

# Assessment of the Employment Works Program

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**November 2013**

Prepared for:  
New York City Center for Economic Opportunity  
(CEO)  
New York City, New York

Prepared by:  
Westat  
*An Employee-Owned Research Corporation*<sup>®</sup>  
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Rockville, Maryland 20850-3129  
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## Foreword

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The Center for Economic Opportunity (CEO) is committed to evaluating its programs and policies and has contracted with Westat and Metis Associates in order to inform decision-making within CEO and the sponsoring city agencies. Westat and Metis have developed a collaborative team approach in the planning, design, and implementation of various types of evaluations, including impact, outcome, and implementation studies. In some cases, staff from both Westat and Metis share duties and responsibilities in implementing the study. In other cases, staff from either Westat or Metis is responsible for conducting the study. This study of the Employment Works program was conducted by staff from Westat.

The analytic plan was developed by Kathryn Henderson and Wendy Stickle. Analysis was conducted by Joseph Gasper and Wendy Stickle. The authors of this report are Kathryn Henderson, Joseph Gasper, Eva Chen, and Wendy Stickle. Additional contributions were made by Liz Quinn and Debra Rog.

We would like to acknowledge the cooperation of the Small Business Services SBS staff and Carin Clary, specifically, for all of their assistance in accessing the data and familiarizing the evaluators with the program model. We would also like to thank the Department of Probation for their assistance in identifying and extracting data for us. All of the individuals who were contacted for background information or to review drafts of the report generously offered their time and their ideas. We also appreciate the help provided by the staff of CEO, especially David Berman, who facilitated this relationship with SBS and has served as an invaluable resource during the project.

**Employment Works Evaluation  
CEO Response  
2013**

Employment Works was launched in 2008 as a pilot initiative to help probationers secure employment, with the goal of promoting their self-sufficiency and reducing their rates of recidivism. The program promotes collaboration between two City agencies by coordinating workforce services between NYC's Department of Small Business Services (SBS) and the Department of Probation (DOP). The program's target was to place probationers in stable employment in jobs paying at least \$9/hour.

CEO asked Westat to evaluate the program's effect on both employment and recidivism. The evaluation initially had two key components- first assessing the effect of the program on the participants and differences between providers, and secondly comparing recidivism rates for the Employment Works (EW) participants versus the probation population that did not get referred to the program.

The participant and provider analysis showed strong positive findings. Approximately 30 percent of those served were placed into employment, a rate significantly higher than the 20 percent placement rate for the general population at the standard Workforce1 Career Centers. Additionally, placement rates and wages at the Employment Works sites were better for those entering in 2009 than in 2008 despite the economic downturn that hit at that time, suggesting that providers became increasingly effective in their work. Reinforcing the value of occupational training in building the human capital of job seekers, the analysis found that participants who receive individual training grants (ITGs) have a greater likelihood of finding jobs than those that did not.

The analysis also showed that the performance of the two providers was nearly the same once the evaluators statistically adjusted for the population differences- a factor important for program managers that oversee multiple sites to keep in mind as they monitor program outcomes. For an employment program, this assessment reminds us that differences between sites in education levels of the population, work history, criminal history, gender, and other factors that are closely correlated with wages need to be factored into any performance management oversight.

The evaluation found a strong correlation between employment and reduced recidivism. Participants who were placed in jobs by Employment Works had much lower odds of being re-arrested compared to participants who did not get placed, suggesting a possible benefit of employment on reducing recidivism. The second component of the research design was to compare Employment Works participants to a matched group of Department of Probation clients that were not served by the program, using existing administrative data. Westat was unable to complete the impact analysis because of DOP data limitations- in particular key variables such as education and employment history were missing.

Evaluations using existing administrative data are an important strategy of assessing program effectiveness, efficiently maximizing available data while keeping evaluation costs low. CEO and its evaluators have used this approach effectively; the Workforce Innovations<sup>1</sup> report is an example, among others. The Employment Works evaluation experience matching data sets from two different agencies built for different purposes demonstrates some of the challenges of this work.

CEO is working with both agencies to improve their data system management for the next evaluation of this program. For example, SBS is working with its vendors to ensure that service data is entered consistently. CEO is helping DOP to improve its data collection efforts by investing in an overhaul of their data collection systems that includes the creation of an external program database for community based providers that contract with DOP as well as a new case management system for probation officers that will effectively measure and track results and statistics in real time.

In addition to changes being made to data tracking systems since the evaluation, the program has evolved based on on-going oversight and performance management by SBS. Some key program updates include:

- A new competitive RFP was issued in 2011 that selected new providers and changed the locations of the two sites to Brooklyn and the Bronx, better reflecting the areas of highest need in terms of numbers of probationers.
- Providers now serve all individuals with a history of court-involvement, instead of only serving clients referred by the Department of Probation.
- The providers are now each focusing on a narrower range of target sectors that have a stronger track record of openness to hiring individuals with a criminal background. SBS has learned from its sector-focused career centers (another CEO initiative) that by developing robust employer relationships and a deeper understanding of industry needs by focusing on a narrow range of occupations, they can achieve higher wages and better placement rates.

These new changes will strengthen the next generation of the program, and CEO looks forward to working with its partner city agencies and external evaluators to demonstrate the impact of the program and document its effective practices in working with this population.

David S. Berman  
Director of Program Management and Policy

Carson Hicks, PhD  
Director of Programs and Evaluation

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<sup>1</sup> *Workforce Innovations: Outcome Analysis of Outreach, Career Advancement and Sector-Focused Programs*, Westat, 2010.

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## I. Introduction

The Center for Economic Opportunity (CEO) has funded approximately 50 initiatives across 20 sponsoring city agencies aimed at reducing the number of working poor, young adults, and children living in poverty in New York City. CEO is committed to assessing the impact of its programs through rigorous evaluation and close program monitoring.

This report assesses Employment Works, an employment program for probationers, sponsored and managed by the New York City Department of Small Business Services (SBS). At the time of this evaluation, Employment Works was co-located within the Workforce1 Career Centers in Queens and a stand-alone site serving Brooklyn.<sup>2</sup> Each Center is operated by a different vendor and therefore operates under a slightly different program model. The purpose of this report is to compare the populations served by the two Employment Works Centers, the services received by participants in each Center, and the employment and recidivism outcomes for participants in each Center. First, we discuss the two program models for the Brooklyn and Queens Employment Works programs. Second, we outline the research design, including the research questions, the data, and the analytic framework. Then we provide a description of the program participants, including the demographic characteristics, service receipt, and descriptive statistics of outcome measures. Next, we conduct multivariate analyses. Then we summarize the key findings of the evaluation and discuss conclusions and implications of the findings. Finally, we offer a number of recommendations for a future impact study, including choosing an appropriate comparison

sample. In Appendix A, we review the existing body of literature on the link between employment and recidivism among a population of offenders.

The key findings of the evaluation are summarized below.

With respect to job placement and retention, we found:

- The job placement rate was 25.9 percent for the Brooklyn Center and 33.2 percent for the Queens Center;
- Among participants who were placed in a job, 62.6 were still employed after 6 months in the Brooklyn Center and 88.4 percent in the Queens Center;
- Among participants who were placed in a job, 27.9 were still employed after 12 months in the Brooklyn and 77.8 percent in the Queens Center; and
- When demographic characteristics, work history, and criminal history are considered, there is no longer a significant difference in the placement rates between the Brooklyn and Queens Centers, which suggests that one reason the Queens Center has a higher placement rate is that, as a whole, they are serving participants that are easier to place in jobs than participants served by the Brooklyn Center.

With respect to recidivism, we found:

- Six-month re-arrest rates were 22.1 percent and 19.5 percent for participants in the Brooklyn and Queens Centers, respectively;
- Twelve-month re-arrest rates were 27.5 percent and 25.3 percent for participants in the Brooklyn and Queens Centers, respectively;

<sup>2</sup> The sites studied in this report were focused on Brooklyn and Queens; in 2012 a new Employment Works procurement selected providers in Brooklyn and the Bronx.



- Conviction rates were 13.4 percent and 15.1 percent for participants in the Brooklyn and Queens Centers, respectively; and
- None of the differences in recidivism between the two Centers are statistically significant.

Several features of the Employment Works program were associated with participant outcomes:

- Participants who received a greater number of services were more likely to be placed into a job;
- Receipt of Individual Training Grant (ITG) vouchers, job readiness services, and job search services were independently associated with job placement, controlling for other characteristics;
- Employment Works participants who receive a job placement have an 80 percent decrease in the odds of re-arrest, controlling for a variety of demographic and background factors.

## Employment Works

Launched in August of 2008 by the Department of Small Business Services (SBS), Employment Works is designed to help individuals on probation in New York City gain the necessary educational, training, and support services to be prepared for long-term employment. The \$2.95 million annual program currently provides a wide array of services to probationers over the age of 18 who are unemployed or employed but earn less than \$280 per week. The program goal is to place between 500 and 600 participants in jobs annually with wages of at least \$9.00 per hour and to achieve job retention rates of at least one year.

Participation in Employment Works is recommended by the New York City

Department of Probation (DOP) for all probationers who meet the eligibility criteria. Eligibility is limited to individuals on probation who: 1) have at least one year of probation remaining, 2) are 18 years old or older, 3) are unemployed, 4) did not fail a drug test in the past 60 days, 5) are not homeless, and 6) are not undocumented residents of New York City. Initial recruitment was limited to probationers who were on a high level of supervision, however, the program was opened to probationers on all levels of supervision within a few months before its launch. Additionally, in its first year participation was limited to residents of Brooklyn and Queens; however, in the program's second year the two Centers have been serving eligible residents from other boroughs.

Trained staff at the DOP conducts the initial screening of candidates. The first orientation to the Employment Works program is held at DOP. This orientation session is mandatory and is used by DOP to identify individuals who are eligible but otherwise are excused from participation. This includes but is not limited to, probationers who are receiving SSI or SSDI, those who are enrolled in school, those who could benefit from ESL or GED classes prior to enrollment in Employment Works, and those with health problems that may be a barrier to employment. The second orientation session is held at the employment Center from which the participants will receive services. After the second orientation session, participants attend a week long job readiness course that addresses such topics as appropriate workplace behavior and attire, time management, and problem solving.

Not all participants who attend orientation are enrolled in the program. According to SBS there is approximately a 50 percent drop off following the initial orientation session at DOP. Additional

participants drop out following the second orientation session and during the week long job readiness course. Individuals who drop out of the program can be referred again at a later point in time. DOP operates under the model that everyone deserves a second chance but those eligible probationers who drop out of the program twice before completing the week-long job readiness course are technically considered in violation of their probation and are at risk of being returned to jail. Interviews with DOP staff revealed that this is rarely, if ever, enforced. Rather, probationers who drop out are returned to DOP for an administrative review conference to determine why the probationer is being non-compliant and to develop an individual plan to address his/her situation.

At the time of this evaluation, the two Employment Works programs operated different program models and tended to serve different populations.<sup>3</sup>

### Brooklyn Center

The Brooklyn program is run by the Center for Employment Opportunities. This organization operates Employment Works as a supportive employment program through which participants receive work experience, income, and a wide range of social services, including parenting courses and help with child care, while they search for more permanent jobs. Following the mandatory week-long job readiness course, participants in the Brooklyn Center without recent work experience are placed into a transitional job in food service, retail, or in a warehouse. Probationers who are placed into these transitional jobs work three days a week for a maximum of 20 days. They earn minimum

wage and a weekly “report card” that assesses their performance on the job. These report cards can be shared with prospective employers. They are also assigned a job development counselor with whom they develop a service plan to determine which educational, employment, and social services they need to prepare themselves for the job market. When participants are considered “work ready” they work with a career coach to search for and apply for jobs. The Brooklyn Center does not regulate how often participants must meet with their job development counselor and/or career coach.

### Queens Center

The Queens program is run by Grant Associates, a for-profit organization with a history of operating other employment programs throughout New York City. The Employment Works program is the first time Grant Associates has specifically worked with a population of probationers. The Queens Center does not place participants in a transitional job while they receive services and search for more permanent positions. Rather, following the mandatory week-long job readiness course, participants in the Queens Center are assigned to a job development counselor and immediately begin their job search. The Queens Center focuses its resources on providing education services, including literacy classes, and vocational training. Participants in this Center are expected to meet with their job development counselor at least once a week and to participate in individual job search activities three times a week.

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<sup>3</sup> The program is now operated in two new locations, and eligibility has been expanded to serve court involved individuals. The two original sites are described below and their experiences and performance remain instructive as the city and others seek to best serve this population.

## 2. Research Design

The current evaluation considers the characteristics of Employment Works participants, the services they received, and their employment and recidivism outcomes. It also examines the relationship between participant characteristics and program services and program outcomes. We begin with a description of the Employment Works program as implemented by the two Workforce1 programs, the characteristics of the populations served, the services received, and the employment and recidivism outcomes for participants. We also explore the possibility of conducting a quasi-experimental evaluation of the impact of the program by matching participants to similar probationers who did not participate in the program. As described in a later section of this report, we encountered numerous challenges in selecting a credible comparison group for this evaluation. We use the lessons learned and findings from the other components of this study to inform future designs for such an evaluation.

### 2.1 Research Questions

This report addresses the following evaluation research questions:

- a) What are the characteristics of participants who have been served by the Employment Works program? Are there differences between those served by the Brooklyn Center and the Queens Center?
- b) Do program participants in the two Centers receive similar types and numbers of services?
- c) What are the rates of job placement, job retention and recidivism among Employment Works participants in the two Centers?
- d) How are employment outcomes and recidivism rates of participants in the two Centers related to participant characteristics and services received?

### 2.2 Data

Data for the analyses in this report were provided by SBS from their electronic record system and by the DOP. The SBS system tracks Employment Works participants' program enrollment, demographic and work history information, service receipts and employment outcomes, including placement or promotion, wages and average hours worked. The system also tracks job retention. The Department of Probation provided de-identified criminal history and recidivism data on the Employment Works participants. Demographic characteristics come from the Workforce1 Career Center Customer Information Form and are self-reported by the client. No personally identifiable information about participants was shared with the evaluators.

The data include all participants who enrolled in the Employment Works program in either the Brooklyn or the Queens Center between October 1, 2008 and March 30, 2010. Participants are considered enrolled in the Employment Works program if they complete both orientations sessions—one at DOP and one at Brooklyn or Queens Center. Participants can be exited from the program if they are not actively looking for a job and staying in contact with their job counselor, including using the Center's resources and receiving services. Many participants who have been exited for non-participation re-enroll in the program at a later point in time and continue receiving services. In circumstances where participants had multiple enrollment dates, we choose the first date. As job retention is one of the goals of the

program, participants are still considered enrolled once they have found a job, although they are not exited for not receiving services.

## 2.3 Variables

### Independent Variables

We examined the relationship between participation characteristics and program outcomes. These include demographic characteristics, program Center, borough of residence, work histories and criminal histories. Table 2.1 provides detailed description of each of the independent variables used in this analysis.

Work history measures include continuous measures of *hourly wage* and *average hours worked per week* at the participant's most recent job. Participants who had no work history information recorded were coded as 0 for both hourly wages and average hours worked per week.

Criminal history measures include a dichotomous measure indicating whether the participant had any *prior arrests* before the probation offense; a continuous variable indicating the *number of prior arrests*; and a group of mutually exclusive dichotomous variables indicating the *top charge* for the most recent offense prior to program enrollment. These include murder, rape, or kidnapping; robbery; assault; fraud, bribery, or identity theft; burglary, arson, or theft; other property offense; drug offense; public order; contempt crimes/violation of court order; and other charge.

### Service Variables

Table 2.2 shows the various services participants could receive from the two Employment Works Centers. These services include assessment of participants' basic skills and work readiness; orientation to the program and services; computer skills

training; financial counseling service; use of the facilities for fax, copier or internet access; interview skills; counseling; job readiness services; job search services; and assistance with resume preparation.

Participants could also receive educational services, such as ESL classes, and referrals to social service providers and organizations, if necessary.<sup>4</sup> "TTG services" indicate the client received an Individual Training Grant (ITG), which is a voucher intended to cover the cost of specialized occupational training, such as commercial driver's license training course. Receipt of each of these services is indicated by a dichotomous variable equal to one if the client received the service and 0 if s/he did not. These categories were prepared to consolidate lists of more than 25 different services. Moreover, each Center has a different list of services unique to its program model. For the purpose of being able to compare a manageable number of services, all services were re-categorized into the groups above.

Employment Works participants could receive different types of services and they could receive a single type of service multiple times. Therefore, in addition to types of service, two additional service variables are included in the analyses. These are *number of services*, which indicates the total number of different types of service the client received between enrollment and placement, and *number of total services*, which indicates the total number of services of any type that the client received between enrollment and placement.

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<sup>4</sup> Although eligible probationers who need ESL classes or GED classes may be excused from participation they are not excluded from participation, if they choose to enroll. These educational and support services are provided to those probationers who choose to participate in the Employment Works program while addressing their other service needs.

**Table 2.1. Definitions of Demographic Variable Measures**

Measure	Definition/Operationalization
Center	Brooklyn=1; Queens=0
Year of enrollment	Year of program enrollment (2008; 2009).
Age	Age, in years (Range: 17-85 years)
Gender	Male=1; Female=0
Race	Mutually exclusive racial/ethnic categories (White, non-Hispanic; African American; Hispanic; Other/Multi-racial; No race designation)
Disability	Client self-reported a disability=1; Did not report a disability=0
Location	Mutually exclusive location of residence (Bronx, Brooklyn, Manhattan, Staten Island, Queens, Other location)
Education level	Mutually exclusive education level categories (Less than high school; High school diploma or GED; Associates or Vocational degree; 4-year College degree or Graduate degree)
Enrolled in school	Enrolled in school at program entry=1; Not enrolled=0
Wage at most recent job	Hourly wage at most recent job (Range: \$0-\$400 per hour)
Avg. hours worked per week at most recent job	Average weekly hours worked at most recent job (Range: 0-80 hours)
Prior arrests	Ever arrested prior to probation offense=1; Never arrested=0
Number of prior arrests	Number of arrests prior to probation offense (Range: 0-22 arrests)
Most recent offense top charge	Mutually exclusive categories for top charge of most recent offense prior to program enrollment (Murder, rape, or kidnapping; Robbery; Assault; Fraud, bribery, or identity theft; Burglary, arson, or theft; Other property offense; Drug offense; Public order; Contempt crimes/Violation of court order; Other charge)

**Table 2.2. Definitions of Service Measures**

Measure	Definition/Operationalization
Assessment	Any type of assessment or screening used to evaluate a jobseeker's skills (basic and job-specific) and employment readiness
Computer skills	Training that is specific to computer-related skills, ranging from basic computer skills and typing lessons to MS Office, internet, and e-mail training
Counseling	Individual and group counseling sessions that focus on career development, career coaching, goal setting, and retention services
Facilities	Physical resources that are made available to jobseekers to assist with their search, including access to: computers, phones, copiers, e-mail, internet, fax machines, media, study/workspaces, and resource rooms
Financial services	Services that help jobseekers with their personal finances, such as bank account set-up and management, debt management counseling, credit report access, and financial goal-setting
Interview skills	Services that help jobseekers develop interview skills and prepare for specific interviews
ITG receipt	Receipt of an Individual Training Grant
Job readiness	Services that help prepare jobseekers for daily life in the workplace, such as workplace professionalism training, training on proper workplace attire and attitudes and time management skills
Job search	Resources and services that help jobseekers find available jobs, such as job fairs, staff-assisted (and self-service) job searches, job banks, and other recruiting events
Orientation	Services that acquaint jobseekers to the program and all of the services the program offers, including standard Center orientation, recruitment event orientation, and introductory sessions
Referrals	Outside referrals made to social service providers and organizations
Resume preparation	Services that help jobseekers develop, write, and review resumes, cover letters, and other job application materials
Workshops/Education services	General and job-specific training and skill building that is not related to computers, occupational skills training, customer service training, tutorials, and employer training; education services, including GED and ESL training, adult education classes, and specialized business certifications; workshops, including labor market information workshops, general advancement workshops, and career strategies workshops
Number of services	The total number of different types of services received by participant (Range 0-13)
Number of total services	The total number of services received by participant, including multiple numbers of the same type of services (Range 0-63)



## Outcome Variables

Table 2.3 provides a description of the employment and recidivism outcome variables included in this analysis. Placement is a dichotomous variable that indicates whether the program participant received a new job placement during the 2-year period considered in these analyses. Hourly wage and average hours worked per week are continuous measures of the wage and hours in the new placement. Job retention measures are included in the analysis to examine the number of participants who have achieved 6-month and 12-month job retention since their first job placement in the Employment Works program. Job retention means the participant is employed in the same job or in a new job 6 or 12 months after placement. Recidivism outcome measures include whether an individual has been re-arrested after being in the Employment Works program and the number of re-arrests within 3 months, 6 months and 12 months of program enrollment date.

Time to re-arrest is a continuous variable that measures the number of days from program enrollment to the first re-arrest. Data on whether the participant is convicted and the number of convictions were also included in the analysis. Official arrest records are the most common measure of recidivism (Bouffard 2002), however, official arrest records may under count the actual extent of recidivism because they do not include crimes that went undetected. Some other studies use self-report measures of offending but these measures tend to be less reliable than arrest data because individuals may be unwilling to admit to committing crimes. While there is no consensus on how best to measure recidivism, the use of both official arrest records and conviction data is a well-established in studies of recidivism and makes use of the most reliable information available.

## 2.4 Analytic Framework

We computed descriptive statistics about characteristics of the participants in the Employment Works program who enrolled at both program sites. Using frequency cross-tabulations, we examined participants' demographics, work history, criminal history and service receipt. Descriptive analyses were also conducted for participants at the two Centers on the outcome variables which include job placement, time to job placement, job retention, number of re-arrests, time to re-arrest, convictions, and number of convictions. We used multivariate regression analysis to examine the relationships between various independent variables, services variables and outcome variables. These analyses provide information about the relationship between each independent variable included in the model (e.g. age, race, number of services received, criminal history) and the outcome variables, controlling for the potential influence of every other variable in the model.

We examined the relationship between participant characteristics, services, and outcomes using regression analysis. Regression analysis allows researchers to model the relationship between a dependent variable (outcome) and one or more independent variables (participant characteristics and services).<sup>5</sup> The analyses of placement and re-arrest include all individuals who enrolled in the two-year time period of observation. The analyses of hourly wages and weekly hour worked focused only on those participants who achieved a placement.

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<sup>5</sup> The relationship of participant characteristics and services to placement and re-arrest was modeled using event history analysis. Event history analysis is a special type of regression analysis that is appropriate when outcomes are unobserved for some individuals. In this case, we do not know the outcomes of participants who are still enrolled in the program when the data was extracted. We used ordinary least squares (OLS) regression to model hourly wages and weekly hours worked.

**Table 2.3. Definitions of Outcome Measures**

Measure	Definition/Operationalization
<b>Employment Outcomes</b>	
Placement	Received a new placement during program enrollment=1; Did not receive a new placement=0
Wage	Hourly wage in new placement or promotion (Range: \$4.65-\$49.00/hour)
Avg. hours worked per week	Average weekly hours in new placement or promotion (Range: 15-72 hours)
Achieved 6 months job retention	Achieved 6 month job retention (in same job or new job)=1; Did not achieve=0
Achieved 12 months job retention	Achieved 12 month job retention (in same job or new job)=1; Did not achieve=0
<b>Recidivism Outcomes</b>	
Re-arrest	Re-arrested=1; Not re-arrested=0
Number of re-arrests	Number of re-arrests at 6 months or 12 months after program enrollment (Range: 0-6 re-arrests)
Time to re-arrest	Number of days from program entry to the date of first re-arrest (Range: 0-689 days)
Convictions	Convicted=1; Not convicted=0
Number of convictions	Number of convictions (Range: 0-4 convictions)

## 2.5 Limitations and Challenges

The goal of the following analyses is to compare the employment and recidivism outcomes of participants in the Brooklyn and the Queens Employment Works Centers.

The two programs serve different clientele. In particular, participants in the Brooklyn program are more likely to be racial/ethnic minorities, have lower levels of education, have more limited employment histories, and earn lower wages prior to the program. These differences in participant characteristics, rather than program processes, could partially explain differences in outcomes between the two sites. Therefore, we controlled for differences in participant characteristics available in the data in our multivariate analysis of outcomes, including education level and number of prior arrests.

However, given the differences in work experience between the two groups, it is possible that the participants in the two Centers also differ on other characteristics, such as skills or motivation, which could affect the outcomes but were not measured in the extant data.

Additionally, the two Centers collect and maintain their data in different ways. The Brooklyn Center does not use the SBS data system to record all of the services received by the Employment Works participants. Instead, they record only those services which are mandated reporting elements in the SBS data system. The Queens Center, on the other hand, uses the SBS data system to track all of the services received by Employment Works participants. Therefore, analytic differences in the number and type of services received may



not accurately reflect actual differences in the participants' experiences.

Because the results are based on observational data, they should be interpreted as correlational rather than causal. That is, the results show which factors relate to placement, wages, hours worked, and re-arrest; it is not possible to conclude that these factors are the cause of the various outcomes.

Another concern involves missing data on several of the key employment outcomes and service variables. The SBS electronic record system only records positive placements for those participants with whom the provider is able to maintain contact. Participants who left the program are recorded as not yet having achieved a placement. It is impossible to distinguish between those who remain in the program and have not achieved a placement and those who have left the program. Absent this distinction, all cases without a recorded placement were assumed to have experienced a negative outcome, although it is likely that a nontrivial number of these cases represent participants who exited the program (and for whom the true employment outcomes are unknown). If one Center does a better job of tracking participants we may be seeing differences in placement and retention between the Centers that may or may not reflect real findings. Caution must be used in interpreting these differences.

### 3. Description of Program Participants

In this section we provide a general description of the similarities and differences among participants in the two Employment Works Centers with respect to demographic characteristics, work history, criminal history, service receipt, and employment and recidivism outcomes.

#### 3.1 Descriptive Statistics of Demographic Characteristics

Table 3.1 provides a description of the demographic characteristics, work history, and criminal records of Employment Works participants at the Brooklyn and Queens Centers. From year 2008 to 2009, there were 1,147 individuals served by the Employment Works program at the Brooklyn Center. The Center in Queens served 322 more people than the Brooklyn Center with a total of 1,469. Roughly one-third of participants in each Center were enrolled in 2008 and the remaining two-thirds were enrolled in 2009. The average age of participants was similar across the two Centers (28.3 years in Brooklyn vs. 28.9 years in Queens). The participants at both Employment Works programs are predominantly male (84.1% in Brooklyn vs. 83.3% in Queens) and relatively few of them had a self-reported disability (less than 4% in both Centers). As expected, the majority of the participants (95.4%) in the Brooklyn Center reside in Brooklyn, while about 74 percent of the participants at the Queens Center live in Queens and the rest of the participants mostly come from Bronx (14.7%) and Manhattan (9.5%).

We found statistically significant differences in racial composition reported by the participants served by the two Centers. The two Centers serve similar proportions of whites. However, the Brooklyn Center serves a higher percentage of participants reporting

they are African American, while the Queens Center serves a higher proportion of Hispanic participants. Approximately 72 percent of the population served at the Brooklyn Center reported being African American while less than 50 percent of the participants at the Queens Center do. About 20 percent of the participants at the Brooklyn Center indicated they were Hispanic while almost 35 percent of the participants at the Queens Center indicated they were Hispanic. Differences were also found in the other race/multi-racial category (e.g. Asian or American Indian) with 1.4 percent of the Brooklyn Center participants and 6.3 percent of the Queens Center participants reporting being other race.

With respect to educational attainment, the Brooklyn Center serves a significantly higher number of people with less than a high school diploma (73.5% vs. 38.2) while the Queens Center has higher proportion of participants with a 4-year college or graduate degrees (4.3%) compared to the percentage of participants with college or graduate degrees in the Brooklyn Center (0.7%). Similar differences were found among participants with an Associates or vocational degree (21.3% vs. 6.1%) and high school diploma or GED (36.1% vs. 19.8%). There is not a significant difference between the percent of participants in the two Centers who are enrolled in school at program entry.

When examining participants' work history, we found that individuals at the Queens Center had higher pay at their most recent jobs (\$13.14) than those at the Brooklyn Center (\$10.33) and, on average, they worked a greater number of hours per week (36.6 hours vs. 34.3 hours).

**Table 3.1. Comparison of Participant Characteristics for Employment Works Participants at the Brooklyn and Queens Center**

	Brooklyn Center	Queens Center	Chi-Square/ T-Test <sup>1</sup>
Sample size	1,147	1,469	
Year of enrollment			
2008	33.0%	32.1%	
2009	67.0%	67.9%	
Age <sup>2</sup>	28.3 (9.5)	28.9 (10.3)	
Male	84.1%	83.4%	
Race			
White, non-Hispanic	7.6%	9.6%	
African American	71.7%	49.7%	***
Hispanic	19.3%	34.5%	***
Other race/Multi-racial	1.4%	6.3%	***
No race designation	7.0%	8.9%	
Disability (N=635/149)	1.4%	3.5%	
Location			
Bronx	1.0%	14.7%	***
Brooklyn	95.4%	1.1%	***
Manhattan	1.1%	9.5%	***
Queens	1.9%	74.2%	***
Staten Island	0.3%	0.0%	*
Other location	0.4%	0.6%	
Education level			
Less than high school	73.5%	38.2%	***
High school diploma/GED	19.7%	36.1%	***
Associates/Vocational degree	6.1%	21.3%	***
College degree/Graduate degree	0.7%	4.4%	***
Enrolled in school	7.4%	10.3%	
Wage at most recent job	\$10.33 (5.44)	\$13.14 (22.41)	***
Avg. hours worked per week at most recent job	34.3 (10.3)	36.6 (10.1)	**
Prior arrests	32.5%	31.9%	
Number of prior arrests	0.9 (2.0)	0.8 (1.7)	

**Table 3.1. Comparison of Participant Characteristics for Employment Works Participants at the Brooklyn and Queens Center (continued)**

	Brooklyn Center	Queens Center	Chi-Square/ T-Test <sup>1</sup>
Most recent offense top charge			
Murder, rape, kidnapping	2.5%	3.2%	
Robbery	19.0%	15.1%	*
Assault	18.1%	16.6%	
Fraud, bribery, identity theft	5.0%	4.9%	
Burglary, arson, or theft	16.6%	19.4%	
Other property offense	0.6%	1.0%	
Drug offense	18.9%	20.9%	
Public order	5.3%	8.7%	**
Contempt crimes/Violation of court order	4.1%	1.7%	***
Other charge	10.0%	8.5%	

\* p<.05 \*\*p<.01 \*\*\*p<.001

<sup>1</sup> Tests comparing age, wage at program entry, average hours worked per week, and number of prior arrests are t-tests. All other characteristics are compared using chi-square statistics.

<sup>2</sup> Statistics presented for age, wage at most recent job, average hours worked per week, and number of prior arrests are means with standard deviation in parentheses.

Regarding criminal histories, participants in the two Centers appear similar. About 32 percent of participants in each Center have been arrested prior to the probation offense and the average number of arrests is comparable among the two groups. No significant differences were found among the two Centers in the percentage of individuals charged with murder, rape, kidnapping; assault; fraud, bribery, identify theft; burglary, arson, or theft; other property offenses; and drug offenses. However, the two Centers do serve different proportions of participants charged with robbery; public order and contempt crimes or violation of court orders. The Brooklyn Center had statistically significant higher proportion of participants who were charged with robbery (19% vs. 15.1%) and contempt crimes (4.1% vs. 1.7%) while the Queens Center served a higher proportion of participants with public order charges (8.5% vs. 5.3%).<sup>6</sup>

### 3.2 Descriptive Statistics of Services Received

Table 3.2 shows the types of services provided by the Brooklyn Center and the Queens Center with the percentage of participants who received each service at least one time.

The most common services across the two Centers were assessment, interview skill training, job readiness services, job search services, and resume preparation. Additionally, almost all participants in the Queens Center reported receiving counseling services. Moreover, according to the data provided by SBS, participants in the Queens Center are more likely to report receiving every service, except for financial services, than their counterparts in the Brooklyn Center.

<sup>6</sup> Data provided to Westat by the Department of Probation (DOP) did not include information on the severity of the probation

offense. In consultation with DOP staff, we categorized the offenses into broad categories based on the type of crime.

**Table 3.2. Comparison of Service Receipt for Employment Works Participants at the Brooklyn and Queens Centers**

	Brooklyn Center	Queens Center	Chi-Square/T-Test <sup>1</sup>
Sample size	1,147	1,469	
Type of service			
Assessment	33.7%	53.9%	**
Computer skills	3.2%	6.3%	**
Financial services	29.3%	2.3%	**
Facilities	4.3%	6.8%	*
ITG receipt	1.4%	6.3%	**
Interview skills	41.1%	57.8%	**
Counseling	4.4%	94.2%	**
Job readiness	50.5%	82.6%	**
Job search	40.5%	89.0%	**
Orientation	16.0%	26.8%	**
Referrals	2.4%	44.3%	**
Resume preparation	42.7%	82.4%	**
Workshops/Education services	25.5%	37.4%	**
Number of services <sup>2</sup>	2.9	5.9	**
	(2.7)	(2.5)	
Number of total services	10.3	21.0	**
	(9.8)	(9.3)	

\* p<.05 \*\*p<.01 \*\*\*p<.001

<sup>1</sup> Tests comparing types of service received are chi-square. Tests comparing number of services and number of total services are t-tests.

<sup>2</sup> Statistics presented for number of services and number of total services are means with standard deviation in parentheses.

The two Centers are significantly different both in terms of the different types of services they report to provide as well as the reported total number of services received by participants. On average, participants in the Queens Center received 5.9 different types of services versus 2.9 different services at the Brooklyn Center. When comparing total number of services received, we found that participants at the Queens Center reportedly received an average of 21.0 services, more than twice the total number of services reportedly received by participants at the Brooklyn Center. However, it is important to reiterate that this may or may not reflect actual differences in service delivery at the two Centers. As noted above, the Queens Center records more services in the SBS data system than the Brooklyn Center and the Brooklyn Center is more likely to accurately record services for participants who are successfully placed into jobs.

### 3.3 Descriptive Statistics of Outcome Measures

#### Employment Outcomes

Table 3.3 shows the employment outcomes for Employment Works participants at the two Centers. Across the two Centers, approximately 30 percent of participants (N=785) are placed into jobs, with average wages of \$10.26 per hour and 35.3 hours per week. Queens Center participants had higher rates of success in finding new jobs than those serviced at the Brooklyn Center (33.2% vs. 25.9%). Among those who are placed, participants at the Queens Center earned higher average wages (\$10.66 vs. \$9.62) and worked a greater number of hours per week, on average (35.9 hours vs. 34.2 hours).

**Table 3.3. Comparison of Employment Outcomes for Employment Works Participants at the Brooklyn and Queens Centers**

	Full EW Program	Brooklyn Center	Queens Center	Chi-Square/ T-Test (Brooklyn v. Queens) <sup>1</sup>
	(N=2,616)	(N=1,147)	(N=1,469)	
Job Placement				
Placement	30.3%	25.9%	33.2%	***
	(N=786)	(N=298)	(N=488)	
Wage	\$10.26	\$9.62	\$10.66	***
	(\$6.37)	(\$2.56)	(\$4.96)	
Avg. hours worked per week	35.3	34.2	35.9	***
	(6.4)	(6.7)	(6.0)	
Job Retention	(N=786)	(N=298)	(N=488)	
Eligible for 6-month retention	72.2%	76.1%	70.1%	
	(N=570)	(N=227)	(N=343)	
Achieved 6-month retention	79.7%	62.6%	88.4%	***
	(N=786)	(N=298)	(N=488)	
Eligible for 12-month retention	29.2%	28.6%	29.7%	
	(N=230)	(N=85)	(N=145)	
Achieved 12-month retention	57.0%	27.9%	71.8%	***

\* p<.05 \*\*p<.01 \*\*\*p<.001

<sup>1</sup> Tests comparing wages and average hours worked per week are t-tests. All other characteristics are compared using chi-square statistics.

<sup>2</sup> Statistics presented for wages and average hours worked per week are means with standard deviation in parentheses.

Of those 785 participants who found jobs, about three quarters of them were eligible for 6-month retention and about 30 percent of them were eligible for 12-month retention. The percentages of participants who were eligible for 6-month and 12-month job retention were comparable between the Brooklyn and Queens Centers. However, there are significant differences between the percentages of participants who achieved 6-month or 12-month job retention in the two Centers.

Across both center, 79.7 percent of those eligible for 6 month retention were still employed while 57 percent of those eligible for 12 month retention remained employed.

In the Queens Center, 88.4 percent of those participants who were eligible for 6-month job retention were still employed, while only 62.6 percent of those in the Brooklyn Center were still employed 6 months after placement. Further, 71.8 percent of Queens Center participants who were eligible achieved 12-month retention, compared with only 27.9 percent of Brooklyn Center participants. The results must be interpreted with caution, however, as these variables have large numbers of missing data.<sup>7</sup> Job retention must be verified with current pay stubs by

<sup>7</sup> Our calculation of retention rates excludes participants who were eligible but for whom retention status was “pending” in SBS administrative data.

Employment Works staff in order to be recorded in their database. There are a large number of participants who are eligible for 6-month or 12-month job retention (that is, they received a placement more than 6- or 12-months prior to the date the data was pulled), 31 percent and 44 percent respectively, but for whom their current placement in a job has not been verified. Unverified retention rates are not recorded in the SBS data so we cannot speculate on how many of these participants may have reached these retention goals. Therefore, it is likely that real retention rates among Employment Works participants are higher than what is reflected in the data and presented here.

### Recidivism Outcomes

Table 3.4 shows the recidivism outcomes for Employment Works participants at the two Centers. Approximately 20 percent of participants were re-arrested within 6 months and 26 percent were rearrested within 12 months of program enrollment. No significant differences were found between the two Centers regarding the percentage of participants who were arrested within 6 months or 12 months following Employment Works program enrollment. However, on the whole, participants in the Brooklyn Center have a slightly higher re-arrest rate (38.7% vs. 34.8%). Participants in Brooklyn also have a slightly greater number of average arrests than do their Queens counterparts.

There are no differences between the two Centers in time to re-arrest or in the incidence of convictions.

## 3.4 Conclusion

In summary, the two Centers both serve predominately male, non-white participants whose average age is in their late 20s. The majority of the participants at the Centers did not self-report a disability and nor were they enrolled in school. Yet there are some

important differences in the populations served by each Center. A higher proportion of participants in the Brooklyn Center are African American, while the Queens Center serves a large numbers of African Americans as well as Hispanics. The Brooklyn Center tends to serve a more disadvantaged population, with higher rates of low levels of education and work histories that, on average, include lower paid jobs and fewer hours worked. Participants in the two Centers have similar criminal histories, with comparable incidence of prior arrests and similar types of charges for their probation offense. A higher percentage of the participants at the Brooklyn Center were charged with robbery and contempt crimes while a higher percentage of the participants at the Queens Center were charged with a public order offense.

The various types of services provided and the average total number of services received by individual participants at the two Centers were markedly different. The data indicates that a higher percentage of participants in the Queens Center receive every type of service, except financial services. Moreover, the Queens Center offered twice as many different types of services and total number of services compared to the Brooklyn Center. However, these differences are influenced to an unknown degree by the differences in reporting methods previously noted.

Queens Center participants had higher rates of success in finding new jobs than those serviced at the Brooklyn Center. Among those placed, they received higher wages and worked more hours, on average, than did their Brooklyn Center counterparts. Queens Center participants were also more likely to achieve 6-month and 12-month job retention. Finally, Queens Center participants were less likely to be re-arrested than those at the Brooklyn Center and had fewer total re-arrests.



**Table 3.4. Comparison of Recidivism for Employment Works Participants at the Brooklyn and Queens Centers**

	Full EW Program	Brooklyn Center	Queens Center	Chi-Square/ T-Test (Brooklyn v. Queens) <sup>1</sup>
	(N=2,616)	(N=1,147)	(N=1,469)	
Re-arrests				
Ever re-arrested	36.5% (N=930)	38.7% (N=433)	34.8% (N=497)	*
Re-arrested within 6 months	20.6%	22.1%	19.5%	
Re-arrested within 12 months	26.3%	27.5%	25.3%	
Number of re-arrests	0.6 (1.0)	0.7 (1.1)	0.5 (0.9)	***
Number of re-arrests within 6 months	0.3 (0.6)	0.3 (0.6)	0.2 (0.6)	**
Number of re-arrests within 12 months	0.4 (0.8)	0.4 (0.9)	0.4 (0.7)	**
Time to re-arrest	194.7 (160.1)	195.3 (166.8)	194.1 (155.6)	
Convictions	(N=930)	(N=433)	(N=497)	
Ever re-convicted	14.3% (N=133)	13.4% (N=58)	15.1% (N=75)	
Number of re-convictions	1.3 (0.6)	1.3 (0.5)	1.3 (0.7)	

\* p<.05 \*\*p<.01 \*\*\*p<.001

<sup>1</sup> Tests comparing number of re-arrests, time to re-arrest and number of convictions are t-tests. All other characteristics are compared using chi-square statistics.

<sup>2</sup> Statistics presented for number of re-arrests, time to re-arrest, and number of convictions are means with standard deviation in parentheses.



## 4. Regression Analysis

We conducted a series of regression analyses to investigate the relationships between the independent and dependent variables. Specifically we address the following questions about the two Centers being compared:

- What is the relationship between Center, participants' characteristics, and employment outcomes?
- What is the relationship between Center, participants' characteristics, and recidivism?
- How does service receipt affect these outcomes?
- Is job placement associated with reduced recidivism for Employment Works participants?

### 4.1 Relationship Between Participant Characteristics and Employment Outcomes

The regression models presented in Table 4.1 examine the difference between participants in the Brooklyn and Queens Centers in placement, and for those who are placed, in hourly wages, and weekly hours. The results indicate that there are not significant differences between the Brooklyn and Queens Centers in placement, hourly wages, or average weekly hours. However, there are a number of participant characteristics that are related to these employment outcomes.

Few characteristics are related to job placement for Employment Works participants. There are not age, sex, or race differences in odds of placement, but participants who self-report a disability are less likely to be placed into jobs. Those with less than a high school diploma or GED are

less likely than those with a diploma or GED to receive placements, while those with an Associates or vocational degree are more likely to find jobs. Average hours worked per week at previous employment is also positively related with job placement. Participants with arrests prior to the arrest for which they were referred to Employment Works also have lower odds of achieving a placement. The type of offense for which participants were referred to Employment Works was also unrelated to placement. Those who committed a violent crime, property crime, drug crime, or other time of offense had similar likelihoods of placement.

Among those who have received job placement, older participants and those who enrolled in 2009, as opposed to 2008, earn higher wages, on average.<sup>8</sup> Participants with higher levels of education and those who earned more at their most recent jobs also tend to earn higher hourly wages. On the other hand, those who worked longer hours at their most recent jobs tend to earn less in their new jobs. Those who reported being African American or other/multiracial earn lower hourly wages than their white counterparts.

Gender and type of offense were related to hours worked among those who achieved a placement. Male participants worked 1.6 hours more per week than female participants. Those whose top charge was a drug offense or another type of offense worked longer hours than those charged with a violent offense.

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<sup>8</sup> There are a number of potential explanations for this finding. It may reflect differences in the economic climate between 2008 and 2009. During this time minimum wage increased from \$7.15 to \$7.25 in July 2009. It may also reflect improvements in service delivery, such that the Centers were better able to place participants in jobs with higher wages.

**Table 4.1. Relationship of Employment Works Participant Characteristics to Employment Outcomes**

	Placement <sup>1</sup>	Hourly Wages	Avg. Weekly Hours
Intercept	-----	9.48***	33.94***
Year of enrollment—2009	0.36	0.66*	-0.21
Brooklyn Center	0.77	0.41	0.36
Age	-0.00	0.03*	0.01
Male	-0.14	0.46	1.64**
Race <sup>2</sup>			
African American	0.15	-2.25***	-1.61
Hispanic	0.23	-1.12	-0.80
Other/Multi-racial	0.11	-1.99*	-2.28
Disability <sup>3</sup>	-1.06**	1.87	0.37
Residence <sup>4</sup>			
Brooklyn	-0.27	-0.53	-1.48
Bronx	0.14	-0.48	-0.76
Other location	-0.40	-1.21	-0.31
Education level <sup>5</sup>			
Less than high school	-0.21*	-0.03	0.63
Associate/Vocational school	0.31***	0.96*	0.17
College degree/Graduate degree	0.26	1.95*	-1.65
Enrolled in school	0.03	-0.56	-0.16
Wage at most recent job	-0.00	0.21***	0.00
Avg. hours worked per week at most recent job	0.00***	-0.03***	0.03
Prior arrest	-0.16*	0.14	0.70
Probation offense top charge <sup>6</sup>			
Property crime	0.02	-0.44	0.58
Drug offense	-0.00	0.28	1.39*
Other offense	0.06	0.65	1.71*
N =	2,616	785	785

\* p<.05 \*\*p<.01 \*\*\*p<.001

<sup>1</sup> This analysis is a proportional hazard model; the regression coefficients are logits.

<sup>2</sup> White, non-Hispanic is the omitted category.

<sup>3</sup> Dummy variables were included for variables with more than 10 percent missing data. Results are not significant and omitted.

<sup>4</sup> Queens is the omitted category.

<sup>5</sup> High school diploma/GED is the omitted category.

<sup>6</sup> Violent crime is the omitted category.

When we include types of services received in the regression model (Table 4.2), we find that the relationships between disability status, education, average weekly hours, and prior arrests remain stable. Participants who reside in a borough other than Brooklyn or Queens have lower odds of placement. Additionally, we find that participants who enrolled in 2009 are more likely to receive a placement, which could reflect improvements over time in the program, differences in the skills and/or motivation of the participants between 2008 and 2009, or changes in the economic climate, which continued to worsen throughout 2008 and 2009. The unemployment rate for New York City was 7.4 in December of 2008 and 9.0 in December of 2009 (New York State Department of Labor).

There are a number of services that are positively related to placement. Consistent with research on other employment programs offered through SBS (Henderson 2010), participants who receive an ITG and those who receive job readiness and job search services have higher odds of finding jobs. Participants who receive resume preparation have lower odds of job placement. It is important to refrain from attributing causality to these relationships. It is just as likely that these service findings reflect a greater use of specific services by program participants who are easier or harder to place in jobs than either a positive of job readiness services or a negative effect of resume preparation on participants' employability.

Few services are related to either hourly wages or weekly hours among those who are placed. Participants who receive job search services earn less per hour. Receipt of an ITG has a strong, positive relationship with weekly hours, such that those who receive this service, on average, work 3.8 more hours per week than those who do not receive this service. These associations may be explained by the process through which Workforce1 participants are awarded ITGs. It is likely that

participants who are the most work-ready and/or most highly motivated to find a job are also the most likely to receive these grants. The other services included in this analysis are not related to either of these two outcomes.

Table 4.3 includes a measure for the number of different services received by Employment Works participants. The results reveal that participants who report receiving more services are more likely to be placed in jobs. Moreover, when the number of services is included in the model, participants in the Brooklyn Center are more likely to be placed into jobs than participants in the Queens Center.

There are a couple of potential explanations for this finding. Descriptive statistics, discussed above, reveal that the participants in the Queens Center report receiving a greater number of services, on average, and are more likely to report receiving almost every type of service. The Queens Center has also a higher placement rate than the Brooklyn Center. The regression results suggest that were participants in the Brooklyn Center to report receiving the same number of services as participants in the Queens Center, they would have higher odds of job placement. But once again, caution must be used in drawing conclusions from these findings. Participants at the Brooklyn Center do not report the full range of services they receive in the SBS database. Therefore, it is likely that equal numbers of services reported to be received in the data available, actually reflect higher rates of service receipt by participants in the Brooklyn Center. Number of services may also be a proxy for motivation. Employment Works participants who are highly motivated to find a job may more frequently avail the services of the employment Center. Highly motivated participants may also be the most likely to find jobs. Number of services received is not related to hourly wages or weekly hours, among those who are placed.

**Table 4.2. Relationship of Employment Works Participant Characteristics and Services Received to Employment Outcomes**

	Placement <sup>1</sup>	Hourly Wages	Avg. Weekly Hours
Intercept	-----	10.04***	33.86***
Year of enrollment--2009	0.32**	0.72	0.22
Brooklyn Center	0.36	0.27	0.81
Age	-0.00	0.03*	0.01
Male	-0.16	0.39	1.81**
Race <sup>2</sup>			
African American	0.12	-2.10***	-1.78
Hispanic	0.19	-0.99	-0.95
Other/Multi-racial	0.05	-1.92*	-2.66
Disability	-1.11**	2.26	0.94
Residence <sup>3</sup>			
Brooklyn	-0.27	-0.75	-1.43
Bronx	-0.23	-0.21	-0.89
Other location	-0.46**	-1.19	-0.18
Education level <sup>4</sup>			
Less than high school	-0.19*	-0.09	0.71
Associate/Vocational school	0.28**	1.02**	-0.16
College degree/Graduate degree	0.23	2.00*	-1.64
Enrolled in school	0.10	-0.61	0.12
Wage at most recent job	-0.00	0.21***	0.01
Avg. hours worked per week at most recent job	0.01**	-0.03**	0.02
Prior arrest	-0.18*	0.16	0.69
Probation offense top charge <sup>5</sup>			
Property crime	0.00	-0.38	0.57
Drug offense	-0.01	0.33	1.33
Other offense	0.01	0.72	1.89**
Service received			
Assessment	-0.02	-0.15	-0.41
Computer skills	-0.07	-0.40	-0.84
Financial services	0.13	0.49	0.56
Facilities	0.24	-0.13	0.44
ITG receipt	0.41*	-0.31	3.79***
Interview skills	-0.15	0.86	0.46
Counseling	-0.19	0.46	0.28
Job readiness	2.08***	-0.18	-1.91
Job search	0.40**	-1.12*	0.30

**Table 4.2. Relationship of Employment Works Participant Characteristics and Services Received to Employment Outcomes (continued)**

	Placement <sup>1</sup>	Hourly Wages	Avg. Weekly Hours
Orientation	0.17	-0.39	0.20
Referrals	0.01	-0.25	0.52
Resume preparation	-0.68***	-0.19	1.05
Workshops/Education services	-0.04	-0.16	-0.78
N =	2,616	785	785

\* p<.05 \*\*p<.01 \*\*\*p<.001

Dummy variables were included for variables with more than 10 percent missing data. Results are not significant and omitted.

<sup>1</sup> This analysis is a proportional hazard model; the regression coefficients are logits.

<sup>2</sup> White, non-Hispanic is the reference category. All other races are compared to White, non-Hispanic.

<sup>3</sup> Queens is the reference category. All other locations are compared to Queens.

<sup>4</sup> High school diploma/GED is the reference category. All other education levels are compared to high school diploma/GED.

<sup>5</sup> Violent crime is the reference category. All other crimes are compared to violent crime.

**Table 4.3. Relationship of Employment Works Participant Characteristics and Number of Services Received to Employment Outcomes**

	Placement <sup>1</sup>	Hourly Wages	Avg. Weekly Hours
Intercept	---	9.84***	33.52***
Year of enrollment--2009	0.33***	0.60	-0.13
Brooklyn Center	0.60**	0.35	0.44
Age	-0.00	0.03*	0.01
Male	-0.16	0.45	1.65**
Race <sup>2</sup>			
African American	0.15	-2.22	-1.64
Hispanic	0.23	-1.09	-0.83
Other/Multi-racial	0.10	-1.99*	-2.29
Disability <sup>3</sup>	-1.07**	1.92	0.30
Residence <sup>4</sup>			
Brooklyn	-0.30	-0.55	-1.46
Bronx	-0.25	-0.46	-0.78
Other location	-0.41*	-1.20	-0.32
Education level <sup>5</sup>			
Less than high school	-0.21*	-0.03	0.63
Associate/Vocational degree	0.31**	0.96*	0.16
College/Graduate degree	0.25	1.92*	-1.61
Enrolled in school	0.04	-0.57	-0.15
Wage at most recent job	-0.01	0.21***	0.00
Avg. hours worked per week at most recent job	0.00	-0.03**	0.03
Prior arrest	-0.18*	0.13	0.71
Probation offense top charge <sup>6</sup>			
Property crime	0.01	-0.44	0.58
Drug offense	-0.02	0.28	1.39*
Other offense	0.04	0.63	1.73*
Number of services	0.19***	-0.06	0.07
N =	2,616	785	785

\* p<.05 \*\*p<.01 \*\*\*p<.001

<sup>1</sup> This analysis is a proportional hazard model; the regression coefficients are logits.

<sup>2</sup> White, non-Hispanic is the omitted category.

<sup>3</sup> Dummy variables were included for variables with more than 10 percent missing data. Results are not significant and omitted.

<sup>4</sup> Queens is the omitted category.

<sup>5</sup> High school diploma/GED is the omitted category.

<sup>6</sup> Violent crime is the omitted category.

## 4.2 Relationship Between Participant Characteristics and Recidivism

Table 4.4 presents the regression results for the relationship between participant characteristics and recidivism for participants in the Brooklyn and Queens Centers. The first model considers Center, demographic characteristics, work history, and criminal history on the odds of re-arrest. We find that younger participants and women are significantly less likely to be re-arrested following participation in the Employment Works program. Those with less than a high school diploma have higher odds of re-arrest while those with a college or graduate degree have lower odds of re-arrest. As one might expect, those participants who have arrests prior to the probation offense also have higher odds of re-arrest.

The second model in Table 4.4 examines whether receiving a job placement while enrolled in the Employment Works program changes the relationship between participant characteristics and recidivism. We find that all the relationships mentioned above are maintained; however, all else equal, Employment Works participants who receive a job placement are 80 percent less likely to be re-arrested. Among those who were re-arrested, there was no relationship between job placement and the likelihood of re-conviction. Borough of residence was significantly related to the likelihood of reconviction. The results revealed that the boroughs could be rank ordered from highest to lowest in terms of the risk of reconviction: Brooklyn, Queens, other locations, and the Bronx. Participants in the Bronx had the lowest rate of reconviction of all of the boroughs.

When we include types of services received in the regression model (Table 4.5), we find that the relationships between year of

enrollment, age, sex, education, prior arrests, and re-arrest remain largely stable.

Placement in a job continues to be associated with decreased odds of being re-arrested; however, neither the type nor the number of services received through Employment Works is related to re-arrest. This pattern holds true for both individual types of services and for the number of different services received by Employment Works participants (see columns 3 and 4 of Table 4.5).

## 4.3 Conclusion

The multivariate regression results reveal that when demographic characteristics, work history, and criminal history are considered, there is no longer a significant difference in the placement rates between the Brooklyn and Queens Centers. This suggests that one reason the Queens Center has a higher placement rate is that, as a whole, they are serving participants that are easier to place in jobs than participants served by the Brooklyn Center. These models indicate that a number of participant characteristics are significantly related to placement, wages, and hours. Participants with less education are less likely to be placed and, upon placement, to earn less per hour than their counterparts with higher levels of education. Among those who are placed into jobs, whites tend to earn higher wages than African-Americans or other (non-Hispanic) and multi-racial participants. Criminal history also matters. Participants with arrests prior to their probation charge are less likely to be placed into jobs, but prior arrests are not related to wages or hours in those jobs.

**Table 4.4. Relationship of Employment Works Participant Characteristics to Recidivism Outcomes**

	Re-arrest	Re-arrest with Placement	Re-Conviction	Re-Conviction with Placement
Year of enrollment—2009	-0.19*	-0.19**	1.03	1.03
Brooklyn Center	-0.38	-0.39	0.80	0.82
Age	-0.04***	-0.04***	0.99	0.99
Male	0.92***	0.92***	2.64	2.63
Race <sup>2</sup>				
African American	0.24	0.24	1.46	1.51
Hispanic	0.00	0.02	1.41	1.44
Other/Multi-racial	-0.26	-0.25	3.39	3.40
Disability <sup>3</sup>	0.10	0.06	0.37	0.36
Residence <sup>4</sup>				
Brooklyn	0.40	0.41	1.09	1.06
Bronx	0.01	0.01	0.21*	0.21*
Other location	0.24	0.23	0.51	0.50
Education level <sup>5</sup>				
Less than high school	0.17*	0.16*	0.82	0.81
Associate/Vocational school	-0.03	-0.00	1.09	1.11
College degree/Graduate degree	-0.86*	-0.85*	0.02	0.02
Enrolled in school	-0.18	-0.18	1.78	1.82
Wage at most recent job	-0.00	-0.00	1.00	1.00
Avg. hours worked per week at most recent job	-0.00	-0.00	1.01	1.01
Prior arrest	0.51***	0.51***	1.03	1.02
Probation offense top charge <sup>6</sup>				
Property crime	0.08	0.08	1.24	1.23
Drug offense	0.10	0.10	1.30	1.30
Other offense	0.06	0.07	0.69	0.69
Placed in a Job	---	-0.19*	---	0.87
N =	2,547	2,547	929	929

\* p<.05 \*\*p<.01 \*\*\*p<.001

<sup>1</sup> This analysis is a proportional hazard model; the regression coefficients are logits.

<sup>2</sup> White, non-Hispanic is the omitted category.

<sup>3</sup> Dummy variables were included for variables with more than 10 percent missing data. Results are not significant and omitted.

<sup>4</sup> Queens is the omitted category.

<sup>5</sup> High school diploma/GED is the omitted category.

<sup>6</sup> Violent crime is the omitted category.



**Table 4.5. Relationship of Employment Works Participant Characteristics and Services Received to Recidivism**

	Service Type		Number of Services	
	Re-arrest <sup>1</sup>	Re-arrest with Placement	Re-arrest	Re-arrest with Placement
Year of enrollment--2009	-0.28**	-0.27**	-0.22**	-0.22**
Brooklyn Center	-0.21	-0.22	-0.41	-0.41
Age	-0.04***	-0.04***	-0.04***	-0.04***
Male	0.90***	0.90***	0.92***	0.92***
Race <sup>2</sup>				
African American	0.26	0.26	0.25	0.25
Hispanic	0.02	0.03	0.01	0.02
Other/Multi-racial	-0.24	-0.24	-0.25	-0.24
Disability <sup>3</sup>	0.09	0.05	0.10	0.07
Residence <sup>4</sup>				
Brooklyn	0.40	0.41*	0.40	0.41
Bronx	0.07	0.06	0.02	0.02
Other location	0.27	0.27	0.25	0.24
Education level <sup>5</sup>				
Less than high school	0.15	0.15	0.17*	0.16*
Associate/Vocational school	0.00	0.02	-0.02	-0.00
College degree/Graduate degree	-0.82*	-0.80*	-0.86*	-0.85*
Enrolled in school	-0.19	-0.19	-0.18	-0.18
Wage at most recent job	-0.00	-0.00	-0.00	-0.00
Avg. hours worked per week at most recent job	-0.00	-0.00	-0.00	-0.00
Prior arrest	0.51***	0.51***	0.51***	0.50***
Probation offense top charge <sup>6</sup>				
Property crime	0.07	0.07	0.08	0.08
Drug offense	0.10	0.10	0.10	0.10
Other offense	0.07	0.07	0.06	0.06
Service received				
Assessment	-0.06	-0.06	---	---
Computer skills	-0.26	-0.27	---	---
Financial services	-0.14	-0.14	---	---
Facilities	0.08	0.10	---	---
ITG receipt	-0.52	-0.50	---	---
Interview skills	0.11	0.12	---	---
Counseling	0.16	0.16	---	---
Job readiness	-0.04	0.02	---	---
Job search	-0.08	-0.07	---	---
Orientation	-0.05	-0.05	---	---
Referrals	0.08	0.07	---	---
Resume preparation	-0.10	-0.13	---	---
Workshops/Education services	0.03	0.03	---	---

**Table 4.5. Relationship of Employment Works Participant Characteristics and Services Received to Recidivism (continued)**

	Service Type		Number of Services	
	Re-arrest <sup>1</sup>	Re-arrest with Placement	Re-arrest	Re-arrest with Placement
Number of services Placed in a Job	---	---	-0.02	-0.01
	---	-0.18*	---	-0.19*
N =	2,547	2,547		

\* p<.05 \*\*p<.01 \*\*\*p<.001

<sup>1</sup> This analysis is a proportional hazard model; the regression coefficients are logits.

<sup>2</sup> White, non-Hispanic is the omitted category.

<sup>3</sup> Dummy variables were included for variables with more than 10 percent missing data. Results are not significant and omitted.

<sup>4</sup> Queens is the omitted category.

<sup>5</sup> High school diploma/GED is the omitted category.

<sup>6</sup> Violent crime is the omitted category.

When reported services are considered, both the types of service and the number of different services received by participants are positively associated with placement, but less so with wages or hours worked. Specifically, receipt of Individual Training Grant (ITG) vouchers, job readiness services, and job search services are independently related to an increased likelihood of job placement. However, these results should be interpreted cautiously because, as discussed in detail below, the Brooklyn Center does not record all services received by Employment Works participants.

With regards to recidivism, there are not significant differences in re-arrest rates between the two Centers and access to services does not appear to be related to likelihood of re-arrest. The factors that are related to re-arrest are age, sex, education, and criminal history, which is consistent with prior research. However, these findings also reveal that participants in Employment Works who were placed into jobs do have a significant decrease in the odds of re-arrest. This finding suggests that employment is a protective factor to re-offending and that if the Employment Works program is able to place

probationers in jobs at higher rates than the general population of probationers than those participants should have lower rates of re-arrest, all else equal. However, this study does not rule out the possibility that pre-existing motivation leads to both (a) a greater likelihood of getting a job, and (b) a reduced likelihood of being re-arrested. Motivation may be more of a protective factor than the employment. Further study is needed to understand this.

## 5. Identification of a Comparison Group for an Impact Evaluation

The analyses in this report provide a description of Employment Works participants and outcomes, and of which services are associated with placement, wages, and hours. The findings suggest that probationers who are placed in employment are less likely to recidivate. While promising, evidence for the effectiveness of Employment Works could be strengthened through a rigorous impact evaluation. By impact evaluation, we mean an evaluation that is designed to determine whether the employment and criminal justice outcomes of Employment Works participants are attributable to the intervention. Such an evaluation would involve identifying a counterfactual—that is, what would the outcomes of Employment Works participants have been in the absence of the intervention? How a comparison group is constructed affects the extent to which the individual differences in each group threaten the validity of the evaluation findings (that is, if the groups are different to begin with, it can be hard to disentangle whether differences in outcomes are due to these initial differences in the participants or to the effect of the program). Therefore, it is ideal to have the groups as equivalent as possible at the outset and random assignment is the best methodology. Westat explored the possibility of drawing a comparison group from other probationers in New York City who are similar to Employment Works participants on demographic background and criminal history. Westat documented numerous challenges to identifying such a group. This section describes those challenges.

### 5.1 Data Limitations

Propensity scoring provides a method for statistically weighting individuals so that the

treatment and comparison groups are balanced with respect to potentially confounding participant characteristics. A propensity score is the probability that an individual would be in the treatment group given their background characteristics (Rosenbaum and Rubin, 1983, 1984). In nonrandomized studies such as this one, where outcome differences may be biased by population differences, propensity score weighting provides one method of controlling such bias. This method, however, requires a comparable set of variables for both the treatment group (Employment Works participants) and control group (probationers who did not participate in Employment Works). In this case we did not have comparable data across the two groups.

The DOP provided Westat with a de-identified data extraction that included information on all individuals on probation in New York City during the study period. The data contained information for each probationer on the date they started probation and the dates of any re-arrests since probation, which would allow us to construct a measure of recidivism. It also contained limited information on demographic characteristics, such as age, gender, race/ethnicity, borough of residence, as well as criminal history, including number of prior arrests and the type of offense that resulted in probation (e.g., violent crime, property crime, drug crime, etc.).

The DOP data did not contain important information necessary for constructing a valid comparison group. The most critical data was related to employment. To be eligible for Employment Works, a probationer must be unemployed. A comparison group would include only probationers who were also unemployed. While the DOP data did include

information on employment, this data was only for the most recent job as of the data extraction. (Westat was informed by DOP that when probation officers update information on probationers' employment status, data on former employment is generally not retained.) Thus the DOP data did not contain a complete record of probationers' employment from the time they started probation. This made it impossible to know whether and at what points a probationer would have been eligible for Employment Works. Comparing a group of probationers, many of whom may have been employed, to Employment Works participants would bias the results away from finding an effect of Employment Works on recidivism.

There were also limitations to the criminal history data available through DOP records. DOP provided a data element indicating whether a probationer was in a "low risk" or "high risk" supervision track. This was important because initially only high risk probationers were referred to Employment Works, and high risk probationers would be more likely to recidivate. In NYC, the supervision level is assigned based on a "criminal risk score" determine by a classification instrument that collects very information on the probationer's criminal history, including any juvenile record, the number of victims physically injured, and presence of psychiatric problems, to name a few. There may be a great deal of variation in criminal propensity even within the high risk track, and it is likely that these more nuanced factors influenced the decision about whether to refer a probationer to the Employment Works program. If we had access to the underlying criminal risk score, or to the variables from the classification instrument that were used in its calculation, we may have been able to use this information to match Employment Workers participations to more a similar set of probationer non-participants.

Several other important pieces of information were not included in DOP data. Educational attainment, marital status, and housing situation are all important predictors of recidivism that should be used to select a comparison group but which were not available in DOP data.

There are also limitations of data available from the Brooklyn and Queens Centers. Specifically, there are no data available on the intensity of services. If there are "dosage effects," that is, the impact of Employment Works depends on the number and intensity of services received, comparing all Employment Works participants with a comparison group would obscure an impact. Unfortunately, the Brooklyn Center does not use the SBS data system to record all of the services received by the Employment Works participants. Instead, they record only those services which are mandated reporting elements in the SBS data system. Additionally, they are more likely to accurately record services for participants who are successfully placed into jobs. Moreover, data from the Queens Center were collected in the form of case notes rather than quantitative format that would lend itself to this type of analysis.

Finally, if probationers in the comparison group are receiving services elsewhere, this could bias downward any observed effect of the program. This seems likely given the availability of services in New York City. To the best of our knowledge, there is not comprehensive data available from the DOP or from other sources that tracks program participation or service receipt for programs other than Employment Works among probationers.

## 5.2 Other Impact Evaluation Challenges

There are several other challenges to evaluating the impact of Employment Works that are related to factors other than data. Because the Employment Works program casts a wide net in terms of probationers it serves, a comparison group cannot be drawn from Brooklyn and Queens. Probationers in these boroughs are likely ineligible for Employment Works or not compliant with Employment Works; otherwise, they would be enrolled. This means that an impact evaluation would have to look to the other boroughs for a comparison group. Unfortunately, individuals in other boroughs may be different from those in Brooklyn and Queens insofar as crime rates and community factors differ between those boroughs. Without measures of those factors, other boroughs may not be a good comparison group for Employment Works participants.

A second challenge was that there is no common starting point for tracking recidivism for Employment Works participants and a comparison group. For Employment Works participants, an impact evaluation would be interested in recidivism from the time participants enrolled in the program; recidivism prior to Employment Works is irrelevant since this would be independent of the program. Most participants do not enroll in Employment Works when they start probation. The requirement of Employment Works is that an individual must have at least one year left on probation when they enroll. The average length of time between probation and enrollment is approximately one year, with a maximum of five years. Because the comparison group consists of individuals who never enrolled in the program, it is unclear from what date an evaluation should track their recidivism. The only date that is available is the date they start probation. This is not a fair comparison because it is well-documented

that the risk of recidivism is highest in the time period immediately following the start of probation and declines over time for many types of probation offenses (cf., Hepburn and Griffin, 2004). Therefore, using probation date for the comparison group would bias toward finding a higher recidivism rate for the comparison group since they are followed during a “riskier” time than treatment individuals.

## 6. Recommendations for a Future Impact Evaluation

We believe that three factors could facilitate a rigorous impact evaluation of the Employment Works program in the future. These are a) selection of an appropriate comparison sample through random assignment; b) prospective data collection on program participation and service receipt; and c) improvements to the way the DOP collects data on probationers.

### 6.1 Selection of a Comparison Sample Through Random Assignment

Because the Employment Works program served, or attempted to serve, all of the eligible probationers in Brooklyn and Queens, those who were not served by the program differed from participants either in their eligibility criteria or in their compliance with program requirements. Probationers who did not participate in the program did not meet the eligibility criteria of the program or match the level of “buy-in” present among the program participants. Therefore, probationers who did not participate in the program were not a strong comparison group for those who did participate. In contrast, randomly assigning eligible participants to treatment and control conditions would ensure that probationers who did and did not participate were similar on all background characteristics and provide the strongest evidence of program effects.

### 6.2 Prospective Data Collection

Because unemployed individuals on probation who are not being served by the Employment Works program are still likely to receive some level of services in the community, it would be important to measure those services to identify the benefits of the Employment Works program, above and

beyond, those of “services as usual.” Moreover, because the Brooklyn and Queens Centers collect and maintain their data in different ways, it would be critical to identify a uniform method of data collection across all program participants to ensure dosage is accurately captured.

As detailed above, the extant administrative data do not sufficiently capture service data for members of the treatment group. It is important that information on services be documented for all Employment Works participants, and members of the comparison sample regardless of whether they are placed in employment. In addition, information on the intensity of services should be collected; for example, how many units of a service an individual received or the length of time an individual received each service. This would allow a study of the different program dosages or service levels on placement and recidivism. Therefore, primary data collection, typically through interviews, is warranted. If sufficient funds were available, we would propose primary data collection for the sample of treatment and comparison group participants, including baseline data collection, and a number of follow-up waves for limited period of time (e.g., two years).

### 6.3 Improved Administrative Data

Finally, an impact evaluation of Employment Works would be possible with improvements to the administrative data collected and maintained by DOP. We understand that the purpose of DOP administrative data is not evaluation. However, a modification of the way in which employment information is collected would increase the possibility of a rigorous impact evaluation. Retaining information about old jobs when job information is updated would

enable the selection of a comparison group of probationers who meet the eligibility criteria of Employment Works of being unemployed but who are not enrolled.

This report provides evidence that the services provided by Employment Works are positively associated with achieving job placements for participants, and that employment is strongly associated with decreased recidivism. With the identification of an appropriate comparison sample through random selection, prospective data collection of service use for both the treatment and control groups, and improvement to the DOP administrative data collection system, a rigorous impact evaluation can strengthen these findings.



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## Appendix A. Literature Review

Over the last 30 years the United States has witnessed an historic increase in the number of individuals incarcerated. From the 1930s through the early 1970s, the incarceration rate was around 110 per 100,000 residents (Pastore and Maguire 2002). By the end of 2008, the incarceration rate had risen to 754 per 100,000 (Sabol, West, and Cooper 2010). Currently, nearly 2.3 million individuals are incarcerated in America (U.S. Bureau of Justice Statistics 2009). The incarceration rate is largely driven by minority incarceration. For example, 1 in 106 white men are incarcerated, compared to 1 in 9 black men and 1 in 36 Hispanic men (Pew Research Institute 2008). Record incarceration rates correspond to an increased number of formerly incarcerated persons being released into the community (Travis 2005). A troubling two-thirds of former state and local jail inmates in New York State are re-arrested within three years after being released (McDonald et al. 2006). The high rate of recidivism may indicate that the justice system is not doing enough to help formerly incarcerated persons reintegrate into society.

Work is widely considered to be a centerpiece of successful rehabilitation, with extant theory suggesting the importance of a job for preventing crime (cf. Sampson and Laub 1993). At the same time, formerly incarcerated persons face bleak labor market prospects. This is in part a reflection of the fact that many formerly-incarcerated persons have low skills and spotty work histories prior to incarceration (Andrews and Bontona 1994; Western 2002). In addition, individuals with a criminal record may have a difficult time finding a job due to stigma associated with their confinement experiences, and time spent incarcerated may reduce the human and social capital necessary for labor market success (Pager 2003; Western 2002; Sweeten and Apel 2008). Therefore, effective reentry policies

and programs must overcome the barriers that formerly incarcerated persons face in the labor market.

A brief overview of theory and prior research on the link between employment and crime is provided below, with a focus on evaluations of work-related programs for formerly incarcerated persons.

### Theoretical Perspectives on Employment and Crime

Theories of crime posit an important role for employment in preventing or reducing crime among formerly-incarcerated persons.<sup>9</sup> Early theories of crime and delinquency posit a negative relationship between employment and offending. Classical strain theory (Cloward and Ohlin 1960) argues that an inability to obtain employment leads to crime in an effort to satisfy desire for material possessions and cultural success. Social control theory (Hirschi 1969) emphasizes that crime is the result of insufficient job stability and commitment. Social learning theories (Sutherland and Cressey 1978) maintain that employment provides formerly incarcerated persons with exposure to other individuals who have attitudes and behaviors supportive of work. In their life course theory of crime, Sampson and Laub (1993) argue that employment can act as positive “turning point” in the life course of criminal offenders away from crime. Formerly incarcerated persons with strong bonds to the labor market are likely to be deterred from criminal behavior. The strength of these bonds is determined by the quality of the job and how satisfied an ex-offender is with the job (Uggen

<sup>9</sup> A considerable literature has examined the relationship between employment and crime among adolescents. Because Employment Works services individuals over the age of 18, this literature review focuses only on the relationship between employment and adult crime.

1999). Therefore, according to several major theories of crime, employment is critically important for preventing recidivism among individuals reentering and reintegrating into the community.

Unfortunately, theories of crime also leads to the conclusion that a criminal record will make it difficult for formerly incarcerated persons to obtain the high quality and satisfying employment they need to stay away from crime. According to labeling theory (Lemert, 1951), a criminal record will send a signal to employers that a candidate is untrustworthy or will make a “bad employee.” In addition to stigma, incarceration may reduce human and social capital. Time spent incarcerated incapacitates an offender not only from committing street crime but also from gaining valuable industry- and firm-specific experience and education and training. Incarceration also isolates an individual from conventional social institutions and individuals that may provide opportunities for employment. This difficulty finding work, a result of incarceration, may lead to further offending and the foreclosure of opportunities to participate in other critical social institutions, such as education and marriage (Moffit 1993; Sampson and Laub 1997).

### **Research on Employment and Crime: Effectiveness of Work-Related Programs for Formerly Incarcerated Persons**

There is a long history of such programs in the U.S., dating back to the 1960s. These programs are quite diverse in terms of the providers of the services, the types of interventions, and the populations served. Some programs are administered by correctional departments and serve individuals while they are still in prison; other programs are run by social service agencies and target

formerly incarcerated persons in the community shortly after they have been released from jail or prison. Still other programs cast a wider net by focusing on at-risk youth or adults who reside in high crime and high poverty neighborhoods but have not yet been involved with the criminal justice system. Programs may offer vocational education, work experience, direct financial assistance, or some combination of services.

However, the extent to which these programs are effective in achieving their goal of sustained employment and abstention from crime is unclear. In the sections that follow, we review several different types of work-related programs designed to prevent or reduce criminal behavior and summarize what is known about their effectiveness. Given the diverse nature of these programs, we guide our discussion by focusing on three broad types of programs: (1) pre-trial interventions, (2) corrections-based programs, and (3) community employment programs. It is important to note that these programs may not be mutually exclusive and some may mix elements of more than one program.

### **Pre-Trial Interventions**

One type of program that has become popular in recent years is pre-trial intervention. During the 1970s, the Vera Institute in New York City sponsored a program that allowed individuals who were charged with non-serious offenses to participate in a 90-day job training. If the individual successfully completed the program, the charges against them were dropped. Two evaluations of this type of program were conducted. The first evaluation found that while less than half of the participants completed the program, the recidivism rate for completers was 15 percent versus 30 percent for non-completers. The study selected a comparison group of similar defendants from before the program began. A

second, more rigorous study was carried out which randomly assigned participants to treatment and control groups and assessed recidivism 23 months later (Baker and Sadd 1981). This study found no significant difference in recidivism rates between the treatment and control groups. Owing to the finding that the program had no effect on recidivism, the program became seen more as a route away from jail than as a method to prevent recidivism.

The mixed results from evaluations of pre-trial intervention programs have not deterred correctional systems from experimenting with similar programs. A number of states currently have in place “alternatives to incarceration (ATIs).” In New York City, one program allows judges to send defendants to one of a number of independent programs that offer counseling, treatment, and classes for 6 to 12 months. The first evaluation of ATIs for felony offenders was conducted by the Vera Institute in 2002 and found no significant difference in the rate of re-offending up to three years later. The authors interpreted the finding of no program impact to mean that the program works, since it shows that offenders can be diverted from prison to a less expensive program and not be at any greater risk of recidivism. However, the goal of work programs is not to produce the same recidivism rate as sending people to prison but rather to lower it.

### Corrections-Based Programs

The “prison boom” has resulted in an increased focus by prison officials on the employability of inmates upon release. Inmates have lower skills and poorer educational backgrounds than the general population (Andrews and Bontona 1994). This is in part because the prison population is disproportionately drawn from the most disadvantaged groups in society—racial and

ethnic minorities and high school dropouts (Wilson 1987). For example, Western (2002) found that young men who were incarcerated earned \$2 less per hour than those who were not incarcerated. , Corrections-based programs attempt to increase the inmates’ employability by providing vocational training, college courses, or work in correctional industries.

Evaluations of corrections-based programs seem to suggest that the programs have a positive influence, but studies often suffer from methodological shortcomings that make drawing any firm conclusions difficult. A meta-analysis of prison-based work programs by Wilson, Gallagher, and MacKenzie (2000) is the only comprehensive assessment of corrections-based programs. The authors compiled results across 33 independent experimental and quasi-experimental evaluations and found that program participants were employed at a higher rate and had a lower recidivism rate than non-participants. However, possible selection bias in the quasi-experimental studies makes it difficult or impossible to know whether the differences were due to the program or the possibility that the inmates who chose to participate in the programs were more motivated and less likely to re-offend in the first place. In his meta-analysis of a broader range of employment-related programs, Bouffard (2002) concluded that vocational education and prison-based work programs seem to “work” based on available evidence but that more rigorous evaluations are needed. In addition, even if corrections-based programs do have an impact, the heterogeneity among programs in terms of the services they provide gives little guidance as to which elements are effective.

### Community-Based Programs

Community-based programs have the longest history of any type of employment



program for formerly incarcerated persons. Community-based programs tend to focus on transitional services once an individual is released from jail or prison. Most of these programs provide some combination of job readiness, job training, and job placement services.

Most evaluations of community-based programs have been unable to demonstrate an impact on employment or recidivism. The Job Training Partnership Act (JTPA) programs provided ex-prisoners with a variety of services including job search assistance, education, work experience, and on-the-job training. The only evaluation of JTPA programs in Georgia found no significant difference in employment at program end or 14 weeks after the program between ex-prisoners and non-prisoners JTPA participants (Finn and Willoughby 1996). The use of a non-prisoner comparison group makes it difficult to interpret the results of this study. However, it may suggest that the program had an effect, since formerly incarcerated persons typically have a lower employment rate than non-offenders. Several recent meta-analyses have examined the effectiveness of JTPA and the earlier community-based employment and training programs discussed above. Visher (2000) included studies dating from 1970s to 1994 of eight community-based programs for formerly incarcerated persons. They found that none of the programs had a significant effect on the likelihood of re-arrest. However, they note that the programs were disparate and served different populations, and all but one of the programs was residential.

A more promising approach to community-based models may be transitional jobs. The New York City-based Center for Employment Opportunities (CEO) transitional jobs program provides formerly incarcerated persons with employment immediately upon release from prison and

soft skills training with the goal of finding permanent, unsubsidized employment. A random assignment evaluation of the CEO model found a significant reduction in recidivism at one and two years among participants versus a control group that received a limited package of services (Bloom et al., 2007; Redcross et al., 2009). The program had its greatest effect for those formerly incarcerated individuals who were at the highest risk for reoffending (Zweig et al., 2010), suggesting that transitional jobs programs may be most beneficial for serious offenders.

## Summary

Major theories of crime suggest that employment plays an important role in preventing or reducing crime among formerly incarcerated persons. A diverse array of job-related programs has been developed with the goal of reducing recidivism, including pre-trial interventions, corrections-based programs, and community-based programs. The results of evaluations of these programs vary according to which type of program is being evaluated.

The results of evaluations of pre-trial interventions suggest that such programs do not necessarily reduce recidivism but they may be a less costly alternative to incarceration without posing a risk to the community.

Evidence on corrections-based programs suggests that the provision of education and work experience to inmates may reduce recidivism. However, evaluations of these types of programs are not as methodologically rigorous as for other types of programs and suffer from problems associated with selection bias. Moreover, the diversity of corrections-based programs makes it difficult to synthesize findings across evaluations.

A long history of evaluations of community-based programs generally shows no impacts on recidivism. However, a recent random assignment evaluation of the New York city-based Center for Employment Opportunity's transitional jobs program showed a long-term reduction in recidivism among the program participants, especially those at high risk of re-offending.

Taken as a whole, available evidence suggests that employment is an important component to successful reentry and reintegration, but our knowledge of “what works” with regard to employment and training programs for formerly incarcerated persons could be improved in several ways. First, evaluations should examine the characteristics of formerly incarcerated persons who choose to participate and their relationship to program outcomes (e.g., employment and recidivism). This would help to illuminate the process by which formerly incarcerated persons self-select into such programs and identify those factors that are most important to control for in an impact evaluation. Second, evaluations should focus on the relationship between program services and outcomes. The diversity of services offered makes it difficult to interpret differences in effectiveness across evaluations of different initiatives. Identifying which services are most efficacious can help to design more effective interventions. Finally, and perhaps most importantly, more rigorous evaluations of current programs are needed. These would ideally include experimental designs in which formerly incarcerated persons are randomly assigned to the program. In cases where an experimental design is not possible, good quasi-experimental designs can be used. These might include a matched samples design in which program participants are compared to a group of formerly incarcerated persons who did not participate in the program but who are similar on factors related to employment and recidivism.