where the availability of additional supports, especially adult-based supports, could be limited. These factors suggest a flexible, proactive approach to service design and delivery. Because SSA is funding the demonstration projects, the projects are able to implement very strong program models, as opposed to what would be feasible in a more typical resource-constrained environment.

This chapter describes the core components we have identified as key to strong transition interventions and the process we used to select projects for the national impact study. Section A summarizes the core components for YTD projects that we view as key to effective transition interventions. Section B describes the process of selecting six projects for the YTD national impact study and summarizes the key characteristics of the projects.

A. CORE COMPONENTS OF YTD INTERVENTIONS

The conceptual framework for YTD projects (presented in Chapter I), which describes the barriers that youth with disabilities face and the service environments in which the projects operate, largely defines the types of interventions this study can test. Furthermore, the key intervention components must be appropriate for SSA's designated target population for the interventions—youth ages 14 through 25—and the agency's desire to see effects on employment and earnings in the evaluation's relatively short four-year observation window.

Keeping these broad parameters in mind, we drew on three main sources to design the core components for strong YTD interventions. First, as described in Chapter I, we adopted and refined components from the standards developed by the National

Collaborative on Workforce and Disability for Youth (NCWD/Y) and summarized in a practical tool called *Guideposts for Success* (National Collaborative on Workforce and Disability for Youth 2005). NCWD/Y, which is made up of partners with expertise in disability, education, employment, and workforce development policy and practice, developed *Guideposts for Success* based on an extensive review of research, demonstration projects, and effective practices covering a wide range of programs and services. This represents the most comprehensive information available on "what works" in promoting successful transitions to adult life for youth with disabilities. Second, we incorporated SSA's waivers for YTD and the benefits counseling that youth need to understand them into our design for the core intervention components. Third, where appropriate, we drew on the lessons from the previous interventions that targeted youth, particularly youth with disabilities. In addition, we discussed our key components with the YTD evaluation's technical work group (TWG), to get input on, and "fine-tune," the identified key components.

We identified seven core components of strong YTD interventions. These components describe the broad range of services that youth targeted by the YTD projects can generally expect to receive. Projects selected for the national random assignment evaluation are expected to incorporate all the key components. Of course, they may emphasize some components more than others, depending on the characteristics of the youth they are serving and on the services available in their communities. As an integral part of the evaluation, TransCen, Inc., is providing intensive TA to the YTD projects in implementing these components and integrating them into strong interventions. Next, we discuss these seven components.

1. Work-Based Experiences

Service providers and researchers have long recognized the importance of work-based experiences for transition-age youth and the contribution of these experiences to postschool employment success (Benz et al. 1997; Colley and Jamison 1998; Luecking and Fabian 2000). Projects can offer a range of work-based service options to meet the diverse needs of the YTD target population, including career exploration, job shadowing, volunteer work, internships, apprenticeships, and paid employment. Experiences such as these offer opportunities for youth to learn the "soft skills" needed to succeed in the workplace, as well as specific occupational skills. They also help a youth and the youth's family or other supporters identify the youth's employment and career preferences. Of equal importance, the work-based experiences help youth identify supports and accommodations that might be essential to eventual long-term workplace success, including the management of social and health issues that may affect workplace absenteeism and performance. Of all the types of work experiences, the literature explicitly identifies paid work in community settings during the secondary school years as the strongest predictor of postschool employment success (National Collaborative on Workforce and Disability for Youth 2005).

2. System Linkages

Two types of system linkages are useful in transition interventions. The first is the linkage of academic course work with work-based experiences. This could be done, for

example, by integrating internships and work-study assignments with classroom instruction. Such a linkage often makes course work relevant to students, keeps them engaged in academic curricula so they are less likely to drop out of school, and/or creates an applied learning environment. This type of linkage can be available only to youth currently enrolled in school.

The second type of linkage, which can be available to all youth, is a closely coordinated network of ancillary and postsecondary services that focuses on youth with disabilities. Many youth, especially those who might participate in YTD, require employment support before, during, and after school exit. That support can take the form, for example, of assistive technology devices, personal attendants, job coaches, medication management, or transportation. Effective linkages among service providers, such as between schools and adult VR providers, permit a seamless, effective transition for youth, ensuring, for example, that job coaching, mental health counseling, case management, and/or benefits counseling are available and delivered without interruption.

According to NCWD/Y (2005), both types of linkage can be improved through (1) the use of written and enforceable interagency agreements that structure the provision of collaborative transition services; (2) the development and delivery of interagency and cross-agency staff training opportunities; (3) the use of interagency planning teams to facilitate and monitor capacity-building efforts in transition; and (4) the provision of a secondary school curriculum that supports student identification and accomplishment of transition goals and prepares youth for success in work, postsecondary, and community living environments. Because the service environment varies substantially across communities, the means for creating these linkages also will vary. YTD projects with few service options in their local areas will have fewer opportunities to take advantage of these potential linkages.

3. Youth Empowerment

Youth empowerment refers to the acquisition of skills and knowledge by youth so that they begin to direct their life choices. Empowerment enables youth to move from passive assent to active choice regarding education and other services based on knowledge of the benefits and disadvantages of the options available. Youth empowerment in the high school context is critical because it provides students with the opportunity to participate in, and make informed choices about, transition planning (Wehmeyer and Palmer 2003). Linking the Individualized Education Program (IEP), required by statute, to youth empowerment has great potential to strengthen the impact of IEP-specified activities. Similarly, empowerment is critical in nonschool services implementation planning, such as medical appointments and involvement in health care decisions, so that youth can make informed choices about services that may influence their employment and career directions.

4. Family Supports

The importance of family supports as a component of effective transition has gained prominence in the recent transition literature (Newman 2005). Family supports are pertinent to youth with disabilities in several contexts: (1) participation in IEP planning; (2) support

for work as an intended educational outcome; and (3) facilitation of, and participation in, ancillary social services. In the YTD projects, family supports will be particularly relevant, because families will necessarily play a central role in helping youth understand the SSA waivers and work incentives and manage their Supplemental Security Income (SSI) benefits. Furthermore, because families often rely on a youth's benefits as part of the family budget, a good understanding of the SSA work incentives, as well as waivers, will be critical not only for the youth, but also for the youth's family.

Within YTD, the role of families can be enhanced through additional training and information support—an area of great need. Recent surveys indicate that families seek information on a variety of issues, including (1) helping youth develop self-advocacy skills; (2) balancing standards-based academic instruction with functional life skills training; (3) inclusive education practices at the secondary level; (4) postsecondary options for young adults with developmental and cognitive disabilities; (5) preemployment experiences and employment options that lead to competitive employment; (6) financial planning; (7) resources available to youth through the One-Stop, VR, Medicaid, and Social Security systems; (8) better collaboration with community resources; (9) housing options; and (10) interacting with the juvenile justice system (Grigal and Neubert 2004; Pleet 2000). YTD projects can also provide the families with information or other direct assistance.

5. Social and Health Services

If youth with disabilities are to become successfully employed, they must have the services and supports they need to be as independent as possible. Many youth with disabilities need social and health services to help them succeed in the classroom, in the community, and on the job. More specifically, they may require referral to, or provision of, a comprehensive array of services from typically fragmented service systems. This is commonly referred to as "case management," "wraparound services," or "care coordination."

In addition to service coordination, many youth need comprehensive medical and social services to help themselves and their families. The school system often provides these services, which include physical, speech, and occupational therapy and adaptive equipment needed to obtain an education. Upon graduation, however, the youth and family must negotiate a plethora of services and systems to obtain comparable supports for employment and daily living. Youth may also require services to develop independent living skills, such as using public transportation, managing money, shopping, and cooking meals. These services may be provided by a Center for Independent Living or a Developmental Disabilities program with limited access and connections to the school system. Because these programs have no direct relationship to the school system, parents become aware of, and access, them on a catch-as-catch-can basis. Consequently, the handoff of transitioning youth from school-based services to adult services is often poorly executed.

6. The SSA Waivers for YTD

An important element of YTD is the modification of selected SSA disability program rules for project participants. A major barrier to employment for youth with disabilities is the fear on the part of both the youth and their families of losing SSI benefits when earned income grows beyond SSA eligibility thresholds. In addition to the loss of cash benefits as a result of working, there is the fear that the youth may lose medical benefits. The SSI program requires that all child beneficiaries have their benefits redetermined at age 18, and approximately one-third of them are determined ineligible for adult benefits. Hence, young beneficiaries' decisions regarding employment, schooling, rehabilitation, and even health care may reflect their perceptions regarding what they must do to maintain their cash benefits and health insurance. Recognizing these potential obstacles to achieving positive employment outcomes, SSA developed five waivers of program rules that are offered to YTD participants. These waivers have been designed to (1) allow youth to keep more of their earnings, (2) encourage their continued education, and (3) encourage asset accumulation. We describe the waivers here:

1. ***Student Earned Income Exclusion.*** Under the SEIE, Social Security disregards up to $1,460 per month of a student's earnings, subject to a cap of $5,910 for the year in 2006. (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, however, the SEIE applies regardless of age. As long as a YTD participant regularly attends school, he or she is eligible for the SEIE.

2. ***Earned Income Exclusion (EIE).*** For all SSI recipients who work, Social Security disregards $65 plus half of any earnings over that amount when calculating countable income formula to determine the benefit amount. 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 after applying all other applicable exclusions, including the SEIE.)

3. ***Plan for Achieving Self-Support.*** This waiver expands the range of eligible activities to include postsecondary education. 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, Social Security Disability Insurance (DI) benefits, childhood disability benefits, or deemed parental income. If the individual is eligible for SSI without the PASS, SSI benefits replace all 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.

4. ***Individual Development Accounts.*** This waiver expands the options for YTD participants to acquire certain kinds of assets. IDAs are trustlike savings accounts. For each dollar of earnings the account holder deposits, a participating nonprofit organization can potentially set aside a matching contribution of anywhere from 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 it determines 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 IDAs that may be used for purposes other than the purchase of a home, postsecondary education, or 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.

5. ***Continuing Disability Review (CDR) or Age 18 Medical Redetermination.*** YTD participants will receive coverage under Section 301 that will allow for continued benefit eligibility for the duration of their YTD participation, regardless of the outcome of a 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 an automatic medical redetermination to see whether he or she meets the adult criteria for disability. Although this coverage does not eliminate these reviews, YTD participants who are determined ineligible for benefits for medical reasons under either of these reviews can continue to receive SSI benefit payments and Medicaid coverage under Section 301.

7. Benefits Counseling

The complexity of work incentives under the SSA program rules makes it necessary for youth who receive disability benefits, or are at risk of doing so, to receive effective benefits counseling. Care must be taken to design and deliver counseling in such a way as to avoid encouraging youth who are not receiving disability benefits to apply for them and to avoid encouraging youth who are receiving benefits to limit their earnings. Counseling also must encourage the accurate reporting of earnings to SSA to avoid benefit overpayments and the consequences of the subsequent recovery of those overpayments. In addition, the SSA waivers for YTD necessitate that projects have well-qualified benefits counselors who can explain the basic benefits under standard rules, as well as the waiver provisions, to youth and their families. Furthermore, these counselors can work with SSA to make sure that the rules and waivers are correctly applied. Thus, benefits counseling offered to YTD participants and their families will be an important component of all YTD interventions.

B. SELECTION OF PROJECTS FOR THE NATIONAL IMPACT STUDY

The YTD national impact study involved the selection of six promising interventions for youth with disabilities to be rigorously evaluated using random assignment. In choosing sites, our goal has been to select the best mix of projects that will allow the random assignment impact study to address a broad range of research questions important to SSA. In particular, we wanted to ensure that the projects in the impact analysis:

- ***Offer high-quality intervention services that are expected to improve self-sufficiency among the target population.*** The interventions should have many of the core components described earlier, including a strong emphasis on work-based experiences. In particular, the focus on employment should lead to improved earnings, income, and self-sufficiency for YTD youth.

- ***Reflect a mix of service strategies and target population.*** Given the limited evidence-based knowledge about the effectiveness of services strategies for youth with disabilities, the projects should be selected in a way that will support the testing of several interventions and service delivery approaches across projects rather than replicate one intervention in all six projects.

- ***Are able to participate in a random assignment evaluation.*** Because of the rigorous evaluation requirements for the YTD study, the projects selected for the evaluation must be able and willing to implement a random assignment evaluation design in their site.

- ***Are large enough to support the estimation of site-specific impacts.*** Each project and its target population of YTD-eligible youth should be large enough to allow 880 youth to be enrolled in the evaluation and 400 of them to be served over a two- to three-year period. This will allow the evaluation to assess (1) program impacts at the project level, and (2) what it takes to scale up projects to a larger size than is typical for programs serving youth with disabilities.

Projects for the random assignment impact study were selected in two phases. In the first phase, three of the original seven YTD projects that SSA funded in 2003 were selected into the national impact study. In the second phase, five new projects were identified, selected, and funded to pilot and operate small-scale YTD interventions in 2007; three of these were selected to scale up for the national random assignment impact study.

1. First-Phase Selection of Projects for the Impact Study

To learn about promising approaches for increasing employment among youth with disabilities, SSA initiated the Youth Transition Process Demonstration, later shortened to the Youth Transition Demonstration, or YTD, in June 2003. In September 2003, SSA funded seven YTD projects in six states: California, Colorado, Iowa, Maryland, Mississippi, and New York (two different projects—in Erie County and the Bronx borough of New

York City). Each project worked with SSA to develop a cooperative agreement for five years of project operations with annual incremental funding. We refer to these projects as the "original projects." As of December 2008, five of these original projects were continuing to operate.[16]

All the original YTD projects targeted youth ages 14 through 25 (or a subset of this age group) who were receiving, or were at risk of receiving, SSI, DI, and/or Childhood Disability Benefits (CDB). SSA funded cooperative agreements to develop youth transition models that integrated existing resources to improve outcomes for youth with disabilities. SSA gave the projects considerable flexibility in their intervention designs, and project goals at the outset were to develop systems linkages across various local, state, and federal partners. While each site had a unique intervention, all shared the goals of improved educational opportunities and outcomes, better employment opportunities and outcomes, and reduced reliance on disability benefits.

Broadly speaking, the key mechanism proposed for helping youth with disabilities to realize these goals was "case coordination," which offered better assistance with benefits planning and service coordination (Butler et al. 2004). All of these projects proposed staff to work closely with youth and their families, some to advise efficient use of SSA benefits, and some to help encourage the use of services that would lead to better education and employment opportunities. Assessments of the projects based on site visits showed that the projects faced three challenges. First, many youth who receive disability benefits fear those benefits will be lost if they successfully pursue career goals. Second, parental anxiety and resistance can be barriers to participation in employment programs by youth with disabilities. Third, the multiple bureaucracies that support existing service systems are complex and dynamic, and project staff must seek better ways of navigating and integrating these systems for their clients (Butler et al. 2004). These challenges led the projects to propose models that engender close, one-on-one relationships between staff and participants.

The original projects also incorporated the five waivers of federal SSA program rules outlined above. These waivers are intended to encourage work, promote asset development, and otherwise provide incentives for individuals to participate in the demonstration (Butler et al. 2004). Table IV.1 summarizes the key characteristics of the seven original YTD projects.

From the start of this demonstration, SSA recognized the importance of evaluating the successes and struggles of the evolving YTD projects. The original projects were required to evaluate their efforts, and they typically contracted with local universities or research groups for this work. While SSA intended for the local evaluations to produce rigorous evidence on the success of the projects, the local evaluators had flexibility in coming up with their own designs to assess program effectiveness.

[16] The Iowa and Maryland projects ceased operations in March and April 2007, respectively.

Table IV.1. Key Characteristics of the Seven Original YTD Projects

Project Name	Target Population	Key Project Services	Lead Agency
California: *Bridges to Youth Self-Sufficiency*	Youth with disabilities ages 14-25	• SSA waivers • Benefits planning/counseling • Services coordination • Early intervention	California Department of Rehabilitation—administered by five projects in seven sites [three full projects (Riverside, Vallejo, and Wittier) and four collaborative projects (Capistrano, Irvine Newport-Mesa, and Saddleback)]
Colorado: *Colorado Youth WINS*	Youth with disabilities ages 14-25	• SSA and DOL waivers • Benefits planning/counseling • Career counseling • Individualized job development • Consumer navigation	Colorado WIN Partners/University of Colorado Denver—administered through workforce centers in four counties
Iowa: *Smart Start*	Youth with disabilities ages 14-25	• SSA waivers • "Cash and Counseling" model that allows youth and their families to access cash accounts that equal value of services for which they are eligible • Individuals and their families direct their own transition services using cash accounts • Medicaid 1115 waiver is critical to developing cash accounts, in addition to other waivers	University of Iowa Center for Disability and Development—administered through two school districts
Maryland: *Project Transition*	Youth with disabilities in school, starting at age 14 and continuing until graduation	• SSA waivers • Benefits planning/counseling • Job coaching and tutors • Work-study opportunities • Vocational assessments • Training on the use of public transportation	Maryland State Department of Education—administered through two school districts and the MD School for the Blind
Mississippi: *Mississippi Youth Transition Innovation (MYTI)*	Youth with disabilities between ages 10-25. Services vary according to age range (10-13, 14-18, 18-21, 22-25 post school exit); focus on youth with significant disabilities	• SSA waivers • Benefits planning/counseling • Customized employment • Transition phases with employment-related activities for each phase • Person-centered planning • Student/family directed budgets • IDAs • Interagency services	Mississippi Department of Rehabilitation Services—administered through two school districts (the Harrison County School District and the Jackson County School District) and the Gulfport WIN Job Center

Table IV.1 *(continued)*

Project Name	Target Population	Key Project Services	Lead Agency
New York (Erie County): *Transition WORKS*	Youth with disabilities ages 14-25; with focus on the younger in this age group, and intensive planning starting at age 14	• SSA waivers • Benefits planning/counseling • Job placement • Work experience • Career exploration • Transition planning • Person-centered planning • Self-advocacy • Intensive case management • Parent training: organization of records • Parent "liaison" to assist parents with advocacy	The Erie 1 Board of Cooperative Education Services
Bronx County, New York: *CUNY Youth Transition Demonstration Project*	Youth with disabilities ages 16-19 and their families	• SSA waivers • Benefits planning/counseling • Vocational skills development • Summer work experiences • Self-determination training • Parent-peer mentoring • Person-centered planning • Recreation activities	City University of New York, John F. Kennedy, Jr. Institute for Worker Education

As interest in the possibility of a national evaluation grew, SSA wanted to explore whether it would be possible to implement random assignment in any of the original YTD projects. Accordingly, the agency funded a study to assess the feasibility of implementing a random assignment national evaluation of YTD. The feasibility study was conducted by MDRC, which was a subcontractor to Disabilities Research Institute (DRI). Starting in December 2003, MDRC staff conducted multiple telephone conference calls with the sites, and conducted site visits to each of the projects. Meetings were held with administrative officials, program providers and partners, and representatives of the local evaluations.

Based on their assessments, MDRC staff concluded that a subset of the original YTD projects might be a good fit with a random assignment evaluation based on (1) the strength of the interventions relative to existing services, (2) the interest of project management in participating in a random assignment evaluation, (3) the compatibility of the intervention designs with random assignment, and (4) the potential to enroll enough youth in the evaluation at each site for the planned statistical analysis to have sufficient power to detect reasonable-sized impacts (Butler et al. 2004).

Building on the recommendations of the feasibility study, during the early months of the evaluation, the YTD evaluation team visited all the original projects to assess which could be included in the national impact study. Based on the criteria presented in the feasibility study (summarized in the previous paragraph), the team recommended three of

the seven original projects to SSA for inclusion in the national impact study. These are the Colorado, CUNY, and Erie projects.[17]

While these three projects recognized the importance of work-based experiences for youth with disabilities, this intervention component was not the centerpiece of their initiatives. The Colorado project emphasized person-centered planning and intensive overall case management to address the unique needs of each youth, and connecting them with appropriate existing services in the community. The CUNY YTD project was designed to empower families and youth to navigate existing, fragmented systems in the Bronx and also provide direct transition services to fill service gaps. The Erie project had evolved into an intervention that provided classroom-based self-determination curricula and training for teachers of youth with disabilities.

Because of the importance of work-based experiences, SSA and the evaluation team encouraged all three of the recommended projects to formally integrate strong employment-related services into their interventions. In addition, in Erie, the YTD team worked with the project to determine the feasibility of moving from the classroom-based teacher training originally designed toward an individual-based intervention. Based on these suggested modifications to the projects, and the recommendations of the YTD evaluation team, SSA approved the selection of the three projects for inclusion in the national impact study. SSA is providing them with supplemental funding to implement their interventions, while the evaluation team is providing them with TA in designing and delivering employment services.

The implementation of the original set of seven projects provides some valuable lessons for implementation of interventions, and for the random assignment evaluation and the process of selecting new projects for the evaluation.

Highly intensive and individualized services can make expansion to scale difficult. The Mississippi YTD project provides intensive person-centered planning and individualized job development to a small number of youth. This project declined to participate in the random assignment evaluation largely because its managers felt that expansion to serve 400 youth, as required by the evaluation, would not be feasible. The lesson from this for the evaluation is that services should be designed to include some group activities and/or less intensive one-on-one activities in order to allow a project to operate at a large scale within the budget available under the YTD evaluation.

[17] It was not possible to recommend two of the original projects—California and Mississippi—for the national impact study, even though they had strong interventions. The California project was unwilling to implement random assignment, and the Mississippi project planned to serve only a small number of youth very intensively. Of the other two projects, the Iowa project had been slow to implement its intervention, while the Maryland project did not have the administrative and state infrastructure support to continue to operate. Concerns about their ability to fully implement their interventions on a large scale precluded the evaluation team from recommending these two sites for inclusion in the impact study. Findings from the assessment of the implementation of the original YTD projects will be presented in an evaluation report devoted exclusively to that topic.

To avoid high "no show" rates, conduct random assignment after enrollment in the evaluation. The Colorado YTD project pilot-tested random assignment before SSA contracted with Mathematica to conduct the national YTD evaluation. Colorado randomly assigned youth on a list of SSA beneficiaries to treatment or control status without any initial contact or recruitment. In addition, the Colorado project used different types of staff to conduct outreach to treatment youth and to control youth—project line staff recruited treatment youth, and central office staff recruited control youth. This strategy resulted in a low overall rate of enrollment by randomly assigned youth in the evaluation and in a differential enrollment rate between treatment and control group youth, both of which are problematic from an evaluation design perspective. This experience led us to develop an approach to random assignment in which random assignment occurs after youth have enrolled in the evaluation, thus ensuring that (1) all randomly assigned youth have agreed to participate in the evaluation, and (2) the type of staff conducting outreach to youth does not vary by treatment/control status.

Projects may require explicit direction to provide intensive employment services. As originally designed, the Colorado YTD project provided career counseling but not intensive, individualized job development and job placement services. This was at odds with the YTD logic model that the Mathematica team developed shortly after it was awarded the national evaluation contract. Our realization that YTD projects might not incorporate these services in their interventions led us to stress individualized job development and job placement in our interactions with prospective projects and in the TA that we provide to both original and new YTD projects.

Interventions selected for evaluation should be consistent with individualized random assignment. When the Mathematica team initially visited the Erie YTD project, it was implementing a classroom-based intervention that would have necessitated random assignment at the level of either the classroom or the school. After briefly exploring the feasibility of group random assignment in Erie County, we concluded that it would be highly challenging and would not justify the effort and expense. We worked with the Erie project to modify its intervention so that it could be evaluated on the basis of random assignment at the level of the individual youth. This entailed moving intervention services out of a classroom setting. Subsequently, we restricted our discussions of potential interventions with prospective new projects to those that could be evaluated with individualized random assignment.

An adequate target population is essential. Achieving targets for the number of youth enrolled in the evaluation has been very challenging in the three original random assignment sites. We have found that approximately 25 percent of youth SSA disability beneficiaries whom we attempt to enroll complete the baseline interview and consent in writing to participate in the evaluation. With a goal of 880 consenting youth per site, this necessitates a population of about 3,500 youth beneficiaries in a project's service delivery area. The challenge of achieving enrollment targets in the original sites led us to place a high priority on the presence of an adequate target population when we selected new projects into the evaluation.

Strong project leadership is critical to success. SSA terminated two of the original YTD projects early. Ineffective leadership of one of these projects resulted in high staff turnover and lengthy intervals when no services were being delivered. This experience, along with the evaluation team's judgment based on earlier evaluations that strong leadership is vital to successful implementation of a demonstration project, led us to place a high priority on strong senior leadership when we selected new projects into the evaluation.

2. Second-Phase Selection of Projects for the Impact Study

The overall goal of the national impact evaluation was to identify six strong program models that could be rigorously evaluated. The goal was to identify projects that had strong interventions, had adequate sample size, could implement random assignment, and represented a variety of geographic and socioeconomic diversity. Based on the findings from the feasibility study discussed in the last section, and the enhancements proposed by the national evaluation team, it appeared that three of the seven original projects could implement a random assignment design and participate in the national impact study.

Anticipating that it would need more projects for the national impact evaluation, SSA charged the national evaluator to help locate new projects that could potentially participate in that evaluation. Therefore, in addition to assessing and recommending original projects for inclusion in the national impact study, the YTD evaluation team spent much of the first year of the evaluation identifying other existing or potential transition programs that we could recommend to SSA for inclusion in the study. Thus, at the same time as we were identifying and developing core components of strong transition programs, we were also conducting reconnaissance work in the field to better understand how best practices were being applied. We visited many promising programs to (1) build a knowledge base about strong programs, (2) better understand implementation challenges, and (3) help us select projects for the second phase of the study.

The goal of this second phase of project selection was to first identify five strong potential YTD projects by fall 2006 that would run pilot programs for small numbers of youth in 2007. The goal of this pilot phase was to provide the evaluation team with enough information to assess each project's potential to recruit and deliver strong services to much larger numbers of youth. The intent was that, at the end of the pilot year, the evaluation team would recommend to SSA three projects that could be selected for full implementation and inclusion in the national impact study.

Consistent with SSA's interests and with the core components of YTD interventions that the evaluation team had identified (see Section A), a strong employment-focused service component was a key criterion for selecting the pilot projects. Below, we discuss the criteria the evaluation team used to select projects for the second phase, the process of selecting the projects and their key features, the selection of the three projects for full implementation, and lessons learned from the pilot projects.

a. Criteria for Selecting Pilot Projects

Based on the lessons learned from the implementation of the seven original YTD projects, prior experience, and our identification of the core components of strong transition programs, the evaluation team developed criteria to assess each potential pilot project's fit with the goals of YTD. These criteria fell into four general domains: (1) program features, (2) management capacity, (3) research considerations, and (4) contributions to learning (Butler 2006). We describe these domains here:

- ***Program Features.*** Organizations seeking to become one of the pilot YTD projects were expected to include the core components discussed in Section A as key features in their existing programs or to demonstrate the willingness and the capacity to add them to their program design. In particular, a presumption of employability—a belief that, with proper support and opportunities, any youth with a disability can exit school with a job or has the ability to pursue postsecondary training and education that will advance his or her prospects for a career—and emphasis on work experience were key criteria for selection of new pilot projects. Strong collaborations with other existing systems, youth empowerment, family supports, wraparound services, and benefits planning and counseling were also important features in the pilot project selection.

- ***Management Capacity.*** The management and institutional capacity of organizations to design and deliver a strong intervention was also of great importance in site selection. The management factors used to assess potential sites included having a mature organization with the demonstrated experience and capacity to manage a complex, multifaceted demonstration project with a strong employment focus. It was deemed important that the lead organization have extensive experience working successfully with at least some of the key partner organizations that would be needed to design and implement strong YTD interventions. In addition, it was considered important that the lead organization and/or several of its key partners have considerable experience working with youth with disabilities and their families at the community level.

- ***Research Considerations.*** The ability and willingness of prospective pilot projects to implement research protocols and procedures related to the random assignment design were important considerations in making selection decisions. The primary research considerations included (1) the appropriateness of individual-based random assignment, (2) the willingness of projects to participate in a random assignment study, (3) the capacity to implement procedures to ensure that control group members do not receive YTD services, and (4) the willingness and ability to meet the data needs and other research requirements of the national evaluation team.

- ***Contributions to Learning.*** The YTD evaluation is expected to generate important findings that will have broad programmatic and policy relevance. Therefore, criteria were developed to help ensure that projects participating in

the random assignment impact study reflect the diversity of program and service environments around the country, including geographic diversity, diversity in the kinds of organizations that are leading the projects, and diversity of targeted youth.

b. Process of Selecting Pilot Sites and Features of Selected Projects

Between December 2005 and August 2006, 29 programs expressed interest in participating in YTD. In determining which of these to recommend to be YTD pilot projects, the evaluation team relied on various sources of information, including (1) written information submitted by the program, (2) the reputation of the program among experts in the field, (3) telephone interviews and conference calls conducted by the evaluation team with program managers, and (4) visits to programs that were deemed promising. These visits provided an opportunity to discuss the current program services and review in more detail the programs' plans for implementing the YTD intervention. Finally, the evaluation team required that a prospective site prepare a well-developed concept paper for its proposed YTD project, a realistic initial implementation plan, and schedule for implementing services during the pilot year. Of the 29 programs, 15 submitted concept papers and were eligible to be considered for selection as pilot YTD sites.

Based on a systematic process that used all the information gathered, we identified five organizations to recommend to SSA to implement the second-phase pilot projects. These were:

- ***Abilities, Inc. of Florida,*** Miami-Dade County, Florida
- ***Community-Minded Enterprises,*** Spokane, Washington
- ***Human Resources Development Foundation, Inc. (HRDF),*** West Virginia
- ***St. Luke's House,*** Montgomery County, Maryland
- ***Vermont Division of Vocational Rehabilitation (DVR),*** Vermont

Of the 15 organizations that submitted concept papers, these 5 proposed the strongest YTD projects. They all met the criteria for selection as pilot projects based on the strength of their intervention design, their capacity to implement the proposed intervention, and their ability to provide us with a fair and rigorous test of the YTD intervention. Moreover, as a group, these sites offered the mix of programmatic features, management and organizational variation, and geographic and population diversity that could maximize the learning opportunities for the YTD evaluation.

Table IV.2 describes the key features of the five pilots selected. As the table shows, customized employment and work-based experiences were key features of all these projects, as were benefits planning and counseling. Four of the five pilots (Miami, Spokane, Vermont, and West Virginia) targeted youth from the SSA lists; Spokane also planned to

serve a small number of youth who had applied to be on the SSI program but whose application for benefits was denied (an "at-risk" group). The Montgomery County project is the only one that includes mostly at-risk youth, and did not recruit youth from SSA lists. This project recruited youth with SED from Montgomery County schools, including public and private schools.

While we identified five promising projects to include in the pilots, none of the interventions these sites proposed were fully developed and ready to be evaluated. To varying degrees, all had some weaknesses in their intervention designs and implementation plans that would need to be addressed through TA that the evaluation team would provide during the pilot phase. All the sponsoring organizations recognized their need for TA and had the management and program capacity to benefit from it. They all also welcomed the opportunity to be partners with the evaluators in an initiative that would help them provide strong transition services based on best practices.

Table IV.2. Key Characteristics of Second-Phase Pilot Projects

Project Name (Formal/Informal)	Target Population	Services	Lead Agency
Formal: *Broadened Horizons, Brighter Futures* Informal: Miami	SSI recipients ages 16 to 22 in Miami-Dade Co.	• Benefits planning/counseling • Customized employment • Paid summer work • Asset development	Abilities, Inc. of Florida
Formal: *Career Options* Informal: Spokane	SSI recipients and denied applications ages 16 to 21 in Spokane Co., Washington	• Benefits planning/counseling • Employment support • School engagement • Family engagement • Health advocacy and education	Community-Minded Enterprises, Inc.
Formal: *West Virginia Youth Works* Informal: West Virginia	SSI recipients ages 16 to 22 in three contiguous counties in north-central West Virginia	• Benefits planning/counseling • Work experience/job development/job placement • Family involvement • Intensive case management	Human Resources Development Foundation, Inc.
Formal: *Career Transition Program* Informal: Montgomery County	SED youth in their junior and senior year in Montgomery County, Maryland	• Customized employment supports • Parent education • Mental health linkages	St. Luke's House, Inc.
Formal: *Yes I Can…* Informal: Vermont	SSI recipients ages 16 to 21 in one northern county and one southern county	• Benefits planning/counseling • Individualized job development • Enhanced case services funding • VR transition counselor	Vermont Division of Vocational Rehabilitation

c. Selecting Projects for Full Implementation

The evaluation team worked closely with the five pilot projects to help them meet their goals for enrollment into program services and service delivery. In conjunction with the evaluation team's survey group, the five pilot projects each recruited approximately 35 youth into the pilot phase of the evaluation between April and September 2007.[18] The evaluation team randomly assigned the recruited youth, which resulted in approximately 25 of them in each of the projects being assigned to a treatment group and 10 to a control group. The projects each had to enroll at least 80 percent of their treatment group youth (that is, 20 per project) in YTD services. In November 2007, the evaluation team assessed the pilots and made recommendations to SSA regarding which best met the criteria for advancing to full implementation of project services.

The broad criteria that we used to assess which pilot projects to recommend for full implementation of their programs included (Martinez 2007):

- Achievement of goals for recruitment of youth into the pilot study and enrollment of treatment group members into project services
- Strong project operations, demonstrated by such factors as availability of, and ease of access to, project services, and fidelity to the intervention design
- Research-related factors, such as the adequacy of the size of the target population, support for random assignment by key partners, and the strength and distinctness of project services relative to the service environment
- Management organizational capacity to implement and maintain the intervention at the large scale required by the evaluation—serving at least 400 treatment group members over four years

We presented these criteria to the evaluation's TWG, which reiterated the importance of strong management and organization of the projects, as well as the projects' ability to contribute to the policy agenda.

To assess projects for selection for the national impact evaluation, the evaluation team used information gathered over the course of the pilot operations, ongoing interaction with pilot projects (including regular site visits and telephone meetings of the evaluation and TA team members with project staff), formal assessment visits conducted by senior management team members, the projects' achievement of recruitment and enrollment goals, and monthly reports provided by projects. This information showed that all five pilot projects had operated very strong programs, making it challenging to select just three of them. After a

[18] The evaluation team used SSA lists of disability beneficiaries to substantially assist four of the pilot projects with recruitment. The Montgomery County project recruited youth from lists provided by the school system rather than SSA, and the evaluation team assisted the project less with recruitment.

careful assessment process, the evaluation team recommended to SSA that the following three projects be selected for full implementation and inclusion in the national impact evaluation: (1) Abilities in Miami, Florida; (2) CTP in Montgomery County, Maryland; and (3) the HRDF project in West Virginia. SSA approved these projects for full implementation and inclusion in the impact evaluation and authorized Mathematica to provide them with funding to begin implementing their interventions in early 2008. We refer to these three projects selected as part of the second phase of project selection as "new" projects.

d. Lessons Learned

The pilot projects yielded valuable information that we used to help them strengthen their interventions during the pilot period and, for the selected projects, in the full-implementation phase. First, services provided by partner organizations were frequently the weakest components of the pilot interventions. In these situations, we required the lead organizations to take corrective actions if they wanted to be seriously considered for advancement to full implementation. Second, some pilot operations revealed weaknesses in senior management and organizational structure. Based on this information, we negotiated corrective adjustments, including designation of a senior manager responsible for YTD in one organization and enhanced supervision of line staff in another. Third, the pilot phase of the Montgomery County, Maryland, project revealed that bureaucratic barriers can make partnerships with school systems problematic. The cooperation of the county's public school system, which was critical to the selection of this site as a potential project for the national study, was contingent upon completion of a complex application process separately for the pilot phase and the full-implementation phase. Political and bureaucratic barriers in the school system resulted in our initial application for the pilot phase being rejected. Ultimately, the school system accepted our proposals for both the pilot research and the research on full implementation of the YTD project. However, this did not transpire without intensive lobbying at the highest levels of the county government and the school system by the YTD project sponsor and the evaluation team.

CHAPTER V

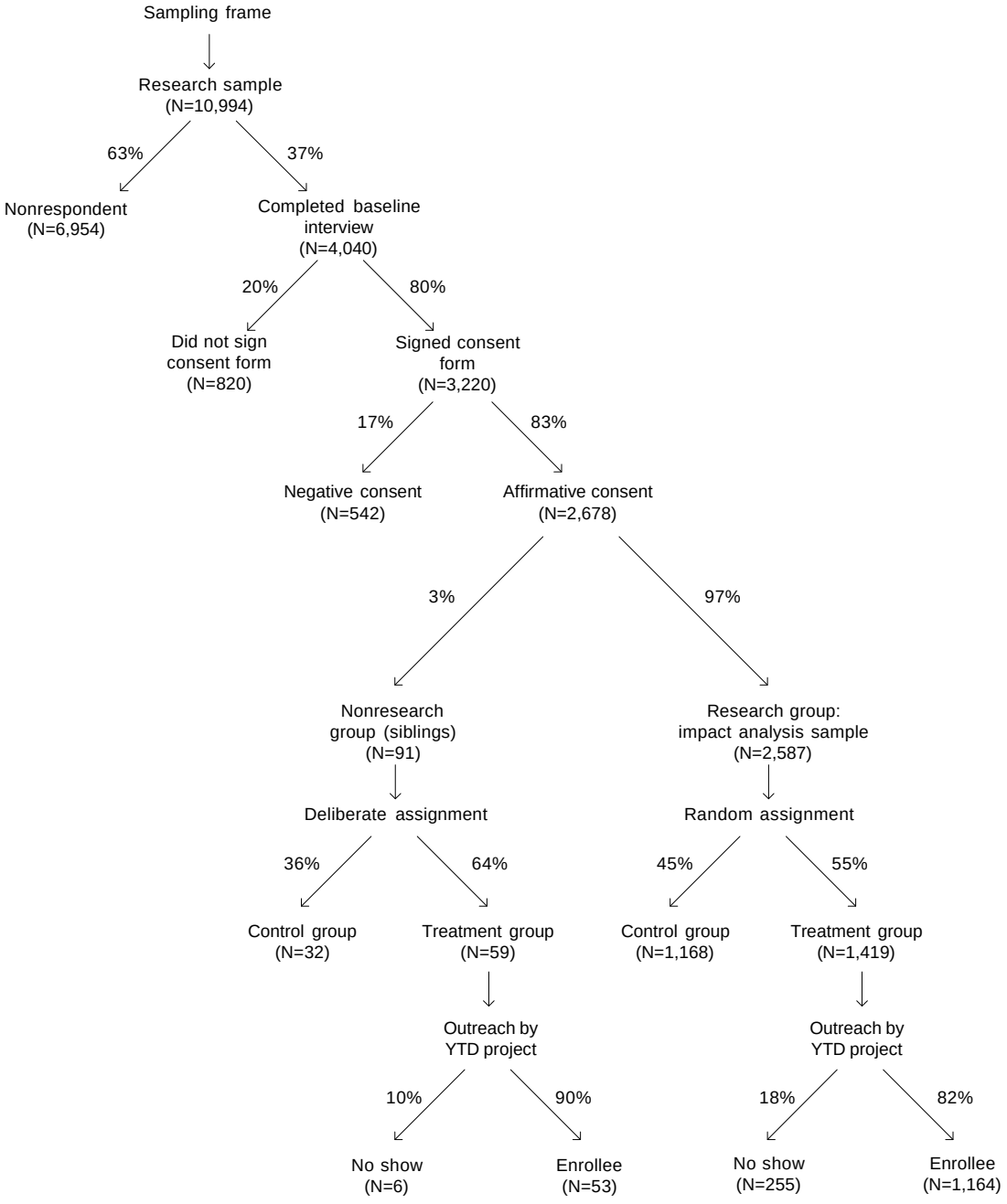
SAMPLE DESIGN AND ENROLLMENT OF YOUTH IN THE EVALUATION AND IN PROJECT SERVICES

This chapter and the four that follow it present our plans for evaluating the seven original YTD projects and the three new projects selected in November 2007 for full implementation. Chapters VI through IX, respectively, present our designs for the four key analytic components of the evaluation: (1) a process analysis of project implementation, (2) an analysis of project costs, (3) an analysis of the impacts of the YTD interventions on youth, and (4) an analysis of the benefits of the interventions relative to their costs. The usefulness of the findings from these analyses will depend on the quality of the underlying research samples, the integrity of the random assignment process, and the results of enrollment efforts by project staff. Therefore, this chapter presents our designs for the samples of youth who will participate in this evaluation (Section A), for their random assignment to treatment and control groups (Section B), and for their enrollment in YTD services (Section C).

Figure V.1 is a diagram of the path that youth in random assignment projects take starting from the sampling frame to enrollment in project services. The figure shows key decision/selection points, including completion of a baseline interview, provision of consent to participate in the evaluation, random assignment, and enrollment in services. At each binary branching of the tree, percentage outcomes are reported based on completed intake activities at the Colorado, CUNY, and Erie projects.[19] The following sections of this chapter give details on the decision and selection processes that the diagram illustrates.

[19] At the time this report was finalized, in December 2008, baseline data collection, random assignment, and enrollment in services had been completed at the Colorado, CUNY, and Erie projects. These activities had been underway for approximately eight months at the three new projects.

Figure V.1 Intake Flow Diagram for the Three Original YTD Projects Participating in the Random Assignment Evaluation



Note: The statistics in this figure are based on data from the Colorado, CUNY, and Erie projects as of January 27, 2009. Assignment of consenting youth to treatment and control groups ended in March 2008 for the Colorado and Erie projects and in September 2008 for the CUNY project.

A. SAMPLE DESIGN

1. Sampling Frame

In a static sense, the sampling frames for five of the six YTD projects participating in the random assignment impact study (the Colorado, CUNY, Erie, Miami, and West Virginia projects) are lists of young Social Security disability benefit recipients. SSA generates these lists for the YTD evaluation from its automated beneficiary records. They include all active Supplemental Security Income (SSI), Social Security Disability Insurance (DI), and Childhood Disability Benefits (CDB) beneficiaries ages 14 through 25 who have either mailing or residential zip codes in a project's service delivery area. The lists also include youth whose benefits have been suspended but not terminated. If necessary, Mathematica excludes youth who do not meet a project's specific criteria or selects youth the project might want to prioritize. For example, projects can target youth in a certain age range, exclude youth with certain types of medical diagnoses if they are unable to serve youth with some impairments, or prioritize youth living in certain zip codes.[20]

SSA periodically refreshes each project's sampling frame and sends updated lists to Mathematica. Mathematica deletes cases on the new beneficiary list that have already been released for interviewing (based on their presence on earlier lists), screens out cases that are no longer age-eligible for YTD, and randomly releases the remaining cases for baseline interviews and recruitment into the evaluation. In a dynamic sense, the sampling frame is all youth who are SSA disability beneficiaries during this period and who satisfy the YTD age and residency criteria.

The Montgomery County, Maryland, project is the only one with a conceptually distinctly different sampling frame from those of the other projects. Its sample frame is students in their last two years of high school who are attending schools in Montgomery County or have recently departed school, and have been classified as having SED or other significant mental illness. Project staff conduct outreach to these youth by visiting special education classes in the schools and attempting to recruit youth from those classes into the evaluation.

2. The Research Sample

In the projects in which Mathematica is conducting outreach to sample members (that is, all projects except the Montgomery County project), Mathematica staff randomly sort the list frame of disability beneficiaries for a project participating in the random assignment impact study into *survey replicates* containing 10 eligible beneficiaries each. Each survey replicate is a random sample of the frame. The replicates are gradually released for baseline

[20] For example, the CUNY project is targeting beneficiaries ages 15 through 18, and the Erie project is targeting beneficiaries ages 16 through 25. Furthermore, during its first year of operation as a random assignment site, the CUNY project excluded youth with certain disabling conditions for which prevalence rates in the Bronx were low. This exclusion was dropped for the second and third random assignment years.

interviewing and informed consent, and are worked until 880 baseline interviews and affirmative written consents to participate in the evaluation have been obtained.[21] The youth in the released replicates constitute the research sample for the evaluation of a YTD project. For most projects, the baseline interviewing and informed consent process is expected to last two to three years.[22]

Through a process that is described in Section B, below, Mathematica staff conduct initial outreach, obtain verbal informed consent, conduct baseline interviews, obtain written informed consent, and then randomly assign youth who provide written consent to a treatment or control group (guardian consent is required for minor youths). Only members of the treatment group are eligible for YTD services and waivers. Youth in the control group are not eligible for YTD services and waivers; however, they may access other services available in the community. Youth in both groups have access to regular SSA work incentives and can get information on these work incentives from sources such as SSA's Work Incentives Planning and Assistance program.

Unbalanced Treatment and Control Groups. For each YTD project participating in the random assignment evaluation, somewhat more youth will be assigned to the treatment group (approximately 480 cases) than to the control group (approximately 400 cases). This unbalanced sample design reflects three considerations:

1. A limited budget for survey data collection, making it necessary for the number of control cases to be limited to 400 per project

2. The recognition that some proportion of treatment group members (forecasted to be 17 percent) will decline to participate in YTD services

3. The desire of several of the original random assignment projects to deliver services to 400 youth

[21] We use the survey replicate approach for the following reason. Each project has a plan for the flow of treatment cases it would like to receive during its intake period. The approach of releasing the sample in small replicates that are random samples of the frame gives us the control we need to regulate the flow of treatment cases while ensuring that the cases a project receives at any time are representative of the youth in its target population who are interested in receiving YTD services and waivers and are willing to cooperate with the evaluation.

[22] We will also collect data on consenting youth from government administrative files for four years and will attempt to conduct follow-up interviews with them 12 and 36 months after the provision of informed consent.

Table V.1. Minimum Detectable Impacts for the YTD Evaluation

Treatment/Control Group Size	Rate of Employment or Benefit Receipt		Annual Earnings (Mean = $1,213)
	50 Percent	30 or 70 Percent	
Full Analysis			
480/400	8.0	7.3	$489
50 Percent Subgroup Analysis			
240/200	11.7	10.3	$690

Note: The calculations assume (1) a 90 percent level of confidence for a two-tailed test and an 80 percent level of power, (2) a standard deviation of $3,069 for annual earnings, and (3) a reduction in variance of 10 percent owing to the use of regression models. The standard deviation in earnings is derived from Mathematica's Ticket to Work Evaluation, based on SSA summary earnings records for youth ages 18 to 25 in 2001.

Power Analysis. For findings from this evaluation to be useful to policymakers, the treatment and control groups must be large enough to support the detection of policy-relevant impacts (treatment-control differences). Table V.1 presents estimates of the minimum detectable impacts (MDIs) of the YTD interventions for two types of outcomes that the evaluation will examine. First, for outcomes that can be expressed in binary terms, such as the likelihood of being employed or of receiving disability benefits, the table presents MDIs for outcomes for which the control group average is 50 percent (the most conservative assumption), as well as 30 or 70 percent. Second, the table presents MDIs for annual earnings based on data from SSA summary earnings records. These MDIs are based on the assumption that we will use a two-tailed t-test with a 90 percent confidence level and 80 percent power to assess impacts. Additional assumptions underlying the MDIs are given in the note to the table.[23]

The values in the table indicate that, in analyses based on the full treatment and control groups, we will be able to detect impacts on employment of seven to eight percentage points and impacts on earnings of $489 annually. For example, if the likelihood of being employed one year after random assignment were 30 percent without YTD services and waivers, and if YTD services and waivers raised this to 38 percent, then we would have an 80 percent chance of detecting this impact. The table also shows that in analyses based on a subgroup containing half of the treatment and control group members, the MDIs on employment and earnings would be ten to twelve percentage points and $690, respectively.

Several studies of people with disabilities confirm the adequacy of the full YTD treatment and control groups and their associated MDIs. For example, the evaluation of the Transitional Employment Training Demonstration (Decker and Thornton 1995) was based on treatment and control groups that each contained about 375 SSI recipients with mental

[23] The MDIs have been calculated considering each variable in isolation. If we adjust for multiple comparisons, the MDIs will be larger. See Chapter IX for a more detailed discussion of multiple comparisons.

retardation. The study estimated that transitional employment services increased earnings during the second year after random assignment by $835 (in 1986 year dollars) and the probability of being employed at the end of that year by 12 percentage points. Similarly, the evaluation of the Structured Training and Employment Transitional Services demonstration (Kerachsky et al. 1985; Kerachsky and Thornton 1987), which targeted youth with mental illness, found an increase of more than nine percentage points in employment for treatment group youth 15 months after random assignment.

B. ENROLLMENT IN THE EVALUATION

This evaluation's design for outreach to youth and their assignment to treatment and control groups ensures that its findings will be both internally valid and generalizable to the full population of YTD-eligible youth on the disability rolls in five of the six random assignment sites.[24] The outreach process, which is conducted intensively for the research sample of eligible youth at each site, identifies those who are willing to participate in a YTD project and cooperate with the evaluation, and it provides an estimate of the proportion of likely participants among all eligibles. The willing youth are assigned to treatment and control groups and for nearly all of them, this assignment is made randomly. (As discussed in Section B.3, the random assignment requirement is waived only for siblings.) The randomly assigned youth will constitute the sample for the impact analysis. Random assignment will ensure the internal validity of the impact estimates. The impact estimates will be combined with the known size of the population of YTD-eligible youth in a site and the estimated proportion of those youth who are willing to participate in a YTD project to obtain estimates of the aggregate impacts of the full rollout of YTD to all eligible youth in the project service area.[25]

1. Baseline Data Collection

Initial Outreach. As described earlier, in every project except for the one in Montgomery County, youth receiving SSI are being recruited from lists provided to us by SSA. Mathematica staff conduct the initial outreach to the eligible youth in the survey replicates that form the research sample. We send an advance letter to every youth in a replicate, using contact information from the SSA lists. The letter explains the study and the intervention and invites the youth to call Mathematica's toll-free number to complete a baseline interview and enroll in the evaluation. Mathematica's survey interviewers place telephone calls to youth who do not respond promptly to the letter. They use computer-assisted telephone interviewing to collect the baseline data.

[24] Montgomery County is the one random assignment site where youth are not being recruited into the evaluation from the SSA beneficiary rolls. In that site the evaluation's findings will not be generalizable to youth on the rolls, but rather to the population of juniors and seniors in Montgomery County schools who are classified as SED or having other significant mental illness.

[25] As discussed in more detail in Section D, study estimates will be generalizable to the full population of YTD eligible youth in these sites on the assumption that a full roll-out would use an approach to outreach and recruitment similar to that being used in this study.

In Montgomery County, project staff conduct outreach by going to schools in the county and recruiting youth with SED or other significant mental illness to the study. After youth (or their parents/ guardians) have provided consent, Mathematica staff conduct the baseline interview and assign youth to treatment and control groups.

Time Frame. The time frame for collection of baseline data varies across the YTD projects, depending on the size of the sampling frame, the design of project services, and project capacity. Baseline data collection was completed for the Erie, Colorado, and CUNY projects in 15, 21, and 26 months, respectively. We anticipate that it will be completed in approximately 30 months for the three new projects.

Oral Consent. Before conducting a baseline interview, the Mathematica survey interviewer explains the local YTD project and the evaluation, including random assignment, to the youth and his or her parent or guardian (if the youth is under age 18 or is age 18 or older and has a legal guardian). The interviewer assesses whether the respondent understands the explanations.[26] If the result of this assessment is positive, then the interviewer obtains oral consent from the youth and parent/guardian to participate in the evaluation. Based on experience in conducting outreach for the Colorado, CUNY, and Erie YTD projects, approximately 37 percent of the youth in the YTD research samples orally consent to participate in the evaluation and complete the baseline interview.

Baseline Interview. The baseline interview takes approximately 30 minutes. The survey instrument, which includes youth and parent modules, gathers information on the following topics:

- Education
- Employment experiences
- Computer use
- Life goals
- Health status and disabling conditions
- Living situation
- Insurance coverage
- Parental education, employment, and income
- Demographics
- Contact information

In the analysis phase of the evaluation, we will use data from the baseline interview to describe the treatment and control group members, to stratify for subgroup analyses, and as a source of control variables for estimating regression-adjusted mean values of outcome measures for treatment and control group members.

2. Obtaining Written Consent

Immediately after a youth completes the baseline interview, Mathematica mails a consent form to the respondent and his or her parent or guardian (if applicable) for their signatures. (As mentioned earlier, the process is different for the Montgomery County

[26] Interviewers receive training to make sure they can make this assessment.

project, where project staff obtain the consent signatures.) The form describes the services and waivers available through the local YTD project and also describes the evaluation, including random assignment. It explains that participation in the project and the evaluation is voluntary and offers the youth a $10 gift card to complete, sign, and return the consent form to Mathematica. The form's signature page includes boxes that can be checked to indicate whether or not the youth agrees to participate in the study and signature lines for the youth and parent/guardian.

While getting youth to complete the baseline interview is relatively straightforward, getting signed consent forms often is more challenging. If the consent form is not signed and returned promptly to Mathematica, reminder letters are mailed and follow-up telephone calls are made. In each such contact, the youth is reminded that it is acceptable to return a signed form declining to participate. In addition, Mathematica deploys field staff who follow up on obtaining signed consent forms from youth who have completed the baseline interview. In some YTD sites, project staff also help with this process by attempting to contact the youth and explaining the available services and waivers in more detail if necessary.

Each youth who returns a signed consent form receives a gift card, whether or not he or she agrees to participate in the study. Eighty percent of the youth in the three original random assignment projects who completed the baseline interview subsequently returned signed consent forms to Mathematica and of those, 83 percent agreed to participate in the study.[27] The typical elapsed time between completion of the interview and receipt of the signed consent form at Mathematica was between 15 and 60 days.[28]

We obtain written consent from youth to participate in the evaluation, rather than relying solely on oral consent, for two reasons. First, the institutional review boards for some of the YTD projects would not approve their participation in the evaluation without written consent. This is true for the Colorado project. Second, if youth were randomly assigned on the basis of oral consent alone, then a larger proportion of them would have little commitment to participating in the evaluation and receiving YTD services and waivers. This could result in a significantly higher no-show rate (the rate of nonreceipt of services) among treatment cases than the 18 percent rate experienced by the three original random assignment projects. A higher no-show rate would have the following negative ramifications for the evaluation:

[27] Our experience with baseline data collection and gathering written consent for the Colorado, CUNY, and Erie YTD projects indicates that we received written affirmative consent to participate in the study from about one-quarter of the research sample in each site. (This fraction is the product of a 37 percent baseline completion rate, an 80 percent written consent rate, and an 83 percent rate of affirmative consent.) This suggests that we need approximately 3,500 eligible youth in each research site to meet our target of 880 youth enrolled in the study.

[28] The elapsed time from a youth's completion of the baseline interview to the receipt of his or her signed consent form by Mathematica is comparable to other school-based studies conducted by Mathematica, in which the consent period ranges from 40 to 70 days.

- The additional no-shows would further dilute the influence of the intervention on outcomes for all treatment cases, thus necessitating larger sample sizes to detect impacts of a given magnitude on youth who actually receive services.

- Additional evaluation resources would be expended attempting to collect and analyze follow-up data on treatment group youth who received no services and on their counterparts in the control group. Methodologically, it would be essential to keep these youth in the evaluation.

As part of the evaluation's process analysis, we will use SSA administrative data to compare youth who consent to participate in the evaluation with those who do not. This analysis, which is described in Section VI.B, will help us to understand the unique characteristics of youth beneficiaries who are willing to participate in an evaluation of employment services.

3. Dealing with Siblings and Assignment to Research and Nonresearch Groups

Most of the youth who provide signed consent are in the study's "research" sample (97 percent in the original random assignment projects), while the small proportion of remaining consenters are in what we call the "nonresearch" group (Figure V.1). The reason for assignment to the nonresearch group is as follows: If a consenting youth is a member of the same household as a sibling who previously consented to be in the study and was randomly assigned to the treatment or control group, we do not want to randomly assign that youth to the opposite status. In other words, we do not want to take the chance that the sibling who applies first would be assigned to the treatment group and that a sibling who applies later (or applies at the same time) would be assigned to the control group and denied access to program services, or vice versa.[29] This special treatment of siblings is the only exception to the requirement that consenting youth be randomly assigned to treatment or control status and, hence, be in the study's research sample.

4. Assignment to Treatment and Control Groups

Within a day or two of receiving a signed consent form, Mathematica staff assign a consenting youth to either a treatment group or a control group for his or her respective YTD project. If the youth is a nonresearch case, then he or she is deliberately assigned to the same treatment or control group as his or her sibling(s); otherwise, the assignment is made randomly through an automated process. The treatment:control ratio for random

[29] Youth participating in the evaluation are not informed of whether they are in the research group or the nonresearch group. Mathematica collects follow-up data on all participating youth without regard for this distinction. YTD projects are not informed of whether a youth in the treatment group is a research case or a nonresearch case. The research-nonresearch distinction will have operational significance only in the analysis phase of the evaluation, when the nonresearch cases will be excluded from the estimation of YTD impacts.

assignment is 6:5.[30] The sample for the impact analysis will be comprised of the randomly assigned youth (that is, all of the youth in the research group). Regardless of whether a youth is assigned randomly or deliberately, Mathematica sends him or her a letter stating the assignment outcome, along with the aforementioned gift card. At the same time, the YTD project is notified through the Efforts-to-Outcomes (ETO) web-based management information system (MIS) if the youth was assigned to the treatment group. The notification is a newly created ETO record containing contact and demographic information for the youth. The creation of this record in the "intake" section of ETO signals the project to initiate contact with the youth to enroll him or her in YTD services and waivers.

5. Restrictions on the Control Group

Youth assigned to the control group do not have access to YTD services for a three-year period or to the SSA waivers for YTD. Access is controlled in two ways:

1. YTD projects conduct outreach to enroll and serve only youth whose names have been transmitted to them by Mathematica through ETO. These are exclusively youth who have been assigned to the treatment group by Mathematica.

2. SSA provides the YTD waivers only to youth whose names have been transmitted to SSA by Mathematica. These are exclusively members of the treatment group who have enrolled in YTD services as indicated by the existence of a service record in ETO.

These mechanisms provide very tight control over access to YTD services and waivers, thus reducing the risks of *crossover* from the control group to the treatment group and of *contamination* of control group members by exposure to YTD services and waivers to negligible levels.[31] Furthermore, in all projects, records are created in ETO for treatment group members only.

C. ENROLLMENT IN PROJECT SERVICES

1. Enrollment Criteria

Each YTD project has considerable latitude in establishing its own criteria for classifying a youth as having enrolled in its intervention, which then sets in motion the YTD waivers and allows project staff to provide services to youth. For most of the projects, a

[30] For the three original random assignment projects, Figure V.1 shows that 55 percent of research cases were randomly assigned to the treatment group and 45 percent were assigned to the control group.

[31] In Montgomery County, as part of the process for obtaining approval from Montgomery County Public Schools for the evaluation of CTP, we agreed that CTP staff will reach out to youth in the control group and offer them information on existing services in the community. However, these youth will not be offered other direct services by CTP staff, nor will they be eligible for the YTD waivers.

member of the treatment group is considered to have enrolled in the YTD intervention if two conditions have been met: (1) there has been a face-to-face meeting between the youth and project staff, and (2) the youth and his or her parent or guardian (if applicable) have completed and signed a project application form. When these criteria have been satisfied, project staff generate a record for the youth in the "services" section of ETO. The appearance of a service record in ETO informs the evaluation team and other project staff that the youth has been enrolled in the project.

2. Timing and Duration of Enrollment Efforts

Project staff initiate efforts to contact and enroll a treatment group youth in YTD services and waivers within several days of the creation by Mathematica of a record for that youth in the intake section of ETO. Most enrollments occur within six weeks of assignment to the treatment group, and few occur more than three months after assignment. The duration of enrollment efforts varies across projects according to the following factors:

- The mode of delivering services (individualized versus group activities)
- The philosophy of the project and of individual staff members regarding the efficacy of gradual versus rapid engagement
- The rate of the flow of treatment cases from Mathematica
- Other demands on project staff, including the need to deliver services to previously enrolled youth
- Project staffing levels

The enrollment of a youth may require many contact attempts by project staff and, possibly, even many successful contacts.[32] Mathematica's involvement in project enrollment is limited to responding to requests from project staff for more recent contact information, sharing information about specific youth that may have been obtained during the baseline interview but not written into their ETO records, and providing technical assistance on methods for contacting youth. The three original random assignment projects achieved a combined enrollment rate of 82 percent for treatment group youth (Figure V.1).

3. No-Shows

Despite having (1) professed interest in the YTD services and waivers and (2) provided oral and written consent to participate in the evaluation, some treatment group youth decline to enroll in the YTD projects, in spite of the outreach efforts by project staff. The sample

[32] Among the initial 150 enrollees in the Colorado and Erie projects, 6.1 and 3.2 contact attempts by project staff were required, respectively.

design for the evaluation acknowledges these "no-shows." It specifies that each project participating in the random assignment evaluation will have a treatment group of 480 youth, of whom 400 are expected to enroll in services, for an implied no-show rate of 17 percent. The memorandum of understanding between Mathematica and each YTD project specifies that project staff must make all reasonable efforts to achieve a no-show rate of 17 percent or less.[33]

4. Monitoring Enrollment

The evaluation team uses ETO to monitor the efforts of project staff to enroll treatment group members. The project staff record the type, duration, and result of each contact attempt in the intake section of ETO. The evaluation team monitors and produces occasional reports on those efforts, which are then shared and discussed with project management and SSA.

The evaluation team also uses ETO to generate a weekly project-specific report on the numbers of treatment group youth and project enrollees. This report presents counts of new treatment cases and enrollees in the current month, as well as cumulative counts since the beginning of random assignment. These reports are submitted to each project and to SSA every week during periods of active assignment and enrollment. A meeting of the project, SSA, and the evaluation team is convened when a report indicates that the pace of assignment or enrollment is substantially lower than expected.

Assignment of consenting youth to treatment and control groups was completed at two of the three original projects that are part of the impact evaluation in March 2008. The Colorado project enrolled 418 of 488 treatment group members (86 percent), while the Erie project enrolled 400 of 480 treatment group members (83 percent). Assignment was completed at the third original project in the impact evaluation, CUNY, in September 2008. As of January 2009, that project had enrolled 399 of 510 treatment group members (78 percent). Assignment to treatment and control groups and enrollment in services began in April 2008 at the three new projects, in Miami, West Virginia, and Montgomery County. These processes will continue for approximately 30 months.

As described in Section VI.B, the evaluation will use SSA administrative data and baseline survey data to analyze whether and how randomly assigned treatment group youth who enroll in project services differ from no-shows.

D. GENERALIZABILITY OF RESEARCH FINDINGS

Impact estimates and other research findings based on youth who were randomly assigned to the treatment and control groups for the YTD evaluation will be generalizable to

[33] The bottom row of Figure V.1 shows that 265 of 1,478 treatment group members (research and nonresearch cases combined) were no-shows at the Colorado, CUNY, and Erie projects, for an overall no-show rate of 18 percent.

the entire caseloads of YTD-eligible youth in the five random-assignment sites where SSA lists of beneficiaries constitute the sampling frames. Consequently, these findings will provide SSA with reliable estimates of how the caseloads would be affected by the full implementation of YTD-like interventions in those sites. This generalizability presumes that such interventions would: (1) be voluntary for youth beneficiaries and (2) entail intensive outreach to and recruitment of eligible youth. Under these conditions, the known size of the youth caseload in a site could be applied to the evaluation consent rate to obtain the projected number of youth beneficiaries who would participate in the proposed intervention. That number could then be multiplied by the evaluation's estimated impact on an outcome measure to obtain the projected aggregate impact on the youth caseload. For example, if the size of the youth caseload in a site was 7,000, the YTD evaluation consent rate was 25 percent, and the estimated impact on SSA benefits was a reduction of $50 per month, then the projected aggregate impact on benefits of fully implementing a YTD-like employment program in that site would be a reduction of 7,000 x .25 x $50 = $87,500 per month.

Two other factors may affect enrollment rates in a fully implemented YTD-like program. First, assuming that the process of providing informed consent and the chance of being denied services deter some youth from participating, it is possible that enrollment rates in a fully implemented program would be somewhat higher because youth would not have to go through random assignment to receive YTD-like services. Second, in a fully rolled out intervention, youth would presumably have greater knowledge of the service providers and the SSA waivers, and therefore be less suspicious about the intervention, which could also affect participation rates. These factors suggest that the rate of participation in a fully implemented YTD-like program might be higher than the rates being achieved in the YTD evaluation, so the actual aggregate impacts of such a program might be larger than projected based on the evaluation enrollment rates.[34] If so, the projected aggregate impacts of YTD on the youth caseload, as detailed in the preceding paragraph, would be lower-bound estimates of the aggregate impacts of the full implementation of a YTD-like program.[35]

The methodological basis for generalizing the evaluation's findings beyond the random assignment sites to the national caseload of youth SSA beneficiaries is considerably weaker. In order to make such generalizations with a high degree of confidence, it would have been necessary to have selected a larger number of sites into the evaluation and to have done so randomly from among all possible sites nationwide. For a number of good reasons, SSA did not choose to select evaluation sites in that manner. However, the actual random

[34] Behavioral economists have long recognized such behavior, observing that people undervalue outcomes that are merely probable in comparison with outcomes that are obtained with certainty. This tendency, called the "certainty effect," contributes to risk aversion in choices between certainty outcomes and probabilistic outcomes with greater expected values (Kahneman and Tversky 1979; Kahneman and Tversky 1984; Starmer 2004).

[35] A related implication is that the consent rate for the YTD evaluation is a lower bound estimate of what the participation rate would be for a YTD-like employment program. Thus, if SSA were to roll out a YTD-like program, it might have to be prepared to provide services to a larger proportion of eligible youth than would be indicated by the consent rate in the evaluation.

assignment sites were selected purposefully to be very diverse (including, for example, urban, rural, and suburban areas). This leaves open the possibility of roughly generalizing from the set of site-specific YTD research findings to the potential impacts of the full nationwide rollout of a YTD-like youth employment program. Because those projections would not be based on rigorous evaluation criteria they would have to be interpreted carefully and with acknowledgment of their methodological limitations.

CHAPTER VI

PROCESS ANALYSIS

The primary goals of the process analysis are to document the interventions and services each YTD project provides, assess how they were implemented and their fidelity to the original proposed model, examine how they enhance services for youth with disabilities, and identify the successes and challenges associated with implementation. The process analysis will provide critical information for future replication or adaptation of the most promising projects and practices. A better understanding of such factors as the fidelity of the implementation to the proposed design, who participated in project activities, and critical programmatic challenges and successes can help explain key project impacts or differential impacts across subgroups of participants. The process analysis will contribute to informing and shaping policy because it will provide evidence of what is necessary to roll out programs similar to YTD.

A strong process analysis will be a critical component of the YTD evaluation. All YTD projects are delivering services based on a common set of core components that research has suggested are the foundation for good transition programs. Each lead organization has taken this theoretical framework and developed its own approaches to implementing the components, taking into account its particular capabilities. Before the demonstration, many of these organizations had never operated programs similar to YTD. Furthermore, most were small and had to scale up to meet the YTD target sizes, or had served different target populations and had to adapt service delivery to the YTD target population.

The process analysis, which will assess how well the projects were implemented and the fidelity of the interventions to the intended design, is uniquely positioned to document what it takes to create such projects and deliver services to youth. By drawing on an extensive amount of data, both quantitative and qualitative, the analysis will allow us to understand the implementation successes and challenges in taking intervention components that theory suggests are important and testing how successful projects are at actually delivering these components, as well as the extent to which youth use them.

The process analysis of the YTD evaluation has many features that make it distinctive compared with typical process analyses associated with large-scale demonstrations. The first

set of factors is related to the data we are using for the analysis. As described below, in addition to many site visits and document reviews, we have a detailed data tracking system in which project staff document the extent and types of services that youth receive, regular telephone interactions with the projects that allow us to track and monitor on a real-time basis any changes to the service delivery approach or deviations from the intended interventions, and a close working relationship with the technical assistance (TA) provider. These enable the evaluation team to have a good understanding of program successes and challenges. In particular, the evaluation includes:

- ***Common Management Information System Across the Projects.*** YTD has a common MIS—the Efforts-to-Outcomes (ETO) software—across all the random assignment projects. ETO includes core elements for each project to ensure consistency in data collected across the projects. At the same time, it allows for some customization to take project-specific differences into account. This data source will allow us to determine to what extent projects were able to deliver the intended services, based on a common set of measures and definitions. It is also a valuable source of information in preparing for the two rounds of comprehensive site visits that we are conducting to the YTD projects as part of the process analysis, because we can use information from ETO to highlight areas to focus on during the visits.

- ***Regular Interactions with Project Staff.*** In contrast to most evaluations, where the evaluators rely almost exclusively on formal site visits to inform the process analysis, our study includes regular interactions with project staff, many monitoring and TA visits, and annual conferences with project teams. These interactions, which are being systematically tracked, provide a rich source of information, in a consistent, ongoing manner, that will supplement what we learn during the formal site visits.

- ***Close Working Relationship with the TA Provider.*** The TA provider (TransCen, Inc., a subcontractor to Mathematica on the YTD evaluation) is working closely with the projects to put in place the core components described in the conceptual framework for the YTD projects that was presented in Chapter I. Our close working relationship with the TA provider, including its participation in weekly team meetings and inclusion in some key visits to the projects, will provide insights on which YTD core components were more or less difficult to implement and why.

We will use the rich sources of data to take a strong analytic approach to assessing program implementation, as well as to understanding the fidelity of implementation to the intended design. We will document the intended intervention in each project, as well as deviations from the intended plans and the reasons for these deviations. Using our conceptual framework and multiple sources of information will provide objectivity to our assessment:

- ***Using the Conceptual Framework to Guide the Analysis.*** Our approach to the process analysis will be grounded in the YTD conceptual framework. In

particular, we will examine how successful each project was in implementing the core intervention components identified in the conceptual framework, as well as the successes and challenges in their implementation. We will also examine the interactions between the service context and the projects' ability to provide services to the youth in a seamless manner.

- ***Use of More than One Perspective in the Analysis.*** The use of more than one perspective to verify responses (often referred to as *triangulation*), will be a key element of our process study. To verify and analyze key questions, we will factor in the perspectives of two different agencies (for example, project staff and school district staff) or staff at different levels, or information provided by staff during site visits and information that they entered into ETO while they were delivering services. These different perspectives should give us a good understanding of key implementation issues.

The rest of this chapter is structured as follows. Section A describes the key research questions for the process analysis. Section B discusses the analytic approach we will use to conduct the process analysis in the YTD projects involved in random assignment, and Section C describes the data we will use to address these questions. Section D contains a short discussion of the approach we will use to describe implementation in the original YTD projects not involved in random assignment. Finally, Section E briefly summarizes our plans for reporting the findings from the process analysis.

A. KEY RESEARCH QUESTIONS

The process analysis will document the details of each project's implementation, including the local environment, the planned intervention, the actual intervention, and service and waiver use and program costs.[36] In particular, it will examine the following questions:

- ***What was the local context and infrastructure?*** What were the economic, employment, and social service environments that youth with disabilities faced? What services were available in the community? To what extent did the service environment in which programs existed enhance or inhibit service delivery? How did the systems involved in the demonstration project areas (for example, the school system, the VR agency) interact, and how did they affect how the YTD project was able to deliver services?

- ***What was the intended intervention?*** What was the proposed structure for the project's intervention? What were the project's primary goal, intended target

[36] Throughout this chapter, when we refer to the YTD intervention, we include both project services as well as waivers. Similarly, the word "services" refers to all types of services provided by the projects, including employment services, benefits and waiver counseling services, as well as case management and other services provided to the youth.

population, and planned services and activities? What was the plan for service delivery? What were the plans for providing benefits counseling and information on waivers? How did the planned approach compare to the services discussed in the conceptual framework? Who were the project partners, and what were their roles?

- ***How were the projects implemented?*** What were the outreach strategies? What was the recruitment and enrollment process? What types of services were offered to the youth? Who delivered the services? What staff provided benefits counseling? What strategies for service delivery worked well, and why?

- ***How did the services and benefits counseling delivered compare with those originally conceived by the program?*** To what extent did the projects maintain fidelity to the planned design? How did the delivery of services evolve? Were there any changes in the approaches to providing benefits counseling? What were the reasons for the deviations from the intended model or service delivery strategy, and why?

- ***How were services and waivers used?*** To what extent did participants actually receive the planned services and waivers? What was the intensity of service use? What waivers were most commonly used? How satisfied were the youth with the services available? How satisfied were the youth with the waivers?

- ***What were the costs of providing the services and waivers?*** What were the overall costs of providing services? How do they break down by key program components? What were the costs of providing benefits counseling? What were the costs of providing waivers? What are the costs per participant?

- ***What were the key implementation lessons?*** What were some of the projects' successes? What challenges did the projects face, and which were more difficult to overcome? What would it take to successfully roll out YTD-like interventions on a large scale?

The process analysis will examine these and related questions to provide a complete picture of project implementation, as well as key successes and challenges. As described in more detail in Section C, the process analysis will rely on a variety of data, including two comprehensive site visits and other smaller visits to each project, information from regular project meetings, project documents, the MIS software ETO, and information gathered from baseline and follow-up surveys and administrative data.

As Table VI.1 shows, because the interventions and approaches to service delivery in each of the projects are distinct, the process analysis will be conducted at the project level. However, we will also look for themes that occur across projects and summarize these in the final project report. Because the cost analysis conducted as part of the process analysis is fairly detailed and complicated, we discuss that analysis in the next chapter.

Table VI.1. Intended Intervention in the YTD Random Assignment Projects

Project Features	Colorado Youth WINS	CUNY YTDP	Erie Transition WORKS	Miami Broadened Horizons, Brighter Futures	Montgomery County Career Transition Program	West Virginia Youth Works
Target population	SSI, DI, and CDB beneficiaries ages 14 through 25	SSI, DI, and CDB beneficiaries ages 16 through 19	SSI, DI, and CDB beneficiaries ages 16 through 25	SSI, DI, and CDB beneficiaries ages 16 through 22	Juniors and Seniors with SED or other significant mental illness	SSI, DI, and CDB beneficiaries ages 15 through 25
Lead organization (grantee)	Colorado WIN Partners/ University of Colorado Denver	John F. Kennedy, Jr. Institute for Worker Education of the City University of New York (CUNY)	Erie 1 Board of Cooperative Educational Services (BOCES)	Abilities, Inc. of Florida	St. Luke's House, Inc.	Human Resources Development Foundation, Inc.
Partner organizations	County workforce centers	CUNY colleges and programs; local and state agencies	Neighborhood Legal Services, Parent Network Center of WNY, Community Employment Office, and other local agencies	Human Services Coalition, National Disability Institute, other local programs	Montgomery County Public Schools, Division of Rehabilitation Services, Montgomery Works/ One Stop	West Virginia University Center for Excellence in Disabilities (WVUCED)
Geographic scope or location(s)	Four Colorado counties: Boulder, El Paso, Larimer, Pueblo	Bronx County, New York	Erie County, New York	Miami-Dade County, Florida	Montgomery County, Maryland	Two regions in West Virginia[a]

TABLE VI.1 *(continued)*

Project Features	Colorado Youth WINS	CUNY YTDP	Erie Transition WORKS	Miami Broadened Horizons, Brighter Futures	Montgomery County Career Transition Program	West Virginia Youth Works
Staffing structure	Independence Teams ("I-Teams") in each county have at least one disability program navigator (DPN), benefits planner, and career counselor.	The intervention relies on benefits counselors, career developers, and parent advocates, as well as many part-time and temporary staff.	Services are provided by transition coordinator, employment specialists, and partner organizations.	Six employment specialists and three benefits specialists provide direct services, with additional support from two subcontractor agencies.	Career Transition Specialists provide individualized, direct support to youth and families. Benefits specialists will provide benefits-specific support as needed.	Services provided by a core staff of eight customized employment specialists who provide direct support, four job developers/job coaches who provide employment support, and two benefits counselors.
SSA waivers and benefits counseling	The benefits planners provide SSA benefits/ waivers counseling to youth.	Addressed at Saturday workshops and as a stand-alone service.	Benefits planning provided by Neighborhood Legal Services.	Benefits specialist will provide initial benefits planning, 1:1 services, and workshops around waivers, existing work incentives, and benefits.	Benefits services provided by CTP and St. Luke's House benefits planning staff as needed.	Benefits planning provided by WVUCED, which also runs the state's Work Incentives, Planning, and Assistance program.

TABLE VI.1 *(continued)*

Project Features	Colorado Youth WINS	CUNY YTDP	Erie Transition WORKS	Miami Broadened Horizons, Brighter Futures	Montgomery County Career Transition Program	West Virginia Youth Works
Work-based experiences	The career counselors are to work with youth on employment-related issues, including developing unpaid and paid work experiences.	Career exploration through person-centered planning sessions and vocational assessments. Youth are to participate in a paid work experiences through NYC agencies. Help youth navigate the application process, identify appropriate placements, and provide job coaching.	Employment specialists and partner organization are to offer individualized job development and follow-along services after employment.	Employment specialists are to provide one-on-one career preparation activities, job development, job placement, work experiences and follow-along services after placement.	Career Transition Specialists are to provide individualized pre-employment, job development, customized employment services, job coaching, and follow-along services after job placement.	Employment specialists and job developers/job coaches are to work with youth to offer individualized job development and follow-along services.
Youth empowerment	I-team staff use a person-centered philosophy to promote youth empowerment.	Self-determination sessions help youth identify goals, learn about available community services, and advocate for themselves. A college buddy system and Saturday workshops also include components of self-determination.	Youth empowerment and self-determination classes offered to youth, which culminate in a transition plan.	Employment specialists use person-centered planning approach to (1) help youth understand that they are in charge of their futures, and (2) develop employment goals.	Career Transition Specialists use individual goal and service needs plans to help youth develop their career or educational goals.	Employment specialists use a person-centered planning approach to identify employment goal, which will be recorded in their person centered plan of action.

TABLE VI.1 *(continued)*

Project Features	Colorado Youth WINS	CUNY YTDP	Erie Transition WORKS	Miami Broadened Horizons, Brighter Futures	Montgomery County Career Transition Program	West Virginia Youth Works
Family supports	The DPNs help youth and their families with a wide range of issues. The benefits planners and career counselors also work with family members as needed.	Parent guides provide resource information. Parents attend workshops on benefits or family support needs. Parent peer mentors check in with families on a regular basis. Parents attend parent-focused classes at the Saturday workshops.	Families receive support through person-centered planning, organizational training, and newsletters.	Employment specialists meet with families at intake, involve them in the person-centered planning process and services, and hold workshops targeted to family needs. Benefits specialists will meet with family members in benefits planning process.	Career Transition Specialists provide direct support to youth and parents, including educating parents on postsecondary and employment options, community resources, benefits, and family role in transition process.	Individual meetings with staff, family-focused workshops, and the continuation of newsletters will educate families about the possibilities for their youth, and assist them in their role as parents. Family-focused workshops will incorporate social activities targeted toward bringing participating youth together in a social setting.
System linkages	The intervention is located in local workforce centers, which encourages center management and staff to consider the needs of youth with disabilities.	Linkages with local Office of Mental Retardation and Developmental Disabilities (OMRDD), VR services, and WIPA services. A YTD advisory committee includes stakeholders and experts from CUNY campuses, community-based organizations that serve people with disabilities, and public agencies.	Referrals to local agencies funded by OMRDD, OMH and other organizations serving youth. Eligible youth referred for VR services. Eligible youth referred to one-stop.	Intervention includes youth involvement with a community partner who has experience in financial literacy. Staff will facilitate linkages with school district, VR, South Florida Workforce Investment Board, and other community organizations.	Referrals to state and county organizations to support youth employment goals, such as Division of Rehabilitation Services, Montgomery Works, and adult community mental health providers.	Intervention will take place primarily in the youth's home or school. HRDF staff will make appropriate linkages based on the youth's needs through a referral process developed between the Youth Works project and respective agency on an as-needed basis and documented in the youth's person-centered plan of action.

TABLE VI.1 *(continued)*

Project Features	Colorado Youth WINS	CUNY YTDP	Erie Transition WORKS	Miami Broadened Horizons, Brighter Futures	Montgomery County Career Transition Program	West Virginia Youth Works
Social and heath services	The DPNs work with youth to address a wide range of issues affecting them and their families.	General case management and support services offered as needed. Referrals made to educational, vocational, and community resources. Recreation sessions promote health and well-being.	Person-centered planning from transition coordinator helps identify additional services and supports. Transition coordinator makes referrals to needed supports.	Employment specialist will identify social and health service issues as part of the person-centered planning process and as part of the life skills component of the intervention; will make appropriate referrals as needed.	Service need plans and goal plans establish objectives to successful transition, including opening bank account or getting driver's license. Career Transition Specialists will provide support or referrals to available resources, including mental health services.	Person-centered planning from customized employment specialists helps identify additional services.
Other key components or features		Saturday workshop and person-centered planning staff have strong connections to the community and people with disabilities. Youth access recreational activities.		Youth will have access to local IDA programs.	CTP participants are primarily "at-risk" and not currently on the Social Security rolls.	Leverage systems and employer contacts from existing HRDF programs.

[a]Region 1 consists of the following 11 northern counties: Monongalia, Marion, Lewis, Preston, Taylor, Harrison, Upshur, Barbour, Randolph, Wood, and Jackson. Region 2 consists of the following eight southern counties: Kanawha, Cabell, Raleigh, Wayne, Putnam, Fayette, Mercer, and Mason.

B. ANALYTIC APPROACH

Using the data sources available, the process study will carefully address the research questions described above. As discussed in the introduction to this chapter, our approach to the process analysis will be theory driven and will rely on the conceptual framework for YTD described in Chapter I. The analysis will examine whether the projects' designs included all of the core components in the conceptual framework, as well as emphasis placed on specific components. We will examine the extent to which the projects were able to deliver services related to these components, as well as the successes and challenges they faced in so doing. We will also rely on ETO data, which will make it easier to compare projects. For each of the key questions, we will rely on at least two sources for information. To draw credible conclusions, we will assess the extent to which these sources support each other and instances in which they do not. Below, we describe the main topics, drawn from the research questions discussed earlier, that we will study in the process analysis.

1. Local Context and Service Environment

In the process analysis, a project's service environment includes the resources that youth in the target population may have access to in the local area, as well as the economic milieu for these youth to find jobs. This contextual information can be helpful in identifying the service gaps a project may fill and in developing a sense of the counterfactual for the study.

In particular, we will start with a good understanding of the labor market and economic conditions in each of the project sites. For example, using Census data, we will look at income and poverty statistics in the relevant areas, and also examine measures from the Bureau of Labor Statistics on the county unemployment rates, key industries in the area, and other indicators of local economic conditions. To provide a sense of the local environment and context in which the YTD projects are operating, we will also look more broadly at other contextual factors, such as population growth, ratings of schools in the area, and the size and characteristics of the Supplemental Security Income (SSI) population in the region.

Each YTD project is being implemented in an existing service environment with myriad service delivery systems and service providers. These systems link to each other in ways that preceded YTD. For example, connections may have existed between the VR agency and the school system. Some YTD project sites might have well-developed links across the different service contexts, while others will not. In our process analysis, we will try to develop a good understanding of the service environment and the existing linkages, and the extent to which they enhance or inhibit an organization's ability to implement its YTD project, drawing on interviews conducted with staff from these other systems and agencies.

In addition, each YTD project is being implemented in a region with an existing SSA infrastructure. It will be important to understand and document the role that the local SSA offices play in providing services to youth in the target population, as well as any existing relationships between local SSA offices and the program. The YTD process analysis team will work with SSA to set up interviews with local SSA staff to get an understanding of these issues.

We will also get information on other organizations in the area that directly provide services to youth with disabilities, and try to understand the types of services available in these communities and the demand for these services. For example, do service organizations have long waiting lists, or do youth receive the services they need quickly? Can the local service providers meet the needs of youth in the area? These types of information will be gathered through semistructured interviews with project managers and staff from the lead organizations, project partners, and other local service providers in the community, as well as with youth and parents. These data will provide us with the background information needed to identify the existing community services, the service gaps, and the reasons for the YTD intervention.

2. The YTD Project and Intended Interventions

This analysis will include a basic description of the planned interventions in each project, and will give us a context for comparing the services that a project intends to provide with what it actually provides. We will describe the basic elements of each project, including the planned target population, planned outreach and recruitment activities, the sequence of activities and services the project is planning to offer, how benefits and waivers counseling is provided, and the project strategies for determining how specific services will be targeted to youth with different characteristics or needs. The analysis will also highlight which of the core YTD project components are featured more strongly in the proposed set of services and which are featured less strongly, and it will help us understand why projects made their decisions. This analysis will also describe the project partners and operating structure, how responsibilities are shared, and the organizational and management structure of the project, including staffing levels and staff roles and responsibilities.

These analyses will draw on the background documents provided by each project, as well as semistructured interviews with management staff at the lead agency and partner agencies. As seen earlier in Table VI.1, the projects take different approaches to serving youth and may emphasize somewhat different elements, but each project includes all the components that were described in Chapter IV as being essential for a successful YTD intervention.

3. Assessing Project Implementation and Fidelity to the Intended Interventions

Each YTD project formulates a detailed plan to deliver services at the outset; however, the actual service delivery approach may vary as the project gains experience about needs of the youth it serves and identifies different approaches that may work better in engaging the youth in services. Thus, a careful assessment of program implementation and the fidelity to the intended intervention will be a critical component of the process analysis. Below, we describe our approach to assessing program implementation, including recruitment, enrollment, and service delivery strategies.

a. Recruitment

An assessment of the target population for each project, as well as of the strategies to recruit youth into the study, is critical to gaining insight into the pool of participants the projects serve. All projects, except the Montgomery County project, are drawing on lists of youth receiving disability benefits for their target population.[37] Although we attempt to contact a random sample of youth in these lists (as mentioned in the previous chapter), only about one in four youth we attempt to contact is actually recruited into the study and randomly assigned into the treatment or control group.[38] Those not randomly assigned, and thus not in the study, include youth (1) we were unable to reach, (2) we reached but who were not interested in participating and did not complete a baseline interview, (3) who completed a baseline interview but did not send a signed consent form back, and (4) who sent a signed consent form back but indicated that they did not want to participate in the study.

We are using both qualitative and quantitative approaches to assessing recruitment. First and foremost, the evaluation team is carefully documenting the results of the survey-based efforts to recruit youth to participate in the study for each project. The lessons learned from the early recruitment efforts (both success and particular challenges) are being documented in the early assessment reports, which are being produced for each random assignment projects approximately six months after random assignment starts.

In addition, we will use SSA administrative data to compare the characteristics of those who were recruited into the study with those who were not, to better understand the characteristics of study participants compared with characteristics of the project's full target population. These will include such items as type of disability benefit, age first on disability, and disabling condition. Although the SSA files provide only limited characteristics, these comparisons will be critical from a policy perspective and will provide information on whether the projects are able to enroll a broad group of disability beneficiaries, or just a distinctive subset of them.

b. Enrollment

After youth are recruited to the study and randomly assigned to the treatment group, project staff must enroll them in project services and waivers. Youth are most likely to engage in project services if they can be reached soon after they consent to participate in the study, before they lose interest. Having high enrollment rates among those assigned to the treatment group also gives us the greatest chance of detecting impacts. The process analysis will carefully document issues related to enrolling youth into services by reviewing project

[37] The Montgomery County project recruits youth with SED or other significant mental illnesses from public schools and private schools in the county. It also recruits youth with these conditions who have recently exited from school.

[38] For youth under age 18, we first contact the parent/guardian for permission to talk with the youth. For minor youth, we need the parent/guardian to provide consent for the youth to participate in the evaluation.

marketing strategies and analyzing ETO data to examine the effort and time it takes for project staff to enroll youth.

Each YTD project has developed marketing and outreach approaches for enrolling youth. We will review the marketing materials created by the project and its approach to reaching youth. We will interview line staff, as well as managers, to gain insights into each project's enrollment approach and to understand how initial strategies might have been modified with experience. In addition, project staff use the ETO system to record all efforts associated with enrolling youth in project services. Using these data, we will be able to determine how long, on average, it took to enroll youth after they were randomly assigned to the treatment group, as well as the effort staff expended in outreach (Table VI.2).

Finally, using data from the baseline interview, we will compare the characteristics of youth who enrolled in project services with the characteristics of other youth who were randomly assigned to the treatment group but who did not enroll in the project. This analysis will indicate if youth with certain characteristics are more difficult to engage in project services than others. Data from the early cohort enrollment efforts in the three random assignment projects suggest relatively high enrollment rates (about 80 to 85 percent). Furthermore, early assessment analyses from the CUNY, Colorado, and Erie YTD projects indicate that enrollees and nonenrollees are similar in most respects (Grossman et al. 2008; Baird et al. 2008; Mamun et al. 2008).

c. Service Delivery Strategies and Fidelity to the Intended Intervention

As discussed above, each project developed a model and approach to service delivery, based on the conceptual framework of services for strong YTD projects. However, projects can deviate from their original conceptions, and actual implementation, in service delivery strategies and engaging youth in planned activities, may or may not correspond to what was planned. Furthermore, aspects of the projects may change as the services offered or delivery strategies evolve. Thus, it will be important to understand actual service delivery approaches, and how the projects address real or perceived problems.

Table VI.2. Measures of Efforts by Project Staff to Enroll Treatment Group Youth in YTD Services

Average number of contacts required to enroll participant in project services
Time spent per participant on enrollment efforts (hours)
Average number of days from date project received treatment case to first attempted contact
Average number of days from first attempted contact to enrollment in services
Average total duration of enrollment effort per participant (days)

Source: The YTD project's ETO MIS.

Note: These outcomes are illustrative. Furthermore, in our analysis and reports, we will present both averages and distributions for all key measures, as appropriate.

This analysis, one of the keystones of the process analysis, will draw on various data sources and use triangulation methods to provide a strong and consistent picture of project implementation. The analysis will rely on interviews with project managers and staff, as well as relevant project partners. It will also draw on our observations of project operations, review of program documents, case file reviews, and focus group discussions with youth in each of the projects. In addition, we will draw on the observations of the TransCen TA liaisons, who are working closely with project staff. Finally, we will also use service and waiver use data (described below in more detail) to assess whether planned service delivery is consistent with services that were actually delivered to participants.

We will triangulate these data sources, so that the findings related to project implementation are based on mutually confirming lines of evidence. For example, staff members' descriptions of service delivery approaches will be compared with descriptions from participants and staff supervisors, as well as direct observations where possible. If there are discrepancies in the staff reports, we will probe further into the issues and look at alternate sources of information, to try to understand and reconcile the differences. For some issues, such as the success of employment placement services, staff perceptions can be compared with data recorded in ETO, as well as outcomes from surveys.

This analysis will provide information on which of the YTD core components were implemented and how they were implemented. We will also describe the number of staff used to deliver services, staff roles, their interactions with the youth, changes in staff turnover, and other similar items.

4. Service Utilization and Satisfaction

Staff in each of the random assignment projects are using ETO as their basic MIS to track service delivery. Using these data, we can conduct detailed analyses of the intensity of services that participants receive. Next, we discuss three aspects of service use that we will analyze: (1) participation in project services, (2) use of YTD waivers, and (3) participants' satisfaction with services. Analysis of service utilization will be a key input into the cost analysis (Chapter VII) and also critical to interpreting program impacts (Chapter VIII).

a. Participation in Project Services

Each project offers participants a range of services. For example, the CUNY project offers vocational workshops, Saturday workshops, a college buddy system, and access to summer and after-school employment programs through NYC. However, not all youth enrolled in the CUNY project will use these services to the same extent. In each project, take-up rates may vary by service component. In addition, the characteristics of participating youth may vary by component.

As described earlier, ETO contains detailed information on services delivered to youth. Using this data source, we will describe participation in various project services, as well as the intensity of service receipt. For instance, most projects offer broad case management services, in addition to services that focus on employment and education. We will use ETO

data to document the percentage of youth that ever received each type of service, as well as the number of contacts for each type of service (Table VI.3). In addition, we will combine baseline survey data with ETO data to examine the characteristics of youth who participate more or less intensely in project services, as well as in different service components. These analyses will be conducted using both descriptive and multivariate statistical methods.

Because ETO records the date of each contact with the youth and the service provided during the contact, we will also examine the extent of service receipt over time. For example, we will examine whether youth begin to participate in project services immediately, or if there is a lag between enrollment and participation, as well as the timing of participation in different components. We will also examine whether most youth take a particular sequence of services and if the intensity of services changes (reduces) over time. In addition, the service utilization analyses will examine whether services varied across different cohorts of enrollees. For instance, we may observe changes in service use as cohort characteristics change, as project staff caseloads change, or as the project management and staff learn from experience delivering services to youth who participated early in the implementation period.

b. YTD Waivers

The SSA waivers are a critical element of the YTD intervention. As discussed in Chapter IV, youth participating in YTD are eligible to receive the waivers, which collectively provide incentives to work by allowing the youth to retain more of their benefits while receiving earnings from employment. Because SSA rules related to earnings disregards and

Table VI.3. Participation in YTD Services by Project Enrollees

Service Component	Percentage of Enrollees	Number of Contacts per Enrollee
Employment-Related Services and Jobs		
Participated in vocational assessment		
Started new paid employment		
Participated in unpaid work experience		
Education-Related Services and Education Enrollment Status		
Received counseling on education opportunities		
Received registration/enrollment assistance		
Enrolled in career/vocational training program		
Case Management and Support Services		
General case management check-in		
Attended person-centered planning session		
Referred to mental health services		
Additional Domains		
Attended group workshop		
Withdrew from project voluntarily		
Moved out of project's jurisdiction		

Source: The YTD project's ETO MIS.

benefits calculations are complicated, each YTD project has staff that will discuss basic SSA benefits, as well as waivers offered as part of the demonstration, with youth and their families. Our analysis of the waivers will examine three issues: (1) the extent to which youth in the projects are receiving waiver counseling, (2) the extent to which youth and families report knowing about the SSA waivers, and (3) the extent to which program group youth actually receive SSA waivers.

Using data from ETO, we will describe the extent to which treatment group youth received counseling regarding basic SSA benefits and the key waiver components, as well as the average number of times the program staff contacted the youth and families to provide these services (Table VI.4). We will document whether the discussions were conducted with the youth and their families, or with just the youth, or with just the families. We will also describe when in the sequence of project services such counseling occurred. To help interpret these findings, we will draw on descriptions provided by the benefits counselors of how the benefits planning services were typically delivered to youth and when and how the waivers were discussed.

To learn whether the benefits counseling leads to increased knowledge about the SSA waivers, we will use information from focus groups with youth and their families, as well as some information on knowledge of SSA waivers gathered from treatment youth as part of the 12-month follow-up surveys. We will also examine whether youth and families who received benefits counseling from project staff show greater knowledge of the SSA benefits and waivers through their responses in the follow-up surveys than treatment youth who did not receive such counseling.

Table VI.4. Benefits Counseling Activities

	Percentage of Enrollees	Number of Contacts per Enrollee
Benefits Planning		
Benefits information and referral		
Benefits analysis and advisement		
Benefits management		
Benefits problem solving and advocacy		
Access to health care		
Other benefit or non-YTD waiver		
SSA Waiver Discussions		
$3 for $4 EIE		
IDAs		
PASS		
SEIE		
Age 18 Medical Redetermination		

Source: The YTD project's ETO MIS.

Finally, we will document the extent of waiver use. This source of information will be obtained both from the ETO data (where level of activation is recorded from the

perspective of project staff) and from SSA administrative data. In addition to identifying the fraction of youth who ever receive a waiver, we will describe trends in waiver use, particularly because we expect that some waivers may be activated as the youth progresses through the project service sequence and finds employment. Table VI.5 illustrates how we might document the use of the EIE, SEIE, and age 18 medical redetermination waivers.

c. Satisfaction with Services

An important aspect of YTD service utilization relates to participant satisfaction with services offered and received, as well as the SSA waivers. The 12-month follow-up survey is collecting information on satisfaction with project services by treatment group youth who actually participated in YTD. The information being collected includes satisfaction with specific services, as well as overall satisfaction with the project (Table VI.6). The survey data will be supplemented with information from focus group discussions on aspects of the project that youth liked or did not like, and their suggestions on how the project could be improved.[39]

Table VI.5. Use of SSA Waivers for YTD

YTD Waiver	Number of Enrollees	Percentage of Enrollees
$3 for $4 Earned Income Exclusion		
Ever implemented Q1-Q4 post RA		
Implemented Q1 post RA		
Implemented Q2 post RA		
Implemented Q3 post RA		
Implemented Q4 post RA		
Student Earned-Income Exclusion		
Ever implemented Q1-Q4 post RA		
Implemented Q1 post RA		
Implemented Q2 post RA		
Implemented Q3 post RA		
Implemented Q4 post RA		
Age 18 Medical Redetermination		
Ever implemented Q1-Q4 post RA		
Implemented Q1 post RA		
Implemented Q2 post RA		
Implemented Q3 post RA		
Implemented Q4 post RA		

Source: The YTD project's ETO MIS and SSA administrative data.

RA = random assignment.

[39] The evaluation team is still developing the discussion guides for participant focus groups. The likely domains of these focus groups include the perceived quality of project services, perceptions of gaps in activities or services, how the SSA waivers were explained and offered to participants, and the use of services outside of the YTD project.

Table VI.6. Satisfaction with YTD Services

	Percentage of YTD Participants
The YTD project has been "somewhat helpful" or "very helpful" with respect to the following:	
Acquiring job- or work-related knowledge and skills	
Working effectively with others	
Developing clearer career goals	
Developing a sense of confidence in abilities	
The participant's overall experience with YTD has been "good" or "very good"	

Source: The YTD evaluation's 12-month follow-up survey.

5. Implementation Successes and Challenges

We will draw lessons related to program successes and challenges by synthesizing the results from the analyses discussed above. In particular, we will note aspects of each intervention that were more or less successful, to determine how these successes and challenges affected the project's ability to provide effective services to participants. These lessons will help inform the impact findings and will provide useful information for future replications or adaptations of the interventions. Some areas in which we expect to describe program successes and challenges are:

- ***Program Management Structure and Partner Relationships.*** Each YTD project has a lead organization that is managing the project and, typically, partners that collaborate with the lead organization to provide services to youth. We will examine how the management structure affects service delivery, as well as staff ability to fulfill their roles. We will also examine the successes and challenges projects face in their partner relationships.

- ***Staff Turnover.*** Capable YTD project staff are essential to the delivery of strong services. We will examine the extent to which projects are successful in retaining capable program staff. If there is high staff turnover, we will examine reasons for turnover and how turnover affected the quality of services provided. We will also examine the strategies project management uses to reduce staff turnover.

- ***Project Philosophy.*** The YTD lead organizations are likely to have philosophies or missions that guide their approaches to service delivery. We will examine whether the YTD projects are fully consistent with those philosophies or conflict with them in some respects.

- ***Service Delivery.*** We will document successful approaches taken by YTD projects to delivering services to youth and the challenges they had to overcome to provide adequate services.

- ***Lessons for Replication and Ability to Roll Out Such Projects on a Wider Scale.*** We will examine the successes and challenges of the YTD projects as they designed their interventions and expanded their capacity so as to be able to serve a total of 400 youth each. We will draw lessons from these experiences regarding the feasibility of expanding YTD to serve much larger numbers of youth if it were to be implemented as a nationwide program.

C. DATA COLLECTION FOR THE PROCESS ANALYSIS

We will collect a wide range of qualitative and quantitative data to inform the process analysis (Table VI.7). This section provides a brief summary of the six key data sources that we will use for the process analysis; a more detailed discussion of the data sources that will inform the YTD process analysis is contained in Rangarajan et al. (2007).

1. Site Visits

The evaluation team is conducting many site visits, for various reasons, to each random assignment YTD project. These have included two or three early visits to train staff on the use of ETO, provide TA on the delivery of services, and to monitor enrollment activities. We will made another visit to each site about six months after the start of random assignment to gather information for an early assessment report on project operations. We conducted these early assessment visits to the Colorado, CUNY, and Erie projects in January/February, April, and August 2007, respectively. We conducted early assessment visits to the three new random assignment projects in October and November 2008. The early assessment reports focus on (1) recruitment of youth into the evaluation, (2) enrollment of treatment group youth in the YTD project, and (3) early engagement of youth in project services. These reports include our recommendations for strengthening project

Table VI.7. Data Sources for the Process Analysis

Research Topic	Site Visits	Document Review	MIS (ETO)	Baseline Survey	Follow-Up Survey	Administrative Data	Local Evaluation
Local Context and Infrastructure	X	X				X	X
Intended Intervention	X	X					X
Project Implementation	X	X	X			X	X
Fidelity to intended intervention	X	X					X
Recruitment into study	X	X		X		X	
Enrollment in project services	X	X	X	X			
Service Utilization	X	X	X			X	
Participation and referral	X	X	X				
YTD waivers	X	X	X		X	X	
Satisfaction with services	X				X		
Implementation Lessons	X	X	X				X

enrollment activities and services. Final versions of the early assessment reports were produced in March 2008 for CUNY (Grossman et al. 2008), and in April 2008 for the Colorado and Erie projects (Baird et al. 2008 and Mamun et al. 2008). Draft early assessment reports for the three new random assignment projects are currently being produced.

In addition to these early visits, we will conduct two comprehensive, multiday site visits to each random assignment project to gather information for the process analysis. During these visits, we will conduct in-depth interviews with senior management staff and semistructured interviews and/or focus groups with project managers, staff, youth participants, and other key stakeholders, such as staff from VR agencies and school districts. The interviews will cover such topics as project management and relationships with other providers, service delivery strategies, project staffing, project costs, and other related items. Table VI.8 provides an overview of the topics that will be covered during these interviews. The comprehensive site visits for the process analysis will typically be conducted by teams of two evaluation staff members for each YTD project. These are staff who have been assigned to work on the project and are regularly involved in project activities and meetings.

We completed the first set of comprehensive site visits to the Colorado, CUNY and Erie projects in spring 2008, and are getting ready for the second round of visits to these projects in spring 2009 (Table VI.9). Comprehensive site visits are planned for the new projects in fall 2009 and winter 2011. To ensure that the teams collect consistent information across the projects, we developed detailed field guides, based on the topics described in Table VI.8, to use for semistructured interviews with different types or levels of project staff. These guides are adapted to fit the specific circumstances of each project. We conduct site visitor training for all the evaluation site team members so they have a common understanding of the key issues on which to gather data during thee visits. In addition to the interviews, we also conduct case file reviews of youth with different patterns of service use. (We determine these cases ahead of time by using data from ETO.) Finally, where possible, we observe project activities, such as assessments, workshops, and training sessions. Data collected during the site visits will be supplemented by information gathered from telephone conversations with project staff and the TransCen TA providers.

2. Document Review

The evaluation team will review a variety of documents available for each project participating in the random assignment impact study (Table VI.10). Review of the initial proposal/implementation plan and budget prepared by each lead organization will help us understand the project's intended intervention and target population, financial obligations, the lead organization's structure, management and partnerships, and other matters. Additional financial documents (for example, invoices and timesheets) will tell us about project expenditures, which we will use for the cost analysis and benefit-cost analysis. Memoranda of understanding and cooperative agreements will detail what each project has committed to do, and continuation packages submitted to SSA will provide information on

Table VI.8. Topics for Discussions with YTD Project Staff and Stakeholders During the Process Analysis Site Visits

Local Environment and Linkages
- Identification of available special education, social, and VR services
- Accessibility of community services for youth with disabilities
- Ties between sponsoring organization and other organizations in the community serving youth with disabilities
- Service gaps filled by the YTD project
- Relationship between sponsoring organization and local employers
- Service gaps for youth with disabilities

History and Experience of Sponsoring Organization
- Organization mission
- History with prior youth transition programs
- Other programs offered by sponsoring organization and populations served
- Annual budget
- Process for developing the YTD project

Program Structure and Staffing
- Organizational and management structure
- Role of partner organizations
- Staffing levels and number of staff per participant
- Roles and qualifications of program staff
- Types of referrals to other providers
- Staff turnover and impact on project

Program Outreach and Recruitment
- Assessment of Mathematica role in recruitment
- Methods used to contact participants
- Intensity with which methods are applied
- Successes and challenges with recruitment
- Reasons youth/family give for refusing to participate

Participants
- Age, disability type, and beneficiary type of participants
- Demographic information for family members
- Types of transition goals
- Participant expectations of, and satisfaction with, services

Program Operations and Services
- Sources of funding and financial contributions of partners
- Procedures for identifying participant needs
- Participant flow from enrollment through project completion
- Comparison of actual and intended service delivery
- SSA waiver implementation
- Detailed description of services for employment, benefits counseling and waivers, education, youth empowerment, family support, health and social service needs, and asset accumulation

Partnerships and Linkages
- Outside organizations that provide services to YTD participants and the services they provide
- Relationships between sponsoring agency and outside organizations
- Interactions with SSA field staff

Lessons Learned
- ETO's effects on staff communications
- Key successes and challenges
- Methods used to overcome challenges
- Lessons for organizations that plan on replicating the YTD project

Table VI.9. Site Visit Schedule

Project	Early Assessment Visit (6 months after start of random assignment)	Comprehensive Process Analysis Visit 1 (15-21 months after start of random assignment)	Comprehensive Process Analysis Visit 2 (12-24 months after visit 1)
Original Projects			
Colorado	4/2007	4/2007	4/2009
CUNY	1-2/2007	1/2008	4/2009
Erie	8/2007	4/2008	4/2009
New Projects			
Typical project	9/2008	7/2009	2/2011

Table VI.10. Project Documents to Be Reviewed for the Process Analysis

Document	Description
Proposal/implementation plan and budget	Submitted by each YTD project detailing project philosophy, planned activities, staffing structure, and how the intervention will be implemented.
Financial documents	Annual budget documents detailing planned expenditures on personnel, project implementation, and other aspects of operation; actual expenditures through timesheets, financial reports, and invoices.
Cooperative agreement	Generated by SSA for, and agreed to by, each YTD project outlining responsibilities of each party. Applies to original projects only.
Memorandum of understanding	Generated by Mathematica for, and agreed to by, each YTD project outlining the responsibilities of each party. Applies to all random assignment projects.
Continuation packages	Submitted by each YTD project to SSA yearly requesting continuation funding. Any changes to the original implementation plan would be described in this document.
Quarterly reports	Submitted by each YTD project to SSA detailing key activities, successes, and challenges during the reporting quarter.

modifications to the original plans. Finally, each participating YTD project submits quarterly progress reports to SSA. These reports, which highlight significant project successes and challenges encountered during the reporting period, present the perspectives of the management of the lead organizations. Information from these perspectives will complement the information that the evaluation team will gather.

3. Management Information System

All projects participating in the national random assignment impact study are using the service tracking and MIS, ETO. This system, developed and maintained by Social Solutions, Inc., is a case management system that allows project staff to track participant-level activities and interactions (known as "efforts" in ETO).

We have developed a core set of elements that each project in the impact study is required to collect through ETO, such as information on enrollment efforts and the services provided to participants (Rangarajan et al. 2007). Within each domain of required data, we identified core data elements that are then customized to reflect each project's intervention and terminology. Working with the projects, we have also included additional ETO data elements within each domain that are particular to specific projects to ensure that a comprehensive set of data is collected for each project.

We are using ETO data to address critical questions related to enrollment efforts, participant take-up of project services, the type and level of service and other issues related to service delivery. ETO will be the key data source for assessing the intensity of service utilization, and will also provide key inputs to the cost analysis. As part of the process analysis, we will also assess project staffs' use of ETO, and address the strengths and limitations of ETO for service tracking.

4. Baseline and Follow-Up Surveys

The baseline and follow-up surveys, which are being conducted primarily for the impact analysis, will also provide some useful information for the process analysis. For example, the baseline survey will provide information on the characteristics of the youth the projects intend to serve, allowing us to develop good descriptions of both the target population and the youth who actually receive services. The 12-month follow-up survey will provide information on participants' knowledge of SSA work incentives and waivers and on their experiences and satisfaction with project services. Also, the 36-month follow-up survey will provide comparable information on knowledge of SSA work incentives and waivers and limited information on satisfaction with project services.[40]

5. Administrative Data

SSA administrative data will be used primarily in the impact analysis but will play a role in the process analyses. Specifically, we will use SSA administrative data that will have been conveniently archived in the Ticket Research File (TRF), along with SSA field office data, to track the use of the SSA waivers for YTD. We will also explore using data in the TRF to compare the characteristics of youth who participate in YTD with all youth who are SSA disability beneficiaries.

6. Local Evaluations

Two of the three original YTD projects in the random assignment impact study have local evaluators who are working to answer unique sets of research questions regarding their

[40] The information from the 36-month survey on participants' knowledge of SSA work incentives and waivers and their satisfaction with project services obtained will be presented as part of the process analysis in the final evaluation report.

projects. For instance, the Colorado evaluators are conducting their own process analysis, as well as an impact evaluation using measures from state databases. The CUNY evaluators will conduct a process analysis. For those two projects, the local and national evaluation teams will share information whenever possible to strengthen both efforts. Table VI.11 describes the local evaluations for random assignment original projects where they exist.

D. PROCESS ANALYSIS FOR THE NON-RANDOM ASSIGNMENT YTD PROJECTS

We will also conduct process analyses for the four original YTD projects that did not participate in the national random assignment impact study. For these projects, we have varying information to inform the process analysis. For instance, two of them—the Iowa and Maryland projects—terminated services earlier than scheduled, as mandated by SSA. For these projects, the primary data source for the process analysis will be data collected by evaluation staff during the final year of project operations. These include field notes from site visits, discussions with project managers, discussions with project staff, and reviews of background materials. The process analyses for these two projects will focus on describing (1) the planned intervention, (2) what services were actually delivered and by whom, (3) the roles of partner organizations in the intervention, and (4) the successes and challenges related to project implementation.

The process analysis for the remaining two original projects that are not participating in the random assignment impact study—the California and Mississippi projects—will address the issues discussed above but will benefit from two additional data sources: (1) MIS that project staff use to track service delivery, and (2) local evaluations. We will review the information from these sources for inclusion in the process analysis for these two projects. Table VI.12 presents a summary of the status and, if applicable, the content of the local evaluation for each original YTD project that is not participating in the random assignment study.

Table VI.11. Local Evaluations for Original YTD Projects Participating in the National Random Assignment Impact Study

Project Name and Location	Description of Local Evaluation
Colorado Youth WINS (four Colorado counties)	A process study will feature a fidelity test examining the degree to which each participating county is successfully and fully implementing the project. Evaluators will also conduct an impact study of select outcomes using administrative data from state agencies that are partners on the project with the lead organization.
CUNY's YTDP (Bronx County, New York)	A process study will examine the relationships between person centered planning and the summer employment experience. Topics will include (1) the influence of person centered planning on youth satisfaction with summer employment and (2) changes in plan specifications following summer employment
Transition WORKS (Erie County, New York)	No local evaluation.

Table VI.12. Local Evaluations for Original YTD Projects Not Participating in the National Random Assignment Impact Study

Project Name and Location	Description of Local Evaluation
Project Status: Early Termination	
Smart Start (Iowa)	No local evaluation.
Youth Demonstration Project (Maryland)	No local evaluation.
Project Status: Normal Termination	
Bridges to Youth Self-Sufficiency (California)	Process study primarily based on data from an MIS that was specially designed for Bridges to track staff activities and youth outcomes. These data provide the basis for routine reporting to SSA and other audiences on program progress. To supplement the MIS data, the local evaluators periodically conduct targeted surveys and qualitative interviews with project participants and their families.
Mississippi Youth Transition Innovations Project (Mississippi)	The local evaluator is primarily responsible for generating statistics and assembling the content of project quarterly reports to SSA. The evaluator has also documented participant and staff experiences through surveys.

E. REPORTING THE FINDINGS

The process analysis is a critical component of the YTD evaluation. It will provide valuable input for understanding the interventions and helping interpret program impacts. Findings from the analysis on the fidelity of the YTD projects to their original designs, enrollment and services used, and project challenges and successes may help explain impact estimates and differential impacts across the projects and subgroups of participants. The process analysis is also closely tied to learning about program costs, which will in turn be a critical piece of the benefit-cost analysis. In addition, the process findings will be a key tool for future replication efforts and will provide information on the degree to which the evaluation's impact estimates generalize to other programs targeting youth with disabilities.

We will report the findings from the process analysis in the following deliverables:

- ***Early Assessment Reports.*** A brief report on each project participating in the random assignment impact study will describe the initial six months of YTD operations following the start of random assignment. These early assessment reports focus on recruitment of youth into the study, the random assignment process, enrollment of treatment group members in the YTD project, and the initial delivery of services. We submitted final versions of the early assessment

reports for the three original random assignment projects in spring 2008, and are currently drafting draft early assessment reports for the three new random assignment projects.

- ***Project Profiles Report.*** We prepared profiles of each random assignment project's intended intervention and compiled these into a cross-site report (Martinez et al. 2008). The report covers project goals and objectives, administrative structure, service interventions, target population and recruitment strategies, and client flow through project services.

- ***Special Report on the Original Projects.*** This report will present findings from the process analysis for the original seven YTD projects. We will deliver a draft of this report to SSA in winter 2009.

- ***Project-Specific Interim Reports.*** We will prepare an interim report for each project that will include detailed process findings and early implementation challenges. These reports will also present impact estimates for the year following random assignment. We will submit drafts of these reports to SSA 18 months after random assignment ends for each project, with the first ones to be prepared in fall 2009 for the Colorado and Erie projects.

- ***Final Report.*** The evaluation's comprehensive final report will cover impact findings three to four years after random assignment, as well as findings from the cost analysis, the cost analysis and process analysis, and process analysis. The process findings will be presented in more summary form in this report than in the project-specific interim reports. We will deliver a draft of the final report to SSA in August 2014.

CHAPTER VII

COST DATA ANALYSIS

A key element of the YTD evaluation is to measure the costs necessary to operate the YTD projects. For policy action, cost information is essential, because legislators and administrators will not be able to proceed with a program or policy unless they have a good idea of the program costs. Cost information is also essential for a benefit-cost analysis. The process analysis (discussed in the previous chapter) will carefully document the intervention components and services provided to the youth; the cost analysis will estimate the resources used to deliver those components, regardless of who pays for those resources. The YTD cost data analysis will summarize the overall costs of operating each YTD project, as well as the costs of key intervention components. In addition, using information on youth participation in project services based on data collected in Efforts-to-Outcomes (ETO), we will calculate two unit cost measures: (1) average cost per youth enrolled in the evaluation, and (2) average cost per project participant.[41]

In this chapter, we first outline our objectives for the cost analysis and provide the framework we will use to measure costs (Section A). Also in Section A, we identify some key analytic issues to keep in mind as we conduct the cost analysis. In Section B, we define the steps we will take to measure costs both within and outside of a YTD project. Section C discusses our approach to estimating the benefit costs to SSA of implementing the interventions, as well as the costs of the waivers. Finally, Section D presents our plans for reporting the findings from the cost analysis.

[41] The former measure includes all youth randomly assigned into the evaluation, while the latter measure refers to those enrolled in the study, and who subsequently received project services. These unit cost measures are consistent with the two types of impact estimates we will generate, as discussed in Chapter VIII.

A. OBJECTIVES AND OVERVIEW

1. Research Objectives

The cost data analysis will provide a comprehensive assessment of the costs of operating each YTD project. In examining project costs, we will address two primary research questions:

1. ***What does each YTD project cost?*** What are the aggregate costs of operating each YTD project during a typical operating year? What is the cost of each major project component? What main project activities or functions contribute to the variation in costs across projects?

2. ***What does the project cost per participant?*** What does it cost to operate each YTD project, on average, per youth enrolled in the study and per participant? What factors explain the per-participant cost of each project, as well as the important variations across projects?

Understanding total project costs, as well as how costs are roughly allocated across key project components, is important for several reasons. First, it will provide programs and policymakers with an understanding of the resources it takes to implement such interventions, as well as what types of services or activities the costs are going toward. Because each project serves approximately the same number of youth, these measures of costs and costs per key component can also be used to compare costs across projects. Furthermore, a good understanding of total project costs and costs of key project components can be useful for replicability and sustainability. Finally, knowing unit costs, or cost per participant, will be critical for the cost-benefit analysis, where we will compare benefits per participant with costs per participant.

Because of the programmatic differences across the YTD projects, the cost analysis will be project specific; however, we will use a common framework across projects to measure costs. For each project, we will identify the types of activities, services, and other factors that contribute most to costs, to examine which of these factors are most responsible for cost variations among the projects. This will help policymakers and program administrators assess the costs of replicating a particular project's approach to providing services to youth with disabilities.

2. Framework for Measuring Project Costs

The cost analysis will provide consistent cost measures across the projects and the resources used by projects, even if those resources do not represent a cost to the projects. Our design for the cost analysis follows the conceptual approach described by Handwerger and Thornton (1988). We will start with a specific definition of total costs and use information from administrative accounting systems, as well as from interviews with project staff, to estimate total costs. We will then combine the total cost estimates with enrollment and participation data from ETO to estimate average costs. We are interested in key cost elements that lead to variation in costs across projects; therefore, as part of the

comprehensive site visits for the process analysis, we will collect information from project staff that will help us break down costs by key project components. We will also gather information on administrative and recruitment costs, which are not associated with specific project components.

Our approach to conducting the cost analysis will involve the following six steps:

1. Clearly define the intervention in each project.

2. Identify the resources used to provide the intervention, and disaggregate costs into key categories.

3. Determine a steady-state time period of program operations for which costs will be estimated.

4. Use market prices or equivalent unit-cost estimates to determine the market value of resources.

5. Sum up across value for all resources to obtain total costs.

6. Use enrollment and participation information to calculate average costs per participant.

Our approach to conducting the cost analysis has two main strengths: (1) a clear analytic framework, and (2) ETO data on service utilization. Cost analysis is inherently challenging, and we are likely to encounter unanticipated issues and ambiguities in the field. By setting up a clear framework to guide our analysis, however, we will be better able to deal with these ambiguities and uncertainties. By using the detailed information on receipt of project services from ETO, we will be able to come up with good estimates of the cost per participant. This will be helpful in conducting analysis of factors affecting costs, as well as the reasons for cost variation across participants. Estimates of costs per participant will allow us to perform benefit-cost analyses for key subgroups of youth as identified in the impact analysis.

3. Key Analytic Considerations in Estimating Costs

Identifying potential analytic issues that are likely to emerge as we start gathering cost data, and planning for those ahead of time, can help facilitate the estimation of project and unit costs. Here, we present three challenges that we have identified that we will address in the ways described below:

1. ***Clearly defining the resources used that will count as project costs.*** Most YTD projects will leverage community resources to provide services to youth and, in many cases, will also likely refer youth to services available in the community. It will be important to have a clear rule for identifying what resources provided by organizations other than the organization that administers the YTD project will be included in the cost analysis. Our analysis will include

as resources all the services directly provided to youth by project staff, as well as services provided to YTD youth through formal subcontracts or through formal, though nonmonetary, agreements between the YTD administrator and other organizations. However, general referrals to services or to education and training institutions will not be counted as resources spent in delivering services; instead, they will be captured in the impact analysis as a difference in service use by treatment and control group youth.

2. ***Apportioning a project's total costs into key component costs.*** YTD projects have many components, and, in theory, it would be useful to identify the cost of each major component. Doing so would improve the estimation of costs for future interventions that include combinations of the YTD components. However, since apportioning a project's costs to each of its component ***activities*** can be challenging, we will attempt to break down costs only by major project components (for example, employment activities, waivers and benefits counseling, and other services). This task will be easier in some projects, where specific staff are dedicated for a task (for example, Neighborhood Legal Services (NLS) staff provide most of the waivers and benefits counseling in the Erie project), while it will be more challenging in others (specific staff on the Colorado project are responsible for providing work-based experiences and benefits management, but all staff provide case management services). In some projects, or for some components, the breakdown will only be approximate; nonetheless, it is a useful indicator of how a project is spending its resources. To estimate costs for key components, we will also draw on ETO data, which tracks in detail the types of services that youth receive, and also ask staff to report on the amount of time they spend in a typical day or week delivering different types of services.

3. ***Separating evaluation costs from implementation costs.*** The YTD projects will incur some expenses in accommodating research requirements, and they will be compensated to offset the burden of participating in the evaluation. To the extent that we can identify evaluation costs and factor them out of the cost analysis, we will do so. In general, we expect evaluation costs to be relatively small for all projects except Colorado and CUNY. The Colorado project will have a larger evaluation cost, because it will be conducting its own process analysis, as well as an impact evaluation using measures from state databases, while CUNY will conduct a process analysis.

B. STEPS IN CALCULATING YTD PROJECT COSTS

We will take a step-by-step approach to measuring costs uniformly across the YTD projects, as described in the framework for conducting the cost analysis.

1. Clearly Define the Intervention in Each Project

The first step in conducting the cost analysis is to make sure that we have clearly identified all the services a project is providing to the youth. This description will be a critical element of the evaluation's process analysis and will capture in detail the different types of project services and the order in which youth receive them. In addition, as part of the process analysis, we will document which of these resources are provided directly by YTD project staff, and which are provided by other agency staff as part of some formal subcontract arrangement or other type of explicit agreement.

2. Identify and Classify Types of Project Costs

Our analysis will encompass the cost of all resources used in delivering services and administering a YTD project during a reference period (discussed in subsection 3). These include both budgeted and unbudgeted costs. In addition, we will attempt to identify the cost of providing technical assistance (TA) and of using the ETO MIS. Table VII.1 shows key data sources for each main source of cost.

a. Budgeted Project Costs

We will build up an estimate of a YTD project's aggregate costs by starting with budgeted items, including labor costs and direct and indirect costs as described in Table VII.2. The information on budgeted costs will come from a project's administrative accounting system, supplemented by information obtained through in-depth interviews with key project staff. In particular, we will examine the project's annual budget, staff time sheets, project-related invoices, financial reports provided to SSA, and annual financial reports from the organization that administers the project.

Table VII.1. Data Sources for Project Costs

	Project Costs			
Data Source	Budgeted Project Costs	Unbudgeted Project Costs	TA Costs	ETO Costs
Administrative Accounting Systems				
Budgets	X			
Time sheets	X			
Financial reports	X			
Invoices	X			
Site Visits				
Staff interviews	X	X	X	X
Detailed time use data	X	X		
Data collection tools	X	X		
Other Sources				
MPR administrative files			X	X
ETO	X		X	X
Other agencies		X		

Table VII.2. Types of Budgeted Project Costs

Labor Costs
Wages and salary
Fringe benefits (such as medical insurance, unemployment and workers' compensation, life insurance, disability insurance, pension, profit sharing, holidays, vacation, sick leave, and personal leave)

Other Direct Costs
Direct services and payments to YTD participants
- Transportation allowances and payments, if applicable
- Other supportive service payments or allowances
- Participant incentives, bonuses, stipends, or wages

Other purchases and expenditures
- Vendor payments on behalf of YTD project participants (for example, job coaching)
- Purchased services
- Lease equivalent of vehicles, supplies, or equipment
- Direct payments, subsidies, or incentives to employers
- Staff travel and subsistence
- Other incentive payments

Indirect Costs
Project overhead, including facilities/rent, utilities, insurance, fixtures and furniture, equipment, and general office supplies and services
General administrative costs

We must be careful to accurately capture the resources spent on YTD-related activities. For example, because some YTD staff, particularly managers, may also be overseeing other projects, we will need to determine, through administrative accounting systems and discussions with these staff, the fraction of time they spend on YTD-related activities. Similarly, many organizations that administer YTD projects are subcontracting service provision to other organizations, and these resources must be counted. As examples, the Erie YTD project has subcontracted with the NLS, and the Human Resources Development Foundation has contracted with the West Virginia University Center for Excellence in Disabilities for waivers and benefits counseling. We will record these subcontracted costs as purchased services in the budgeted project costs.

In addition, administrative accounting systems will provide information on indirect costs, such as utilities and office supplies. We will also use each administering organization's audited indirect rate to get overhead costs. One component of indirect costs that warrants special consideration is capital costs, which are expenditures on depreciating assets, such as computers, automobiles, and furniture. Capital costs should not be assigned entirely to the cost period when they are incurred, because doing so ignores the fact that the asset has value and can be sold or used in the future. We will use Internal Revenue Service guidelines to spread capital costs over a period that reflects the useful life of the underlying asset.

b. Unbudgeted Project Costs

Budgeted costs do not always fully reflect the resources it takes to conduct project operations, because projects often use additional goods and services to accomplish their

goals. Our cost data collection and analysis will attempt to capture the costs of resources provided by organizations and people that typically may not be reported in the administrative accounting systems. These unbudgeted costs include:

- ***Unbudgeted External Services.*** The primary source of unbudgeted costs is services that are integral to the project but supported with funds outside those explicitly budgeted.[42] For example, the Colorado, Erie, and Miami projects all leverage resources from their local VR agencies, and the CUNY project benefits from a city-based summer employment program. To the extent that these services include some formal agreement with the agencies to prioritize and provide services to YTD youth (though there may be no money exchanging hands), it will be appropriate to factor these resources in as YTD costs. Even if there is an agreement, these services can only be classified as resources expended if the collaborations are working well and the YTD youth actually receive the prioritized services. As part of the comprehensive site visits for the process analysis, we will need to carefully assess the extent to which YTD agencies have such agreements and are successfully using them to provide services to youth.

- ***Unpaid Assistance.*** Projects may receive unpaid assistance from volunteers or benefit from donated goods and services, such as computers or other equipment. During the cost data collection and analysis, we will measure such assistance and assess its value. For example, in addition to paid staff, the CUNY project uses volunteer staff to help with its Saturday workshops and person-centered planning sessions. In this and other projects that use volunteer staff, we will value the time of such staff by using an estimate of the wages that the project would pay if it had to hire staff to provide these services.

- ***Other Staff.*** We will identify staff of the organization that administers the YTD project who may provide YTD services but who are not included in the YTD budget. This may occur when the staff funding falls under a different program run by the organization or has been shifted to another funding source so that the YTD project does not bear the cost. During the comprehensive site visits, we will identify these staff and obtain their cost information and the proportion of time they spend on the YTD project.

c. TA Costs

The YTD projects will benefit from resources that the evaluation's TA provider (TransCen) uses to promote the success of the projects. The projects receive TA on recruitment, enrollment, intervention design, service delivery, and other topics. Their TA

[42] External services that are integral to the project stand in contrast to external services that a YTD participant may use by virtue of the project but that are not specified components of the project intervention.

needs are met through many modes, including site visits, in-person and web-based trainings, annual conferences, and telephone consultations. We will track project-specific costs through information provided by TransCen on staff time and expenses (such as travel) for a specific project. However, because some TA is provided jointly to all projects (such as annual conferences and general TA services provided to all projects through web-based or other trainings), we will estimate the prorated costs of these services and add them to the project-specific TA costs.

d. ETO Costs

Another service the evaluation is providing to the YTD projects is the use of ETO, the web-based case management tool. Though part of its function is to collect data for the evaluation, ETO is primarily a tool the projects use to manage the delivery of services. Project staff use ETO to track recruitment and enrollment efforts, monitor services provided, and observe participant outcomes. The project-specific cost of ETO will be assessed through accounting data maintained by the evaluation contractors on the cost of (1) accessing the ETO software, (2) customizing it to meet the needs of the individual projects, and (3) evaluation staff time to train project staff on ETO and troubleshoot problems. Much of the cost of ETO will be for customization and training at the time of project startup, which we will treat as a capital cost and amortize its value for the cost data collection year.

3. Determine a Steady-State Time Period Over Which Costs Will Be Estimated, and Collect the Cost Data

We will identify a one-year period for each project that represents a relatively steady state of operations, when the project operations will most closely resemble those of an ongoing program. Because the projects go through a planning implementation and refinement phase, when they are building up operations and enrolling cases, we do not want to pick a period too early in the evaluation to gather costs. We also need to make sure that the cost analysis period does not reflect the phasing out of project services. We are planning to collect cost data for a steady-state period beginning roughly two years after the start of project services (Table VII.3) and ending a year later. Because each project has a slightly different enrollment period, the steady-state period will vary a little from project to project. The cost analysis period will be either a calendar year or a program year, depending on the project service cycle and the administrative accounting system.

We plan to collect cost data for each project to cover at least one one-year period. A second year of cost data would provide additional insight into project costs and verify the accuracy and robustness of the data collected for one year. This is not an option for some projects, such as the Colorado and Erie ones, because they are operating for a shorter time. However, such an effort would be useful for projects that have longer enrollment and service delivery periods, such as the CUNY project and, perhaps, the new projects.

Table VII.3. Site Visit Schedule for Cost Data Collection

Project	Services Start Date	First Site Visit	Second Site Visit	Cost Data Period
Original Projects				
Colorado	9/2006	4/2008	4/2009	2008
CUNY	10/2006	1/2008	4/2009	mid-2008 to mid-2009
Erie	2/2007	4/2008	4/2009	2008
New Projects	5/2008	7/2009	2/2011	mid-2010 to mid-2011

We will collect cost data for each YTD project during the two comprehensive site visits that we will conduct for the process analysis at each random assignment site. During the first of these visits, we will develop an understanding of a project's key cost components. The actual cost data will be collected primarily during the second visit and, secondarily, through follow-up telephone calls with project staff, partner organizations, and other service providers in the community. Because of the staggered start of services in the YTD projects, we will first collect cost data for the Colorado and Erie projects, in conjunction with our second process analysis site visit in spring 2009.[43] We will refine and customize our protocol for the other projects based on that experience.

A member of the process study site visit team will be designated as the liaison to the cost study. That person will work closely with staff of the YTD project to understand the resources that support the intervention and to obtain access to expenditure and staffing records. The liaison will clarify with project staff that the purpose of the visits is not to audit project expenditures or to ask staff to account for deviations of actual from budgeted costs, but rather to gather data that will help us understand and measure costs for evaluation purposes. The liaison will use a standardized set of data collection tools and will follow consistent definitions and conventions, which will ensure the validity of cost comparisons across projects. To produce comparable cost estimates across the projects, we will convert all costs to 2011 dollars using the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W), because SSA uses that index to adjust benefits for inflation.

4. Determine the Market Value of Resources Used by the Projects

The next step in the cost estimation process is to determine the market value of specific resources used by the projects—that is, the price that would be paid for those resources in the open marketplace. For the most part, this will be straightforward, because staff costs and other resources that projects use will usually reflect the price paid in the marketplace, and the costs in the administrative accounting systems will reflect the true costs. The costs we will need to determine the value of relate mostly to unbudgeted costs. As described earlier, for volunteer labor, we will use the market costs to the project if it were to hire

[43] If necessary, we will conduct a separate visit before the second comprehensive site visit, to collect the cost data.

additional staff to provide these services. For unbudgeted services provided by other organizations that the administering organization has arrangements with, we will obtain the costs of providing these services by talking to project management and staff at the relevant organizations during the site visits.

5. Estimate Total Project Cost

Through the methodology described above, we will compile each project's budgeted costs, unbudgeted costs, TA costs, and ETO costs. We will then compute an estimate of a project's total cost by summing the values of these cost elements (Table VII.4).[44]

Table VII.4. Total Project Cost

Type of Cost	Amount
Budgeted Project Costs	
Labor costs	
Other direct costs	
Indirect costs	
Unbudgeted Costs	
Unbudgeted external services	
Unpaid assistance	
Other staff	
TA Costs	
ETO Costs	
Total Project Cost	

6. Estimate Component Costs

During the comprehensive process site visits, to help us obtain the costs of key program components, we will discuss staff responsibilities with project managers and staff, as well as the time staff typically allocate to the functions they serve. Using this information, along with data obtained from ETO, we will allocate total costs to the key project components. By definition, component cost estimates will be less precise than the total cost estimate; nonetheless, these estimates will help us understand the variation in total costs across the demonstration projects.

We will use a single framework to estimate costs by component in a way that will be relevant for program administrators and will also make it easier to compare costs across the projects. As Table VII.5 shows, we will try to disaggregate a project's total cost into three

[44] We expect that SSA will bear most of these costs through its funding of YTD services. To the extent that there are significant costs covered by other funding sources, we will disaggregate them while conducting the cost analysis.

key YTD intervention components: (1) work-based experiences; (2) benefits counseling; and (3) youth empowerment and general case management (which includes systems linkages, family supports, and social and health services).[45] To these we add the following categories of cost-generating activities that will be present for some or all of the YTD projects:[46]

- ***Program Administration Costs.*** This cost category includes project management and oversight, record keeping, and general administrative duties.

- ***Outreach and Recruitment.*** This category includes activities specifically aimed at publicizing YTD project services and enrolling youth in the project.

- ***Supportive Service Payments.*** This category includes the actual value of payments provided by the YTD project directly to youth, or to other organizations to promote the employment of participating youth. For example, the CUNY project has set aside funds to help youth pay for transportation.

Table VII.5. Project Component Total Costs

Project Component	Cost	Percent of Total
Work-Based Experiences		
Benefits Counseling		
Youth Empowerment and General Case Management		
Administration		
Outreach and Recruitment		
Supportive Service Payments		

To implement this disaggregation, we will attempt to map each staff position and/or key project activity into one or more of the key components, and verify this mapping with project staff during our first comprehensive site visit for the process analysis. For staff and activities that map into several cost components, we will work with project administrators and staff to identify the approximate portion of time devoted to each of those components. After identifying all the staff time and/or activities that map into a given cost component, we will aggregate the costs associated with that time or those activities to obtain an approximate estimate of that component's cost.

[45] Because of the overlaps between some of these broader categories of services, it will be difficult to break the costs down into any more detailed categories.

[46] Another key cost for the YTD interventions are the waiver costs. These costs are not directly borne by the projects, but indeed represent a cost to SSA, and are important to document. A discussion of our approach to estimating these costs is discussed in Section D of this chapter.

7. Estimating Unit Costs

After we have developed estimates of total project costs, we will standardize these estimates by converting them into unit cost estimates related to the level of project participation. These unit cost estimates will give us a basis for making comparisons across the YTD projects and will provide information that may be valuable in planning future interventions. They will also be critical inputs for the benefit-cost analysis. We will estimate unit costs over the life of a project in two distinct analytic stages, as described below.

In the first stage of estimating unit costs, we will calculate these costs over a *yearlong cost analysis period*. This window will reflect a steady-state period of project implementation. Our cost calculations based on this window will represent our best estimates of what it might cost to implement YTD-like services on ongoing basis. These unit cost calculations will be based in part on data from ETO on project enrollment and participation. In ETO, project staff record all the contacts they have with youth and their families, as well as other efforts made on behalf of a youth, including the duration and type of services provided. Following the methodology summarized in Table VII.6, we will use this information to calculate the *number of youth participating in project services* during the yearlong cost analysis period and the *average duration of their participation* (in months) during this window. We will use these two values to calculate the *total person-months of participation* in services across all the youth enrolled in the demonstration project during the cost period. We will obtain the *total project cost* during the cost analysis period from Table VII.4 and use it to calculate two key measures of unit project costs. First, we will calculate the *average total cost per participant during the cost period* by dividing the total cost over this period by the number of youth who received services during this period. Second, we will calculate the *average total cost per participant month during the cost period* by dividing the total cost by the total person-months of participation during the cost period.

Table VII.6. Calculating the Unit Costs of YTD Projects During the Cost Period

	Number of Participants During Cost Period	Average Duration of Participation During Cost Period (Months)	Total Person-Months of Participation During Cost Period	Total Project Cost During Cost Period	Unit Costs During Cost Period: Average Total Cost per Participant	Unit Costs During Cost Period: Average Total Cost per Participant Month
	a	b	c = a*b	d	e = d/a	f=d/c
Project 1						
Project 2						
⋮						
Project 6						

The second stage of estimating unit costs will involve calculating the per-participant average cost for the *lifetime of the project.* To do this, we will obtain the average total duration of a participant's receipt of project services during the entire period of the youth's engagement with the project (from enrollment to termination) from ETO records. We will calculate the *average total cost per participant* by multiplying the average total duration of participation by the average cost per participant month during the cost period (Column f in Table VII.6). This average total cost per participant provides a standardized metric for understanding the overall cost for a project to deliver services to a participant. It will be consistent with per-participant impact estimates from the impact analysis, thus facilitating the use of this unit cost measure in the benefit-cost analysis (described in Chapter IX). In addition, we will also calculate the *average total cost per eligible youth* in a similar fashion to facilitate benefit-cost analysis using per-treatment-group-member impact estimates.[47]

We will also use this methodology to calculate unit costs for the key YTD intervention components. These calculations will be based on data on participation in specific components and the component total costs in Table VII.5. While they will be approximations, we will use these component unit cost measures to better understand the variation in total costs across projects. They will also allow us to describe and analyze the variation in costs across participants that could arise because certain subgroups of youth may participate in specific intervention components with more or less intensity. These analyses of component unit costs will improve our understanding of the determinants of total project costs and how project resources are used. The unit cost measures will also facilitate benefit-cost analyses of key subgroups of youth.

C. ESTIMATING COSTS OF SSA BENEFITS AND COSTS OF THE SSA WAIVERS

The YTD interventions, including the services and waivers, will affect the benefit payments that SSA makes to youth participating in the intervention. Each of the five waivers extends an existing SSA work incentive that reduces the effects of additional income on benefit months. Consequently, the waivers will constitute a major cost to SSA in delivering the YTD interventions because the agency will be paying higher benefit amounts to YTD participants under the waivers relative to what they would have had to pay under existing program rules.

To document the full costs of operating the interventions, we will calculate the change in the benefit amounts as a result of the interventions and the specific costs of providing the YTD waivers. We will also document the administrative costs to SSA of documenting and tracking the waivers.

[47] See Chapter VIII, Section C for a discussion of the distinction between per-participant (TOT) impact estimates and per-treatment-group-member (ITT) impact estimates.

1. Estimating the Costs to SSA of Providing the YTD Waivers

The YTD interventions may result in treatment group youth having different benefit amounts than they would otherwise have experienced for three reasons: (1) the YTD waivers may result in youth receiving greater benefit amounts regardless of any other changes in their economic circumstances; (2) the YTD employment services may lead youth to work and earn more, which could affect the benefit amounts they receive; and (3) the waivers and benefits counseling may encourage youth to increase their use of SSA work incentives. Separating the impacts of the waivers and benefits counseling on employment outcomes from the impacts of the employment services on employment outcomes is not possible because the interventions are provided as a package to youth.

We will use two approaches to calculate the benefit and waiver costs to SSA of providing the YTD interventions:

1. We will first calculate the total costs to SSA of the increased usage of SSA work incentives on benefit amounts as a result of the YTD interventions. This estimate will provide SSA information on the total costs of providing expanded work incentives with an employment intervention. For the reasons noted above, we expect the YTD interventions to increase the treatment youth's use of all SSA work incentives, including existing SSA work incentives and the extensions of these work incentives through the YTD waivers. We can compare the total cost to SSA of the expanded work incentives by calculating the difference between the total benefit amount received by treatment group youth and the total benefit amount received by control group youth. The benefit amount received by control youth represents the amount that SSA would have paid treatment group youth in the absence of the YTD interventions.

2. We will also calculate the direct cost of the waivers by comparing the benefit amounts recorded in SSA administrative files for treatment group members with simulated benefit amounts that we will calculate for these same youth using standard SSA program rules (i.e., without the waivers). This estimate will provide SSA information on the specific costs associated with expanding each of the individual waivers. This estimate assumes an accounting of waiver costs based on the actual outcomes experienced by treatment group youth. Thus, if the interventions have an impact on earnings, this approach would calculate the additional benefits paid to youth as a result of the waivers, based on their changed situations. As noted above, any impact of the YTD interventions on earnings will reflect the combined effects of project services and waivers. However, by calculating the waiver costs using this approach, we would essentially be attributing all of the earnings impact to project services. This is because, if the waivers did not exist, the impact on earnings might be smaller, and as a result, the waiver cost would be lower. Hence, the waiver-cost estimate based on this approach should be viewed as an upper bound for the cost of the waivers.

Both estimates provide important information to SSA for planning purposes. The first cost estimate represents the total costs to SSA of the YTD demonstration, which will be important in assessing the overall cost effectiveness of the demonstration. The second cost estimate attempts to capture the direct effect of expanding work incentives with return to work initiatives, which will be useful in considering expanding waiver incentives in other SSA demonstration projects or to other SSA populations.

SSA is also interested in learning about the take-up rates for each waiver separately and the costs to SSA of each type of waiver. While we can track take-up rates of waivers relatively straightforwardly, it is much more challenging to assess the costs to SSA of each waiver separately because multiple waivers are offered to youth as part of the YTD interventions and these waivers interact with one another in complicated ways. We will attempt to use the same approaches described earlier to calculate separately the cost of each waiver. Under the first approach, we will examine the observed use of each work incentive (or the extent to which CDR benefits are used) for treatment group members, and compare that with the use of the same work incentive by control group members (who represent the counterfactual, or what would have happened in the absence of the YTD interventions). Under the second approach, we will compare to estimate separate waiver costs using the second approach, we will compare actual benefit outcomes for treatment group members for each waiver with the simulated outcomes under the existing rules for the treatment group. However, we will include the appropriate caveats in doing so, and acknowledge that sum of the separate costs of each waiver will not be equal to the estimated cost of all five waivers combined.

2. Determining the Administrative Costs of the Waivers

In addition to the actual costs of the waivers, there are costs of administering the waivers. These administrative costs are a function of the staff time involved in this process (for example, the field office staff, the area work incentive coordinators (AWIC), and other SSA staff involved in the administration of waivers). This would include time involved in recording youth who are eligible for waivers, any other time spent processing cases, and any time spent in training and changes to recording information in the system. Data on staff time spent will be obtained qualitatively through interviews with key staff at SSA—staff in field offices as well as the AWIC. We will work with SSA to facilitate these meetings. Based on total staff costs and the number of youth enrolled in the YTD projects, we can calculate a unit administrative waiver cost per youth.

D. REPORTING THE FINDINGS

We will produce analytic cost memos for each project six months after the second process site visit. This means that the project cost memos will be prepared by May 2009 for Colorado, October 2009 for CUNY and Erie, and August 2011 for the three new random assignment projects. Our cost analysis will include:

- Comprehensive descriptions and assessments of each project's total cost for a one-year period

- Cost per participant and per participant month
- Costs of specific YTD project components

Summary findings on project costs will be included in the draft final report on the YTD evaluation, which is scheduled for delivery to SSA in August 2014.

CHAPTER VIII

ANALYSIS OF YTD PROJECT IMPACTS

A rigorous assessment of the impacts of the YTD projects is a key component of the YTD evaluation. The impact analysis will examine whether the YTD projects are effective in improving the outcomes of the youth they serve. As part of the impact analysis, we will identify the effects of the YTD projects on outcomes for the group of youth who were offered the opportunity to receive program services, as well as for those who actually participated and received the project services.

This chapter describes our approach to conducting the impact analysis. In Section A, we describe the overall objectives of the impact analysis and the research questions we will address as part of this analysis. Section B elaborates on the primary short- and longer-term outcomes we expect the YTD projects to influence, as described in the conceptual model in Chapter I. Section C describes the basic approach to conducting the impact analysis, and Section D discusses extensions of the impact analysis, such as pooled and subgroup analyses. Section E discusses how we will address special analytic issues, such as multiple comparisons and survey nonresponse. Section F provides a brief discussion of the data sources, and Section G describes the plan for reporting the findings from the evaluation.

A. OBJECTIVES AND RESEARCH QUESTIONS

The main goal of the impact analysis is to determine whether the YTD projects succeed in improving the intended outcomes, including increased participation in work-related activities, greater employment and earnings, increased income, reduced risky behavior, and improving the overall well-being of youth with disabilities. In particular, the impact analysis will address three main questions:

1. ***Do the YTD projects achieve their fundamental objectives?*** Do the YTD projects achieve their goals of promoting employment and earnings outcomes for youth with disabilities? Do they increase youths' income, and do they have

the potential to reduce reliance on public assistance? Do the projects improve the well-being of the youth they serve?

2. ***What are the interim effects of YTD projects on work-related experiences and attitudes?*** Do the YTD projects lead the treatment group youth to receive more employment-focused services than the control group youth in the short run? Do the programs lead to better work attitudes and greater work experience in the short run?

3. ***Do the projects work better for some youth than for others, and do some program strategies work better than others?*** What are the characteristics of the youth who benefit most from YTD interventions? Which strategies are more effective or less effective at improving outcomes for youth with particular characteristics?

We will address these questions using both survey and administrative data. The survey data will be collected approximately 12 and 36 months after random assignment. A variety of administrative data will be used to assess program impacts and will primarily cover a 36- to 48-month period following random assignment for most youth. (Section F of this chapter contains a brief description of the data sources, and more detailed information on data sources for the impact study is contained in Rangarajan et al. 2007.)

Answers to these questions will provide SSA and other agencies and programs with useful information on effective strategies to help youth with disabilities become independent and move toward self-sufficiency. They will also help programs identify groups of youth who may benefit more or less from services, or the mix of strategies most likely to help the youth become employed and move to self-sufficiency.

B. ANTICIPATED IMPACTS OF YTD

The goal of the YTD evaluation is to identify projects with strong interventions that provide services to address many of the barriers that youth with disabilities face in their attempt to transition from school to work. By providing expanded services and waiving certain disability program rules, the projects are expected to encourage youth to work and/or continue their education, and improve other outcomes for the youth. (Figure I.1 in Chapter I lays out the conceptual framework underlying the YTD evaluation.) We do not expect that many beneficiaries will leave the disability rolls during the evaluation's four-year follow-up period, especially during the early years of the study. This is partly because of the SSA work incentives, which allow youth to work and have some earnings while remaining on SSA. Furthermore, the SSA waivers offered as part of the demonstration, particularly the age 18 redetermination waivers and the more generous work incentives for treatment group participants, will also help these youth retain benefits longer. However, many youth are expected to make progress toward the goal of eventually getting off the SSA rolls through employment or continued education in the near term.

If effective, the most immediate impacts of the interventions should be reflected in increased employment-focused services and work-related experiences for those in the

treatment group, more paid employment, greater income resulting from increased employment and more generous work incentives offered by the waivers, more positive attitudes and expectations about the future, and continued progress in education for projects that emphasize education. In the intermediate and longer terms, we expect treatment group youth in the projects to increase their employment and earnings, have greater income, reduce risky behaviors, and have greater self-determination and self-efficacy and move toward independent living. Furthermore, we expect that, in the considerably longer term, particularly after the waivers are no longer in effect, the projects will reduce youths' dependence on disability programs.

Thus, we expect the YTD interventions to affect some outcomes quickly, while, for other outcomes, it may take considerable time before we see impacts in the expected direction. Our analysis will carefully distinguish between outcomes for which short-term impacts are anticipated and those for which impacts are anticipated only in the longer term. Because of the relatively short follow-up period for the evaluation, we expect to be able to observe impacts on employment and earnings, but do not expect to see reductions in SSA benefit amounts or movement off the disability rolls.[48] However, our research design will allow SSA to use its own administrative data to estimate long-term impacts on some of the main outcomes after the scheduled end of the evaluation contract.

The rest of this section discusses the outcomes we will examine in greater detail. The short-term impact estimates will be based on information gathered from the 12-month follow-up survey, as well as administrative data on employment and benefits receipt. 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. It is important to recognize that, because the target age range for the YTD interventions is broad—including youth ages 14 to 25—short- and longer-term transitional pathways and goals can vary, depending on the youth's age at enrollment into a YTD project.

As part of the YTD 12- and 36-month surveys, we are gathering a large amount of information on youth outcomes related to different aspects of the youth's life. In particular, in the 12-month surveys, we will gather detailed information on youths' participation in a variety of services, education progress of youth, work-related experiences, understanding of work incentives, and youths' expectations about the future. In the 36-month survey, we will gather information on employment and earnings, education and skills attainment, income and assets, living arrangements, risky behavior, self-determination, and other related variables.

[48] The evaluation's three-year observation period is "relatively short" in the sense that this is not enough time to allow the youngest members of the YTD target population (the eligible age range is 14 to 25 years) to fully enter the labor force. Furthermore, the SSA waivers for YTD will be in effect throughout this period, and some of the intervention's hypothesized impacts on program participation and benefits are unlikely to be manifested until after the waivers end.

While all of these outcomes are important, and it will be useful to assess the impacts of the interventions on all outcomes, we have to be careful about the problem of "multiple comparisons." This problem is that, when a large number of statistical tests are performed, the probability that at least one will appear statistically significant by chance, even if no true significant effects exist, is greater than the significance level used for any one test (typically 5 percent). Thus, simply comparing each of the p-values to the 5 percent significance standard would lead us to mistakenly find more spurious "impacts" than the underlying true effects. While corrections exist to help address this problem, the corrections often become stringent as the number of comparisons increases, and may lead to an error in the other direction, so that true underlying impacts are no longer detected.

One proposed approach to addressing multiple comparisons is to limit the number of main outcomes we examine to those areas where we expect the programs to have the greatest impacts (what we refer to as primary outcomes) and view other impact estimates as supporting or supplementary analyses. In particular, following the approach suggested in Schochet (2008), we will specify, *a priori*, the primary domains in which we would expect to see program impacts, and specify primary outcomes to be tested in these domains. These primary outcomes will be the main hypotheses we test, correcting the standard errors appropriately to address the multiple comparison issue. Our goal is to try to be as parsimonious as possible in defining the domains and primary outcomes, while making sure to capture the major areas where the program might have impacts. As discussed earlier, the more primary outcomes we include and make the multiple comparison adjustments, the greater is the potential for loss of power (see Section E). In addition, we will examine supplementary outcomes to help explain impacts on the primary outcomes.[49] These supplementary analyses will provide further information about our primary outcomes and point to possible areas for future research. However, we cannot lead with these supplementary findings if there are no impacts on the main outcomes, and we will have to view these findings as exploratory and worthy of further investigation. In the next section, we describe the domains and primary outcomes for the short- and longer-term impacts, as well as some of the supplementary analyses we will conduct. Section E contains more details on the multiple comparisons problem and how we will address it.

1. Short-Term Impacts

Short-term impacts will be estimated largely on the basis of data from the first-year follow-up survey currently being fielded, and will cover a period from random assignment to about a year after random assignment for most youth. As Table VIII.1 shows, we have grouped the domains for which YTD impacts are expected in the short term, and describe the primary outcomes we will examine as part of each domain. We also describe other supplementary hypotheses we will examine related to these domains.

[49] If the primary outcomes show impacts, we will not need to worry about conducting multiple comparisons adjustments for the supplementary outcomes.

Table VIII.1. Primary and Supplementary Outcomes for Which Impacts Are Anticipated in the Short Term

Outcome Measure	Description of Measure
Employment-Focused Services/Activities	
Primary outcome	Receipt of any employment-focused services (including help finding jobs, help with resumes, internship volunteer work, community employment, job coaching, and other work-based services)
Supplementary outcomes	Receipt of individual services, amount of services (number of months of services received, frequency of services, duration of services), other general non-employment-focused services received
Paid Employment	
Primary outcome	Ever employed during first year of random assignment, fraction of months employed during first year of random assignment
Supplementary outcomes	Earnings, hours worked, full-/part-time work, time pattern of employment, number of jobs held
Youth Income	
Primary outcome	Total income from earnings and benefits during first year of random assignment
Supplementary outcomes	Type and amount of earnings and benefits received, amount of SSA benefits, use of SSA work incentives, knowledge of SSA benefits
Attitudes and Expectations	
Primary outcome	Attitudes and expectations about the future, measure of self-efficacy
Supplementary outcomes	Educational expectations, employment expectations, independent living expectations, self-efficacy items and locus of control, social interactions
Educational Progress	
Primary outcome	Enrolled in or completed high school since random assignment
Supplementary outcomes	Time spent in school, type of school attended, Individualized Education Plan (IEP) completed, received any special skills training

a. Employment-Focused Services/Activities

All the YTD projects have a central goal of improving employment outcomes for youth. Through job counseling and other approaches, the projects may affect the attitudes youth have toward work and their own employability. Furthermore, most YTD projects seek to provide youth with early work-related experiences, which may range from visits to job sites to paid competitive employment. Therefore, it will be important to examine whether, in the short term, the YTD projects improve youths' work attitudes and lead them to have more work experience than the control group members. The primary outcome measure we propose in this domain will be the youth's receipt of any employment-focused services. This would be a composite measure that includes help finding jobs, help with resumes, internships, volunteer work, community employment, job coaching, and other work-based

services. That is, we will create a single measure of the receipt of employment-focused services/activities based on these component elements. The hypothesis is that, in the short run, if we see impacts on these activities, they should lead to longer-term employment increases.

Examples of measures that will be used to test supplementary hypotheses related to this domain include the percentage of youth receiving each type of service and the amount of services received (such as the number of months services are received, and hours per month of service receipt). In addition to employment-focused services, as part of the supplementary analyses, we will examine whether youth received services related to life skills training, and assistance or services related to education and training, benefits counseling, and health care needs.

While the process analysis (Chapter VI) describes the services treatment group members receive using data recorded by project staff in the MIS system, the impact analysis will use youth and family reports from the follow-up surveys to determine whether treatment group members receive more and different services than control group members. Because data on services that control group members receive will not be available in the MIS system, to examine impacts on services received, we will rely on information obtained comparably for the treatment and control youth as part of the 12-month follow-up surveys. These treatment-control differences in service receipt will indicate the intensity of the YTD service component.

b. Paid Employment

All the YTD projects have a central goal of finding paid employment for youth, particularly for older, out-of-school youth. Therefore, we propose to examine the impacts on paid employment as a key domain. The primary outcomes in this domain are the percentage of youth ever employed in a paid job during the year after random assignment, and the fraction of time (or percent of months) employed over this period. The former variable captures any attachment to paid employment, while the latter is a measure of the intensity of employment. Instead of analyzing these variables separately, we will likely create a single composite variable reflecting participation in paid employment.

As supplementary analyses in this domain, we will examine impacts on earnings, hours worked, full-/part-time work, time pattern of employment impacts, and number of jobs held during the year following random assignment.

c. Youth Income

The YTD interventions include employment-focused services, as well as the SSA waivers that will supplement the income of youth who use them. Thus, one of the key domains to examine will be if youth income increased, and the primary outcome in this domain will be youths' total income from earnings and benefits (during the first year after random assignment).

As supplementary analyses, we will look at impacts on earnings and benefits separately, as well as at the fraction of income from these sources. Other supplementary hypotheses will examine the extent to which youth receive more SSA benefits in the short term. The SSA waivers offered as part of YTD should lead youth in the treatment group to be more likely than youth in the control group to participate in disability benefit programs in the initial years following random assignment. In particular, the continuing disability review (CDR) or age 18 medical redetermination waiver allows treatment group youth enrolled in a YTD project to continue to receive SSA benefits, regardless of the outcome of the CDR. Finally, the intensive benefits counseling, combined with the YTD waivers, is expected to increase awareness of SSA work incentives by treatment group members relative to control group members, and we will examine youths' knowledge of SSA work incentives as part of the supplementary hypotheses.

d. Attitudes and Expectations

As the logic model in Chapter I shows, a key component of most YTD interventions is youth empowerment. All the YTD projects include components on youth empowerment designed to instill in youth a belief in their ability to succeed in life. Project staff typically focus on a person-centered plan for the youth, in which the youth's interests and preferences play a role in determining his or her transition plan. Thus, important short-term outcomes to examine are if there are any differences in youths' attitudes and beliefs about themselves (self-efficacy), as well as their expectations about the future. The primary outcomes for this domain include a measure of self-efficacy and a measure of attitudes and expectations about the future. (We will likely create a single measure that includes both variables.) Short-term impacts on these measures may be precursors to longer-term impacts on other primary outcomes. As part of the supplementary analyses, we will examine whether the projects improve youths' expectations for educational achievement, substantial employment, and independent living. We will also examine whether the projects promote social interactions among the youth they serve.

e. Educational Progress

Some YTD projects (notably the Montgomery County and Erie projects) serve school-age youth, and progress in education could be an important short-term outcome for some youth. In particular, staying in school and completing high school would be a key programmatic objective for the youth they serve. Because all youth in the Montgomery County project are juniors and seniors in school at the time of recruitment and enrollment, a key goal of that project is to ensure that youth successfully graduate from high school. Similarly, the Erie project focuses on education-related services for youth who are in school, or who want further education. Particularly in these projects, we will examine the impacts of the interventions on education outcomes as a key domain. The primary outcome measure would include a composite measure including staying in high school and/or high school completion. *A priori*, we expect that the YTD interventions will have positive short-term impacts on these outcomes, especially for younger youth and for those in school at baseline. We will examine impacts on these outcomes as a supplementary analysis in the other projects. Supplementary outcomes in this domain will also include amount of time spent in

school, participation in different types of schools (including postsecondary education) proportion of youth completing IEPs, and the extent to which youth receive skills training.

2. Longer-Term Impacts

In the longer term, the YTD projects are expected to help youth find stable employment and improve their earnings and income. They should also lead to reduced risky behaviors and facilitate greater self-sufficiency among youth, including a heightened sense of well-being and more independent living arrangements. Finally, in the time beyond the evaluation period, after the waivers have ended, the YTD interventions are expected to reduce youths' reliance on SSA disability benefits.

We will examine several of these outcomes as part of the longer-term impact analysis. This analysis will draw on the evaluation's 36-month follow-up survey and a variety of sources of administrative data for up to 48 months following random assignment. For some youth, however, particularly those at the younger end of the YTD-eligible age range, outcomes measured three or four years after random assignment will provide only a limited assessment of the long-term impacts of the projects particularly those of major interest to SSA such as employment, earnings, and benefits receipt. As discussed earlier, the YTD waivers themselves could suppress impacts on disability program participation and benefit amounts while they are in effect. Impacts on these primary outcomes might not appear until 5 to 10 years after random assignment. Administrative data may provide a cost-effective basis for assessing these long-term impacts.[50]

We have grouped the key domains for which we will examine YTD impacts in the longer run into five areas, as summarized in Table VIII.2 and discussed below.

a. Employment and Earnings

All the YTD projects are designed to improve the employment outcomes and earnings of their participants. Over time, we expect the work experience will lead to improved earnings, so both employment and earnings will be assessed for the longer-term impact analysis. The primary outcomes in this domain will be the percentage of time employed in the year before the survey and earnings over the same period. We will likely create a single composite variable that captures these two measures.

The 36-month follow-up survey will also obtain detailed information on jobs held, such as characteristics of the jobs, accommodations provided, fringe benefits, and satisfaction with the jobs. As part of the supplementary analyses, we will examine related outcomes on

[50] Because information on earnings and benefit amounts will be available through SSA administrative records data, these data can be used to examine the longer-term impacts on earnings, income, and benefit amounts even after the evaluation has ended. The administrative records can be linked to baseline and follow-up surveys using the youth's social security number.

Table VIII.2. Primary and Supplementary Outcomes for Which Impacts Are Anticipated in the Longer Term

Outcome Measure	Description of Measure
Employment and Earnings	
Primary outcomes	Fraction of time employed in past year, earnings in past year
Supplementary outcomes	Ever employed during follow-up period, earnings patterns, hours worked, full-/part-time work, number of jobs held, wage rates, benefits, accommodations, impacts from administrative data (over the three-year period following random assignment)
Youth Income	
Primary outcomes	Total income from earnings and benefits during prior 12 months or entire follow-up period
Supplementary outcomes	Type and amount of earnings and benefits received, amount of SSA benefits, use of SSA work incentives and IDAs
Engagement in Gainful Activity	
Primary outcomes	Fraction of youth either employed or participating in an education or training program
Supplementary outcomes	Time spent engaged in gainful activities, educational attainment
Reduction in Criminal Justice System Contact	
Primary outcomes	Contact with criminal justice system (arrests, incarcerations, other involvement with the criminal/juvenile system)
Supplementary outcomes	Types of criminal activity
Self-Determination and Self-Efficacy	
Primary outcomes	Self-determination and self-efficacy scale, independence (such as traveling, having a bank account, living arrangements)
Supplementary outcomes	Items comprising the scales, other measures of independence, attitudes and expectations, self-esteem, social interactions
Other Exploratory Analyses	
Medicaid utilization	Number and total amount of Medicaid paid claims during a calendar year
Health status	SF-12 health scale; self-reported health status: excellent, good, fair, poor; self-perceptions of health conditions and disabilities; participation in drug and alcohol treatment programs
Quality of life	Selected components of the instrumental activities of daily living (IADL) that are relevant to youth; limitations in mental, emotional, and social functioning

several measures of employment, including whether the youth was ever employed over the entire follow-up period, as well as over selected subintervals (such as the most recent month, quarter, and year). We will also examine impacts on earnings patterns over time, hours worked, full-/part-time work, and number of jobs held. The supplementary analyses will

also include an examination of impacts on earnings from administrative data over the entire three- to four-year follow-up period. Finally, to provide context for the main impact estimates, we will examine how job characteristics (such as the wages earned, and the extent to which the job offers benefits and accommodations) differ between those in the treatment and control groups.[51]

b. Youth Income

A key indicator of the success of the YTD interventions, especially from the perspectives of the participating youth and their families, is whether they result in higher incomes. If the interventions are successful in increasing earnings, then they are very likely to increase income. Furthermore, the waivers will be in effect at the time of the longer-term impacts, three to four years after random assignment. After the waivers end, a premise underlying the interventions is that the accumulated work experience and human capital of youth in the treatment group will allow them to earn significantly more than their control group counterparts, so that their incomes will be larger in the longer run, even with the loss of benefits. Similar to the outcome proposed for the short-term impact analysis, the primary outcome in this domain will be the youth's total income from earnings and benefits (either during the year before the survey or over the entire period following random assignment).

As supplementary analyses, we will look at impacts on earnings and benefits separately, as well as the impacts on the proportion of income from different sources. As described earlier, although the long-term goal of the YTD intervention is to reduce youths' dependence on disability programs, we do not expect that the YTD projects will be able to reduce SSA benefit payments and program participation in the three to four years for which we can observe youth following random assignment. For a YTD treatment group member who is not a student and who does not have a PASS or IDA, earnings would generally have to increase by nearly two times the earnings of a comparable control group member for us to see reductions in SSA benefits.[52] Treatment group youth who can use the PASS, IDA, and/or SEIE waivers would require yet more earnings for their benefits to be reduced. This

[51] Because job characteristics are observed for self-selected subsamples of employed youth only, these differences in the job characteristics of youth in the two groups cannot be viewed as impact estimates; nonetheless, they provide useful and important contextual information that can shed some light on the main impacts.

[52] Under SSI rules, $20 of income from any source per month may be disregarded in computing the benefit amount. An additional $65 in income from employment may also be disregarded. Thus, if a beneficiary's only income was from employment, a total of $85 per month could be disregarded. A control group youth earning $650 a month, working 20 hours a week at $7.50 an hour, would receive $341 of SSI benefits, assuming he or she could get the maximum amount, with the standard $1 for $2 disregard. A treatment group youth, working 35 hours at the same wages, with the $1 for $4 waivers offered as part of YTD, would receive $360 in SSI benefits, showing no reduction in SSI benefits compared with the control youth, even though the treatment youth is earning significantly more than the control youth. If the treatment youth works 40 hours per week (earnings about twice that of the control youth), he or she would receive about $320 in SSI benefits, and show a reduction in SSI benefits compared with the control group youth.

means that a YTD project that is highly successful at increasing employment and earnings may nevertheless fail to reduce benefits while the waivers are in effect.

The CDR/age 18 redetermination waiver is perhaps an even more compelling reason to expect that the YTD projects will not reduce dependence on disability benefit programs during the evaluation's three- to four-year follow-up period. Past experience indicates that approximately one-fourth of the control group members will lose their eligibility for disability benefits because of a negative redetermination. These youth will leave the rolls, and their benefits will fall to zero. Meanwhile, treatment group members who receive a negative redetermination will retain their benefits until the waivers end. For the intervention to reduce benefits in the aggregate, earnings by treatment group members would have to increase by at least enough to reduce their benefits by more than the aggregate reduction in benefits that the control group members will experience because of the negative redeterminations. In addition, as illustrated in the previous paragraph, the other waivers imply that the increase in earnings would have to be very substantial.

Therefore, given the waivers, we do not expect to find reductions in SSA program participation and benefit amounts during the evaluation's current follow-up period. Even if the interventions are quite successful at increasing earnings during that period, we are likely to find positive impacts on program participation and benefits. However, assuming that the interventions do increase earnings, we would expect them to have negative impacts on program participation and benefits after the waivers end. To be able to estimate those impacts, a longer-term impact evaluation will need to be conducted.[53]

As noted earlier, YTD benefits counseling services offered by the projects is expected to increase youths' understanding of SSA waivers in the short term. In the longer term, that enhanced understanding, especially in the context of the strong emphasis on employment by the YTD projects, should result in more actual use of the work incentives by treatment group youth than by control group youth. The SSA waivers for YTD provide additional motivation and eligibility for treatment group youth to use the work incentives. Of all the standard work incentives, continued eligibility for Medicaid by people whose earnings are so high that they no longer qualify for a cash benefit [section 1619(b)] may be the most powerful and the key to the success of YTD and other SSA back-to-work initiatives. Consequently, as part of the supplementary hypotheses, we will pay particular attention to estimating the impacts of YTD on the use of this incentive.

[53] It is important to recognize that the waivers themselves provide an incentive for the youth to find jobs and participate in the labor market, as they can retain more benefits under the more generous work incentives offered by the waivers. After the waivers end, there is some reversal of incentives, and this might lead to reductions in employment and earnings impacts. This possibility reiterates the importance of examining impacts in the longer term using administrative data, after the waivers have ended.

c. Engagement in Gainful Activity

In the longer term, we would expect that treatment group youth are more likely than control group youth to be engaged in some gainful activity. Therefore, this will be a key domain to examine impacts in the longer term. The primary outcome to look at in this domain is the fraction of youth who are either employed or are participating in an education or training program during the year before the survey. This measure will capture the engagement in a productive activity by youth of all ages in our study. We propose this measure, as it is designed to reflect the reality that youth who are younger at baseline may still be in school at the time of the 36-month follow-up survey, while those who are older at baseline are more likely to be employed at that time.

Outcome measures for supplementary analyses in this domain include the fraction of time spent in gainful activity and the fraction of time spent in each component activity (employment, education, training). As part of the supplementary analyses, we will examine the effects of the YTD interventions on educational attainment, including high school graduation and participation in postsecondary education programs.

d. Reduction in Criminal Justice System Contact

Through counseling youth and engaging them in positive activities, the YTD interventions are hypothesized to reduce the likelihood that these youth will engage in risky behaviors such as criminal activity. We will measure criminal activity indirectly in the 36-month follow-up survey by asking youth about their arrests, incarcerations, and other involvement with the criminal justice system. Risky behaviors can have long-term detrimental effects on youths' health, education, and employment, and they can also impose costs on society. Therefore, it will be important to understand the impacts of the YTD interventions on these behaviors. Any such impacts could factor significantly into the evaluation's benefit-cost analysis (Chapter IX). The primary outcome in this domain will be reduced contact with the criminal justice system during the year before the 36-month follow-up survey.[54] Supplementary analyses would include an examination of reduction in each type of criminal activity.

e. Self-Determination and Self-Efficacy

It is expected that the YTD interventions will eventually lead to greater self-determination and self-efficacy among youth, and a sense of belief the youth have in themselves and their ability to make changes in their lives. Similarly, we expect that youth will start moving toward greater independence in their lives, and have a greater say in their decision making. Therefore, we will want to examine impacts on the domain of greater self-determination and self-efficacy and independence in decision making. The best measure of

[54] Depending on the extent to which the projects directly address reductions in risky behavior, this outcome could also be treated as a supplementary analysis to the previous domain—engagement in gainful activity.

these concepts will be based on scaled items that capture the concepts, as well indicators of independence (such as independence in traveling, having a bank account, and independent living arrangements). Supplementary analyses we propose include examining certain individual items in the scales, as well as other related measures of social interaction and independence.

f. Exploratory Analyses

In addition to the key domains identified above, we have identified two other areas—Medicaid utilization and health and quality of life indicators—in which we propose to conduct exploratory analyses. We have classified them as exploratory analyses because these are not areas in which the projects are directly intervening. However, impacts on Medicaid utilization will be a useful input into the cost-benefit analysis, and it is possible that the projects, through their effects on employment and income, may affect how youth perceive their quality of life and health.

Medicaid and Medicare Utilization. Most YTD projects include activities to connect youth with wraparound services, including health care services. In addition, the CDR waiver will keep more treatment group youth than control group youth on Supplemental Security Income (SSI) and, therefore, eligible for Medicaid. As a result of both factors, we expect the YTD projects to lead to greater use of Medicaid services in the first few years following random assignment. However, over time, there could be a reduction in the use of Medicaid services if (1) the health and well-being of treatment youth improve with their engagement in employment, (2) youth replace Medicaid with employer-provided health insurance, and/or (3) youths' earnings exceed Medicaid eligibility limits. Moreover, YTD youth who are receiving DI or CDB benefits will be eligible for Medicare.[55] Some of the youth who are currently SSI beneficiaries may also become eligible for Medicare if they can achieve employment for sufficiently long period of time.

We will use data from Centers for Medicare & Medicaid Services (CMS) administrative records to estimate the impacts of the YTD interventions on the annual number of Medicaid claims and total Medicaid payments. While the CMS administrative records will be useful for identifying someone's eligibility for Medicare coverage, they do not have information on Medicare claims and payments. We will use Medicaid identification numbers (i.e., HIC numbers) in the CMS administrative records, supplemented as necessary with SSNs, to link to Medicare claims and payment records for youth who are eligible for Medicare.[56] Long-

[55] Our preliminary analysis indicates that about 20 percent of YTD evaluation enrollees in sites other than the Bronx, NY, receive DI or CDB either alone or concurrently with SSI. The target population for the CUNY YTD project in the Bronx is primarily youth under age of 18, for whom receipt of DI and CDB is less common.

[56] A data use agreement between SSA and CMS will be necessary in order for the YTD evaluation to obtain access to Medicare claims and payment data. Such an agreement is likely to stipulate that the data must reside at SSA, which would imply that the analysis of the data would have to be conducted at an SSA facility, but most likely by MPR staff.

time lags in the availability of the CMS data will limit our ability to analyze these outcomes—at most, we will be able to estimate these impacts for only one or two years following random assignment within the current timeframe for the YTD evaluation. Despite their limitations, these estimates will be important for the benefit-cost analysis, as they will capture an important cost consequence of the YTD projects. We recommend that SSA arrange for follow-up analyses of the CMS data to determine the extent to which the YTD interventions reduce Medicaid utilization in the longer term.

Health and Quality of Life. By providing referrals for social and health services, extending Medicaid eligibility under the CDR/age 18 redetermination waiver, and helping youth become productively employed, the YTD projects are expected to improve the health status and quality of life of participating youth. We will estimate YTD impacts on a variety of measures of health status and quality of life, as shown in Table VIII.2. These measures include a health status scale based on the Short Form 12 Health Survey (SF-12) and selected components of the IADL that are relevant to youth. The measures will be constructed from data gathered through the 12- and 36-month follow-up surveys. We will also estimate impacts on participation in drug and alcohol treatment programs, primarily to obtain additional findings on service utilization for the benefit-cost analysis.

C. ANALYTIC APPROACH TO ESTIMATING IMPACTS

In this section, we discuss our analytic approach to estimating the impacts of the YTD interventions. The estimation strategies discussed here apply to the analysis of both short- and longer-term impacts. In interpreting the impact estimates, it should be kept in mind that, while the control group members are not eligible for YTD services, they are eligible to participate and receive other services that are available in their communities, including the general benefits counseling on SSA work incentives. Hence, estimated impacts of the YTD projects reflect the effects of the YTD services in the absence of the project services, and not in a "no-service" environment. The process analysis will document the extent to which services are available for control group members. While there may be a broad set of services available for control group members, it is not clear how coordinated the services are and the extent to which control group youth have access to them. Furthermore, the services provided by the YTD interventions are much more employment focused than the general services available in the communities. The benefits counseling services offered to treatment group members should help give youth a better understanding of the SSA work incentives. Furthermore, control group members will not have access to the YTD waivers, which provide incentives for the treatment group youth to find employment.

Impacts will be estimated separately for each YTD project. Because the projects are located in different areas, serve youth of different age ranges and with different characteristics, and include different service components, we consider estimation of project-specific impacts to be the most appropriate strategy. However, the projects do have important commonalities, including the SSA waivers, the general target population, and a focus on employment as the primary objective. In fact, it is likely that the variation across the demonstration projects is no greater than the variation that would exist across sites in a hypothetical nationwide YTD-like program. Consequently, as the projects evolve and the

final interventions are identified, we will assess the appropriateness of pooling data across the projects and estimating demonstration-wide impacts.[57] Having acknowledged the possibility of a pooled analysis, the rest of the discussion in this section of our basic analytic approach focuses on the estimation of project-specific impacts. Section D discusses our analytic approach to a potential pooled analysis.

For each project, we will estimate two types of impacts. The first, called the *intent to treat* (ITT) impact, is the impact on receptive eligible youth of being offered the opportunity to participate in a YTD project—that is, on all youth who consent to participate in the evaluation and go through random assignment. The second, called the impact of the *treatment on the treated* (TOT), is the impact on youth who actually participate in a YTD project.[58] In presenting the impacts of the YTD projects, we primarily focus on the ITT impacts, as they have greater policy relevance. However, because the TOT impacts are often useful in helping programs learn how participants they actually enroll fare, we will present those estimates as well, and discuss that estimation methodology in the last part of this section.

1. Estimating the Impacts of the Offer of YTD Services

Estimates of ITT impacts address the policy question: "What are the effects of a YTD project on eligible youth who were interested and consented to participate in YTD and were subsequently offered the opportunity to participate in the project?" The ITT impacts reflect both the decisions of those who decline to participate in project services and the effects of the YTD intervention on those who accept the offer of services.

We discuss two methods that we will use to estimate the ITT impacts of the YTD intervention: (1) the difference in simple means approach, and (2) the difference in regression-adjusted means approach. Typically, these two approaches generate fairly similar results. While regression adjustment is often used to generate impact estimates, there are some conditions under which the difference in simple means approach might be preferred. These conditions are discussed below and also in Section E, along with the investigations that we will conduct to determine which of the two ways to generate impact estimates is best suited to this study.

a. Difference in Simple Means

If random assignment is well implemented, there should be no systematic differences in characteristics between the treatment and control groups at the time of random assignment.

[57] Pooling data from several YTD projects would make the formal statistical comparison of impacts across projects and the estimation of impacts for relatively small subgroups of the YTD-eligible population more feasible.

[58] Approximately 17 percent of youth who enroll in the evaluation, go through random assignment, and are assigned to the treatment group are expected to fail to participate in YTD services.

Therefore, the difference between treatment and control group youth in the simple mean value of an outcome measure is an unbiased estimate of the impact of the YTD intervention. We will use the associated t-test (for the mean value of a continuous variable) and chi-squared test (for the distribution of a categorical variable) to assess the statistical significance of the impact estimates.

We will verify the appropriateness of using the difference in simple means approach by comparing the baseline characteristics of treatment and control group members. When random assignment has been implemented correctly, then statistically significant differences in baseline characteristics should arise only by chance.[59] If there are statistically significant baseline differences between the treatment and control groups in one or more characteristics believed to be correlated with primary outcome measures, an approach based on regression-adjusted means may be more appropriate for obtaining unbiased estimates of project impacts.

b. Difference in Regression-Adjusted Means

The difference in regression-adjusted means approach to estimating impacts involves using ordinary least squares (OLS) or logistic regression methods (for continuous or categorical variables, respectively) to estimate multivariate models that control for baseline characteristics that are believed to be correlated with the outcomes of interest. Both this approach and the difference in simple means approach provide unbiased impact estimates when random assignment has been properly implemented. However, if baseline control variables that have significant power to account for variation in the outcome measures are available, then the regression adjustment approach may yield more precise impact estimates—that is, estimates with smaller standard errors—thereby providing greater statistical power to detect small impacts. In addition, the regression adjustment approach allows researchers to control for chance differences between treatment and control group members in observable baseline characteristics that they believe are correlated with outcome measures.

To implement the difference in regression-adjusted means estimation methodology, we will use regression models of the following form:

$$(1) \quad Y_i = \beta_0 + \beta_1 T_i + \beta_2 X_i + \varepsilon_i,$$

where i is an index for the individual youth, Y_i is the outcome of interest, T_i is an indicator of treatment status (equals 1 if the sample member was randomly assigned to the treatment group and equals zero otherwise), X_i is a vector of baseline characteristics of the youth, ε_i is a

[59] Even if random assignment is implemented flawlessly, we would expect to find significant treatment-control differences for about 5 percent of the characteristics if we were using a statistical test with a 95 percent confidence level. Because such an investigation typically includes many baseline characteristics, it is common to find statistically significant treatment-control differences for a few of them.

random error term that captures the effects of unobserved factors that influence the outcome, and β_0, β_1, and β_2 are parameters or vectors of parameters to be estimated. The parameter of greatest interest is β_1, because it will show the average effect on the outcome measure of the opportunity to participate in the YTD project.

We will estimate the parameters in equation (1) by using OLS regression for continuous outcome measures (for example, hours, earnings, and the disability benefit amount). When the dependent variable is binary (for example, employment status, receipt of any disability benefit, and use of an SSA work incentive), we will use logistic maximum likelihood estimation methods. Table VIII.3 illustrates how these impact estimates for selected continuous and binary outcome measures will be displayed in a report. For outcomes that are measured repeatedly, such as employment, earnings, benefit receipt, and benefit amount, we will display the treatment and control mean values graphically, as shown in Figure VIII.1. The difference between the treatment and control means for any time period in the figure is a graphical representation of the impact estimate.

Table VIII.3. Estimated Short-Term Impacts on Paid Employment of a YTD Project

Outcome and Follow-Up Period[a]	Treatment Group (T)	Control Group (C)	T - C (*p-value*)
Primary Outcomes:			
Percentage ever employed in year before follow-up survey			
Percentage of months employed in year before survey			
Supplementary Outcomes:			
Percentage Employed During:			
Month 1			
Month 2			
.			
.			
Month 12			
Earnings During:			
Year 1			
Earnings at the Time of the Survey			

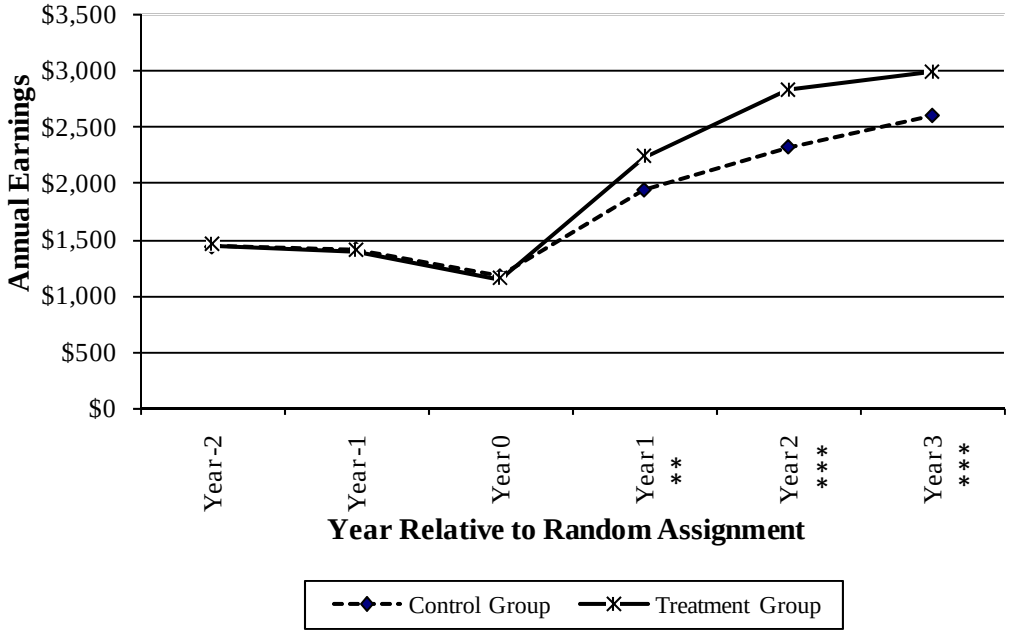
Source: SSA administrative records data

Note: Values are hypothetical and provided only for illustrative purposes.

*/**/*** Treatment-control difference is statistically significant at the .10/.05/.01 level, using a two-tail test.

[a]Outcomes indicated are illustrative.

Figure VIII.1. Estimated Impact of a YTD Project on Annual Earnings



Source: SSA administrative records data

Note: Values are hypothetical and provided only for illustrative purposes.

*/**/*** Treatment-control difference is statistically significant at the .10/.05/.01 level, using a two-tail test.

c. Control Variables

To estimate the regression-adjusted impacts, we will identify a core set of control variables to be included in the vector, X_p in equation (1), based on the following criteria:

- ***The control variables should pertain to the period at or before random assignment.*** The control variables will be constructed using data from the baseline survey and from administrative records on the pre-random assignment period.

- ***The variables should be expected to affect one or more outcomes of interest.*** For simplicity, we will use one set of control variables to estimate impacts for all outcome measures. We will include (1) variables for which the treatment and control groups have significantly different mean values; (2) variables that are believed, or known, to have strong behavioral relationships with the outcome measures; (3) variables related to the enrollment cohort or the timing of random assignment; and (4) variables that could be used to target intervention services to youth for whom they would have the greatest impacts.

Table VIII.4 presents values at or before the time of random assignment for a broadly inclusive set of variables from the baseline survey and administrative records. We will use this presentation to describe the research sample for a YTD project and to document any

Table VIII.4. Baseline Characteristics of the Research Sample (Percentages, Unless Otherwise Noted)

	Full Sample	Treatment Group (T)	Control Group (C)	T – C (*p-value*)
Demographic Characteristics				
Female				
Age (mean years)				
Race/ethnicity				
Hispanic				
Non-Hispanic white				
Non-Hispanic black				
Non-Hispanic other				
Speaks primarily English at home				
Education and Training				
Attending school at baseline				
Highest grade completed				
9th grade or less				
10th or 11th grade				
12th grade				
College or technical school				
Other				
Diploma, GED, or certificate of completion				
Received job training in last year				
Health and Disability				
Self-reported health status				
Excellent				
Very good/good				
Fair/poor				
Primary disabling condition				
Mental illness				
Cognitive/developmental disability				
Learning disability/ADD				
Physical disability				
Other				
Assistance Required				
Help with personal care				
Living Arrangement and Household Composition				
Living arrangement				
House/apartment with parents/family				
House/apartment with friends/roommates				
Supervised group home/dormitory				
Other				
Number of people in household (mean)				
Lives with others who have disabilities				
Work-Related Experience and Earnings				
Worked as a volunteer in last year				

Table VIII.4 *(continued)*

	Full Sample	Treatment Group (T)	Control Group (C)	T – C (*p-value*)
Worked for pay				
In last year				
In last month				
Annual Earnings				
First year before year of random assignment				
Expectations for Next Five Years				
Will live independently from parents (with or without help)				
Will continue education				
Will work for pay				
Parental Characteristics				
Mother graduated from high school				
Mother is employed				
Socioeconomic Background				
Household income in last year				
Less than $10,000				
$10,000 - $24,999				
$25,000 or more				
Household member receives public assistance				
Other Characteristics				
Random assignment cohort				
Year 1 cohort				
Year 2 cohort				
Year 3 cohort				
Location within a YTD project's service delivery area				
Site 1				
Site 2				
etc.				
Sample Size				

Source: YTD baseline survey, SSA administrative data.

*/**/*** Treatment-control difference is statistically significant at the .10/.05/.01 level, using a two-tailed test.

differences that may exist between the treatment and control groups. Based on the above criteria, we will select a subset of these to use as control variables when estimating regression-adjusted impacts of YTD.

2. Estimating the Impacts of YTD Participation

Policymakers and program operators are often interested in knowing the impacts of a program on people who actually participated in it. These are the previously mentioned TOT impacts, which, for YTD, answer the policy question: "What are the effects of a YTD project on eligible youth who consented to be in the evaluation and who actually participated in the project?"

In each YTD project, some youth who consent to be in the evaluation and who are randomly assigned to the treatment group fail to enroll in project services. In the program evaluation literature, such individuals are referred to as "no-shows." As discussed in Chapter V, the YTD evaluation design specifies that each YTD project will have 480 treatment group youth, of whom 400, or 83 percent, are expected to enroll in project services. Thus, the design incorporates the assumption of a 17 percent no-show rate. Enrollment results from the three original YTD projects participating in the random assignment impact study confirm that this assumption is realistic.[60]

No-shows are a self-selected subset of treatment group youth who are likely to have different baseline characteristics, on average, than YTD participants. This means that it would be inappropriate to estimate the TOT impacts by simply excluding the no-shows from the analysis of treatment-control differences. Under that approach, the control group would no longer provide a valid basis for comparison with the participant subsample.

One methodologically sound approach to estimating TOT impacts, initially proposed by Bloom (1984), is one that retains all treatment group members—participants and no-shows—in the analysis of treatment-control differences. It requires three assumptions that are not necessary when estimating ITT impacts, the most notable of which is that no-shows experience zero impact from the intervention.[61,62] Under these assumptions, estimating the TOT impacts involves dividing the ITT impacts by the proportion of treatment group members who actually participate. Given the simplicity of this approach, it will be straightforward to compute the TOT impact estimates after we obtain the ITT impact estimates. While this adjustment to the ITT impact estimates affects the magnitude of the impact estimates, it does not affect their statistical significance.

D. EXTENSIONS OF THE IMPACT ANALYSIS

1. Pooled and Cross-Project Analyses of Impacts

As mentioned earlier, our main approach to estimating impacts will be to generate impact estimates separately for each YTD project. However, we anticipate that we will also pool the data across the projects to estimate the overall impacts of the collective

[60] Actual no-show rates were 15 percent for Colorado, 17 percent for Erie, and 22 percent for CUNY. The no-show rate for these three projects combined was 18 percent.

[61] The projects do conduct some outreach activities when they attempt to enroll the no-show cases. For example, project staff spend an average of 1.3 hours in Colorado and 2.2 hours at CUNY communicating, or attempting to communicate, with each treatment group member who does not enroll. While it is not the purpose of these contacts to deliver services, some minimal services might be delivered during them. However, the impacts of any such services are expected to be negligible compared with the impacts of the much more intensive services received by the YTD participants.

[62] The other two assumptions underlying the Bloom approach are that (1) the no-shows would not have participated in the intervention if they had been assigned to the control group, and (2) the control group counterparts to the no-shows experience no effect from going through random assignment.

interventions. These estimates will indicate the average impacts that might be expected if a YTD-like program were to be rolled out on a broad scale across the country.

The pooled data will also provide a basis for formally investigating whether certain projects or groups of similar projects have larger impacts than others. A framework such as that presented in Table VIII.5 will guide our investigation into the cross-site variation in impacts. For each of the six random assignment YTD projects, this table displays characteristics that may be correlated with the presence and size of impacts, including the main intervention components, characteristics of the intervention, local socioeconomic conditions, and strength of existing services for youth with disabilities. The table also displays estimates of impacts on primary outcomes, such as employment and earnings.

After entering data for all projects into Table VIII.5, we will search qualitatively for patterns in the project characteristics and impact estimates. For example, we might find that projects that offer strong employment services or benefits counseling tend to have larger impacts on most outcomes than projects that do not emphasize these components. This qualitative approach to comparing characteristics and impacts across YTD projects has potential to provide useful insights into the intervention features and environmental conditions that are conducive to project impacts. Again, we emphasize that this approach is exploratory and should not be considered as a rigorous attempt to quantify the relationship between characteristics of the interventions and impacts on youth outcomes.

This exploratory approach presented in Table VIII.5 may reveal subgroups of projects with similar features and impacts that would be candidates for subgroup analyses based on pooled data. If we determine that pooling is justified, we will apply a common statistical test (the Chow test) to verify the appropriateness of data pooling. If the test indicates that the pooling of data across these sites is appropriate, then the larger sample size achieved by pooling would support more precise subgroup analyses (as discussed in the next subsection).

2. Subgroup Analysis

To be responsive to the multiple comparisons problem, it is important to identify upfront key subgroups that we will use to estimate impacts. For the same reasons described earlier in the chapter, it will be important to minimize the number of key subgroups for which we will estimate impacts as part of the primary analyses. The small sample size per project (880 youth per project) also makes estimating project-specific subgroup impacts for multiple subgroups challenging. Based on these considerations, the two main subgroups that we propose to examine in our analyses are (1) youth under 18 or age 18 and older at baseline (or alternatively, whether an age 18 redetermination had taken place at the time of the baseline interview); and (2) in-school versus out-of-school status at baseline. To ensure adequate statistical power to detect impacts in these and other potential subgroup analyses, we will conduct the analyses for an individual YTD project only if we can define subgroup pairs for which the sample split is between 40/60 and 60/40; otherwise, we will avoid conducting the analyses.

We will examine impacts using one or both of these subgroups, depending on the YTD project and its target population. There are reasons to view these as the critical subgroups. For example, we might expect to see different impacts on income and work incentives and

Table VIII.5. Characteristics and Impacts of YTD Projects

	Value of Characteristic or Estimated Impact			
Characteristic or Outcome	Project 1	Project 2	- - - - - - -	Project 6
Intervention Components				
Individualized work-based experiences				
System linkages				
Youth empowerment				
Family supports				
Social and health services				
SSA waivers				
Benefits counseling				
Characteristics of the Intervention				
Age range of youth at enrollment				
Total direct service time per youth				
Enrollee:staff ratio				
Average time from random assignment to enrollment				
Average cost per enrollee				
Other				
Socioeconomic Conditions				
Strength of the local economy				
Employment rate of adults on SSI				
Population density				
Other				
Strength of Existing Services				
Per-capita spending on VR services				
Other				
Primary Outcome Measures (Estimated Impact)				
Employed third follow-up year				
Earnings third follow-up year				
Other				

Sources: Characteristics from baseline survey, ETO, and the process analysis; impact estimates from the impact analysis.

benefits for youth under 18 or age 18 or older as a result of the age 18 CDR waiver. Similarly, we might expect to see larger impacts on employment on older or out-of-school youth as opposed to younger or in-school youth. The subgroup indicators will be constructed from data pertaining to the period at or before the time of random assignment, and will be obtained through the baseline survey or SSA administrative records.

If sample sizes permit, we will examine impacts for certain other subgroups listed below as part of supplementary analyses. These include subgroups that may help in interpreting the main impact estimates (e.g., duration on the beneficiary rolls), as well as subgroups related to the research methodology (e.g., enrollment cohort). The subgroup analyses will be conducted for individual projects and, where appropriate, for groups of projects. (For example, if the cross-project exploratory analysis discussed in the previous subsection identifies two or more projects with similar characteristics and overall impacts, we will conduct subgroup analyses based on pooled data from those projects to improve the statistical power for detecting subgroup impacts.) We will also conduct limited subgroup analysis based on pooled data from all the projects to estimate demonstration-wide impacts on selected subgroups of youth.

- Beneficiaries versus "at-risk" youth (for the Montgomery County project)
- Other demographics: race/ethnicity, gender, family income, education, employment, and living arrangements
- Primary disabling condition (not relevant for projects serving youth with a particular disabling condition; for example, the Montgomery County project serves only youth with SED or other significant mental illness)
- Prior work experience
- Enrollment cohort
- Duration on SSA disability benefits (recent versus long-term beneficiaries)
- Response versus nonresponse to the follow-up surveys (to assess whether impacts vary by survey status for outcomes measured through administrative data)
- Elapsed time from completing baseline survey to providing informed consent to participate in the evaluation (to assess whether impacts are different for hard-to-enroll youth)

To estimate subgroup impacts, we will modify the multivariate model in equation (1) to include the interaction of the treatment status indicator with specific subgroup indicator variables. For each subgroup, we will conduct tests of significance to determine the statistical significance of the subgroup impact estimate, and also test whether the differences in impact estimates across the subgroups are significantly different from each other.

E. ANALYTIC ISSUES

Several analytic and data-related issues will influence our final decisions regarding our approach to the analysis and choice of outcomes. These issues include (1) addressing the multiple comparison issue, (2) the appropriateness of regression adjustment, (3) nonresponse

to the YTD follow-up surveys, (4) cohort differences in project services and the characteristics of evaluation enrollees, (5) length of the implementation period, and (6) the sensitivity of YTD impact estimates to the age composition of the research sample.

1. Dealing with the Multiple Comparisons Issue[63]

Impact studies assessing the effectiveness of interventions typically collect data on large samples and many outcomes, and in analyzing the data, researchers implement multiple hypotheses tests to address key impact evaluation questions. Tests are often conducted to assess intervention effects for multiple outcomes, and for multiple subgroups of individuals.

In most instances, separate t-tests are performed for each outcome to test the null hypotheses of no impact. Often, the statistical significance level for these tests is set at the 5 percent level, suggesting that, for each test, the chance of erroneously finding a statistically significant impact (that is, finding a difference when there is none) is 5 percent (Type I error rate). In other words, when there is really no true difference between outcomes for the treatment and control groups, we want to keep the chance of obtaining statistically significant results small.

However, when multiple tests are conducted, we increase the probability of finding that at least one of these tests of the null hypotheses is statistically significant at much more than 5 percent. For example, if all null hypotheses are true, the chance of finding at least one spurious impact is 23 percent if 5 independent tests are conducted, 64 percent for 20 tests, and 92 percent for 50 tests (Schochet 2008). Thus, without accounting for the multiple comparisons being conducted, users of the study findings may draw unwarranted conclusions.

At the same time, statistical procedures that correct for multiple testing can result in hypotheses tests with reduced statistical power—the probability of rejecting the null hypotheses given that it is false. In other words, corrections to adjust for the multiple testing reduce the likelihood of identifying real differences between the two groups (increase in the Type II error rate of accepting a false null hypotheses). Commonly used corrections show a reduction in statistical power from the commonly used 80 percent for an uncorrected individual test, to 59 percent if 5 tests are conducted, and 41 percent for 20 tests (Schochet 2008). Thus, the multiple comparisons corrections can lead to substantial loss in statistical power.

An approach proposed by the Institute for Education Sciences is to limit the number of outcomes and subgroups, to prioritize ahead of time the domains in which impacts will be estimated, and to specify the key outcomes in each domain before the data analyses are conducted. This is the approach we propose to use. We have identified, in Section B of this chapter (as well as in the logic model in Chapter I), what the key domains are and the

[63] This section, and the approach we propose to deal with the multiple comparisons problem, are summarized from Schochet (2008).

primary outcomes we will examine in each domain. Of course, these are our expected hypotheses at this time based on what we currently know about the projects and the interventions they are planning to implement. However, several projects are relatively new, and it is likely that their interventions will evolve to some extent over time. Before we actually conduct the data analyses, we will specify or respecify the key areas where we expect to see impacts, and structure the data accordingly.

Finally, based on the primary outcomes selected for each project, we will use the Benjamini-Hochberg (BH) correction for appropriate outcomes. The traditional method used to correct for multiple comparisons is the Bonferroni method, but that approach tends to be somewhat conservative. The BH method adjusts for multiple comparisons by controlling false discovery rate, instead of the family-wise error rate. It is less conservative than the Bonferroni method, yet still provides adequate protection against Type I error in a wide range of applications, and is shown to be the best solution to the multiple comparison problem in many practical situations (Williams et al. 1999).

2. Appropriateness of Regression-Adjusted Impact Analysis

Recent theoretical research in econometrics suggests that analyzing experimental data using OLS multivariate regression models may not always be justified, even if control variables with significant power to explain variation in the outcome measures are available (Freedman 2006). Freedman's argument is that multivariate models, under some circumstances, may lead to biases in the standard error of the impact estimates. Schochet (2007) examined data from several large-scale random assignment evaluations and found that, in practice, conducting regression adjustments did not lead to biases in the standard errors of the impact estimates. In general, as long as there is a fairly even split in the sample between the treatment and control groups, the regression-adjusted estimates do not lead to biases in the standard errors of the impact estimates.[64]

We will empirically investigate whether a slight imbalance in the research samples will lead to biases in the standard error of the impact estimates. Because the research samples are only slightly unbalanced (6:5), they are still pretty close to an even split, and we do not expect this slight degree of imbalance to introduce significant issues with respect to the OLS standard errors. In any case, the simple differences in means will produce unbiased estimates; the regression-adjusted impacts will primarily improve the precision of the estimates. Furthermore, we will conduct sensitivity tests by estimating impacts on all primary outcomes using both simple differences and regression-adjusted models.

[64] If the sample is not more or less evenly balanced, the standard errors of the impact estimates are not biased if the impacts of the interventions are homogenous across subgroups. However, in the YTD interventions, we do not expect similar impacts across subgroups for the key subgroups we have selected; hence, we will have to verify if the slight imbalance will lead to biases in the standard errors.

3. Nonresponse to the Follow-Up Surveys

To estimate project impacts, we will use data from administrative records, as well as surveys conducted at 12 and 36 months following random assignment. While nonresponse is not a concern for the outcome measures based on administrative data, it can be for the survey-based measures. If the nonrespondents differ systematically from the respondents, and we do not account for the differences, then the estimated impacts of the YTD projects could be biased.

We will use the following three approaches to address any potential survey nonresponse problem:

1. Most important, we will try to maximize the overall survey response rate and minimize the nonresponse differential between the treatment and control groups. We expect to achieve a response rate of 90 percent for the 12-month survey and 80 percent for the 36-month survey. The YTD evaluation's data collection plan outlines our strategy for maximizing the survey response rates (Rangarajan et al. 2007, Appendix D).[65] Interview completion will be monitored by treatment and control status, and survey resources will be shifted between these groups as necessary to minimize the nonresponse differential.

2. We will assess whether the nonrespondents are systematically different from the respondents by comparing these sample groups with respect to both baseline characteristics and follow-up outcome measures from administrative records.

3. If nonresponse rates are higher than anticipated, or if there is differential nonresponse between the treatment and control groups, and if we find evidence of systematic differences between respondents and nonrespondents, then we will adjust for nonresponse by weighting the respondent cases to make them more representative of the original sample. We will derive the weights by using regression models to predict a sample member's likelihood of being a respondent to a follow-up survey. The explanatory variables in these models will include baseline characteristics, as well as follow-up outcome measures from administrative records.

4. Cohort Differences

Youth in each of the YTD project sites enroll in the evaluation and YTD services over two to three years. During this relatively long enrollment period, the characteristics of

[65] Survey nonresponse has two major dimensions: (1) noncooperation, and (2) nonlocatability of respondents. All youth in the research samples would have responded to the baseline survey and will provide written consent to participate in the evaluation. The baseline interview will obtain extended contact information (names and telephone numbers of three relatives or friends) for all sampled youth. In addition, extensive contact information will be obtained at each survey point. These activities are expected to address both the noncooperation and nonlocatability dimensions of survey nonresponse.

enrollees may change. Likewise, as a project matures and gains experience, the services that it provides may evolve. Furthermore, economic conditions may change over time. To document these changes and assess their implications for the analysis of project impacts, we will conduct three analyses. First, we will use baseline data to examine whether the characteristics of youth who consent to be in the evaluation vary by enrollment cohort. Second, we will carefully document changes in project services over time as part of the evaluation's process analysis, as well as any changes to economic conditions over time (see Chapter VI). Finally, we will estimate project impacts separately for subgroups corresponding to enrollment cohorts and assess whether any differences are statistically significant. The cohorts for these analyses will be constructed based on the date of random assignment. Given the sample sizes in each project, we expect that we will not have more than two cohorts in each project, and we will identify the cohorts based on the duration of the enrollment period, cohort size (the number of evaluation enrollees) and its implications for statistical precision, and the timing of shifts in enrollee characteristics and/or project services.

5. Different Timeframes for Implementing YTD Projects

The YTD projects have been selected in two phases. Three projects were selected as part of the first phase, and started enrolling youth for the impact evaluation in late 2006 and early 2007. The last three projects will begin implementation in mid-2008. This difference in the timeframe for implementation of original and new YTD projects can potentially result in the projects being implemented under very different economic and policy environments. This is a problem common to large-scale evaluations where many sites are selected, and site selection takes place at different times. Because the YTD evaluation is designed to estimate impacts separately for each YTD project, this problem is not as great as it would have been if we were planning on only presenting pooled estimates across the projects.

Nonetheless, we must remember that our interventions may span periods of varying economic conditions and that the same project may yield different impacts during a period of boom than during one of weaker economic conditions. It is difficult to predict *a priori* what direction the weaker economic conditions in more recent times will have on the impact estimates generated by each project. For example, it is possible that the impacts are stronger in a period of strong economic conditions, as the treatment group members can easily find employment. However, it is also possible that, under those conditions, control group members also easily find employment, and impacts may actually be larger during a weaker economy. While we cannot do anything very rigorous to address this issue, we can look at similar YTD interventions that were implemented under very different economic environments to understand how the project impacts might vary with changing economic conditions. Similarly, if different enrollment cohorts of youth within a YTD projects are exposed to varying economic conditions, we can conduct a subgroup analysis with the subgroup sample identified by one or the other type of economic environment they would have experienced.

6. The Age Composition of the Research Sample

SSA has defined the YTD-eligible population as youth ages 14 through 25 who are receiving, or are at risk of receiving, SSI or other disability benefits. Within these parameters, projects may serve youth in a more narrow age range. Among the original YTD projects in the random assignment impact study, the Colorado project has elected to serve the full age range of eligible youth, whereas the project in Erie County, New York, is targeting youth ages 16 through 25, and the CUNY project is targeting youth ages 17 and 18. The new projects are generally focusing on youth between ages 16 and 22. As discussed earlier, to determine whether a project's overall impacts (that is, impacts estimated on the project's full research sample) are sensitive to the ages of its targeted youth, we will estimate impacts separately for subgroups defined by age at random assignment as we expect to find differences in impacts on selected outcomes. For instance, we expect to find that acquisition of competitive employment is a relevant outcome for older youth, but less relevant for younger youth, who might focus more on education attainment.

When making cross-project comparisons of impact estimates, it will be necessary to consider the age distribution of evaluation enrollees. For instance, if many of the enrollees were ages 14 to 17 at random assignment, we might find stronger impacts on education and skills attainment three years later but, at most, weak impacts on employment and earnings. When sample sizes permit, we will also address this issue by estimating impacts for specific age groups that are common to several projects. For example, it might be possible to estimate impacts on youth who were 17 or 18 years old at random assignment for each of the three original random assignment projects.

F. DATA SOURCES

The analysis of YTD project impacts will rely on two general sources of data: (1) the surveys being conducted as part of the YTD evaluation, and (2) administrative files maintained by government agencies. Typically, administrative records do not provide the rich diversity of information that can be gathered through surveys. However, administrative data may be more accurate than survey data and can be obtained for the full research sample, including survey nonrespondents. On the other hand, surveys can provide data on outcomes, such as attitudes and expectations, that are rarely available from administrative sources. The YTD impact analysis will be enriched by our use of both administrative and survey data.

In this section, we briefly discuss these data sources and present a table that summarizes the sources of the variables that will be used in the impact analysis (Table VIII.6). A more detailed discussion of these data sources is provided in the evaluation's data collection and survey plan (Rangarajan et al. 2007).

Table VIII.6. Data Sources for the Impact Analysis

Variable	Data Source: YTD Evaluation Surveys: Baseline	12-Month Followup	36-Month Followup	Administrative Files: SSA Benefits Data and Earnings Records	CMS Medicaid Paid Claims
Control Variables					
Demographics (age, gender, race/ethnicity, primary language)	X			X	
Education and training	X				
Health status	X				
Primary disabling condition				X	
Employment and earnings	X			X	
Expectations about the future	X				
Parental education and employment	X				
Socioeconomic background	X				
Other characteristics	X				
Short-Term Outcomes					
Employment-focused services/activities		X			
Paid employment		X			
Youth income		X		X	
Attitudes and expectations		X			
Educational progress		X			
Longer-Term Outcomes					
Employment and earnings		X	X	X	
Youth income		X	X	X	
Engagement in gainful activity		X	X		
Reduction in criminal justice contact		X	X		
Self-determination and self-efficacy		X	X		
Other exploratory analyses		X	X		X
Selected Subgroup Indicators					
Key Subgroup					
In-school versus out-of-school	X				
Age at random assignment	X			X	
Supplementary Subgroups					
SSI beneficiaries versus "at-risk" youth				X	
Primary disabling condition				X	
Prior work experience	X			X	
Enrollment cohort	X				
Duration on benefit rolls before random assignment				X	
Survey respondents versus nonrespondents		X	X		

1. Survey Data

A baseline survey and two follow-up surveys will provide data for the YTD evaluation. The baseline survey is being conducted as part of the evaluation's sample intake process. It provides demographic characteristics and personal and family background information for

all youth who have consented to participate in the study. As Table VIII.7 shows, the baseline survey will be the principal source of the control variables that will be included in regression models to improve the precision of impact estimates. It will also be a source of criteria for defining subgroups.

The follow-up surveys of YTD evaluation enrollees will be conducted 12 and 36 months after random assignment. These surveys will provide critical data for the impact analysis, as they will gather information on outcomes that are not readily available from administrative files and that the YTD interventions might affect. These will include outcomes that may be affected in the short run (such as receipt of services, attitudes toward work, and understanding of SSA work incentives) and longer-term outcomes (such as employment and job characteristics, use of SSA work incentives, and measures of health and quality of life). In the 12-month follow-up survey, we will ask respondents to provide information on key outcomes since the time of the baseline interview and random assignment. In the 36-month followup, we will focus on outcomes during the year (or shorter intervals, such as the month) preceding that interview; however, we will obtain a full employment history extending back to the time of the 12-month survey. Both surveys will also gather information specific to the date of the interview on a variety of outcomes, such as living arrangements and educational attainment.

2. Administrative Data

The evaluation team will obtain administrative data from automated files maintained by SSA and other federal and state government agencies. We will use these data primarily to track selected outcomes for evaluation enrollees for up to 48 months after random assignment. The administrative data will also supplement the baseline survey as a source of enrollee characteristics for use as control variables in the estimation of YTD impacts. Described in greater detail in the evaluation's data collection report (Rangarajan et al. 2007), the four principal types of administrative data that we will collect for the YTD impact analysis are (1) SSA benefit program records; (2) SSA earnings records; (3) student records maintained by school districts; and (4) other administrative records, such as CMS paid claims records and Rehabilitation Services Administration (RSA)-911 records.

Table VIII.7. Reporting Schedule for the Impact Analysis

	Project-Specific Reports		
YTD Project	Interim Report (12-Month Impacts)	Letter Report (24-Month Impacts)	Comprehensive Final Report (36- and 48-Month Impacts)
Colorado	10/2009	2/2011	8/2014
CUNY	2/2010	6/2011	8/2014
Erie	10/2009	2/2011	8/2014
New projects	Approx. 3/2012	Approx. 7/2013	8/2014

We will gather data from SSA benefit program records, SSA earnings records, and Medicaid paid claims records, as well as RSA data for YTD evaluation enrollees in all the random assignment sites. However, we will gather data from school records only for the Montgomery Country project, where the structure and objectives of the YTD projects are such that educational outcomes are critical.

G. REPORTING THE FINDINGS

We will report findings from the impact analysis in three major types of deliverables: (1) project-specific interim reports on impacts 12 months after random assignment, (2) project-specific letter reports on 24-month impacts, and (3) a comprehensive final report on impacts 36 and 48 months after random assignment (Table VIII.7).

1. Project-Specific Interim Reports

Project-specific interim reports will present findings from the impact analysis for the year following random assignment, along with findings from the process study. These reports will focus on the short-term impacts of the projects on outcomes such as receipt of services, attitudes toward work, and understanding of SSA work incentives. They will be based on information gathered from the 12-month follow-up survey and administrative records.

We will submit these reports to SSA in draft form 18 months after the last youth goes through random assignment. According to our current plans for completing random assignment for the three original projects, we will deliver the interim reports on the Colorado and Erie projects in October 2009 and the interim report on the CUNY project in February 2010. We estimate that we will deliver the interim reports on the new random assignment projects in March 2012.

2. Project-Specific Letter Reports

These brief project-specific reports, which will be in memo format, will present estimates of impacts on outcomes based on administrative data only. The principal outcomes will be employment, earnings, participation in SSA disability programs, and the disability benefit amount. These outcomes will pertain to the two-year period following a youth's random assignment to the treatment or control group.

We will submit drafts of the letter reports to SSA 34 months after the completion of random assignment. That will be in 2011 for the original random assignment projects and 2013 for the new projects.

3. Comprehensive Final Report

The final evaluation report will focus on the longer-term impacts of YTD, including impacts on employment and earnings, program participation and benefits, use of SSA work incentives, and health and quality of life. The impact estimates will be based on data from

the 36-month follow-up survey and administrative files. This report will be comprehensive in that it will cover all the random assignment projects and will present findings from the process and benefit-cost analyses, as well as the impact analysis.

We are scheduled to deliver a draft of the comprehensive final report on the YTD evaluation to SSA in August 2014. Based on SSA's comments on the draft, we will revise and resubmit this report to SSA in final form in October 2014.

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CHAPTER IX

BENEFIT-COST ANALYSIS

The benefit-cost analysis is one of the most important components of the YTD evaluation. Using information from the impact study and the cost analysis, the benefit-cost analysis will determine whether the impacts of the YTD projects are large enough to justify the cost of the intervention. This analysis will indicate whether the investment in providing services and waivers to youth pays off, and under what circumstances. In conducting the benefit-cost analysis, we will examine key measures from several different perspectives, including those of the youth who participate in the YTD projects and whom the intervention is directly intended to benefit, SSA, and society as a whole. The findings from the cost-benefit analysis will inform current and future programs that provide services to youth with disabilities, and will help SSA decide whether to expand YTD services and waivers for these youth.

This chapter is organized as follows: Section A describes our general approach to the benefit-cost analysis for the YTD projects. Section B describes the elements of benefits and costs that will be included in the analysis. Section C discusses the perspectives from which benefits and costs will be compared. Sections D and E, respectively, discuss measurement and analytic issues related to the benefit-cost analysis. Finally, Section F describes our plan for reporting the findings from the benefit-cost analysis.

A. GENERAL APPROACH

Our approach to the benefit-cost analysis draws on work currently under way on Mathematica's evaluation of SSA's Ticket to Work program and on the methodologies that Mathematica used to conduct benefit-cost analyses of other public programs, including Job Corps (McConnell and Glazerman 2001; Long et al. 1981), the National Supported Work Demonstration (Kemper et al. 1984), and the Iowa Family Investment Program (Gordon and Martin 1999).

In a benefit-cost analysis, all benefits and costs are measured relative to a counterfactual, or a comparison situation. In particular, in the YTD evaluation, we will compare the actual behavior of youth participating in YTD projects with what we estimate their behavior would

have been without the intervention. With a random assignment design, the behavior of the control group members represents the counterfactual against which the behavior of the YTD treatment group members can be compared. Thus, we will measure the benefits and costs of the YTD projects relative to a status quo situation in which some youth receive transition and employment-related services from other existing programs. This comparison reflects the decision policymakers must make—whether to expend resources to implement youth transition programs on a wider scale, keeping in mind that some youth would receive services from existing providers absent the expansion. Before turning to our general approach to conducting the benefit-cost analysis, we highlight an important element related to the time frame for the benefit-cost analysis, and how we propose to approach the issue.

1. Time Frame for the Benefit-Cost Analysis

Based on the timing of the project site selection and the length of the enrollment period, the largest observation window for the benefit-cost analysis common to the six demonstration projects prior to the end of the YTD evaluation contract in September 2014 will be a three-year period after the end of random assignment.[66] While most of the costs of the YTD interventions will be incurred during the early years of their implementation, their benefits are expected to accrue over a longer period. Key anticipated benefits of the interventions are higher earnings and reduced SSA benefits over the lifetime of a participating youth. The potential for a lifetime of reduced SSA benefits was a major impetus to the YTD initiative, and it is likely to be a big factor in determining whether the benefits of the interventions outweigh their costs. However, as discussed in Chapter VIII, with the YTD waivers in effect, we anticipate that there will be no reductions in SSA benefits over the three-year observation window even if the projects have significant positive impacts on earnings.[67]

To confirm our hypothesis, we simulated impacts on benefits given various assumptions regarding the magnitude of YTD impacts on employment and earnings, in combination with the SSA waivers during the three-year observation period. We found that, even assuming implausibly large impacts on employment and earnings, we are unlikely to see significant reductions in disability benefit amounts and participation in the disability programs by treatment group members relative to control group members during the three-year observation period. Considering just the CDR/age-18 medical redetermination waiver and the EIE waiver, we found that the earnings of treatment group youth would have to be at least three times larger than those of control group youth for the treatment youth to experience significant reductions in SSA benefits and almost four times larger for them to exit the rolls. Impacts of this magnitude on earnings are implausible; we do not expect to find them in our impact analysis. Thus, conducting a benefit-cost analysis while the waivers remain in effect would provide a distorted perspective on potential for YTD to generate

[66] Four years of follow-up data may be available for at least two of the three original assignment projects.

[67] The SSA waivers will be in effect for a minimum of four years for all youth participating in a YTD project and up to six years for younger participants.

long-run net benefits and would not provide SSA decision makers with the critical information they need for policy-making purposes.

The YTD evaluation contract ends in September 2014, which would only allow for a three-year window for the benefit-cost analysis. Given that such an analysis will likely provide a distorted view of the cost-effectiveness of the YTD interventions, we have agreed with SSA to take the following approach to conducting the benefit-cost analysis for the evaluation. Essentially, SSA will conduct the full benefit-cost analysis after our evaluation contract ends, using administrative data and based on an extended observation period following random assignment. However, the evaluation team will conduct a benefit-cost analysis based on data for the first three years following random assignment. We will present the findings from that analysis to SSA in the form of a memo rather than as a chapter in the final evaluation report. In addition to the early benefit-cost findings, the memo will present a framework and step-by-step instructions for SSA to conduct longer-term benefit-cost analyses that will incorporate findings from the three-year analysis plus findings from longer-term impact analyses based on SSA administrative data on earnings and benefits. SSA will be able to utilize the framework to conduct longer-term benefit-cost analysis, perhaps multiple times (for example, at 5, 10, and 15 years after random assignment), to assess whether and when the benefits of the interventions outweigh the costs.

2. Accounting Framework: Project-Specific Benefit-Cost Analysis

The YTD benefit-cost analysis will use an accounting framework that appropriately captures the net benefits generated by each YTD project. To that end, we will compare the estimated benefits and costs for each YTD project separately. Because the YTD projects vary in their interventions and service environments, the project-specific estimates of net benefits are most appropriate for assessing the options that will be available to policymakers for a possible national youth transition program. If the impact analysis indicates substantial differences in impacts for subgroups of participants, we will also analyze benefits and costs for these subgroups. The subgroup analysis would inform policymakers of possible alternatives in targeting youth for transition services and waivers.

3. Consistency in Assumptions for Benefit-Cost Analyses Across SSA Demonstrations

Because SSA is currently conducting a number of demonstrations in addition to YTD, it will be important to ensure that the assumptions underlying the benefit-cost analyses (for example, the discount rate, the correction for inflation, projections about potential productivity growth) are consistent to the extent that is feasible. As we make plans for the YTD cost data collection, as well as for the benefit-cost analysis, we will make sure that our assumptions are acceptable to the SSA Office of the Chief Actuary. In addition, as appropriate, we will attempt to coordinate with the evaluations of other SSA demonstrations to ensure that the assumptions underlying the benefit-cost analyses are consistent across the evaluations. This consistency will facilitate more accurate comparisons of the various policy options that SSA is testing.

The rest of the chapter describes our approach to conducting the benefit-cost analysis. The approach we propose can be used regardless of the observation period. However, the longer that period is, the more confidence we can have in conclusions that we draw from it regarding the cost-effectiveness of the YTD interventions.

B. BENEFITS AND COSTS TO BE INCLUDED IN THE ANALYSIS

For the YTD benefit-cost analysis, we will place a dollar value on all potential benefits and costs resulting from the interventions that can be valued with reasonable confidence. We will measure a wide range of different benefits and costs, as listed in Table IX.1. This list includes benefits and costs for which dollar values can be assigned without resorting to extreme or questionable assumptions, as well as some benefits that are more difficult to quantify but that will be included in the analysis in a qualitative way.

1. Benefits

The benefits of the YTD projects can be categorized into four broad groups: (1) increases in output and productivity, (2) changes in use of other programs and services, (3) reductions in risky behaviors such as criminal activity, and (4) improvements in participants' general well-being.

a. Increases in Output and Productivity

Increases in output and productivity are among the most important anticipated benefits of the YTD initiative, which has a stated goal of improving the employment and, hence, the productivity of the youth the projects serve. We will estimate the increase in output resulting from the additional employment through the increase in total compensation, which is a broader measure of worker output than earnings alone.

We will estimate the impacts of the YTD projects on earnings (wages and salaries) from the time of random assignment until the end of the follow-up period. This increase will be a benefit both to the youth and to society as a whole. We will obtain data on pretax earnings for youth in the treatment and control groups from SSA administrative records. Earnings are only one component of an employee's total compensation, which also includes fringe benefits, such as paid leave and employer contributions to insurance plans (health, accident, and life) and retirement plans. To estimate the value of fringe benefits, we will combine data from the YTD follow-up surveys on the fraction of youth who receive fringe benefits with data on the cost of fringe benefits as percentage of earnings for all U.S. workers who receive fringe benefits from published sources (for example, employee compensation data published by the U.S. Department of Labor, Bureau of Labor Statistics). Payments made by employers on behalf of employees for social insurance programs such as OASDI, unemployment insurance, and workers' compensation are another component of total compensation. These contributions can be calculated using published rates. We will adjust our estimates of YTD impacts on earnings by our estimates of fringe benefits and our calculations of employer contributions for social insurance to obtain estimates of the impacts on total compensation and, hence, on the value of output.

Table IX.1. Benefit-Cost Accounting Framework for the YTD Evaluation, by Perspective

Benefit or Cost	Perspective				
		Federal Government			
	Youth and Their Families	SSA	Other Federal Agencies	Rest of Society	Society as a Whole
Net Benefits During the Observation Period					
Increased Output and Productivity					
Earnings and fringe benefits	+	0	0	0	+
Taxes[a]	–	+	+	+	0
Use of Non-YTD Education and Training Services					
Education programs	?	0	?	?	?
Training programs	?	0	?	?	?
VR	?	?	?	?	?
Increased SSA and Other Benefit Payments[b]					
Federal disability benefit programs (SSI, DI, CDB)					
Benefit payments	+	–	0	0	0
Administrative costs	0	–	0	0	–
Public assistance programs (State SSI, TANF, food stamps)					
Benefit payments	+	0	–	–	0
Administrative costs	0	0	–	–	–
Health care programs (Medicare, Medicaid)					
Paid claims	+	0	–	–	0
Administrative costs	0	0	–	–	–
Reductions in Risky Behaviors					
Criminal activities	0	0	+	+	+
Improvements to Participants' General Well-Being					
Health status	+	+	+	+	+
Self-esteem	+	+	+	+	+
Perceptions of overall quality of life	+	+	+	+	+
Total Benefits (A)					
YTD Project Costs					
Budgeted cost	0	–	?	?	–
Unbudgeted cost	0	–	?	?	–
Other costs (for example, TA, ETO, waiver administration)	0	–	?	?	–
Total Costs (B)					
Total Net Benefits (A-B)					

Table IX.1 *(continued)*

Benefit or Cost	Perspective				
		Federal Government			
	Youth and Their Families	SSA	Other Federal Agencies	Rest of Society	Society as a Whole
Projected Net Benefits Beyond the Observation Period					
Increased Earnings and fringe benefits	+	0	0	0	+
Increased Taxes	-	+	+	+	0
Decreased use of disability benefit programs					
Benefit payments	-	+	+	+	+
Administrative costs	0	+	+	+	+
Decreased use of public assistance programs					
Benefit payments	-	0	+	+	+
Administrative costs	0	0	+	+	+
Decreased use of health care programs					
Paid claims	-	0	+	+	+
Administrative costs	0	0	+	+	+

Notes: The "rest of society" includes everyone other than the YTD participants and SSA.

"+" indicates an expected net benefit; "-" indicates an expected net cost; "0" indicates neither a net cost nor a net benefit; and "?" indicates that the effect is unknown.

As discussed in Chapter VIII, we expect to see positive impacts on disability benefit payments and Medicaid paid claims during the observation window because the YTD waivers will be in effect during most of this period.

CDB = Childhood Disability Benefits; DI = Social Security Disability Insurance; ETO = Efforts-to-Outcomes; SSI = Supplemental Security Income; TA = technical assistance; TANF = Temporary Assistance for Needy Families; VR = vocational rehabilitation.

[a]Taxes will include federal income taxes, payroll taxes, federal excise taxes and state and local taxes. The analysis will examine the separate contribution of each of these various taxes by the various perspectives, even though they are shown in aggregate in this table for simplicity.

[b]States share some or all of the costs of state SSI supplemental, TANF, and Medicaid payments, which is included as a cost to the rest of society.

As the earnings of YTD participants increase, so will their tax payments, which represent a cost to the participants but a benefit to taxpayers. The additional taxes will not affect society as a whole, as they are a transfer from one component of society to another. We will estimate the tax payments based on information on income and household composition reported in the follow-up surveys. Taxes will be defined broadly to include:

- Federal income taxes (including the EITC and child benefits)
- Payroll taxes (6.2 percent for OASDI, 1.45 percent for Medicare taxes, 0.8 percent of the first $7,000 for federal unemployment insurance, and an estimated 0.6 percent for state unemployment insurance [U.S. House of Representatives 2004])
- Federal excise taxes (on tobacco, gasoline, etc.; estimated to be 2.1 percent of income for households with incomes less than $16,000 [U.S. Congressional Budget Office 2007])

- State and local taxes (sales, excise, property, and income taxes; estimated to be 12.4 percent of income [McIntyre et al. 2003]).

Income will also be defined broadly to include wages and salaries, transfer payments, and taxable fringe benefits. The proportion of all household income that is paid as taxes is the *effective tax rate*. For the benefit-cost analysis, we will use existing estimates of the average effective tax rates for low-income families. For instance, the Tax Analysis Division of the Congressional Budget Office (CBO) estimated the average effective tax rates for four federal taxes: individual and corporate income taxes, payroll taxes, and excise taxes (U.S. Congressional Budget Office 2007. Unfortunately, these estimates do not include state and local income taxes. If timely estimates of state and local tax rates by CBO or other reliable sources remain unavailable when we conduct the benefit-cost analysis in 2013-2014, we will use 2002 effective tax rates for state and local taxes estimated by McIntyre et al. (2003), albeit with some concern about the accuracy of those estimates, which would then be over 10 years old.[68]

b. Changes in Use of Non-YTD Education and Training Services

Participation in a YTD project may affect the use of other non-YTD education and training services. The extent to which this will occur will depend on the nature of the services that the project offers (for example, how often the project refers youth to non-YTD services, or whether most services are provided directly by project staff). To some extent, this will also depend on the youths' situations—for instance, youth in school and youth working may be less likely to use other non-YTD education and training services, while out-of-school youth who are not employed may be more likely to participate in such services. Furthermore, in some cases, the youth might incur some costs as a result of participation in such services (for instance, if they attend a community college and do not get grants to cover their costs), while in other cases, it may be paid for by the tax payer (for instance, if they receive VR services). As a result of these various factors, we are uncertain a priori about the direction of the impacts of YTD on the use of other education and training services; the actual impacts must be estimated through empirical analysis.

We will use information primarily from surveys and secondarily from administrative records to estimate the impacts of the YTD projects on the use of other programs and services. For services that are clearly distinct from those offered by YTD, such as education, the impact estimates will be based on data from the 12- and 36-month follow-up surveys, which will ask youth to report on their use of these services since baseline. Cost estimates for these programs will be obtained from published sources, such as from the National Center for Education Statistics. In assigning costs to participation in secondary education, we will use estimates from Chambers et al. (2003), which showed that per pupil expenditures

[68] Estimating effective tax rates requires not only examining tax schedules and statutory tax rates, but also making assumptions about the incidence of taxes (the true burden of taxes) and behavioral response to increase in income. Such an undertaking is beyond the scope of the current study.

for students who receive special education services are about 1.9 times greater than expenditures for students who do not receive any special education services. Comparable estimates are not available for post-secondary education; however, we can test the sensitivity of the cost estimates using cost ratios similar to those for secondary education.

To obtain measures of the use of non-YTD services, we will examine data from the follow-up surveys for treatment and control group members on the types of these services used and their intensity. For the treatment group members, we are concerned that these data might not allow us to distinguish between services provided by a YTD project and services provided by other organizations. If the survey data will support drawing this distinction with reasonable accuracy, then we can use the data to estimate impacts on the use of non-YTD services, and multiply them by the prices of such services obtained from published sources and interviews with relevant service providers. To verify the accuracy of the survey data, and to assess how well we can distinguish between YTD and non-YTD services from these data, we are planning to conduct in-depth interviews with 40 treatment and control group youth in each random assignment site. These interviews, which will be conducted approximately a month after the youth complete the 12-month survey, will be semi-structured and will focus exclusively on the use of services. They will provide us with measures of the intensity of YTD and non-YTD services during the year following random assignment. We will use these measures as benchmarks for assessing the accuracy of the data on service use from the 12-month survey and to inform our decisions regarding the appropriate use of those data in the benefit-cost analysis.

c. Changes in SSA and Other Benefit Payments

The waivers offered as part of the YTD should lead to increased participation in SSA disability benefit programs and payments in these programs in the initial years following random assignment. Furthermore, the benefits counseling offered as part of the YTD services may also lead to increased participation in other public assistance programs such as food stamps, TANF, and others. Youth might also be more likely to receive healthcare benefits in the near-term. These increases in payments will show up as a positive benefit for the youth in the short term, but a negative benefit (or cost) from SSA, other federal agency, or the rest of society perspective.[69] These changes in payments are essentially transfers between the participant and the government, and do not really affect society as a whole. However, the administrative costs that result from the increased use of disability and other benefits reflect increased costs to the relevant agencies as well as to society as a whole. It is anticipated, however, that in the long run we would expect the reliance on these programs to decrease if the YTD interventions are successful in increasing employment and earnings.

[69] Because most of the increased SSI benefit payments results from the YTD waivers, as described in Chapter VII, we will try to separate total net benefits into the net benefits (or costs) that arise from the waiver component, and the net benefits that would have ensued if there had been no waivers. In doing so, we will have to ignore any behavioral changes in employment that may have resulted from the offer of waivers.

d. Reductions in Risky Behaviors

Transition-age youth with disabilities are more likely than youth without disabilities to use alcohol and/or illicit drugs and to be involved with the juvenile justice system (Chesapeake Institute 1994; SRI International 1997). We anticipate that the projects may reduce the participants' involvement in criminal activity, and thereby reduce the probability of being arrested, convicted, and incarcerated. Any reduction in the use of the justice system that can be associated with the decrease in criminal activity is also a benefit. Similarly, participation in the YTD projects may reduce drug and alcohol abuse and, hence, the need for and use of drug and alcohol treatment services.[70] The benefit-cost analysis will account for these benefits of the YTD projects. These reductions in risky behavior will be a savings to government and taxpayers, and hence to society as a whole.

Information on youths' risky behaviors will be obtained largely through the 36-month follow-up survey. These data will include information on criminal activity, arrests, incarceration, probation or parole, and substance abuse, as well as on participation in drug and alcohol treatment programs. Because this information will be obtained for youth in both the treatment and control groups, we will be able to estimate the impacts of the YTD intervention on these outcomes. These estimates will form the basis of our measures of YTD-induced changes in risky behaviors.

For each net impact related to criminal activity or other risky behaviors, we will assign a monetary value (or cost of that activity). We will use existing data to estimate the costs of various risky activities. For example, using data from the National Crime Victimization Survey administered by the U.S. Census Bureau for the Bureau of Justice Statistics (BJS), we can estimate the expected cost of property damage and personal injury because of rape, robbery, assault, burglary, larceny, and other personal crimes. Any reduction in risky activities is also expected to result in resource savings in justice system processing costs. We will use estimates from existing studies and data from the BJS to estimate the average savings in justice system costs. In addition, the benefits from changes in the use of drug and alcohol treatment programs will be estimated by multiplying the estimated YTD-induced changes in the use of these programs by existing estimates of the average cost of drug and alcohol treatment (see, for example, Harwood et al. 1998).

e. Improvements in Participants' General Well-Being

YTD is expected to provide other benefits that are difficult to assign monetary values to, such as improvements in participants' general well-being that may result from enhanced self-empowerment skills and better employment outcomes. The projects may lead to improvements in youths' health status, self-esteem, and overall life quality. These potential benefits can be measured, but it is difficult to assign dollar values to them. Therefore, we will not value them in dollars. Instead, we will list and measure these benefits as

[70] The 36-month follow-up survey will measure use of drug and alcohol treatment services and will be the basis for the analysis of impacts on these outcomes.

comprehensively as possible and provide indicators of the potential importance of each. The 36-month follow-up survey will collect information on many measures that reflect the sample members' well-being. Our estimates of impacts on these measures will be incorporated in the benefit-cost analysis, as indicated in Table IX.1. We recognize that the data from the follow-up survey will generally allow us to estimate impacts on these measures at only a point in time, rather than for the evaluation's entire observation period. Nonetheless, they will provide an indicator of the impacts of YTD on participants' general well-being.

2. Costs

YTD project costs fall into three broad categories:

1. Budgeted project operating costs

2. Unbudgeted project operating costs

3. Other costs, such as TA costs, ETO costs, and SSA's costs of administering its waivers for YTD[71]

As discussed in greater detail in the cost data analysis chapter (Chapter VII), budgeted program costs refer to staff time and other direct costs, such as purchased services, which will be calculated based on information from a project's administrative accounting system. We will also obtain information on indirect costs, such as project overhead and general administrative costs. Unbudgeted program costs include services provided by external organizations, unpaid assistance (such as volunteers' work), and work done by staff of the lead and partner organizations not paid through the project. Other costs include the cost of TA that the project receives through the evaluation contract, and the cost of using ETO (the web-based case management tool). We will calculate two measures of project unit costs for use in the benefit-cost analysis: (1) average cost per participant, and (2) average cost per participant month.[72]

C. BENEFITS AND COSTS FROM DIFFERENT PERSPECTIVES

The findings from a benefit-cost analysis typically vary, depending on the perspective from which benefits and costs are measured. This will also be the case for the benefit-cost analysis of the YTD projects. Most of the benefits of YTD projects will accrue to the youth (and their families) who enroll and participate in the project activities, while SSA will incur most of the short-term costs. Some of the benefits, such as reduced crime, will affect other

[71] SSA's cost of administering the waivers for YTD will end when the last treatment group member's eligibility for the waivers ends, which will be approximately four to six years after the last youth is randomly assigned to the treatment group. SSA's benefit cost of the waivers (that is, the cost in terms of higher benefit payments) will also end at that time.

[72] Table VII.6 explains how the two unit costs measures will be calculated.

citizens as well. Hence, the benefits and costs for participating youth and their families are expected to differ considerably from the benefits and costs for SSA and the rest of society.

We will examine the benefits and costs from five perspectives:

1. Participant youth and their families
2. SSA
3. Other federal agencies
4. The rest of society (other than participants and the federal government)
5. Society as a whole

A positive benefit from one perspective could be a negative benefit (that is, cost) from another perspective. For instance, an increase in tax payments by participants is a benefit to the federal government and to the rest of society, but a cost to participants. The benefit (or cost) to society as a whole is just the sum of the benefits (or costs) to participants, SSA, and the rest of society.[73] Here, we briefly discuss the different perspectives.

1. Participant Youth and Their Families

Assessing benefits and costs from the perspective of YTD participants and their families will allow us to address whether participating in a YTD project is a good investment for the group the demonstration is directly intended to affect. While we expect that youth who participate in YTD will gain from that experience, it is important to assess the magnitude of the net benefits to those youth. Given the SSA waivers and the expected positive impacts on earnings, we anticipate that the projects will yield relatively large net benefits to the participant youth and their families.

2. SSA

The benefits and costs of the YTD projects will also be analyzed from the perspective of SSA. Because the projects target youth who either are currently, or are at risk of, receiving Social Security disability benefits, and because SSA is incurring the outlays for these demonstration projects, it will be important to measure benefits and costs from SSA's perspective. While it is hoped that YTD projects will save SSA money in the long term, it is likely that the projects will cost SSA money during the evaluation's four-year observation period. The SSA-specific benefit-cost analysis will help the agency understand the net benefits of the projects that will accrue directly to the agency and will enable it to make

[73] Table IX.1 indicates, for each benefit and cost item, whether it is expected to be a benefit or cost from each different perspective.

appropriate long-term funding arrangements (including interagency agreements to share expected costs and benefits) if it decides to proceed with the YTD approach nationwide.

3. Other Federal Agencies

The benefits and costs of the YTD projects will also be analyzed from the perspective of other federal agencies. Some of the benefits and costs of YTD will accrue to the non-SSA parts of the federal government. For instance, increased taxes as a result of increased earnings of participants will be a cost to participants, but a benefit to other federal agencies. Similarly, the YTD projects may generate benefits (or costs) through reductions (or increases) in the use of services provided by other (non-SSA) parts of government (including public assistance programs and Medicaid/Medicare). Other benefits that may accrue to other federal agencies include changes due to a reduction in criminal activity, as well as increased involvement of people with disabilities in their communities.

4. The Rest of Society

The "rest of society" refers to everyone other than the YTD participants and the federal government. Since we are separating out the costs and benefits to the federal government, this perspective most reflects benefits and costs that accrue to taxpayers through state and local governments as changes in taxes and spending. For instance, it is possible that the YTD projects could draw on resources provided by state and local governments (for example, for special and general education, and VR services), the burden of which ultimately is borne by taxpayers. Other benefits that may accrue to the rest of society include changes in criminal activity and increased involvement in their communities by people with disabilities.

5. Society as a Whole

To compare benefits and costs from the perspective of society as a whole, we will aggregate benefits and costs across all groups. Examining benefits and costs from this perspective will help us to understand the extent to which the benefits from YTD projects offset the costs, regardless to whom those benefits and costs accrue. If there is a positive net social benefit, then a project can be viewed as successful in the sense that it has increased the value of the overall resources available to society. In estimating the net social benefits, we will ensure that the social perspective is the sum of the more narrowly focused benefit-cost analyses (the youth/families, SSA, other federal agencies, and the rest of the society). This additive approach will provide an analytic check on whether effects at all levels are appropriately accounted for. Because this perspective will aggregate benefit and costs over everyone in society, it may be a very relevant perspective for policymakers.

D. MEASUREMENT ISSUES

The benefit-cost analysis seeks to appropriately measure the net benefits and costs of the YTD projects and to assign dollar values to them. This section presents our approach to measuring net benefits and costs, and converting impact estimates into benefits and costs

with dollar values. This section also discusses the unmeasured benefits and costs of YTD services.

1. Measuring Net Benefits and Costs

The estimates of the impacts of YTD projects on earnings, use of other programs, criminal activity, and participants' well-being will be the starting point for measuring most of the net benefits and costs of YTD interventions. We will use the impact estimates based on data from the baseline, 12-month, and 36-month surveys, as well as administrative records.

We will use estimates of the intervention's impacts on all youth who were eligible and were offered a chance to participate in the YTD projects (that is, on all treatment group members) as the basis for measuring the net benefits of YTD. These were introduced in Chapter VIII as intent-to-treat (ITT) impacts. For consistency with the ITT impact estimates, the measures of the intervention's costs that we will use in the benefit-cost analysis will also be calculated per YTD-eligible youth.[74]

We will measure benefits using the point value of the estimated program impacts even if the estimates themselves are not significantly different from zero at conventional levels of statistical significance. For example, if the point estimate of the impact of YTD on criminal behavior by participants is a five percentage point reduction, but the estimate is not statistically significant, we would still use the estimated five percentage point reduction and assign a monetary value to the benefit, instead of assuming a zero impact. We will obtain a more accurate and complete accounting of the benefits of YTD by using the best evidence available—our estimated impacts—even if they are not precisely measured. However, we will test the sensitivity of our estimates of the benefits to variations in the magnitude of the impact estimates by using information on the standard errors of the estimates (Section E in this chapter provides details of the sensitivity analysis).

Estimates of start-up and operating costs for the YTD projects themselves will be derived from administrative records maintained by the projects and from interviews with project staff (discussed in greater detail in Chapter VII). Unit cost estimates from these sources will be incorporated into the benefit-cost analysis to generate comprehensive measures of the costs of the YTD interventions.

[74] An alternative to estimating impacts on all YTD eligibles (that is, estimating ITT impacts) is to estimate impacts on the youth who actually participated in YTD projects. Chapter VIII introduced the latter as impacts of the treatment on the treated, or TOT impacts. TOT impacts are calculated per participant youth, whereas ITT impacts are calculated per eligible youth. Similarly, the costs of the YTD interventions can be calculated per participant youth or per eligible youth. As discussed in the text, our principal approach in the benefit-cost analysis will be to estimate ITT impacts and compare them with costs per eligible youth. However, we will also estimate TOT impacts and compare them with costs per participant youth. The two approaches will yield the same benefit-cost ratio, but the estimates of the benefits and costs will differ. We will provide both sets of estimates in our benefit-cost calculations.

2. Converting Impacts into Benefits and Costs with Dollar Values

Our general approach to placing a dollar value on the benefits and costs of the YTD interventions is based on the concept used to calculate gross domestic product (GDP). GDP is calculated by valuing all goods and services at their market prices. Thus, our basic approach for measuring the benefits and costs of a YTD project will be to value impacts at market prices. For example, we will value the additional output produced by employed YTD participants using the amount that employers are willing to pay for the additional output—the cost of the employee's compensation. The advantages of using market prices are that they are readily observable, straightforward to use, and good indicators of the values that society places on goods and services. However, the YTD projects will have impacts on activities that do not involve market transactions (for example, use of the criminal justice system and criminal activity). When the market price is not available, we will obtain a best estimate of a "shadow price," or the value of resources used in the activity. For example, to estimate the benefit from a reduction in the use of the criminal justice system, we can use the value of the resources used for investigations, bookings and arrests, prosecution and trial, and sanctions (McConnell and Glazerman 2001).

E. Analytic Issues

There are several analytic issues that will need to be addressed in the final benefit-cost estimates, including: (1) net benefits after the observation period, (2) comparing net benefits and costs that occur at different time periods, and (3) sensitivity of the estimated benefits and costs to the assumptions about uncertain parameters underlying the estimates.

1. Net Benefits After the Observation Period

A typical issue encountered in benefit-cost analysis is that net benefits and costs may extend beyond the observation period, and projections will need to be made on expected costs and benefits in the future. This is challenging, particularly when future projections have to be made based on a short observation window with little information on actual impacts. Our strategy of having SSA conduct the final benefit-cost analysis based on data extending well beyond random assignment considerably mitigates these concerns. While projections on future earnings impacts may still need to be made, several more years of observed information on program impacts will be available on which to base these projections, which will help make the projections more reliable. Our memo to SSA providing the framework and approach to completing the benefit-cost analysis will include guidance on how to use the available data to examine impact trends to help make projections on net benefits beyond the observation period.

2. Comparing Net Benefits and Net Costs That Occur at Different Times

The costs and benefits that occur during the first year of the demonstration are valued differently from those that occur in subsequent years for two reasons: (1) because of inflation, a dollar today is worth more than a dollar in the future; and (2) a dollar received today can be invested to produce a yield, and thus is expected to be more than a dollar in the

future. To compare benefits and costs that occur in different years, we will adjust the dollar values using the following approaches:

a. Present All Net Benefits and Costs in Constant Dollars

To account for inflation, we will use a price index to convert every year's dollar measures of costs and benefits into 2011 dollars. Because this analysis is being conducted for SSA, we will use the same index that is used for calculating increases to SSA benefits—the consumer price index for urban wage earners and clerical workers (CPI-W).[75] All dollar measures will be converted for comparison to the last year of the demonstration, 2011, so that the results of the analysis will be closer to the dollar value at the time when policymakers will assess the findings from the demonstration.

b. Discount Future Net Benefits and Costs

Even after accounting for inflation, a dollar today is worth more than a dollar in the future, because a dollar received today can be invested to produce a yield, but a future dollar cannot. To take this into account, we will apply a *discount rate* to all benefits and costs that accrue after the first year of the study observation period and show how the overall results differ with alternative assumptions about the discount rate.

While it is widely agreed that benefits and costs that accrue in the future should be discounted, there is no consensus about which discount rate to use. For example, the Office of Management and Budget recommends a real discount rate of seven percent (U.S. Office of Management and Budget 2007), with the justification that it approximates the real pretax return on private investment and that the government should not invest in a program if it could obtain a higher rate of return from the private sector. However, many view this as overstating the return needed for an attractive government investment, and therefore regard it as an upper bound on the appropriate discount rate (see, for example, Gramlich 1981; U.S. Congressional Budget Office 1998). Another approach, generally used by the Government Accountability Office in its analyses of federal investments, is to base the discount rate on the government's cost of borrowing (U.S. Government Accountability Office 1991). The Congressional Budget Office has estimated the federal borrowing cost at roughly two percent per year in real dollars (U.S. Congressional Budget Office 1998). Many researchers have also recommended discounting using the U.S. Treasury borrowing rate, such as the rate of return on 30-year Treasury bonds. The advantages to this rate are that it is readily available and can be interpreted as the opportunity cost of the government borrowing money to fund a program. The real rate of return on 30-year U.S. Treasury bonds is currently three percent (U.S. Office of Management and Budget 2007-Appendix C). This would be the appropriate measure of the Treasury borrowing rate to use because our measures of benefits and costs will be in constant dollars. Before conducting our benefit-

[75] We will consult with the SSA Office of the Chief Actuary on the use of CPI-W to adjust dollar-denominated measures for inflation.

cost analysis, we will work with SSA to determine what assumption is the most justifiable and consistent with other studies and benefit-cost analyses done for SSA.

3. Sensitivity Analysis

As in most benefit-cost analyses, there are many potential sources of uncertainty that are likely to affect our estimates of the benefits and the costs of the YTD projects. These uncertainties fall into three broad categories:

1. ***Deviations of the Impact Estimates from the True Program Effects.*** Although the impact estimates are unbiased estimates of the true program effects, there is still some uncertainty surrounding them, because they were made using a sample, rather than the whole population that was eligible for a YTD project. The standard error of each impact estimate is a measure of this uncertainty.

2. ***Uncertainty Surrounding the Factors Used to Convert the Impacts into Dollar Values.*** The factors may not correspond exactly to the ideal measure of the dollar value of the benefits or costs and may not capture the actual value. In addition to this potential error, the factors are themselves estimated from samples and so have a standard error.

3. ***Other Assumptions.*** Throughout the analysis, we will make assumptions that we consider appropriate. The most important are assumptions related to being able to accurately measure the extent to which programs lead to changes in the use of non-YTD services for treatment group youth and the related costs, as well as the amount of services that control group youth receive and the costs of these services. We will also use assumptions about the discount rate in estimating the future benefits required for the project to be cost-neutral. These assumptions will no doubt be characterized by some uncertainty surrounding their appropriateness.

Because benefit-cost analyses typically involve many assumptions, it is important to test the sensitivity of the results to these uncertainties. In our benefit-cost analyses we will provide benchmark estimates of benefits and costs that are based on the best available data and the most appropriate assumptions in our judgment. However, recognizing the inherent uncertainty in the benefit-cost estimates, we will also conduct sensitivity tests that show how benefit-cost estimates may be affected by changes in specific underlying impact estimates and valuation assumptions.

To test for the sensitivity of our findings due to deviations of the impact estimates from the true program effects, we will compute the major benefits using the endpoints of a statistical confidence interval, which represents a range we can be fairly certain contains the

true impact.[76] These sensitivity analyses will play a role analogous to that of standard errors in the estimates of program impacts. An area where sensitivity analysis is critical in benefit-cost analyses is related to the assumptions about post-observation extrapolation of impacts. However, a benefit of our approach—with SSA updating our initial benefit-cost analysis and generating the final estimates at a later point—is that it will be possible to make those extrapolations based on more years of actual impact estimates, which will allow for greater confidence in the findings of the benefit-cost analysis.

F. REPORTING THE FINDINGS

The findings from the three-year benefit-cost analysis will be submitted to SSA in the form of a memo in August 2014, along with a framework and step-by-step instructions for SSA to conduct longer-term benefit-cost analyses. The memo will illustrate how to incorporate findings from the three-year analysis plus the findings from longer-term impact analyses based on SSA administrative data on earnings and benefits.

[76] We could consider a stochastic approach to incorporating the uncertainties in the benefit-cost analysis (Briggs 2001) if we have sufficiently accurate individual-level cost data, particularly for the control group members.

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CHAPTER X

EVALUATION TIMELINE AND REPORTS

The YTD evaluation is a large, ambitious study that began in September 2005 and will be completed in September 2014. Its nine-year period of performance includes many critical milestones for activities, such as the selection of projects into the evaluation, provision of technical assistance to the projects, random assignment, and data collection. As is typical for such a large evaluation, we will produce many reports. These reports will describe the projects and present important interim findings from the process and impact analyses. We will also produce a comprehensive final report. This brief chapter presents the timeline for evaluation activities and the schedule for evaluation reports.

A. EVALUATION TIMELINE

The timing of key activities on the YTD evaluation will differ, depending on whether they pertain to the original projects that entered the random assignment evaluation in 2006 or to the new projects that were selected into the random assignment evaluation late in 2007. Accordingly, Table X.1 presents separate evaluation timelines for the original and new projects in the left and right columns, respectively. Most of the evaluation activities will occur approximately two years later if they pertain to the new projects rather than the original projects. To avoid cluttering the timeline with entries for individual projects, the dates for some activities are averages. More precise dates for the beginning and ending of random assignment, completion of the follow-up surveys, and comprehensive site visits are provided in Table X.2 for specific projects.

The baseline survey and random assignment began for the CUNY and Colorado projects in 2006, for the Erie project in early 2007, and for the new projects in 2008. These critical initial activities were completed for the original projects in 2008 and will be completed for the new projects in 2010. However, the collection of follow-up survey data will continue for another three years, until 2011 for the original projects and 2013 for the new projects. We will gather data for the process analysis through two comprehensive site visits to each project, which will occur in 2008 and 2009 for the original projects, and in

Table X.1. YTD Evaluation Timeline

Original Projects	New Projects
2006	
Visit all seven projects	Gather information on highly regarded programs
Select three projects into RA evaluation	Conduct outreach to potential sponsors
Begin baseline survey and RA	Receive concept papers from potential sponsors
Monitor project operations through visits and ETO	Select five organizations for YTD pilots
Provide TA on project operations (ongoing for four years)	
2007	
Continue baseline survey and RA	Provide TA on program design
Begin 12-month follow-up survey	Conduct baseline survey and RA for pilot operations
Monitor project operations through visits and ETO	Monitor pilot operations
Provide TA on project operations (ongoing for three years)	Select projects into RA evaluation
Project-specific early assessment reports	
2008	
Project profiles report covering all RA projects	Begin baseline survey and RA for full operations
Complete baseline survey and RA	Project profiles report covering all projects
Continue 12-month follow-up survey	Monitor project operations through visits and ETO
First round of comprehensive site visits	Provide TA on project operations (ongoing for four years)
	Project-specific early assessment reports
2009	
Complete 12-month follow-up survey	Project-specific early assessment reports
Begin 36-month follow-up survey	Continue baseline survey and RA
Second round of comprehensive site visits	Begin 12-month follow-up survey
Extract administrative data	First round of comprehensive site visits
Project-specific reports on process analysis and 12-month impacts	
2010	
Continue 36-month follow-up survey	Complete baseline survey and RA
Extract administrative data	Continue 12-month follow-up survey
2011	
Project-specific letter reports on 24-month impacts (based on administrative data)	Complete 12-month follow-up survey
Complete 36-month follow-up survey	Begin 36-month follow-up survey
	Second round of comprehensive site visits
2012	
	Continue 36-month follow-up survey
	Extract administrative data
	Project-specific reports on process analysis and 12-month impacts
2013	
Extract administrative data	Complete 36-month follow-up survey
	Extract administrative data
	Project-specific letter reports on 24-month impacts (based on administrative data)
2014	
	Extract administrative data
Comprehensive final report, including 36-month (survey data) and 48-month (administrative data) impacts	

ETO = Efforts-to-Outcomes
RA = random assignment
TA = technical assistance

Table X.2. Milestones for Individual YTD Projects

	Random Assignment		Survey Completion Dates		Comprehensive Site Visits	
	Begin	End	12-Month Followup	36-Month Followup	First Visit	Second Visit
Colorado	8/2006	4/2008	4/2009	4/2011	4/2008	4/2009
CUNY	8/2006	8/2008	8/2009	9/2011	1/2008	4/2009
Erie	1/2007	4/2008	4/2009	4/2011	4/2008	4/2009
New Projects	4/2008	9/2010	9/2011	9/2013	3/2009	3/2011

2009 and 2011 for the new projects. At three different times during the middle and later years of the evaluation, we will extract data from administrative systems maintained by SSA and other federal and state agencies. These data, along with data from the follow-up surveys, will provide the outcome measures for our analysis of YTD impacts on youth. As discussed in more detail in the following section, we will produce reports on various aspects of the evaluation throughout its period of performance, culminating with a comprehensive final report on all major components of the evaluation in 2014.

B. REPORTING SCHEDULE

A series of 21 reports will inform SSA and the disability policy community of the design for the YTD evaluation, the characteristics and early implementation experiences of the individual YTD projects, and the findings from the major analytic components of the evaluation, including the process, impact, and cost-benefit analyses. Table X.3 identifies each of these reports and indicates when it will be delivered to SSA in draft form. Final versions of the reports will typically be delivered two months after the drafts. Currently, SSA plans to release all these reports to the public, but it will make its final decision about the public release of each report upon its completion.

In 2007 and 2008, the evaluation produced two types of descriptive reports on the projects participating in the random assignment evaluation. There were project-specific early assessment reports covering the initial six months of project operations following the start of random assignment.[77] Each of these reports describes a project's YTD intervention, document efforts to recruit youth into the evaluation and enroll them in the project, and provide early findings on participation by enrolled youth in project services. In addition, a project profiles report comprehensively described all the YTD projects participating in the random assignment evaluation.

[77] Drafts of the early assessment reports for the West Virginia and Montgomery County, Maryland, projects will be delivered to SSA early in 2009.

Table X.3. Reporting Schedule for the YTD Evaluation

Report	Scope	Number of Reports	Delivery Date		
			General	First Project	Last Project
Evaluation design report	Comprehensive	1	8/2007	n.a.	n.a.
Early assessment reports	Project specific	6	8 months after RA begins	7/2007[a]	1/2009
Project profiles report	Comprehensive	1	6 months after final site is selected (approximately 5/2008)	n.a.	n.a.
Reports on process analysis and 12-month impacts	Project specific	6	18 months after RA ends	10/2009	3/2012
Letter reports on 24-month impacts	Project specific	6	34 months after RA ends	2/2011	7/2013
Final report	Comprehensive	1	8/2014	n.a.	n.a.

Note: This table shows delivery dates for draft reports. In general, final reports are due two months after draft reports.

[a]The early assessment reports for the CUNY, Colorado, and Erie projects were delivered 10, 11, and 10 months after the beginning of random assignment, respectively.

n.a. = not applicable; RA = random assignment.

Over a four-year span starting in 2009, two series of reports will present interim findings from the evaluation's process and impact analyses. There will be six project-specific reports in each series. The first series will report impact estimates based on the analysis of data from administrative records and the evaluation's 12-month follow-up survey, as well as findings from the process analysis of data gathered during the comprehensive site visits to the random assignment projects. The second series will report estimates of impacts 24 months after random assignment, based on administrative data only.

The evaluation's comprehensive final report, to be delivered to SSA in 2014, will present findings from the major components of the evaluation for the six random assignment projects. The impact estimates in this report will be based on data from the evaluation's 36-month follow-up survey and up to 48 months of administrative data. Findings from the process analysis that will have been previously presented in project-specific interim reports will be consolidated in this report. In one stand-alone document, the comprehensive final report will describe the project interventions, the evaluation design, the key research findings, and the implications of the YTD evaluation for policies affecting youth with disabilities.[78]

[78] Under the original design for the YTD evaluation, the final report was to include findings from the benefit-cost analysis. However, as discussed in Chapter IX, under the current design, SSA will conduct the full benefit-cost analysis several years after the completion of the final report. SSA will prepare a separate report on that analysis. The YTD evaluation team will conduct an interim benefit-cost analysis based on the limited follow-up data that will be available by 2014. We will present the findings from that analysis in a memo to SSA, which will also provide guidance for conducting the full benefit-cost analysis.

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