Process Study of the U.S. Department of Labor's "Pay for Success" Pilots in Two States: Development of the Grant Applications and Initial Implementation

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Executive Summary

In September 2013, the U.S. Department of Labor (DOL) awarded grants to two states, New York and Massachusetts, to operate Pay for Success (PFS) pilot projects. The PFS model, which uses financing from private sector and philanthropic sources, is thought to have the potential to promote innovation and to allow evidence-based practices to be scaled up, thus improving social or environmental outcomes for people and communities. In a PFS project, private and philanthropic investors cover the up-front costs of delivering an intervention, while the government or other "payors" reimburse investors for those costs and provide potentially significant returns on the investment, when specific outcomes or impacts are met or exceeded, as determined by a rigorous evaluation. A model similar to PFS was first tested in Great Britain in 2010, with the Social Impact Bond pilot at Her Majesty's Prison Peterborough, and the first U.S.-based PFS project, the NYC ABLE Project for Incarcerated Youth, was initiated in 2012 at Rikers Island Jail in New York City. The DOL PFS pilots, funded by DOL's Workforce Innovation Fund, are the first effort by a federal agency to test this financing model.

The two DOL grants, awarded to the Massachusetts Executive Office of Labor and Workforce Development (EOLWD) and the New York State Department of Labor (NYSDOL), were for approximately $12 million each. Both states also committed state funds to continue the pilots beyond the DOL grant period. Both projects focus on improving employment outcomes and reducing recidivism among newly released ex-offenders. The Massachusetts project targets young male parolees, while the New York pilot focuses on adult ex-offenders generally.

DOL also sponsored a process study of the two PFS pilots, conducted by Abt Associates, to document project implementation and provide information on the PFS approach for policymakers and program administrators. This is the process study's first report. It documents the development of the pilots, much of which occurred during the grant application process, and their early implementation through September 2014. The report is based on in-person interviews conducted in fall 2014 with the key partners involved in each pilot and reviews of grantee documentation and performance data that was reported to DOL.

Specifically, this report examines the pilots' early planning and operational experiences, including developing working partnerships and management structures, securing private and philanthropic capital and financing mechanisms, establishing the service intervention, setting up the evaluation design, and establishing outcome measures, outcome targets and payment amounts. Because this report documents the development of the pilots during the grant application period and the first approximately ten months of a multi-year operational period, it provides an early look at the grantee experiences. A second report, based on additional site visits to each grantee, will cover a later period of program operations for each pilot and report on the pilots' longer-term experiences, including the extent to which the pilots achieved their performance milestones and provided a return to investors.

Overview of DOL's PFS Pilots

DOL issued a Solicitation for Grant Awards (SGA) in June 2012, with proposals due by January 2013. Grants were made in September 2013 and grantees were required to complete all procurement and other necessary start-up activities two months after award. To be awarded a grant, DOL's SGA required applicants to establish key elements of the PFS approach, which included the following:

- A government agency to identify the social problems to be targeted by the project and set aside grant funds to repay investors if target outcomes are achieved
- A target population and specific employment and training related problem that would be the focus of the intervention strategy
- An intermediary to manage the PFS pilot
- Investors to provide operational financing for the program
- An independent validator to verify if outcome targets were achieved, based on the results of the project's experimental or quasi-experimental evaluation, and
- A service provider (though not required as a formal partner) to deliver an intervention to the target population.

Additionally, DOL plays a key supporting role, in monitoring progress under the grants, approving possible modifications to them, confirming that the validation methodology has been followed, and approving investor payment.

Both Massachusetts and New York had had an interest in the PFS model before the announcement of the DOL PFS grant opportunity in 2012. In both states, the governors and high-level workforce and public safety agency leadership were knowledgeable about PFS and interested in testing an innovative approach to improving employment outcomes and reducing recidivism for recently released offenders. When DOL's SGA was released, both states had already begun identifying stakeholders and resources to support PFS projects. This put them in a strong position to respond to the SGA and meet its requirements. The key components of the PFS pilot in each state, developed primarily as part of the DOL grant application process, are described below.

Government. The Massachusetts Executive Office of Labor and Workforce Development and the New York State Department of Labor are the respective government sponsors for the pilots. They are the DOL grantees "testing" the PFS model and will use grant funds to pay back investors if targets are met. In considering options for each pilot's focus, both states built on their interest in improving the employability of ex-offenders and reducing recidivism. In addition to the approximately $12 million grant each received from DOL, both states committed additional resources ($15 million in Massachusetts and $11 million in New York) to continue the delivery of services and the evaluation of impacts. These additional state investments will significantly increase the scale of the two projects over an extended time frame and yield greater social impacts. In both states, the PFS projects are managed as a single initiative that operates in two phases. Phase I is supported by the DOL grant and corresponds with the requirements and schedules specified by this grant. Phase II is supported by a state commitment of resources for the purposes of expanding the number of enrollees in the project through an extended period of operation (this was done to improve the precision of the evaluation results).

Social problem and target population. Both pilots opted to address the problem of recidivism experienced by individuals who had been formerly incarcerated. In Massachusetts, the PFS pilot targets young males (ages 17 to 24) who are on probation or parole or who are exiting the juvenile justice system. Once both states determined the specific problem and the target population that the pilot would address, they then needed to procure an entity to deliver the services. In New York, the PFS pilot targets adult parolees as they are being released from prison. In both locations this focus was driven by a combination of factors including, the pressing nature of the problem, the tested capacity to provide effective interventions and practical options available for tracking and measuring related outcomes.

Intermediary. Under a PFS model, the sponsor (the government in this case) hires an intermediary to develop the PFS project, manage all aspects of it, coordinate the roles and responsibilities of all stakeholders, and secure the private sector and philanthropic financing. Massachusetts selected Third Sector Capital as its intermediary while New York chose Social Finance. Both of these organizations had experience operating PFS models.

Investors. The two projects had to identify private or philanthropic investors to provide up-front capital for operational and service delivery costs. A total investment of $19.4 million was made in PFS by these investors in Massachusetts and $21.1 million in New York.

- In Massachusetts, Goldman Sachs, the only for-profit private sector financing source, along with Living Cities (a consortium of 22 foundations) and the Kresge Foundation, are the primary investors for this pilot. Collectively they loaned the capital to operate the program and manage the PFS pilot. In addition to loans, the Massachusetts pilot also received grant funding from philanthropic organizations including New Profit, the Laura and John Arnold Foundation, and the Boston Foundation.
- In New York, the PFS pilot is financed through a private placement offering structured by the Bank of America Merrill Lynch. A total of forty high-net-worth private investors and organizations with an interest in social impact investment participated in this offering. Beyond the investors in the private placement offering, the New York pilot also received philanthropic donations from the Robin Hood Foundation, the Laura and John Arnold Foundation, and the Rockefeller Foundation.

Evaluation and independent validator. Consistent with the specifications of the SGA, which required either an experimental or quasi-experimental evaluation, both pilots developed an experimental random-control trial (RCT) evaluation design. Under an RCT, program enrollees are randomly assigned to a treatment group (who receives the funded services) or a control group (who does not) to determine the impact of the intervention, with the difference in treatment and control group outcomes on measures of interest are considered the impact of the program. The evaluations were to measure the impacts of the pilots on participants' employment and recidivism; and these impacts will be used as the basis for determining if investors will recover their principal and receive a return on their investment. Massachusetts opted to engage a third party to operationalize and oversee its evaluation plan. Sibalytics was initially chosen as the evaluator for the PFS pilot in Massachusetts but was replaced 10 months after the pilot started with the Urban Institute. Alternatively, New York had the capacity and expertise in house to implement their approved RCT through its Research Office at the state Department of Corrections and Community Service (DOCCS).

Both sites also engaged an independent validator to oversee the implementation of the evaluation, monitor its fidelity and validate the findings. The validator is responsible for developing and applying a plan to ensure the evaluation adheres to the design. If the validator detects any potential threats to the integrity of the design, it must develop strategies to address them. In addition the validator is responsible for confirming that data are being interpreted correctly, that outliers and missing values are being handled properly and that outcomes are statistically unbiased. Once the results of the evaluation are determined, the validator will review the data and evaluation methodology to verify the results that trigger incremental success payments. The separation of the evaluation and validation roles was not explicitly required by the

SGA (which did require an independent validator but allowed for the validator to also conduct the evaluation) but this additional layer of external review was consistent with DOL's commitment to transparency and simultaneously served to instill confidence among partners and prospective investors. Massachusetts contracted with Public Consulting Group (PCG) to serve as its validator, while New York selected Chesapeake Research Associates (CRA).

Service providers: To address the identified social problem, both states engaged well-known and established providers of services for ex-offenders. The service provider in Massachusetts is the nonprofit organization Roca. The Massachusetts program, which provides up to two years of services through the program and an additional two years of post-program follow-up, focuses on building strong relationships between the program staff and the participants to change destructive thinking patterns (known as “cognitive restructuring") combined with transitional or subsidized employment, vocational and basic skills training, and work readiness training. The service provider in New York, the nonprofit Center for Employment Opportunities (CEO), operates an approximately four-to-six month program that provides transitional employment and work readiness services followed by job placement assistance and approximately one year of post-employment follow up.

Partnership agreements and structure. DOL's SGA specified that the PFS pilots develop a partnership agreement between the four entities (government, intermediary, investors and independent outcome validator) to design, finance, implement, administer, monitor, and evaluate the PFS initiative. This required the partners, led by the pilot's intermediary, to develop a detailed agreement that later served as the base for a contract specifying the partnership roles and responsibilities, including the management structure, the intervention or service model, the definition of performance measures, and the evaluation design used to assess the impacts of the interventions. These contracts also established an oversight, reporting and dispute resolution structure, led by two key committees for each pilot that involved all the key partners, to oversee and manage the initiative. Given the value demonstrated during the planning phases, both projects included the Harvard Social Impact Bond Lab at the Kennedy School of Government (Harvard SIB Lab), now known as the Harvard Kennedy School Government Performance Lab, as a partner and provider of pro bono technical assistance (see below). In addition, the Massachusetts pilot also chose to include the service provider in the partnership agreement in light of their history of working together during the initial exploration around the PFS model.

Outcome measures, targets and budgetary savings. Through the agreements, each pilot established the outcome measures that will be used to estimate program impacts and the targets used to determine the effectiveness of the service interventions and the public budget savings they generated. As their key impact measures, both pilots selected an increase in post-program employment and reduction in recidivism, as measured by the RCT, that could be linked to budgetary savings for the government. For their employment outcomes, the pilots will measure increases in employment and earnings resulting from the service intervention, and estimate budgetary savings resulting from increased taxes and reduced public benefit receipt and “costs” borne by crime victims. For their recidivism outcomes, the budgetary savings would be realized through reductions in incarceration or “bed days avoided” in jail or prison. While each project measures outcomes in the same general areas, the specific measures they used varied across the two projects.

Payments to investors. Both pilots also developed the outcome targets to be achieved for these measures; however, there are differences between the two pilots in their approach to how the payments would be made to investors. In addition, both pilots structured the payments so that they are primarily based on savings achieved for reductions in recidivism (rather than employment and earnings increases of participants) as this is where most of the cost savings are expected. This required setting a cap on the payments associated with the achievement of employment and earnings related savings. Massachusetts established different “tiers” of performance, where investors are paid more for more substantial reductions is recidivism. In New York, payments are made if a single performance level is reached. In part this is because the Massachusetts service intervention is significantly more expensive than New York’s, requiring a higher level of budgetary savings to offset these costs. Once investors’ principal has been repaid, an additional variable return on investment was available to investors. Both the pilots negotiated a maximum level of return that was deemed reasonable and this could not exceed the level of government savings.

Technical assistance. While not required by DOL’s SGA, the Harvard SIB Lab, which had assisted with the development of other PFS projects, offered pro bono assistance to both states in designing and structuring the project and also helped develop the evaluation methodology.

Overall, both states were able to develop and launch their PFS pilot within the time frame specified by DOL. Enrollment in program services and the RCT evaluations began in January 2014, and the pilots will end in late 2017 with evaluation results and potential payments to investors. The additional state funding for both pilots will end in 2019 when a final set of payments to investors could potentially be made.

Preliminary Observations from the PFS Pilots

This report examines the development and early implementation stages of the two DOL PFS pilots: the seven month period grantees had to develop their grant applications after the SGA was announced the four months of planning once awards were made, and the initial ten months of operation. As such, it is too early to draw formal conclusions or lessons. The following preliminary observations are based on the early experiences of the pilots in implementing the PFS approach, as reported by grantees and their partners.

The support and influence of each state’s Governor’s Office as well as other state leaders was important in launching the initiative. Prior to the announcement of DOL’s PFS SGA, both states had begun to explore PFS initiatives on their own, with interest from both the Governor in each state as well as other executive-level state leadership. This leadership was viewed by the PFS partners as important in developing and launching the PFS projects, as it generated visible and influential support for the approach. The PFS partners report that this early interest in PFS and high level support were particularly helpful given the relatively short planning period established by the SGA.

Educating pilot partners about the PFS approach was a necessary part of the planning process. The implementation of the PFS pilots required knowledge of technically complex concepts and design issues. These included, for example, defining and measuring the target outcomes to determine the effectiveness of the intervention, estimating budgetary savings that result from any improved outcomes, determining payment points and potential returns on investment, and designing and implementing rigorous evaluations. PFS partners reported that they dedicated significant time to discussions to ensure that all partners fully understood these concepts and issues, but that this was critical to establish and maintain the projects.

Carefully structured contracts and a strong management and communication process are needed to guide project organization and the PFS partnerships. The PFS partners reported that developing the partnerships between state agencies, intermediaries, investors, and evaluators, as well as service providers, that were needed to plan and implement a PFS initiative required significant attention and a structured approach. Many of the organizational relationships required by PFS had to be formed "from scratch," while others had to be revisited given the nature of the PFS approach. PFS partners reported that they had few established templates for contracts or financing arrangements to work from and even those who had worked successfully together in other settings were now working with new concepts, relationships, timelines and incentives. Moreover, the partners brought different perspectives and goals. For example, the state agencies did not want to create an overly profitable investment opportunity, while the private investors, in particular, sought a return big enough to generate interest in the initiative. To address these and other issues, PFS partners for both states negotiated and established structured and detailed agreements or contracts specifying all aspects of the pilots, including the service intervention and its cost, outcome measures and targets, the evaluation design, and the payout schedule for investors. The contracts established specific structures for managing the pilots, primarily through committees responsible for broad oversight as well the day-to-day operations of the pilots.

While private capital remains the cornerstone of the PFS approach, partners reported the value of a diverse funding base. Engaging the philanthropic community provided additional legitimacy and helped secure private investment for both pilots. Both the financial commitment and the visibility of the philanthropic investors allayed some of the concerns of private investors about risks associated with the initiative. In addition, the philanthropic investors' willingness to, for instance, reinvest their returns or guarantee a portion of the private investment allowed for shared risk and greater support for the PFS approach.

Recognizing the need for rigorous evaluation was an important milestone that was eventually reached by both projects, but there have been some challenges in implementing these designs. While the use of an experimental or quasi-experimental design was a required element of the DOL grant proposal, at the time of the proposal submissions, stakeholder understanding of the RCT methodology (and its justification) was limited. Over time, however, partners reported that they came to value the rigorous evaluation approach because it helped to maintain investors' confidence. To strengthen the evaluations, both states made plans to implement state projects that expanded the scale of the pilots so that, over time, larger sample sizes could be achieved and smaller impacts detected. This was particularly important given that payments will not be made to investors unless the impact results from the RCT are statistically significant (even if outcome targets are met).

Determining the how to measure the outcomes of the service interventions and the potential budgetary savings associated with them was a difficult task. Partners reported that determining future costs and budgetary savings required assumptions and estimations, not all of which could be accounted for, let alone accurately monetized. Each pilot has similar measures to gauge the success of their service interventions based on the RCT, but they use different methodologies to determine the budgetary savings, in part reflecting that there is not an established way to do this. Partners reported that it was important to reach consensus regarding the type of outcomes they expected the interventions could achieve and then focus on how the outcomes would be measured.

Establishing outcome targets that trigger payments to investors required significant time and negotiation. Determining investor payouts was a complex, technical, and time consuming part of the planning process, with each pilot taking similar, but distinct, approaches. For both pilots, the result is a set of detailed formulas that specify under what circumstances and when payouts will be made to investors.

The technical assistance provided by the Harvard SIB Lab was particularly important for reaching consensus between the partners on this critical element of the PFS pilots.

Overall, both Massachusetts and New York were able to develop and launch their PFS pilots in the time frames specified by DOL. Thus far, both pilots have recruited investors, established detailed contracts to guide the initiative, implemented a management structure to oversee the effort, started enrollment into program services, and set up RCTs. This study will continue to document the ongoing implementation of the PFS model, including management actions and decisions, to fully illustrate using PFS as a new way of doing business. The study will observe the services provided through the initiative and the progress of the pilots as they begin to serve higher volumes of participants and generate evidence from the evaluation. The final report will also document whether the services provided by the pilots will generate impacts for participants that allow for payment of the investments.

1. An Introduction to Pay for Success and DOL's PFS Grants

Pay for Success (PFS) is an innovative way of financing services to help payors target limited dollars to achieve positive, measurable outcomes with people and communities. Under PFS, financing comes from investors who are repaid only when specific, pre-determined results are achieved and verified. The service interventions financed with this approach are theorized to have the potential to generate positive outcomes and corresponding budgetary savings for government or other payors. The proposed payouts to investors cover both the payment of the principal plus a reasonable return on investment based on a calculation of the projected savings to government.

Those who promote the PFS model see its potential for helping payors, who are often state and local governments, fund social or environmental services and produce long-term benefits, such as reduced programmatic costs, more efficient spending, and better outcomes for people and communities. PFS potentially offers payors, and particularly state and local governments, a way to finance services that might not otherwise be feasible due to limited budgets. Beyond this basic goal, PFS initiatives are thought to have the potential to influence how payors will operate services in the future, since payouts are contingent on interventions achieving specific impacts and outcomes. Proponents of PFS believe it has a number of potential benefits, including the following:

- Creating incentives for social innovation, improved outcomes, cost savings, and efficiency gains
- Identifying effective preventive or proactive services that generate cost savings to the government
- Encouraging flexible service delivery and management structures that allow providers to respond to results by altering their approaches

In September 2013, the U.S. Department of Labor (DOL) awarded two grants, funded under its Workforce Innovation Fund, to operate pilots financed using the PFS approach. The grants were awarded to the Massachusetts Executive Office of Labor and Workforce Development (EOLWD) and the New York State Department of Labor (NYSDOL). Both pilots focus on improving employment outcomes and reducing recidivism among newly released ex-offenders. The Massachusetts pilot targets young male parolees, while the New York pilot focuses on adult ex-offenders generally. The DOL pilots are the first effort by a federal agency to support the PFS financing model. DOL's Solicitation for Grant Awards (SGA) specified that most major elements of the PFS model needed to be in place for applicants to receive a grant.

This is the first report of a process evaluation of the two DOL PFS pilots. It documents the development of each initiative and its early implementation. A future report will include the continued implementation of the PFS model, including management actions and decisions, to fully illustrate using PFS as a new way of doing business, particularly for populations not currently being served by existing programs and for new, preventative efforts that can reduce burden on existing programs.

This chapter provides the background and context for the PFS grants awarded to Massachusetts and New York. It begins with a brief introduction to the PFS model and the key partners needed to support PFS implementation, operation, and oversight. The next section summarizes the structure of DOL's PFS pilots, including its 2012 decision to fund two PFS initiatives. The chapter concludes with an overview of the process evaluation and an outline of the remainder of the report.

1.1 The Pay for Success Approach

A primary goal of any PFS effort is to promote effective solutions to difficult social or environmental problems. While each pilot is unique in the target population, financing vehicles, partners, and the intervention or services provided, the PFS financing and managerial structure is typically designed around the partner and other stakeholder roles and responsibilities described below.

- **Government.** The payor, often a federal, state, or local government agency, is responsible for selecting a social problem to address through the PFS model. The payor also is responsible for (1) contracting with an intermediary or transaction coordinator to manage key aspects of the project, (2) managing the funding for repaying investors, and (3) helping determine the outcome measures, targets and potential savings to the government.
- **Intermediary.** This third-party organization, contracted by the government or other payor, manages all aspects of the PFS initiative, coordinating the roles and responsibilities of all stakeholders, and securing financing through private or philanthropic investors.
- **Investors.** Not-for-profit or for-profit entities, or individuals, provide financing for the PFS effort with the expectation that the government will repay the investment based on the achievement of predetermined outcomes. Typically, this financing covers the costs associated with the delivery of the service intervention.
- **Independent Evaluator/Validator.** The party or parties responsible for empirically measuring the impacts of the service intervention. These metrics become the basis for determining if and how much investors are repaid. The payor or government often contracts with an external third-party to verify the fidelity of the evaluation design and results.
- **Service provider.** This organization provides the intervention designed to achieve a specific set of social and/or economic outcomes.
- **Target population**. The group of individuals requiring the identified services and that are recruited and enrolled to participate in the services.

This report examines how each of the DOL pilots established partnerships and other relationships with these six entities and operationalized the PFS approach.

1.2 Origins of DOL's PFS Pilots

PFS is a relatively new and evolving approach to financing services. The first project testing Social Impact Bonds—a model with similar principles as PFS—the Social Impact Bond pilot at Her Majesty's Prison Peterborough—was launched in September 2010 at the Peterborough Prison in England. The project was sponsored and overseen by the Ministry of Justice with support from Social Finance U.K., a nonprofit social investment organization that served as the intermediary. The goal of the project was to implement new rehabilitation services for ex-offenders with the aim of reducing recidivism.[1] Since the Peterborough project was initiated in the U.K., Australia, Belgium, Canada, France, Germany, Ireland, Israel, South Korea, and the Netherlands, in addition to the United States, have begun exploring and implementing PFS projects.[2, 3]

The first U.S.-based project using a model similar to PFS, NYC ABLE Project for Incarcerated Youth, was launched in August 2012 at Rikers Island Jail by the New York City Department of Correction, using a Social Impact Bond (SIB).[4] At the time of this report's publication, there are multiple other PFS projects under way or being explored and developed in the U.S. These projects address a range of needs and include, for example, prevention or reduction of asthma, homelessness, and teen pregnancy.[5] Strongly supported by White House and Office of Management and Budget (OMB) interest in the model, DOL sought to directly test the use of the PFS concept in a workforce development context as part of its newly established Workforce Innovation Fund (WIF).

Workforce Innovation Fund

The Department of Labor's Workforce Innovation Fund (WIF) was established in 2011 to invest in projects that demonstrate new, innovative strategies or replicate effective evidence-based strategies that align and strengthen employment outcomes. The Pay for Success SGA was developed as part of the WIF portfolio of investments to test this innovative strategy for achieving specific social outcomes.

The specific PFS model to pilot and other requirements established in DOL's SGA were developed over six months by an intra-agency DOL team. The team initially considered a range of approaches related to PFS. These included, for instance, giving priority "points" to projects that integrated aspects of PFS into their "traditional" programs funded under the WIF. Ultimately, DOL decided to run a separate

1 Due to the government's decision to restructure the provision of probation services in the United Kingdom, the Ministry of Justice announced on April 24, 2014, that the Peterborough pilot would close early. "Peterborough Social Impact Bond Reduces Reoffending by 8.4%; Investors on Course for Payment in 2016," *Social Finance Limited Website* (August 7, 2014). Retrieved from http://www.socialfinance.org.uk/peterborough-social-impact-bond-reduces-reoffending-by-8-4-investors-on-course-for-payment-in-2016/

2 Brinda Gangly, "The Success of the Peterborough Social Impact Bond," The Rockefeller Foundation Blog (August 8, 2014.) Retrieved from https://www.rockefellerfoundation.org/blog/success-peterborough-social-impact/

3 Aunnie Patton, *The Social Investment Market: The Role of Public Policy in Innovation and Execution* (London: Cabinet Office, 2013).

4 In 2012, New York City launched a SIB aimed at reducing recidivism among young people at Rikers Island through the implementation of the Adolescent Behavioral Learning Experience (ABLE) intervention.

5 An up-to-date list of U.S. PFS projects is available at http://payforsuccess.org/pay-success-deals-united-states

competition to pilot the PFS model's feasibility in the workforce development policy arena and because of growing interest in the concept.[6]

Drawing on external PFS literature and internal subject matter expertise, the DOL planning team developed the SGA to include specifications and an application process that allowed state workforce agencies to apply to DOL to receive funds to implement a PFS pilot.[7] The goal of the grants was to promote the use of flexible financing mechanisms that transfer the risk of investments in social programs from the public sector to the private sector.[8] As shown on Exhibit 1-2, the PFS SGA was issued in June 2012, with proposals due by January 2013. In September 2013, DOL awarded a total of $23.7 million to Massachusetts and New York. The PFS pilots have a four-year performance period that began in October 2013 when the grant awards were made and that will conclude in September 2017.

Exhibit 1-2: Schedule for the DOL PFS Pilots

Activity	Date
DOL SGA Released	June 2012
PFS Proposals Due to DOL	January 2013
DOL Announces Grant Awards	September 2013
Enrollment in PFS Pilots Begins	December 2013 (NY)/January 2014 (MA)
Scheduled End of Enrollment/End of Services	December 2015/September 2016
Reporting of Initial Results	Mid-2017
End of Performance Period for DOL Grant	September 2017
Initial Payments to Investors	September 2017

Massachusetts was awarded $11.7 million by DOL to implement a PFS pilot focused on improving the employment prospects of young ex-offenders and reducing their risk of re-incarceration. In addition, the state of Massachusetts is investing an additional $15 million to increase the overall scale and impact of the initiative. Collectively, the DOL and state investments support a PFS pilot that targets 929 formerly incarcerated men ages 17 to 24 in the Boston, Chelsea, and Springfield, Massachusetts, areas who are aging out of youth services or who are currently on adult probation and determined to be at high risk for re-incarceration. The pilot is structured in two phases: Phase I (funded with federal funds and operating from early 2014 to late 2017 with the DOL funds) will serve up to 535 individuals; Phase II (funded with state funds operating from early 2016 to mid-2019 with the state funds) will serve the remaining 394 individuals. Services are provided by Roca, a nonprofit organization that has been operating for 25 years in the Chelsea and Springfield, Massachusetts, area. Roca's programs focuses on "cognitive restructuring" and a strong relationship with program staff, work readiness activities, and transitional employment.

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6 Megan Lizik and Gina Wells, "Pay for Success," U.S. Department of Labor, Employment and Training Administration (PowerPoint slides, 2012).

7 See the DOL PFS Solicitation for Grant Awards: http://www.doleta.gov/grants/pdf/pfs_sga_dfa_py_11_13.pdf

8 Lizik and Wells, "Pay for Success," (PowerPoint slides, 2012).

New York was awarded $12 million, also to implement a PFS pilot focused on improving employment outcomes and reducing recidivism of formerly incarcerated individuals. In addition, the state of New York plans to provide an additional $11 million to the project to increase the scale and impact of the initiative. The New York PFS pilot aims to serve a total 2,000 ex-offenders under community supervision in New York City and Rochester, New York, who are at high risk of returning to prison. Like the Massachusetts PFS pilot, the New York PFS pilot also is structured in two phases (the first funded with DOL funds and the second with state funds) with similar operational time periods. Phase I and Phase II will each serve 1,000 individuals. Before being released from prison, eligible individuals are identified by the New York Department of Corrections and Community Supervision (DOCCS) and referred to the service provider, the Center for Employment Opportunities (CEO). CEO's four- to six-month employment-based intervention emphasizes work readiness and subsidized or transitional employment.

1.3 Process Study Research Questions and Data Sources

To document the design and implementation of the two PFS pilots, DOL sponsored a process study, conducted by Abt Associates, to address the following research questions:

- **How were the PFS pilots designed, and what were the national and local contexts in which they were developed?** The study examines the political, policy, and program environments in which grantees and their partners developed their pilots.
- **How did grantees identify, recruit, and maintain partnership organizations for their PFS pilots?** The study documents changes made in the partnerships and responsibilities over time as well as specific challenges and issues faced by individual partners.
- **How is the PFS initiative managed and operated?** The study examines the role of the state grantee and the intermediary organization in managing the project, facilitating partner communication, handling dispute resolution, addressing investor issues, and overseeing service provision.
- **How was the PFS financing structure developed and operated?** The study examines the identification and integration of private and philanthropic capital for the pilots, the financing mechanisms used to pay for the services, and outcome measures, targets and payoff mechanisms used to provide returns to investors.
- **How does the service delivery operate and what services were provided to participants?** The study documents the nature and content of services provided, including participant recruitment and tracking of participant outcomes.
- **What are the challenges and promising practices experienced by PFS grantees?**

The data sources for the process study are (1) interviews with grantee representatives and stakeholders conducted during two site visits to each pilot; (2) documents including the SGA, review criteria, and the grant application; (3) performance data and quarterly reports provided by the grantees to DOL; (4) periodic conference calls with grantee representatives to monitor implementation, pilot operations, and potential management or structural changes.

This first process study report examines the development of the pilots during the grant application period and early implementation. The site visits for this report were conducted in fall 2014, approximately ten months after enrollment in the pilots started, and used interview protocols that were organized around topics and questions developed in conjunction with DOL. The key topics reflect the research questions discussed above and include the establishment and maintenance of the partnerships, recruitment of investors and development of the financing structure, design of the RCT, the outcome measures, targets and structure of the payouts, and the nature of the service intervention. Semi-structured interviews were conducted with representatives of the intermediary, the service provider, investors, key state agencies, executive-level leadership, and technical assistance providers for each pilot. Unless otherwise noted, observations and opinions about these PFS projects are taken directly from data collected through these structured interviews. A list of organizations interviewed is included in Appendix A.

A second phase of data collection will cover a later period of operations for each pilot, with a final report expected in 2017 (the state pilots will run through mid-2019). The 2017 report, which will be based on an additional round of site visits, will document the remaining research questions and a more "steady state" phase of operations and continued implementation, any changes made over the grant period, and lessons that can inform and shape PFS efforts moving forward.

1.4 Structure of the Report

The remaining seven chapters of this report describe the origins and early implementation of the two PFS pilot projects. Chapter 2 discusses the history and development of each of the PFS pilots, including how interest in and support for PFS had evolved before the release of the DOL SGA and how each state's pilot design and application for the DOL grant took shape. Chapter 3 describes the service providers and their respective interventions. Chapter 4 describes the partnerships and management structure of each PFS pilot, including how partners were recruited, how roles for partners were established and managed, and how the partners communicated and resolved disputes. Chapter 5 describes the identification of investor partners and the design and structure of the financing tool. Chapter 6 details the implementation of the random assignment process for each of the two PFS pilots. Chapter 7 describes the performance metrics used to determine cost savings and payment schedules. Finally, Chapter 8 concludes the analysis by summarizing initial observations from early implementation of the pilots as shared by the partners involved.

2. The Development and Design of the PFS Pilots

As discussed in Chapter 1, state officials in both Massachusetts and New York had begun planning for PFS projects before DOL released its SGA for the PFS pilots. This chapter first describes how this early interest in each state helped to shape the PFS pilots and then provides an overview of the pilot each state developed.

2.1 Pay for Success Model Development before the DOL SGA

When DOL released its SGA for the PFS pilots in June 2012, both Massachusetts and New York had already explored the possibility of developing a project that used PFS and had dedicated resources to the conceptualization and design of PFS projects. PFS partners and stakeholders in both states reported that their respective governors played important roles in developing interest in and support for PFS. This leadership generated visible and influential PFS supporters, according to the stakeholders, such as the deputy director of Public Safety in New York and the secretary of Administration and Finance in Massachusetts. This executive-level commitment helped the partners to move the PFS pilots forward. Each state's experience with the PFS model before release of the DOL SGA is summarized below.

Massachusetts

PFS partners in Massachusetts reported that the initial discussions regarding whether and how a PFS approach could work in the state began in 2010 between then-Governor Deval Patrick and members of his cabinet. Governor Patrick was knowledgeable about the PFS project in England and interested in developing a similar initiative in Massachusetts. In addition to the governor, other state officials supported exploring the PFS financing model, including the state's secretary of Administration and Finance, who had an interest in the outcomes financing aspect of the model, and the commissioner of Youth Services, who was interested in the potential of PFS-financed services to address social and economic challenges faced by Youth Services' clientele. The concurrent formation in Boston of the Harvard Social Impact Bond Lab (Harvard SIB Lab) at Harvard's Kennedy School of Government also generated interest in the approach.

As a result of the interest and activities of these stakeholders, in 2012 the Massachusetts legislature created the Social Innovation Financing Trust Fund. This fund authorized the state's secretary of Administration and Finance to enter into multi-year PFS contracts. By providing up to $50 million in multi-year payments, the fund allowed state agencies to enter into PFS contracts with significant financial support. State staff interviewed for this study reported that this commitment to uninterrupted, longer-term funding was important to attracting private capital since payments would not be subject to annual appropriations risk.

After this legislation passed, state staff moved ahead with planning a PFS project. The Office of Administration and Finance issued a request for response (RFR) to identify potential policy focus areas and find an intermediary that could both guide the planning process and engage appropriate partners. Based on responses to the RFR, the state contracted with Third Sector, an organization specializing in capacity building for nonprofits. Third Sector's response to the RFR was submitted in collaboration with several potential partners that were well positioned to engage investors and deliver services, depending on the programmatic direction selected by the state. Thus, by the time DOL released its PFS SGA in June 2012, Massachusetts was already identifying potential PFS projects and searching for an intermediary to pursue the grant opportunity.

New York

In New York, initial interest in PFS was connected to a broader policy commitment to public safety. According to state agency staff, Governor Andrew Cuomo and the state's executive leadership were committed to improving quality of life through a reduction in crime. One of Governor Cuomo's public safety initiatives sought to reduce recidivism by providing job-readiness services and occupational skills training for individuals transitioning from incarceration. In 2012, the governor announced the Work for Success initiative explaining that "…the initiative will reduce poverty and joblessness for some of our state's hardest-to-employ citizens while enhancing public safety and improving economic conditions for the families and communities to which they return."[9] At the same time, the New York Department of Corrections and Department of Community Service merged to create the Department of Corrections and Community Supervision (DOCCS). The purpose of this organizational restructuring was to better support individuals transitioning from incarceration to employment by providing post-release oversight and services.

During this period, New York also was focused on developing evidence-based investments. The Work for Success initiative, for example, was directed to "evaluate the employment programs that currently exist for the formerly incarcerated and carry out evidence-based, action-oriented research to identify which strategies work best."[10] The emphasis on evidence-based solutions was reinforced by a rigorous evaluation of an offender reentry intervention operated by the Center for Employment Opportunities (CEO). The evaluation, conducted with funding from the U.S. Department of Health and Human Services (HHS) and DOL, used an experimental design that showed that CEO's intervention both increased employment and reduced recidivism for individuals who had been recently released from prison and who were at high risk for recidivism.[11] These results helped generate support at the state level for the PFS approach and particularly for the DOL pilot, which involved CEO.

According to staff from the New York State Department of Labor (NYSDOL), the eventual PFS grantee, the state also had an interest in performance-based financing that pre-dated the DOL SGA. In part this resulted from New York City's Social Impact Bond Project at Rikers Island Jail that was implemented during this time period. [12] As a result of the proximity and prominence of this effort, coupled with Governor Cuomo's interest in connections between recidivism and public safety, in 2013 the state legislature provided up to $30 million in funding for PFS initiatives in a range of areas, including health care, child welfare, early childhood development, and public safety.

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9 Governor Andrew Cuomo, "Governor Cuomo Announces 'Work for Success' Employment Initiative for the Formerly Incarcerated" [Press release], (New York City, 2012). Retrieved from https://www.governor.ny.gov/news/governor-cuomo-announces-work-success-employment-initiative-formerly-incarcerated

10 Ibid.

11 Cindy Redcross, Megan Millenky, Tim Rudd, and Valerie Levshin, *More Than a Job: Final Results from the Evaluation of the Center for Employment Opportunities (CEO) Transitional Job Program,* OPRE Report 2011-18, (Washington, DC: Office of Planning, Research and Evaluation (OPRE), Administration for Children and Families, HHS, 2012).

12 The independent evaluation of the Rikers Island Social Impact Bond found that the program services did not lead to reductions in recidivism and did not meet the target required to pay investors. The program was discontinued in August 2015. See Vera Institute, *Impact Evaluation of the Adolescent Behavioral Learning Experience (ABLE) Program and Rikers Island: Summary of Findings* (July 2015). Retrieved from http://www.vera.org/sites/default/files/resources/downloads/adolescent-behavioral-learning-experience-evaluation-rikers-island-summary.pdf

In retrospect, the New York PFS partners interviewed for this study reported that the DOL SGA accelerated existing momentum by providing resources to launch a PFS pilot. The partners also indicated that New York's pursuit of a PFS model would have continued without the DOL grant, just at a slower pace.

2.2 Overview of the DOL PFS Pilots

The DOL's SGA for the PFS pilots was released in June 2012, and applications were initially due in early December of that year. As discussed above, stakeholders in both states acknowledged that the release of the SGA focused their interests by specifying design requirements, giving them a schedule for submitting an application, and requiring a plan for execution of the pilot. Specifically, DOL required that the following PFS elements be in place when the application was submitted:[13]

- A partnership that includes an intermediary, at least one investor, and an independent validator
- A well-defined problem and associated target population that faces documented employment- and training-related challenges
- A service intervention that addresses the needs of the target population and can achieve predetermined outcome targets, one of which must be employment
- A financing model that details investors' up-front financing of pilot operations, demonstrates potential government savings, and determines the outcome targets that trigger payment to investors
- Plans to implement an experimental or quasi-experimental evaluation methodology to determine if outcome targets have been met and to ensure that impacts can be confidently attributable to the service intervention

In response to the SGA, Massachusetts and New York focused their PFS applications on the "social problem" of increasing employment and reducing recidivism among formerly incarcerated individuals. In addition to being priority policy areas in both states, these goals fit well with the PFS approach, according to partners from both pilots, because the potential outcome metrics would be relatively straightforward and measurable, thereby facilitating payment based on the achievement of specific targets, the cornerstone of PFS. In addition, hypothesized budgetary savings would be clearly identifiable and could be tracked over a relatively short time period. Moreover, the partners reported that the focus on employment fit well with DOL's overall objectives for the pilots.

In responding to the grant opportunity both states elected to divide their PFS projects into two phases. The first phase would be paid by the DOL PFS grant, while the second phase would be paid entirely from money allocated by the states directly. This was done for two reasons. First, increasing the number of participants increased the overall potential level of government savings that could be realized from the pilots. As discussed in Chapter 7, the pilots needed to result in relatively large public savings, primarily from reduced recidivism, for the investors to be repaid. The more individuals served, the larger the potential savings if the services produced their intended effects. Second, as discussed further in Chapter 5, the experimental designs that grantees chose to implement require relatively large sample sizes to detect meaningful impacts, so increasing the number of participants strengthened the evaluation as well. It is

[13] U.S. Department of Labor, ETA Solicitation for Grant Applications: SGA/DFA PY 11-13, Notice of Availability of Funds and Solicitation for Grant Applications for *Pay for Success Pilot Projects*, Section I. B.

important to note however, that the pilots in both Massachusetts and New York are designed so that the federal component can stand on its own and meet all of the requirements of the DOL. Federal funds will finance the early cohorts of program enrollees and make payments based upon results that can be demonstrated and validated within the 4 year time period.

The designs of the PFS pilots developed by Massachusetts and New York are described below. The details of the PFS pilot components that are summarized below are discussed in the remainder of this report. Specifically, the remainder of the report discusses the services operated by the pilots' service providers (Chapter 3), the management of the projects by the intermediaries (Chapter 4), the role of investors (Chapter 5), the implementation of the evaluation designs (Chapter 6), and the outcome measures, outcome targets and payout mechanisms established (Chapter 7).

Massachusetts

The roles of the key partners and other involved entities in the Massachusetts PFS pilot are described below.

Government. DOL awarded $11.7 million to support Phase I of the Massachusetts PFS pilot. This will be followed by an additional $15 million state investment for Phase II, DOL's PFS grant application was formally submitted by the Massachusetts Executive Office of Labor and Workforce Development. However, the Office of Administration and Finance, which as discussed above, had been developing PFS projects in Massachusetts before the DOL PFS grant was announced, managed the grant. The pilot also included two additional state partners: the Office of Corrections and Probation and the Division of Youth Services, both of which identify individuals about to be released from prison who are potentially eligible for the pilot and provide referrals to the service provider.

Intermediary. As discussed above, Third Sector had been identified as an intermediary for a PFS project by the state of Massachusetts before the DOL SGA. State staff reported that Third Sector was selected because of its understanding of the pilot requirements and connections to private capital markets and philanthropic sectors. As intermediary, Third Sector plays a lead role in recruiting investors and managing the service provider and other key stakeholders. Its role includes coordinating communication among the stakeholders and providing some oversight of the evaluation, negotiating performance targets, and establishing investor payouts.

Investors. The Massachusetts PFS pilot raised capital for both Phases I and Phase II concurrently, and identified a total of $19.4 million from a range of private and philanthropic sources to fund program services. Since Third Sector was seeking investors for both phases of the project as a single entity, investors did not designate funds to specifically support the DOL or state funded portion of the pilot. New Profit Inc., a philanthropic organization, made a financial contribution and, working with Third Sector, played a lead role in recruiting other investors. Goldman Sachs, the senior lender, provided the largest investment, a loan of $8 million. As senior lender, Goldman Sachs will be paid first for any return on investment. Two junior lenders will be repaid after Goldman Sachs. These are the Kresge Foundation and Living Cities, a consortium of 22 foundations, which each provided $1.33 million in loans. Supporting these investments are grants from the Laura and John Arnold Foundation ($3.34 million), New Profit Inc. ($1.81 million), and the Boston Foundation ($300,000). These philanthropic investors are not requiring repayment of their grants and specified that any profit owed to them should be used to expand the PFS model in Massachusetts and support Roca's expansion into other states. Finally, Third Sector and Roca deferred payment of a portion of their program costs to provide additional financial support to the pilot.

Under this arrangement, a portion of Third Sector's intermediary fees and of Roca's service costs will be withheld until certain benchmarks are achieved.

Evaluation and validation. The evaluation and its validation are inter-related functions ensure that the achievement of agreed upon performance measures triggering investor payment are valid. For reasons related to both capacity and transparency, the Massachusetts PFS partnership chose to separate these functions by retaining both an independent evaluator and an independent validator**.** Both the evaluation and validation roles for the PFS project were subcontracted to external organizations with expertise in the design and implementation of experimental designs. The independent evaluator was responsible for implementing all aspects of the evaluation methodology as specified in the agreed upon evaluation plan. This included, among other tasks, conducting random assignment, securing secondary data sources and analyzing the results. The original evaluation contract was awarded to a small business, Sibalytics, whose previous experience with random assignment studies helped to form the informal partnership (along with Third Sector/Youth Services Inc. and Roca) that was taking shape in Massachusetts prior to the DOL pilot. In November 2014, Third Sector/Youth Services Inc. replaced Sibalytics with the Urban Institute, a nonprofit organization with substantive knowledge of criminal justice systems as well as the organizational capacity to address the evaluation needs of the project. The independent validator to review and confirm the findings was contractually retained by the Office of Administration and Finance, and was competitively procured and awarded to Public Consulting Group (PCG), in line with the requirements as described in the SGA.

Service provider and target population. Roca, a nonprofit organization with extensive experience operating juvenile justice services was selected as the service provider. The PFS partners in Massachusetts reported that Roca was selected primarily based on its experience in the field in addressing the specific social problem identified for this effort. As described in Chapter 3, the Massachusetts pilot targets young males (ages 17 to 24) who are on probation or parole or who are exiting the juvenile justice system. The Roca service intervention implemented for the PFS pilot, which can last up to four years, focuses on fostering relationships between agency staff and participants to help participants change destructive thinking patterns (known as "cognitive restructuring"), combined with transitional or subsidized employment, vocational and basic skills training, and work-readiness training. Roca plans to serve a total of 929 individuals, 535 funded by the three-year DOL grant (known as Phase I) and the remainder funded by the other state resources provided for a subsequent two-and-a-half years after the DOL grant ends (known as Phase II). Although not a requirement, the Massachusetts PFS pilot elected to include the service provider as a partner with the intermediary in the partnership agreement, given that Roca had a previously established relationship with the intermediary. Third Sector and Roca had jointly responded to a state-issued "Request for Information" in May of 2011 seeking external support to identify policy areas and potential interventions for a Pay for Success effort.

Technical assistance. The final member of the group of stakeholders in this pilot was the Harvard SIB Lab (now known as the Government Performance Lab at the Harvard Kennedy School of Government). This organization provided pro bono assistance while the state was designing and structuring the project and also helped develop the evaluation methodology. Maher and Maher, a nonprofit agency, also provided technical assistance as part of their contract with DOL to provide technical assistance to Workforce Innovation Fund grantees.

New York

The roles of the key partners and other involved entities in the New York PFS pilot are described below.

Government. DOL awarded $12 million to support Phase I of the New York PFS pilot. In addition, Phase II was supported by an additional $11 million state investment). The New York PFS pilot's focus on formerly incarcerated individuals necessitated the involvement of two state agencies in developing the grant application for DOL. As the state's workforce agency, NYSDOL was designated as the formal grant applicant and administrator while the New York State Department of Corrections and Community Supervision, which is responsible for preparing inmates for release and for their transition to the parole system, was designated to identify and recruit individuals for project services. The two agencies had a limited history of collaboration on past initiatives, and thus the pilot established an inter-agency memorandum of understanding to launch the effort.

Intermediary. To select an intermediary in the time frame required by DOL's SGA, NYSDOL issued a Request for Quote (rather than a Request for Proposals), which allowed prospective intermediaries to respond directly with a preliminary work plan and budget that could be finalized quickly once the organization was engaged. Social Finance, a nonprofit organization with PFS experience in the United Kingdom, was selected as the intermediary. Social Finance also brought connections to domestic private capital markets and philanthropic sectors. As intermediary, Social Finance played a lead role in recruiting investors and manages the service provider and other key partners. This includes coordinating communication among the stakeholders and providing some oversight of the evaluation, negotiating outcome targets, and establishing payouts to investors.

Investors. The New York PFS pilot raised capital for both the federal and state projects at the same time, and identified a total of $21.1 million from a range of private and philanthropic sources. With the support of the governor's office, NYSDOL delegated the responsibility for identifying investors to the pilot's intermediary, Social Finance. The state specified that the investments had to come from a mix of private and philanthropic sources to maximize the breadth of stakeholders. The pilot partners selected Bank of America Merrill Lynch (BAML) to oversee the private investments. Through a private placement offering, BAML identified over 40 individual financial investors who provided $13.5 million in total to the PFS pilot. In addition, the Robin Hood Foundation provided $300,000 and, the Laura and John Arnold Foundation provided $6 million, the latter of which has pledged to invest any returns on their investments in future social innovation financing projects that focus on scaling up projects with proven impacts. Finally, the Rockefeller Foundation provided $1.3 million as a 10 percent "first-loss guarantee" for all the BAML investors, reducing these investors' risk to 90 percent of their investments if the performance targets are not met. Since Social Finance was seeking investors for both phases of the project as a single entity, investors could not earmark funds to specifically support the DOL (or state funded) portion of the pilot. Payments associated with performance during Phase I and Phase II will draw from the same undifferentiated pool of invested funds.

Evaluation and Validation. The execution of these two related functions was organized to leverage internal capacity within state government while still maintaining the necessary level of external oversight. The New York State Department of Corrections and Community Supervision (responsible for preparing inmates for release and for their transition to the parole) research office had an institutionalized familiarity with the study population, service operations, client records and data systems that would be needed to implement random assignment evaluation design. To leverage this capacity, NYDOL gave DOCCS the responsibility of implementing and overseeing the PFS evaluation design including the ongoing identification of sample, conducting random assignment, accessing secondary sources for gathering outcomes data and analyzing the results. These roles and responsibilities were laid out in the partnership contract. Following the requirements as described in the SGA and included in the subsequent partnership contract, NYDOL entered into a “Validator Agreement with a Validator to provide Determinations” with Chesapeake Research Associates (CRA). CRA’s role entails reviewing the final data collection and verifying the agreed upon methodology for calculating outcomes that ultimately trigger payments.

Service Provider and Target Population. Social Finance led the effort to identify a service provider that had both programmatic expertise and the capacity to participate in a PFS pilot that addressed the state’s identified problem. Social Finance conducted a literature review and interviewed five established service providers that target the ex-offender population. From that process, two were selected to participate in an invitation-only RFP. After a review by Social Finance, DOCCS, and NYSDOL, the nonprofit CEO was selected.

For the PFS pilot, CEO is operating an approximately four-month program followed by post-program follow-up to provide transitional employment and work-readiness services as well as job placement assistance. The program targets adult parolees as they are being released from prison. As discussed above, a previous evaluation of the same service model showed positive impacts on employment and recidivism, and also showed that CEO had the capacity to implement a random assignment study and collect the data that would be needed for the PFS project.[14] As discussed, CEO is aiming to serve a total of 2,000 individuals in the pilot program, 1,000 funded by the three-year DOL grant (known as Phase I) and the remainder funded by the other state resources provided for a subsequent two-and-a-half years after the DOL grant ends (known as Phase II).

Technical Assistance. As in Massachusetts, the Harvard SIB Lab helped New York design and structure the project and develop the evaluation methodology. Initially, this assistance was provided pro bono, but the New York Governor’s Office formalized this relationship by entering into a contract with the Harvard SIB Lab for this support. In addition, Maher and Maher, a nonprofit organization, provided technical assistance as part of its contract with DOL to assist the Workforce Innovation Fund grantees.

In part due to their work on PFS issues before the release of the SGA, both states were able to put the key partners and other stakeholders, financing, and services needed for the PFS pilot in place within the time frame specified by DOL. The rest of this report documents the states’ experiences managing the initiative and developing the individual components of the pilots, particularly the service intervention, evaluation procedures, investments, performance measures, and payoff mechanisms.

[14] Redcross et al., *More Than a Job,* 2012

3. PFS Service Providers

In responding to the DOL SGA, applicants were required to establish an agreement with the intermediary. Specifically, that SGA states that the applicant must identify a "well-defined problem and associated target population as well as a preventative service delivery strategy that is managed, coordinated, and guided by the intermediary, is flexible and adaptive to the target problem and population, and has either an evidenced-based history of success, or a justifiable level of confidence for success." While the specific target groups and services provided differ, the Massachusetts and New York pilots both identified the "problem" of engaging recently released offenders in services to help them obtain employment and to avoid re-incarceration.

By investing in evidence-based services to formerly incarcerated individuals that improve their employment and earnings prospects and prevent their re-incarceration, the pilots in Massachusetts and New York hope to achieve long-term savings in public expenditures that can be used to repay PFS investors. As discussed in Chapter 2, for both the Massachusetts and New York pilots, these services are provided by a single service provider specifically chosen to address the specific problem identified by their PFS initiatives. Both states focused on selecting a service provider with a strong and established service model that could achieve the outcomes needed to ensure payment to investors. Representatives from state agency staff and the intermediary organizations agreed that that a PFS project was not an appropriate vehicle for testing new service models or working with inexperienced providers. In addition, the SGA required that the service provider have both the systems and expertise to use and generate data. This was a particularly important requirement since the PFS pilots are structured to reimburse investors when specific outcomes are achieved. Finally, the prospective provider had to have the organizational capacity (e.g., staff, expertise, and infrastructure) to operate the program on the relatively large scale required for a randomized controlled trial.

In both Massachusetts and New York, the services provided through the PFS pilot by the providers include one-on-one assistance from staff, transitional or subsidized jobs, education and training, and job placement assistance. The Massachusetts PFS pilot's intervention provided through Roca is notably longer in duration (up to two years of services with an additional two years of follow-up for the participant) than the New York PFS project's intervention (approximately 4 to 6 months of services with an additional year of follow-up for the participant). This chapter describes the service providers selected for the PFS pilots and then provides an overview of the intervention offered by each of the pilots. The subsequent PFS process report will include more information on the services received by individuals participating in the PFS pilot.

3.1 Pilot Services in Massachusetts

The service provider for the Massachusetts pilot is the nonprofit organization Roca. Roca was founded in 1988 and serves high-risk youth in three locations in Massachusetts: [15] Boston, Chelsea, and Springfield.

15 "High-risk" is defined by Roca as including risk factors such as involvement in crime, engaging in dangerous behaviors, having rejected help, engaging in substance abuse, and/or having dropped out of school.

Roca participants are primarily males under age 25.[16] Roca, named for the word “rock” in Spanish, serves a range of disadvantaged youth, including high school dropouts, gang members, young parents, refugees, and immigrants. Roca specifically targets those that have a history of involvement in the adult criminal justice system. Virtually all participants have been involved in the juvenile and/or adult criminal justice system and have limited or no work histories and minimal educational attainment. Because of their history, most participants are unable or unwilling to enroll in standard employment and training programs available in the community.

For the PFS pilot, high-risk young men aged 17 to 24 who are either approaching release from the Department of Youth Services or have an active status with the Office of Probation, meaning they are scheduled to be released from custody are eligible for the Roca program and are targeted for participation. Roca participants also need to have an address in Boston, Chelsea, or Springfield.[17] Individuals in the target group are ineligible for the PFS pilot if they have previously been enrolled in the pilot, have previously been enrolled at Roca, or have an open felony charge or a conviction/adjudication due to a sexually violent offense. As discussed earlier in this report, Roca plans to service 535 youth with the three-year DOL PFS grant and an additional 394 with state funds. To meet these enrollment levels, Roca opened its third facility in Boston in late October 2014.

Staff at Roca strongly supported participating in the pilot, seeing is as a good fit with the organization since Roca has been “data focused” and uses empirically based metrics to continually adjust the services it provides. Also, Roca staff described the pilot as an opportunity to demonstrate Roca’s impact. Program managers had a long-standing interest in participating in an RCT but had been unable to find a funder for the evaluation. Finally, Roca staff were interested in the opportunity that the pilot offered to expand the scale of their program.

Exhibit 3.1 presents an overview of the key components of the Roca program being offered under the pilot. Roca, at the time of the interviews for this report, had not made significant changes to the program for the PFS pilot. As shown, the program at Roca includes a combination of one-on-one assistance from program staff, work-readiness activities, transitional employment, and education and training activities that were developed specifically for high-risk, underserved populations.

The potential pilot participants referred to Roca by the Department of Youth Services are contacted by Roca Staff individually at or around the time of their pre-release, 60-day discharge meeting or before their release from custody. For those referred by Office of the Commissioner of Probation, who are on probation in the community and not incarcerated, Roca uses a more aggressive outreach strategy and attempts to contact potential participants two to three times per week until an initial contact is made. Once contact is made, Roca staff conduct additional screening to ensure the individual meets the criteria for predictive adult criminal justice involvement, which include having a previous history with the juvenile

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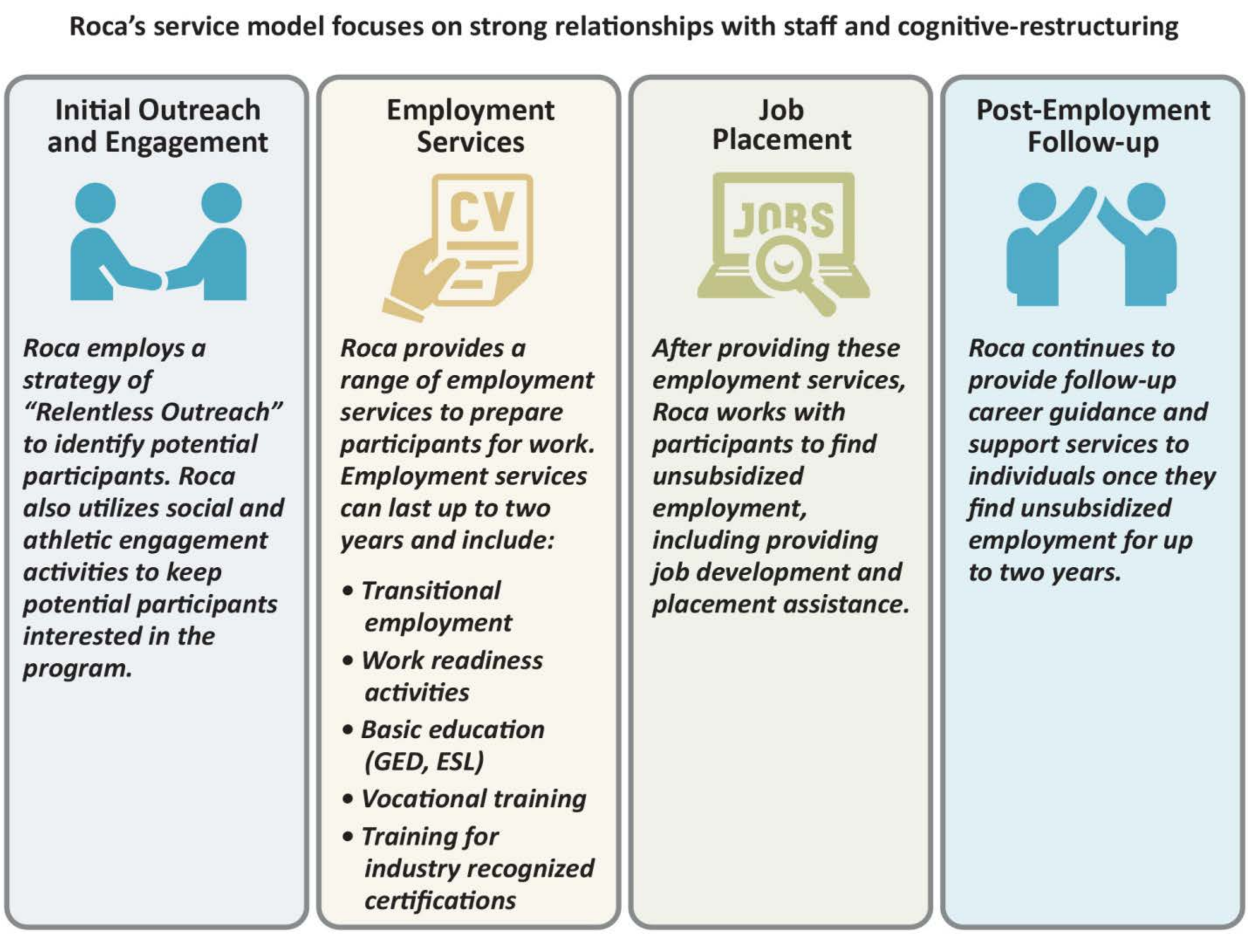
16 Roca’s Chelsea facility provides individualized programming to high-risk, young, pregnant, or single parent mothers aged 12 to 24 to help them build the skills necessary to become good parents and attain economic self-sufficiency for themselves and their children. These young women are not included in the PFS project.

17 The original target population included 16-year-olds but by January 2014 the partners agreed to remove juvenile probationers (age 16) because it was difficult to obtain parental consent for them to participate and to maintain random assignment. Additionally, the maximum age limit was increased from 22 to 24 to help maximize the number of referrals from OCP.

justice system, no work history, and a limited educational background (i.e., no high school diploma or general educational development [GED] certificate).

The core component of the Roca program is strong personal relationship between participants and program staff. Underlying this approach is the theory that strong relationships with trained counselors can reinforce the skill building and behavior changes needed for participants to establish new patterns of decision making. The program also includes a focus on "cognitive restructuring." This is a therapeutic process in which individuals learn to identify, understand, and change negative thought patterns that can occur in stressful situations. Staff report that once established, these relationships become the foundation for cognitive-behavioral change as they help participants develop a plan for improving their lives and creating opportunities as they make educational, life-skills, and employment gains.

Exhibit 3-1: Key Components of the Roca Service Model



The four-year Roca program consists of up to two years of engagement in services that are customized to participant needs and two years of follow-up services. Within the context of sustained engagement, the program is intended to be flexible enough to accommodate individual circumstances. Consequently, the time a participant spends in each of the program phases varies.

Roca contacts participants through an approach called "relentless outreach," which consists of program staff seeking to contact eligible youth by going to "where they are." This could mean connecting with youth directly in the community (e.g., circling the neighborhoods in the Roca van or on foot, knocking on doors) or within the criminal justice system as an individual prepares for release (e.g., jail, court, referrals from the Department of Youth services or parole officers).

Once individuals enroll in the program, they are assigned to a youth worker who follows the participant throughout their tenure in program. Youth workers are trained in a range of evidence-based and clinical techniques for promoting behavioral change, including cognitive restructuring, client-centered counseling, and "stage-based" learning that focuses on academic and prevocational and transitional employment.

Youth workers carry caseloads of no more than 25 participants and aim to communicate with each participant in their caseload a minimum of twice per week. Youth workers try to hold these meetings with participants in person but will conduct meetings by phone if necessary. As a first step in the program, the youth worker and participant jointly develop an individualized service plan that articulates goals and the services available to help the participant meet his goals, in particular the goals of finding employment and staying out of prison. Youth workers are trained to work with participants on cognitive restructuring, the core component of the Roca program. Early in program enrollment, Roca also tries to keep participants engaged and interested in the program through a variety of sport and social engagement activities.

The individualized assistance and support provided by Roca youth workers draws from a range of employment-focused activities provided on-site by staff. The activities used and their sequence are tailored to individual participant's needs and circumstances and include the following:

- **Education and training activities**. Roca provides a wide range of education and training activities. In addition to English as a Second Language (ESL) and GED classes, Roca provides on-site training courses in such skill areas as forklift operation, green cleaning and housekeeping, construction, hospitality, retail, and culinary arts. Roca also offers training for industry-recognized certifications in such areas as cardiopulmonary resuscitation (CPR), automated external defibrillator (AED) use, safe lead removal, carpet care, floor care, and food handling safety.
- **Work-readiness activities**. Roca offers workshops on employment-related topics such as workplace communication, resume development, job interview skills, conflict resolution, and sexual harassment sensitivity. Activities also include an emphasis on developing the "soft skills" needed for employment, such as being on time, working on a team, following directions, having a positive attitude, and exhibiting appropriate job behavior.
- **Transitional employment**. To help participants learn workplace behaviors and gain work experience, participants may be assigned to a small work crew or individually placed in a job based on their interests and training. Most participants are encouraged to participate in this component. Work crews, supervised by Roca staff, consist of seven to eight participants working on property maintenance, painting, or landscaping.
- **Job placement assistance**. Job developers track employment opportunities in the area and communicate with local employers about appropriate job opportunities for their clientele. Staff also work directly with participants to help them find unsubsidized jobs.

In addition to delivering these services to participants, staff at Roca work with local police officers, judges, and other youth service providers to promote open lines of communication on issues involving program participants.

3.2 Pilot Services in New York

The service provider for the New York PFS pilot is the Center for Employment Opportunities (CEO), a nonprofit organization that provides employment-focused services for men and women returning to their communities after being released from incarceration. CEO targets men and women who are hard to employ, primarily those with criminal backgrounds and minimal employment experience. CEO's headquarters are in New York City, but it operates in four states (New York, Oklahoma, Pennsylvania, and California).

The focus of the CEO model, which is used across all of its locations, is to engage participants in transitional employment or subsidized employment soon after their release from incarceration to provide earnings, avoid parole violations related to unemployment, and build basic workplace skills. Similar to Roca in Massachusetts, CEO has a history of operating this program model (the organization was founded in 1996) and, at the time of the interviews conducted for this report, had not made any adjustments to their program for the PFS pilot. With the DOL grant, CEO plans to serve 1,000 individuals in New York City and Rochester, New York, and targets formerly incarcerated individuals under community supervision who are at high risk of re-incarceration.

CEO staff reported they were interested in participating in the PFS pilot for a number of reasons. First, they viewed the resources provided through PFS as an opportunity to significantly scale-up their program. Second, staff were interested in measuring program impacts with an RCT evaluation methodology. In addition, they viewed the PFS pilot as an opportunity to strengthen key operational functions within the parole system by expanding referrals to their program. Finally, staff reported that the PFS pilot created an opportunity to reinforce CEO's collaboration with DOCCS and other criminal justice partners in support of evidence-based funding decisions.

New parolees are told about CEO when they meet with their parole officers from DOCCS immediately after their release. A CEO outreach specialist attends this meeting to inform new parolees about CEO services. If an individual chooses to enroll at CEO, as shown on Exhibit 3.2, he typically progress through a sequence of activities. Although the duration of the program varies by individual, program services typically last four to six months and include the following:

- **Job-readiness training.** After enrollment, participants are immediately placed in the five-day life skills education class. Taught by CEO instructors, these classes focus on resume writing, job-search skills, personal presentation, communication, appropriate workplace behavior, job interview etiquette, and techniques for answering questions about a criminal record. The classes begin at 6:00 a.m., a time intended both to help prepare participants for a real-life work schedule and send a clear message about the seriousness of the program.
- **Transitional employment.** Upon completion of the workshop, participants are placed into short-term transitional employment. Participants work four days a week for six hours a day in crews performing maintenance, grounds-keeping, and custodial and repair work for city and state agencies. They receive a paycheck at the conclusion of every day they work. The crews are supervised by a CEO staff member who ensures that tasks are completed and identifies and helps address inappropriate

workplace behavior. CEO staff also identify individuals who may require disciplinary action and provide daily feedback on performance.

- **Staff support while in transitional employment.** At the end of the first week, participants return to the CEO office to work with a "single-stop specialist" who assists the participants in accessing needed government benefits and community services (e.g., housing assistance, substance abuse treatment). As part of this meeting, participants discuss issues related to work readiness and employment with a job coach and a job developer assesses the participant's interests, job skills, and work history. This support is intended to help participants remain focused and motivated through their transitional employment period. After two weeks in transitional employment, job coaches assess participants for job readiness. Those who are not ready typically continue in transitional employment; staff report that participants work approximately 75 days across four months in subsidized transitional employment before being deemed job-ready.

Exhibit 3-2: Key Components of the CEO Service Model

CEO's service model is focused on transitional employment

Job Readiness Training	Transitional Employment	Job Placement	Post-Employment Follow-up
Participants attend a five-day "life skills education" workshop that includes resume development, job search skills and workplace behavior.	*After completing job readiness training, CEO participants are eligible for transitional, subsidized, employment.*	*Participants continue to receive services and work with a job developer to search for permanent employment while continuing transitional employment.*	*CEO offers an incentive program, Rapid Rewards, for participants who have secured full-time employment. The program provides grocery coupons and transit fare cards to participants who achieve services of employment milestones. CEO also provides career guidance and other services for up to one year after the individual becomes employed.*

- **Job placement assistance.** Once determined to be job-ready, participants work with a job developer who helps them find full-time, unsubsidized employment. Job developers also contact employers and identify job opportunities for their clientele.

- **Post-placement follow-up.** CEO staff provide participants with post-placement services up to one year after they attain unsubsidized employment. Post-placement and follow-up services include career planning, financial counseling, crisis management, and access to educational and vocational opportunities. CEO also offers monthly bonuses to participants (known as "rapid rewards") for maintaining full-time employment and hosts retention events twice a year where staff and participants come together to discuss employment and other issues.

Overall, both Roca and CEO are relying on established service models to provide a range of services designed to assist ex-offenders to increase their employment prospects and to reduce their risk of re-offending. While some of the services provided by the two organizations are similar, the Roca model is notable for its emphasis on strong personal relationships and focus on cognitive restructuring, while CEO focuses on transitional employment as its core activity. The Roca program also is significantly longer in duration than the CEO program (two years of in-program services for Roca and four to six months for CEO).

4. Partnership Formation and Management

The planning, intervention design, financing, evaluation, and payment structure of a PFS project is unique and, by definition, requires the involvement of multiple stakeholders with different interests and expertise. Because of these requirements, the PFS pilots used defined and structured processes to establish the relationships between organizational partners and stakeholders. In particular, the pilots entered into contracts with partners and stakeholders that specify the role of each and a defined process to manage the working relationships. This chapter examines how the partnerships and roles for the Massachusetts and New York PFS pilots were formally established and operationalized. Section 4.1 of this chapter describes the partnership contracts, and Section 4.2 examines the management structure adopted by each of the pilots.

4.1 Establishing PFS Partnerships and Contracts

Establishing agreements around roles and responsibilities and establishing working relationships was a major part of planning for the PFS pilots, both during the grant application phase and immediately after the grant award was made by DOL. In each state, the key stakeholders reported they came to the pilot with different backgrounds and interests that influenced how the pilots were developed. Many of the partnerships required by PFS had to be formed from scratch, while others had to be revisited given the unique nature of the PFS approach. PFS stakeholders reported that they had few established templates to work from and even those who had worked successfully together in other settings were working with new concepts, relationships, time lines, and incentives. Moreover, the partners and stakeholders brought different perspectives and goals, which were reflected in the nature and substance of the PFS contracts.

Elements of PFS Partnership Contracts

- *Roles and responsibilities of all parties to the agreement*
- *The service intervention model, including the client flow process*
- *The provider's service delivery capacity and cost*
- *A primary and secondary evaluation design*
- *Outcome targets*
- *Potential savings to the state budget*
- *Returns to investors*
- *Data requirements and access and transfer agreements*
- *Mitigation of funding risks*
- *Remedies for breach of contract*
- *Termination and exit options*

The most significant factors affecting the development of the partnership agreement required by the SGA (and which were then developed into contractual documents) were the involvement of both public and private priorities and the requirement for a significant level of resources. State agency staff from both pilots reported in interviews conducted for this study that, while they were interested in innovative ways to finance needed services under the projects, they did not want the initiative to appear to create an overly profitable investment opportunity for the private sector. In contrast, the private investment partners reported business objectives as the primary reason for their involvement, saying they mainly saw the opportunity as a way to tap into market demand for impact investing opportunities. The investment partners also sought a return big enough to generate interest among potential investors. Finally, most partners were unfamiliar with working through an intermediary and using an RCT evaluation design to determine if and when payments would be made. Both grantees reported they developed tightly constructed contracts to formalize all aspects of the PFS pilot partnerships and to ensure their perspectives were addressed when the initiative was operationalized. The key topics addressed in each state's partnership contract were defining the intermediary's and other partners' responsibilities; documenting the entire evaluation plan including the specification of the experimental design and related methodologies and expected outcomes of the service intervention; and savings that could potentially be realized. The contract also specified the roles of the evaluator, the independent validator and the process for determining how payouts to investors would be handled. In addition, the contracts reflected that the organizational relationships needed to extend beyond the traditionally established government appropriation and contracting cycles and that the pilots needed to be implemented under the aggressive time line specified by the DOL SGA.

The PFS partners reported that each of these topics required deliberation and negotiation, including detailed planning and articulation of "what if" scenarios to identify possible unanticipated circumstances. The result of these negotiations was a detailed partnership contract drawn up by each state's legal team. Topics that required particular attention included client referral processes, determining investment risk and returns for investors, and the coordination of the different state data systems needed to generate outcome information. The PFS partners reported that the contract negotiations as painstaking but necessary. In addition, the process was hastened by the DOL SGA's deadlines, which motivated them to reach agreement on details. While not formal signatories to the contract, the investors in each pilot are represented indirectly by the intermediary who negotiated their initial engagement and is responsible for involving them in relevant design, operational and financial issues.

The Massachusetts PFS contract was finalized in January 2014 between the state of Massachusetts and Roca Inc. and Youth Services Inc., building upon the partnership agreement put in place as part of the application to DOL. Youth Services Inc. is a nonprofit corporation created by Third Sector to manage the PFS contract and to serve as the finance and information intermediary for the funding partners, the state of Massachusetts, and Roca. The contract is a public document that specifies the details of Roca's service model; the primary and back-up evaluation plans; reporting requirements and forms; standard contractual certifications of the state of Massachusetts; funding and payment conditions; and the schedule of fees for and responsibilities required of the intermediary, service provider, independent evaluator, and independent validator. [18] Each of the key partners used legal counsel during the contract negotiations. Roca used pro bono advice from Goulston-Storrs, a Boston-based law firm; the investors and Third Sector obtained private counsel, and the state relied upon its internal counsel.

In New York, the detailed contract containing both the legal and operational foundation for the pilot became effective in October 2013, and is publicly available. The firm of Jones Day was selected to negotiate and finalize the New York PFS partnership agreement. Entitled the *Pay for Success Intermediary Agreement*, the document[19] outlines the obligations and responsibilities of the New York State Department of Labor and Social Finance, Inc., the two key parties to the agreement. Among other contractual specifications, the agreement addresses key personnel, interagency memorandums of understanding, data confidentiality and data sharing, as well as dispute resolution. The contract also

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18 The contract is available online at the Third Sector website. http://www.thirdsectorcap.org/wp-content/uploads/2015/03/final-pay-for-success-contract-executed-1-7-2013.pdf

19 The agreement is available online at the New York state website. https://www.budget.ny.gov/contract/ICPFS/PFSMainAgreement_Sched_0314.pdf

details all design and operational aspects of the PFS project, including, for instance, details on partnership governance and the measurement of target outcomes and payment points. The agreement also specifies that NYSDOL separately develop a contract with an independent validator to confirm the veracity of the work conducted by the independent evaluator. This independent validator was retained in mid-2014.

4.2 Ongoing Partnership Management

As discussed, the design and operation of the PFS pilots required a management structure that allowed for ongoing communication, transparency, and timely decision making, both initially and over the project life cycle. The management structure for the partnerships was established as part of each state's contract, both of which specify a committee structure, with committees responsible for strategic direction and operational oversight. The contracts specify the management or oversight of committee composition, structure, attendance requirements and flexibility, meeting frequency, and specifications for determining meeting agendas. The New York contract also specifies the exact roles and responsibilities of each committee, specific individuals involved, and an explicit management process for altering the oversight structure or processes. The PFS partners reported that these specified committee and meeting structures were important for managing the partnerships, particularly given that PFS was a multi-year effort. The management structure for each of the pilots is summarized below.

Massachusetts Partnership Management

The Massachusetts PFS contract established two committees to manage the pilot: the Oversight Committee and the Operating Committee. The Oversight Committee meets quarterly to review any high-level issues affecting the strategic direction or standing of the PFS initiative and includes senior-level representatives from Roca, Department of Youth Services, Office of Probation, Executive Office of Labor and Workforce Development, Office of Administration and Finance and the evaluator, the Urban Institute. Special meetings of the Oversight Committee can be held on an emergency basis, with investors brought in to address any proposed significant changes to the pilot.

The Operating Committee meets at least monthly and has overlapping membership with the Oversight Committee, although partners have the flexibility to be represented by practitioner-level representatives or additional attendees at the meetings. While certain restrictions and limitations apply, the investors also can attend the Operating Committee meetings. The contract specifies that meeting agendas must address a range of topics related primarily to Roca and the implementation of its service model. This includes, for instance, changes in the referral or service delivery processes as well as the status of specific youth with respect to prison release, enrollments, and any incidents of note. In addition, the Operating Committee oversees the budget for the project as a whole, while Third Sector/Youth Services Inc. and Roca handle the budgeting associated with their respective responsibilities and the state of Massachusetts oversees the budgets for state agencies and the evaluation and validation contracts.

Within this specific structure, PFS partners report that less formal communication occurs much more frequently among the partners, sometimes daily if attention to a particular issue is needed. For example, during the initial months of the pilot when referrals were lower than anticipated, as discussed in Chapter 6, Operations Committee members reported that meetings were scheduled frequently and required a significant time commitment. The PFS partners reported the need for a flexible management structure that allows for addressing problems as they arise and for an ongoing commitment to addressing problems and negotiating solutions.

New York Partnership Management

The New York partnership contract specifies that the PFS governance be managed by two committees and a variety of smaller working groups. The committees specified in the contract include the following:

- **Executive Steering Committee.** The Executive Steering Committee is responsible for securing the spending authority and resources for the project. Its members include several deputy secretaries and commissioners from state agencies as well as executive leadership from the intermediary and the service provider; these individuals are expected to provide leadership and strategic direction for the pilot.
- **Management Committee.** The Management Committee is responsible for carrying out the specific responsibilities enumerated in the contract and resolving issues brought forward by the working groups (see below). The Management Committee's members include deputy and associate commissioners from the Department of Corrections and Community Service and the New York State Department of Labor, as well as representatives of the intermediary and the service provider and a representative of the Harvard SIB Lab. Management Committee meetings are led by two project coordinators (one from New York State and one from the intermediary) who simultaneously serve as the liaisons with the working groups.

The multiple working groups are composed of staff from across the partner agencies. Their members provide input and review implementation progress. The contract specifies a primary project-level working group as well as several functionally specified groups, including case classification and identification, operations, finance and grants management, and policy development and progress reporting. The working groups are flexibly staffed based on need and specific agenda items. Participating stakeholders are assembled from the New York State Department of Labor, the Department of Corrections and Community Service, the Division of Criminal Justice Services, the Division of the Budget, the Governor's Office, the intermediary, the service provider, and the Harvard SIB Lab.

While all the partners have specific roles and responsibilities across the committee structure described above, Social Finance as intermediary plays a key role and has responsibilities on each committee in the areas of partnership governance, investor relations, and performance data management.

Overall, PFS partners for both pilots established structured contracts specifying a range of details for all aspects of the pilots. The contracts also include specific structures for managing the initiative that involved all the partners. The partners consistently reported that the level of specificity in the contracts, which required a significant time commitment by the key partners to negotiate, develop, and finalize, as well as the management structure established in the contracts, were of critical importance in launching and maintaining the operation of the PFS pilots.

5. Identification of Investors and Financing Arrangements

The PFS model relies on investors to finance a public service intervention in exchange for a potential return on their investment. As discussed in Chapter 2, Massachusetts and New York were already committed to pursuing PFS initiatives before the DOL SGA was released. The grant solicitation, however, provided the impetus and structure for the states to identify and secure investment capital. The DOL SGA required applicants to have the expected investor capital preliminarily secured at the time grant applications were submitted in January 2013, and the PFS applications had to include investor letters of intent/interest. However, most investors were still finalizing the terms of their commitments in spring 2013, and the details of the financial structures (outcome payments and timing) were not finalized until fall/winter 2013.

The PFS intermediary in each state (Third Sector in Massachusetts and Social Finance in New York) played the lead role in recruiting investors. The intermediaries were selected because of their understanding of the pilot requirements and their ties to private capital markets and philanthropic sectors. While the prospective payment of investors was funded from two distinct sources (DOL in Phase I and the states in Phase II), the intermediaries solicited the PFS opportunity to investors as a single initiative. That is, investors and their capital were not specifically earmarked for specific phases of the pilot. Both pilots sought a mix of private sector and philanthropic-based investments to increase the type and number of project stakeholders. As part of investor recruitment, the PFS pilots also had to develop financial instruments to manage the capital invested and the returns if outcome targets are met. This chapter discusses the investors recruited to participate in the pilots and the financing structure established to manage the investments.

5.1 Massachusetts Pilot Investors and Financing Arrangements

While Third Sector led the effort to recruit investors in Massachusetts, Non Profit, Inc. a philanthropic organization with a focus on promoting social innovation and building capacity in nonprofit organizations, also played an important role. New Profit had established credibility in the juvenile justice arena as well as contacts in the private investment and foundation communities, and the pilot partners reported New Profit's involvement facilitated the identification of other investors. New Profit also made an investment of its own (see below).

Third Sector and New Profit staff reported that they used a broad outreach effort to identify investors for the PFS pilots. Drawing on their social and professional networks, they targeted both private and philanthropic sources. The intermediaries' staffs said an important element of their outreach was familiarizing potential investors with the PFS concept, as many did not have experience with the proposed financing and payment structures. The one exception was Goldman Sachs, which had previous experience with the PFS model through its investment in the New York City SIB Project at Rikers Island. During the PFS grant application period, Third Sector and New Profit secured $19.4 million of aggregate commitments of which $11.7 million are required to fund project operations under Phase I. The primary investors' contributions are summarized below:

- **Goldman Sachs**. This investment firm agreed to provide $8 million in loans to the PFS pilot and is the project's "senior lender," meaning its investment will be paid off first if and when there are returns. To develop the agreement, Third Sector worked with Goldman Sachs's Urban Investment

Group, which has a focus on partnering with community stakeholders to support underserved urban communities.

- **Living Cities and the Kresge Foundation.** These philanthropic organizations each agreed to provide $1.33 million in loans for the PFS pilot. Both joined as "junior lenders," meaning they would be repaid after the senior leader, Goldman Sachs, is paid in full. Living Cities is a consortium of 22 foundations and financial institutions (including the Kresge Foundation) that seek investment opportunities to address the social and economic challenges facing low-income individuals. At the time Massachusetts was seeking investors for its pilot, a number of Living Cities' member organizations were trying to advance the PFS approach within the consortium as part of their broader emphasis on performance-based investments. Beyond its contribution through Livings Cities, the Kresge Foundation made an additional contribution due to an established history the foundation had with Roca, the pilot's service provider.
- **Laura and John Arnold Foundation, New Profit, Inc., and the Boston Foundation.** These three foundations provided "recyclable grants" to the PFS pilot. This means that the foundations made the grants to the PFS initiative with no expectation of a return. Instead, any returns on their investments are to be "recycled" into other PFS initiatives in Massachusetts or to expand Roca into new geographic areas. Recyclable grants came from the Laura and John Arnold Foundation ($3.34 million), the Boston-based New Profit (discussed above, $1.81 million), and the Boston Foundation ($300,000). The grant from the John and Linda Arnold Foundation, which has a national reputation for supporting evidence-based approaches to address social problems, was viewed as significant by others considering an investment as it allayed their concerns that the initiative had only local support.
- **Third Sector and Roca.** In addition to these loans and grants for the pilot, both Third Sector and Roca deferred payment of a portion of their program costs to provide additional financial support to the pilot. Under this arrangement, a portion of Third Sector's intermediary costs and Roca's service provider costs are being withheld until certain benchmarks are achieved. The investors interviewed for this study reported that these deferred payments were another important factor in their decision to participate because it showed Third Sector and Roca had confidence in their own services and performance.

The Massachusetts PFS pilot operates through an expansion loan from the private sector investors. This means that the money to operate the Roca services and manage the PFS pilot is loaned by investors to Third Sector/Youth Services Inc. and Roca. Pilot partners reported that they used this financing approach because it was preferred by Goldman Sachs, the pilot's largest investor. Goldman Sachs's Massachusetts PFS investment was one of the first investments it made as part of its $135 million Social Impact Fund and was a key element of its broader business plan to support a diversified array of socially conscious investments. Goldman Sachs preferred the straightforward expansion loan structure for managing the financing because the structure could readily be replicated for future investments.

At Goldman Sachs, the investment opportunity had to be reviewed by an internal investment committee, which is standard practice at the company. The investment committee examines all risks against potential returns. In its deliberations about the project, the committee examined Roca's service model; its potential to achieve the performance measures, or project outcome targets, and impacts that would result in repayment of the loan; and its overall organizational capacity, including managerial experience, staff stability, and financial solvency. Goldman's investment committee also examined the risks related to the state legislature's commitment of $15.3 million to the project. The federal government shutdown of 2013, which occurred after the grants were awarded but while the investment was being finalized, also raised concerns. The governor's establishment of the Social Innovation Financing Trust Fund, which provides up to $50 million for PFS projects, helped to ease Goldman's concerns.

In its capacity as junior loan partners, Living Cities and the Kresge Foundation also assessed the risk of the investment before committing to the pilot. While acknowledging the assessment done by Goldman Sachs, the foundations hired an outside expert to examine the potential risks and rewards from their organizational perspectives.

In sum, Massachusetts was able to identify investors and set up a financing mechanism within the eight-month grant application time period. The Massachusetts pilot primarily relies on one private sector investor, with several foundations also providing capital for the initiative.

5.2 New York Pilot Investors and Financing Arrangements

As in Massachusetts, the New York intermediary, Social Finance, was responsible for recruiting investors and was selected because of its knowledge of the PFS model. Social Finance approached several financial institutions and philanthropic organizations to identify potential investors and financing options. Ultimately, Social Finance and the other partners selected Bank of America Merrill Lynch (BAML) to develop the PFS financing for the pilot while also approaching several philanthropic organizations. The investors and the financing approach for the New York pilot are described below.

Bank of America Merrill Lynch. BAML is the New York pilot's lead private sector investor. Its approach to raising the capital was to establish a private placement offering (PPO), a non-public security offering made available to a limited number of pre-screened investors identified by BAML. As described below, through this financing mechanism BAML secured commitments from over 40 investors that provided $13.5 million for the PFS pilot.

Social Finance reported that it chose to work exclusively with BAML for two reasons. First, the investment opportunity suited BAML's established business priorities. BAML staff reported having identified strong interest among groups of investors for additional "impact investing" opportunities, the term used for investments that target social problems, and PFS met this objective. Second, staff at BAML were knowledgeable about the New York City SIB Project at Rikers Island, which reduced their perception of the risks associated with the approach.

BAML's preferred approach to accumulating the capital necessary for the PFS pilot was to establish a PPO. Staff at BAML reported that their clients prefer PPOs because of their relative simplicity, with investment returns tied directly to performance and payments divided proportionally based on the level of investment. The PFS PPO fell under BAML's Wealth Management Division, which offered the investment opportunity to specific high-net-worth investors (those with at least $10 million invested with BAML, among other requirements). BAML staff reported that these investors were among those with an interest in social impact investment opportunities and thus were good candidates for investing in the PFS pilot.

BAML and Social Finance worked collaboratively to develop the PPO, which required following standard BAML procedures for assessing the opportunities and risks of the investment. This necessitated obtaining incarceration data from DOCCS and program performance and cost data from CEO, and using the data to identify acceptable performance thresholds, payment triggers, and return potentials.

These analyses also included assessing risks that could potentially impede the achievement of the goals that would trigger payouts. BAML staff reported they had concerns about whether the New York State legislature would maintain its funding commitment. To address these concerns, the partners agreed to an accelerated evaluation design for reporting results and determining payment. Specifically, if the state legislature was not able to allocate enough money to fully repay investors for the outcomes achieved, the PFS pilot will would repay investors proportionally based on the money available. In addition, concerns were raised about incentives for the intermediary and service provider to drop out of the pilot if the project was underperforming and appeared unlikely to meet the established outcomes. In response, the partners specified circumstances or conditions that would warrant replacement of either the intermediary or the service provider (e.g., non-responsibility, confidentiality breach, bankruptcy). Finally, as in Massachusetts, the sustained availability of DOL grant funding was a concern, given that the 2013 federal government shutdown was being debated as the investors were finalizing their investments.

Once these issues were resolved, BAML created a PPO security called the Social Finance N.Y. State Workforce Reentry 2013 LLC, which was marketed to BAML's investors, with $100,000 established as the minimum investment. Typically, the outreach and recruitment of individual investors for a PPO at BAML is conducted by an internal team of financial advisors. For the PFS project, however, the unique nature of the investment, coupled with a compressed time frame (recruitment of individual investors had to be accomplished in approximately half the time that BAML generally uses to market a PPO), Social Finance joined BAML and played a key role in marketing the investment.

To recruit investors, Social Finance and BAML developed materials that provided an overview of the PFS pilot; explained the contract between CEO and Social Finance; described the policy issue and target population, particularly recidivism and its effects; and explained the investment opportunity and how the financial vehicle would work. Since a PPO is a federally regulated financial vehicle, Social Finance and BAML had to abide by Securities and Exchange Commission disclosure rules, meaning the risks and the potential for a complete loss of the investment had to be disclosed as part of its recruitment efforts. As noted, the efforts were ultimately successful with BAML identifying over 40 investors who committed $13.5 million for the PFS pilots through the PPO.

Robin Hood, Laura and John Arnold Foundation, and the Rockefeller Foundation. In addition to individual private investors, Social Finance identified and recruited three foundations to provide up-front capital for the PFS project, but these investors had different expectations about the payoffs they wanted from their investments. The Laura and John Arnold Foundation provided $6 million and the Robin Hood Foundation, whose mission focuses on poverty reduction, provided $300,000. These foundations specified that any returns on their investments were to be used to support future social innovation projects, with the goal of rigorously evaluating programs and scaling up those that are proven to have an impact. Finally, the Rockefeller Foundation provided $1.3 million as a 10 percent "first-loss guarantee" for the BAML investors, which means only 90 percent of those investors' capital is at risk.

Staff at BAML and other PFS partners reported that the philanthropic involvement was important for securing private sector investments. Specifically, the Robin Hood Foundation's knowledge of the target population and intervention strategies and the Laura and John Arnold Foundation's interest in evidence-based investment brought credibility to the project.

In sum, as in Massachusetts, New York was successful in securing the private and philanthropic investment commitments it needed to complete its DOL PFS application and launch its PFS pilot. However, the pilots took different approaches to securing investors, with Massachusetts relying primarily on a loan from a single investor (Goldman Sachs) and New York using one financial investor (BAML) to secure investments from numerous investors through a PPO. Both pilots also used philanthropic organizations to support the pilots and both reported that this strategy increased the credibility of the investment opportunity among private sector investors.

6. Implementing the Randomized Controlled Trial Research Designs

Evaluating the success of the service intervention in achieving its objectives is a key component of any PFS project. Determining whether the intervention had the desired impacts is not only important in terms of understanding if and how much investors will be repaid but also for determining the benefits to participants and communities. Specifically, the evaluations of the PFS pilots are designed to provide rigorous evidence on whether the service interventions were effective in increasing employment and reducing recidivism for those that participated. Recognizing the important role of evaluation in a PFS project, DOL's SGA required applicants to use an experimental or credible quasi-experimental design, and both pilots proposed rigorous experimental or randomized controlled trial (RCT) designs, in their projects. This requirement was included to help ensure that the pilots' investors would only receive payouts for results that could be causally linked to the services provided.

A RCT requires eligible program applicants to be assigned at random to either a group that can access the intervention under evaluation (the treatment group) or a group that cannot access the intervention under evaluation but can access other services in the community (the control group). For the two PFS pilots, this means control group members cannot be referred directly to the PFS service providers, although they can seek out services at these or other organizations on their own.[20] Because the assignment process is random, there are no systematic differences between the treatment and control groups at the time they enter the study. Thus, any differences detected during the follow-up period can be attributed to program services and not to some other factor. The difference in outcomes between the treatment and control group is referred to as the "impact" of the project.

As discussed previously, Massachusetts opted to engage a third party to operationalize and oversee its RCT evaluation plan. Sibalytics was initially chosen as the evaluator for the PFS pilot in Massachusetts but was replaced 10 months after the pilot started with the Urban Institute. Alternatively, New York had the capacity and expertise in house to design and implement the RCT. Specifically, the Research Office of the state Department of Corrections and Community Service (DOCCS) is responsible for all aspects of the evaluation including the random assignment of the sample and securing secondary data for measuring individual outcomes. Section 6.1 highlights several key elements of the evaluation plans including the grantees' approach to identifying and selecting their sample and their choice of data sources for measuring approved outcomes. This is followed by a discussion of their choice of back up methodologies in the event that the RCT proves impractical or infeasible. The section closes with an overview of the role of the independent validator that each grantee has engaged to review the methods and findings of the evaluators. Section 6.2 examines the procedures that each pilot is using to randomly assign participants to either the treatment group that could receive the intervention from the service provider or to a control group that could not.

6.1 Developing the Random Assignment Research Designs

At the time of the site visits for this report, both pilots had implemented random assignment research designs. While the SGA allowed for some flexibility, both states generally recognized DOL's interest in implement an RCT evaluation design whenever feasible. However, many of the partners reported having

[20] See discussion in Section 6.1 for how the evaluation design accounts for the issue that the control group members may receive similar services.

a limited technical understanding of this type of design and what it would require when they began developing the pilot projects. Technical assistance provided by the Harvard SIB Lab helped the pilot partners understand the concepts involved and develop design options. While some partners initially were concerned about implementing an RCT design due to costs and operational requirements, partners from both pilots reported that the Harvard SIB Lab's assistance helped address these concerns and launch the designs. In addition, a number of design issues had to be addressed as part of the planning process, such as setting the enrollment period for the study so that outcomes could be estimated in the time frame necessary to pay back investors and determining the sample sizes needed to detect impacts. As a result, developing the details of the evaluation design was a significant activity for both pilots, which focused on the four key issues described below.

Determining sample sizes and enrollment period. In developing their research designs, the both pilots had to determine the sample size needed to detect the impacts that would trigger payments. This was particularly important given that investors would only be paid for impacts that were statistically significant, meaning statistical tests were done to determine that it is not likely the impacts occurred due to chance. In general, random assignment research designs need large samples to detect statistically significant impacts. Especially for designs where not all treatment group members participate in the service intervention after they were randomly assigned to it, which is the case for the PFS pilots, large samples are needed are to detect impacts, particularly if they are not large. Based on calculations they conducted, Harvard SIB Lab staff determined that the pilots designed in response to the DOL SGA were somewhat "underpowered"; that is, they lacked sufficient sample size to detect impacts at a desirable levels of statistical confidence.

This conclusion led both pilots to expand the DOL pilot to a second phase supported by state funds. While the parameters of the pilot proposed in the grant application to DOL (Phase I) would remain intact, the addition of a second phase would allow for increasingly precise estimates of impacts that trigger payments to investors. This strengthened the overall value of the pilots by increasing their capacity to generate budgetary savings to government.

Massachusetts set the target number for enrollment at Roca at 535 for Phase 1 and 929 for Phase I and Phase II combined. As discussed above, individuals assigned to the treatment group are not required to participate in the services provided by Roca and some may choose not to do so. To achieve the enrollment targets in its PFS proposal to DOL, the Massachusetts pilot aims to randomly assign 753 to the treatment group. The partners for New York State pilot set the target for the number enrolled at CEO at 1,000 for Phase 1 and 2,000 for Phase I and Phase II combined..

Identifying data sources needed for the evaluation. Another issue that both pilots addressed was identifying sources for the data needed to conduct the evaluation. These data included the demographic characteristics of all individuals at the time of random assignment (known as baseline data), the duration and content of services delivered to treatment group members by the two service providers, and the employment and recidivism outcomes for both treatment and control group members needed to calculate investor payments (see Chapter 7 for information on the specific measures).

As shown in Exhibit 6-1, collecting the data needed for the evaluation requires the involvement and coordination of several different agencies in each state. As part of the planning process, each of the pilots determined the parties responsible for providing the data and ensuring that it would be available on the schedule needed to make payouts to investors. In Massachusetts, a number of agencies and organizations are involved in collecting baseline data, while recidivism data is collected from the Executive Office of

Public Safety and Security's Criminal Offender Record Information Support Services Unit. Employment data, specifically Unemployment Insurance (UI) quarterly wage records, come from the Executive Office of Labor and Workforce Development. In New York, the Department of Corrections provides baseline and recidivism data and NYSDOL provides the employment data (again UI wage records). For both pilots, the service providers provide data on service receipt.

Exhibit 6-1: Data Sources for the PFS Evaluations

Massachusetts		
Agency or Organization	**Data Provided**	**Data Uses**
Department of Youth Services	• Demographic information • Criminal history	• Baseline data
Office of the Commissioner of Probation	• Demographic information • Criminal history	• Baseline data
Superior Court System of Massachusetts	• Demographic information • Criminal History	• Baseline data
Executive Office of Public Safety and Security	• Arrest and conviction (post-enrollment)	• Recidivism outcomes
Executive Office of Labor and Workforce Development	• Unemployment Insurance wage records	• Employment outcomes
Roca	• Program participation data	• Service receipt
New York		
State Agency or Organization	**Data Provided**	**Data Uses**
Department of Corrections and Community Service	• Demographic information • Criminal history • Arrest and conviction (post-enrollment)	• Baseline data • Recidivism outcomes
New York State Department of Labor	• Unemployment Insurance wage records	• Employment outcomes
Center for Employment Opportunities	• Demographic information • Program participation data	• Baseline data

Identifying appropriate statistical methods to compute impacts. The pilot partners also worked with the Harvard SIB lab to determine the appropriate statistical methods to use in the evaluation. Because some treatment group members may not choose to participate in the PFS interventions and some control group members may access these services on their own, the pilot partners worked to develop statistical methodologies that reflect that not all treatment group members will receive the services being studied, while some control group members may receive them. Following standard procedures for experimental designs, both pilots determined that the evaluation should primarily use multivariate regression to estimate the effect of *access* to the pilot services, generally referred to as the impact of the intent to treat (ITT). The ITT analysis compares the outcomes of all individuals assigned to the treatment group to the outcomes of all individuals assigned to the control group. However, the ITT analysis does not account for whether treatment group members actually receive the intervention services or whether some control group members may receive the services on their own. To measure the impact of intervention services for individuals who received grant-funded services, called the treatment-on-the-treated (TOT) effect, both evaluations will use instrumental variables techniques. For both pilots, the final evaluation design specifies that impact results will include both the ITT and TOT estimates.

- **Determining a back-up evaluation strategy.** Each pilot opted to have a back-up methodology planned in the event that their proposed RCT was not viable. This determination of viability was largely driven by two concerns. The first had to do with the overall sample size particularly if enrollment proceeded at a slower than anticipated pace. The second issue concern had to do with the difference between the control and treatment group samples. This stems from (as discussed earlier) the possibility that control group participants could enroll in the program on their own at levels that would make it difficult to detect program impacts. In addition to providing a viable alternative to the primary evaluation design, this type of proactive planning served to create an additional level of comfort among prospective investors. In Massachusetts, the specific trigger for implementing the back-up methodology is if the proportion of treatment group members served by Roca is not at least 30 percentage points higher than the proportion of control group members that receive Roca services. The Massachusetts partners developed a non-experimental difference-in-differences analysis that will compare outcomes for (1) high-risk individuals in the communities served by the service provider (Roca) that are included in the PFS pilot to (2) similar individuals from other communities not being served by Roca. The Massachusetts pilot plans to use the back-up methodology (if needed) at the end of Phase 2, which is the end of the state-funded project. Phase 1 will use the RCT evaluation design regardless of the level of control group members accessing Roca services.
- In New York, the trigger for implementing the back-up evaluation strategy is the same as in Massachusetts—the proportion of treatment group members receiving CEO services must be at least 30 percentage points higher than the proportion of control group members receiving CEO services. The New York PFS pilot team developed a non-experimental matched historical comparison evaluation as its back-up methodology. Under this approach, individuals in the treatment group will be matched to similar individuals, based on their baseline characteristics, who were released from prison before the start of the PFS pilot in New York City and Rochester.

Defining the role of the independent validator. As described in Chapter 2, each pilot retained an external independent validator to oversee the implementation of the evaluation, monitor its fidelity and validate the findings. The validator is responsible for developing and applying a plan to ensure the evaluation adheres to the design. If the validator detects any potential threats to the integrity of the design, it must develop strategies to address them. In addition the validator is responsible for confirming that data are being interpreted correctly, that outliers and missing values are being handled properly and that outcomes are statistically unbiased. Once the results of the evaluation are determined, the validator will review the data and evaluation methodology to verify the results that trigger incremental success payments. As part of planning the grant application, pilot partners worked to select a validator and determine how its work would be coordinated with the evaluation. During the early stages of random assignment and enrollment, the independent validators worked closely with the evaluators to monitor referrals and ensure random assignment followed the evaluation plans. The independent validators are Public Consulting Group (Massachusetts) and Chesapeake Research Associates (New York).

6.2 Implementing the Random Assignment Procedures

One of the most critical elements of an RCT is the assignment of eligible program participants to the treatment and control groups. For the PFS pilots, the process for randomly assigning individuals had to be integrated into the referral and enrollment procedures to identify potential program participants and refer them to the service provider, with only the treatment group receiving a referral for services. The processes each pilot used to identify and randomly assign individuals to the treatment and control groups are discussed below.

6.2.1 Random Assignment Procedures in Massachusetts

As discussed, the PFS pilot in Massachusetts initially contracted with a small-business, Sibalytics, to implement and oversee the random assignment process. This decision was based on Sibalytics experience with RCTs and with managing multiple large data sets. However, in late 2014, the Massachusetts Oversight Committee determined that Sibalytics was having difficulty implementing certain aspects of the RCT procedures due to an increase in the scope of work (beyond what originally had been envisioned) associated with cleaning data received from existing referring agencies as well as from referring agencies added for the pilot. The committee decided to replace Sibalytics with the Urban Institute. This change in evaluators did not affect the random assignment procedures that were developed for the evaluation.

For the Massachusetts PFS pilot, the steps involved in identifying eligible participants (a multi-step process) and randomly assigning them to the treatment and control groups are shown in Exhibit 6-2 and outlined below:

- Referrals for the PFS pilot are sent monthly from multiple organizations to the state's Office of Administration and Finance. The referral organizations include the Department of Youth Services, Office of Probation, Massachusetts Department of Corrections, the Massachusetts Parole Board, and corrections agencies in Suffolk County, Essex County, Hampden County, and Middlesex County. The referral partners electronically provide lists of individuals who appear to meet the intervention's eligibility criteria. As described in Chapter 3, to be eligible for the Massachusetts pilot, individuals must be male and age 17 to 24; must have a high or medium ORAS score; must be aging out of Department of Youth Services or on adult probation; and must be living in the Boston, Chelsea, or Springfield area.[21]
- The Office of Administration and Finance sends the referral lists to Sibalytics/Urban Institute. On a monthly basis, Sibalytics/Urban Institute matches this list against records maintained by the Department of Criminal Justice Information Services to determine if any candidates are ineligible for the PFS pilot based on other criteria. Specifically, individuals who have a prior enrollment in the PFS pilot, a prior enrollment in Roca, an open felony charge, or a conviction/adjudication due to a sexually violent offense are not eligible for the PFS pilot.
- All remaining individuals are then randomly assigned to the treatment or control groups by Sibalytics/Urban Institute, who in turn provides identifying and contact information of individuals assigned to the treatment group to Roca. The list is sent monthly to Roca via a secure electronic file.

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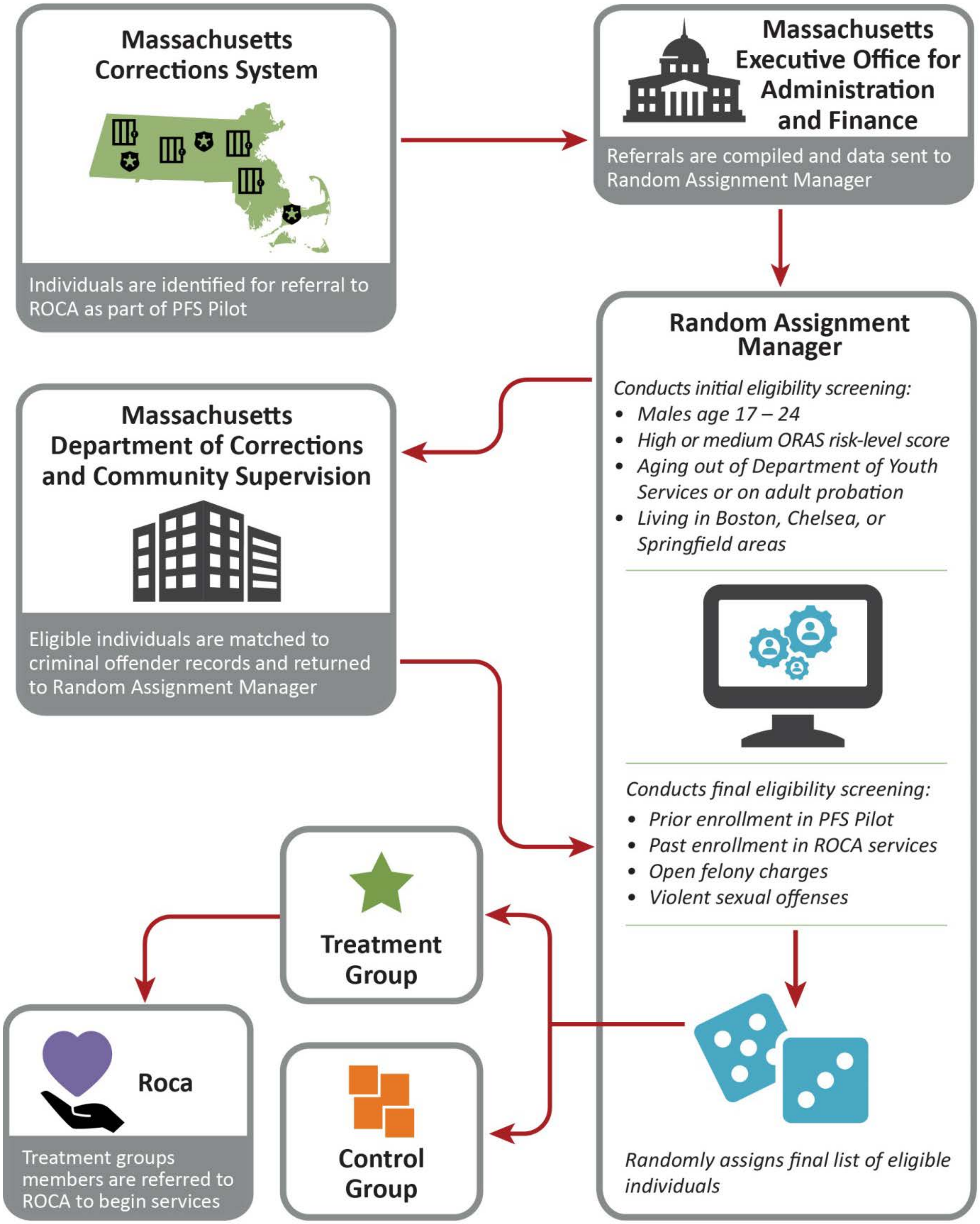
[21] ORAS is the risk assessment instrument used in Massachusetts to assess the level of risk and needs for each inmate leaving prison for community supervision.

- Upon receiving the list of individuals assigned to the treatment group, Roca assigns each treatment group member to a youth worker who contacts the participant. Once contact is established, Roca staff have 60 days to reassess the individual's eligibility for services. Specifically, as discussed in Chapter 3, individuals who have any new criminal charges since the time of random assignment or those who do not meet Roca's own eligibility criteria of a background indicative of future involvement in the criminal justice system (i.e. no high school diploma, limited or no work history) are not eligible. At the time of interviews for this report, Roca staff reported that many more referred individuals had been ineligible for services than expected, with approximately 50-60 percent having been determined ineligible after they had been randomly assigned.

Exhibit 6-2: Random Assignment Process in Massachusetts



- During the time period reviewed by this study, the Massachusetts pilot experienced significant issues both identifying eligible individuals and enrolling them in Roca to meet the targeted number for the pilot. In part this was due to cumbersome data transfer procedures from the criminal justice agencies and courts that slowed referrals (e.g. several different trial courts had to manually enter certain participant data, and some agencies provided incomplete and/or out-of-date data). The quality of participant contact information also was poor, and this hindered Roca's ability to find individuals and enroll them in the program. While the quality and timeliness of the data transfers were key issues, the low enrollment numbers also stem from an overestimation of the number of potentially eligible individuals. The partners in the Massachusetts pilot reported that they do not know the specific cause of the projection error but speculate it could be due to reduced criminal activity or changes in sentencing practices.
- During the initial months of pilot operations that are examined in this report, the Massachusetts PFS partners developed several strategies to address the recruitment shortfall. These included expanding the age range of individuals served by Roca (from 22 to 24 years old at the top end), broadening the eligibility requirement to allow medium-risk individuals to enroll, and working proactively with probation and corrections staff to improve efforts to verify addresses and other information before submitting referrals to Roca. Because the referral targets and random assignment procedures were part of the formal contract with the investors, any changes had to be addressed both operationally and legally.
- Through March 2015, Massachusetts had completed 15 months of its two-year random assignment period for the DOL-funded PFS participants (Phase 1). As discussed, the PFS pilot in Massachusetts had a goal of enrolling 535 individuals in the Roca program over this two-year random assignment period. As discussed above, recognizing that not all individuals assigned to the treatment group would enroll in services, the Massachusetts partners estimated that the target would be met by randomly assigning 753 individuals to the treatment group over the first two years of the project (a 71 percent enrollment rate). Based on data provided to DOL, during first 15 months of the pilot, 528 individuals had been randomly assigned to the treatment group, with 177 of those individuals enrolling in Roca (a 34 percent enrollment rate). Having enrolled only 33 percent of its target enrollment number with 9 months remaining under the DOL-funded phase of the pilot, pilot partners in Massachusetts were considering additional strategies to boost enrollment.

6.2.2 Random Assignment Procedures in New York

For the New York pilot, the Research Office of the state Department of Corrections and Community Service is the evaluator and is responsible for identifying prospective participants and conducting random assignment. As shown on Exhibit 6-3, the random process for the New York pilot involves the following steps:

- DOCCS maintains an updated file of prisoners nearing release. Two to four weeks before a prisoner's release date, DOCCS examines his eligibility for the CEO program based on two factors: the location of the individual's release from incarceration and his supervision level. Eligible individuals are those released to community supervision at the locations participating in the pilot: one of the five New York City parole bureaus, the Queensboro Correctional Facility, and the Rochester Metro parole bureau. Additionally, potential participants must be assessed as COMPAS Supervision Level 1 or

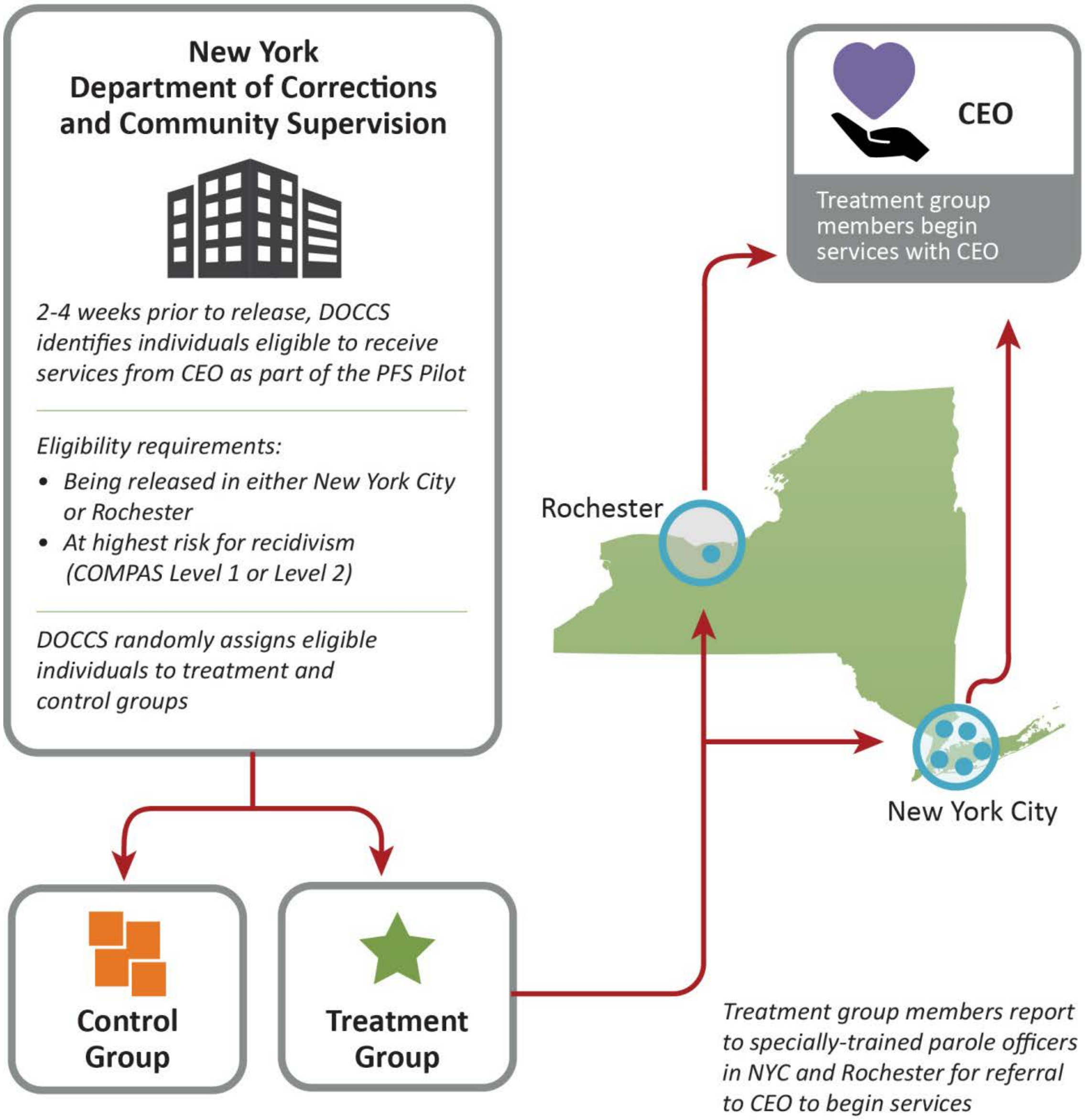
Level 2,[22] those at highest risk for recidivism, and must agree to participate in the study and the services as part of the terms of their parole (individuals who do not consent are not referred to CEO or included in the study).

- Those meeting the eligibility criteria are randomly assigned by research staff at DOCCS. DOCCS emails the identity of treatment group members to a specific parole officer who is responsible for all individuals in the PFS pilot and to the service provider, CEO. Additionally, treatment group members are flagged in the management information system used by parole officers and maintained by DOCCS to ensure they are referred and served appropriately.
- As part of their parole requirement, treatment group members must contact their designated PFS parole officer within 24 hours after release and schedule an in-person meeting with the parole officer within a week. This meeting also is attended by a member of the CEO staff with the goal of enrolling the individual in the CEO program. PFS parole officers received special training on the benefits of the CEO program and how to make successful referrals. The PFS parole officers also were provided scripts to help them encourage parolees to enroll at CEO. To help minimize the possibility of control group members accessing CEO services on their own, control group members are assigned to parole officers who have not received the training on CEO and who have a limited history of referring parolees to CEO in the past.

As discussed above, the New York pilot's target number of enrollees at CEO is 1,000 for the two-year intake period for Phase I. As of March 2015, 15 months into the random assignment period, 1,049 individuals had been randomly assigned to the treatment group, with 619 enrolling in CEO services (a 59 percent enrollment rate). Overall, the New York PFS pilot had achieved 62 percent of its target enrollment at CEO for the DOL portion of the grant, with 12 months of the random assignment period remaining.

[22] COMPAS is the instrument used in New York to assess the level of risk and needs for each inmate leaving prison for community supervision.

Exhibit 6-3: Random Assignment Process in New York



7. Outcome Targets, Measures, Projected Savings, and Payment Structures

One of the critical elements of any PFS project is determining what constitutes success in meeting the project's objectives and how achieving success translates into investor payments. This determination involves addressing the following questions:

- What specific outcomes best capture the objectives of the service intervention?
- How should these outcomes be defined and measured?
- What time frame is appropriate for measuring these outcomes?
- What are the projected budgetary savings for achieving the outcomes?
- What specific measures could be used for determining these savings?
- How should outcomes be used to calculate payments to investors?

The PFS grantees were required to address these questions in their applications for the DOL grants. In the application process, the PFS partners established outcome targets, or the specific level of achievement on the proposed outcomes that reflected the projects' shared objectives: increasing employment and reducing recidivism among previously incarcerated individuals. The pilots' success in achieving these objectives is measured by the impact of the programs' services as determined by the RCT evaluations. The partners also developed mechanisms to estimate the potential budgetary savings to the government based on achieving the desired impacts on these performance measures. The estimated savings to the government, in turn, serve as the basis for determining the amount of investor payment.

This chapter examines how the PFS pilots addressed these complex issues and describes the measures used to determine the impacts of the interventions as well as the projected savings and the payment structure s. Section 7.1 describes the selection of performance measures and how budgetary savings were estimated. Section 7.2 documents the payment thresholds and amounts established by each pilot.

7.1 Selection of Outcome Measures and Estimation of Budgetary Savings

To measure whether the desired outcomes of their service intervention are achieved, each pilot is conducting an RCT that will measure the impact of the interventions in two areas: recidivism and employment and earnings (see Chapter 6). These impacts are measured by calculating the differences in outcomes between the treatment and control groups on the defined measures. The impacts are used both to estimate the budgetary savings resulting from the service interventions and to determine a performance threshold that will trigger investor payment. Both pilots also measure project performance in a third area: the level of engagement of the treatment group in the service intervention. For both pilots, the approach to measuring outcomes and their potential resulting savings are follows:

- **Recidivism.** To measure the effectiveness of the service interventions in reducing recidivism, both pilots measure the impact of the program on days incarcerated over a five-year period (the impact is the difference between days incarcerated for the treatment group compared to days incarcerated for the control group). This measure also is known as "bed-days avoided," meaning that if the intervention keeps an individual from re-offending it thereby reduces future days spent living in prison and generates savings in incarceration costs.[23] Some of these savings estimates are direct and begin to be incurred immediately (e.g., reduced prison costs), while others are indirect and longer term (e.g., probability of closing a prison due to reduced need). Both pilots also estimate savings in terms of reduced "victim" costs resulting from the reductions in recidivism; these include tangible costs, such as medical bills and lost wages, and also intangible costs, such as pain, suffering, and reduced quality of life.

- **Employment.** To measure the effectiveness of the service interventions on employment and earnings, both pilots measure the impact of their program on the employment rate of treatment group members compared to that of control group members. The increased level of employment and earnings is hypothesized to provide budgetary savings through increased taxes and reduced public assistance receipt.
- **Engagement in services.** In addition to these outcomes, each pilot also established a measure of the extent to which enrollees in the treatment group participated in the services offered by the service provider (with no comparison to a control group). The New York PFS pilot uses this measure to calculate budget savings, and in both pilots, this measure is used in determining payouts to investors.

While both pilots focus on reducing recidivism, increasing employment and earnings, and engaging participants in services as their measures of success, they use different measures to determine the success of the interventions in these areas, the budgetary savings to their state, and the payment of the investments. In large part, the differences between the two pilots are due to the more expensive service intervention provided by the Roca program in Massachusetts compared to New York's CEO program. The extra expense of Roca is primarily due to the longer duration of the program (as discussed in Chapter 3). Roca provides up to two years of services with two years post-program follow-up, while CEO typically provides services for four to six months with one-year of post-program follow-up. Consequently, the Massachusetts PFS pilot estimates a cost per participant of close to $28,000 for the Roca program compared to $8,400 per participant for the CEO program in New York. This requires the Massachusetts PFS pilot to generate higher budgetary savings to offset program costs.

This section of the chapter provides the specific details of each pilot's outcome measures and savings calculations. The following section documents how the measures will be used to determine when and if payments will be made to investors. The Harvard SIB Lab provided technical assistance to both pilots to help them determine their performance measures and savings, and both pilots also analyzed external research and data to develop the measures and associated savings.

7.1.1 Massachusetts Outcome Measures and Projected Savings

The PFS partners in Massachusetts—led by the Office of Administration and Finance, Roca, and Third Sector/Youth Services Inc.—established several measures to determine the impacts of the service intervention and its potential cost savings. The two-phase structure of the Massachusetts PFS pilot, as

[23] While measures of recidivism commonly focus on incidents of re-arrest and re-incarceration, in the context of a PFS initiative, these types of measures would not work well because they could not be directly linked to future budgetary savings. Tracking the re-arrest or re-incarceration rate provides only a static point-in-time metric and does not capture the associated long-term budgetary costs or savings.

described in Chapter 2, has implications for the timing of performance measurements and of payments to investors.

- A total of 535 individuals are targeted to receive services through Roca in Phase I, which is the part of the program being funded by the DOL grant. Enrollment in Phase I and the RCT started in January 2013; Phase I is scheduled to end by December 2015. The pilot will estimate performance for Phase I starting in fall 2016 to allow time for the last individual enrolled in the pilot to receive services, with a goal of providing a payment to investors in 2017 if targets are achieved. This allows for a follow-up period of approximately 3 to 11 quarters (called the study period), depending on when the individual enrolled in the pilot, to measure recidivism, employment, and program engagement outcomes.
- A total of 394 individuals are targeted to receive services through Roca in Phase II when the services will be financed by state funds. Impacts and savings for Phase II will be determined based on the outcomes of individuals enrolled in Phase I and Phase II (a total of 929 individuals in the treatment group). Enrollment in Phase II will start in January 2016 and is scheduled to end by December 2018. In a time frame similar to that of Phase I, the pilot will estimate performance for Phase II starting in fall 2018 to allow time for the last individual enrolled in the pilot to receive services, with a goal of providing a payment to investors in 2019 if targets are achieved. This allows for a follow-up period of approximately 3 to 19 quarters, depending on when the individual enrolled in the pilot, to measure recidivism, employment, and program engagement outcomes.

Phase I and Phase II will use the same approach for calculating the performance measures and budgetary savings, which is described below.

Measures of and Savings from Reductions in Recidivism

To measure whether the service intervention decreases recidivism, the Massachusetts PFS pilot measures the impact of the service intervention on the days of incarceration resulting from new offenses committed during the first five years post-release. The estimate of days of incarceration includes actual sentences issued during the study period, scaled up to five years, and imputed sentences for any open arraignments that have occurred but not yet been fully adjudicated by the end of the study period. [24] The impact, or the difference between the treatment and control group on this measure, provides a measure of beds avoided or saved due to the intervention.

The Massachusetts pilot partners estimated three tiers of potential savings—low, medium, and high—that vary depending on the level of reduction in bed use. As discussed above, in addition to measuring reductions in the variable costs associated with prison stays, such as food and uniforms, these tiers allow for measurements of potentially significant fixed-cost savings due to changes in staffing and facilities operations if large reductions in incarceration are achieved. Given the relatively high per-participant cost of its service intervention, to cover the cost of the intervention and provide a return on the investments the Massachusetts PFS pilot needs to achieve the medium or high level of impacts on recidivism that would

[24] The Massachusetts Juvenile Employment and Recidivism Initiative Technical Narrative states estimates of recidivism impacts and savings are based on five-year bed-day impact models, which is the point at which the impacts of the service intervention are expected to be highest, based on past research. Because of the timing for producing results, the pilots will not have five years of post-enrollment recidivism data for most participants, so both pilots are using a "scaling factor" to estimate five-year bed-day impacts. The scaling factors were developed in collaboration with the Harvard SIB Lab, and use historical incarceration data from both states to generate estimates of a participant's total number of incarceration bed-days based on the number of observed bed-days and the length of observation period.

result in the closure of prison wings or complete facilities. This tiered approach was developed with a statistical model that estimated increases in cost savings based on the number of foregone bed-days. [25] The estimates use the measurement unit "bed-year," or the amount saved per person by avoiding 365 days of incarceration. The results of this analysis, as shown in the third column in Exhibit 7-2, provide estimates of the cost savings associated with different levels of reductions in incarceration.

- At the lowest level, if the intervention reduces the number of occupied beds by less than 100 over the course of the entire pilot, it would save the state approximately $12,400 per bed-year based on a reduction of the variable operating costs.
- At the medium level, if the intervention reduces the number of occupied beds by between 100 and 300, it creates the potential to close sections of a prison. This would result in an increase in savings of approximately $28,470 per bed-year, based on reduced facilities costs and adjusted staffing levels. [26]
- At the highest level, if the intervention reduces the number of bed-days by 300 or more, it creates the possibility of closing an entire prison or avoiding the need to build a new facility, which could result in savings of $47,500 per bed-year (or more).

Exhibit 7-2: Levels of Savings Achieved by the Massachusetts PFS Pilot, by Tier

Tier	Reduction in Bed-Days from Pilot	Incarceration Savings per Bed-Year Saved	Victim Cost Savings per Bed-Year Saved	Total Cost Savings per Bed-Year Saved (Incarceration Savings plus Victim Cost Saving)
Low Impact	Less than 100	$12,400	$6,400	$18,800
Medium Impact	Between 100 and 300	$28, 470	$12,500	$40,970
High Impact	Over 300	$47,500	$18,601	$66,101

SOURCE: The Massachusetts PFS Technical Proposal

Massachusetts also monetized the cost savings from having fewer crime victims as a result of reductions in recidivism due to the service intervention. These cost savings were calculated using an established methodology that estimates savings to society achieved through fewer crime victims.[27] As also shown in Exhibit 7-2, as for the recidivism measure, victim cost savings were estimated as low, medium, and high based on the level of impact on the reduction in bed-days. The savings in victim costs in each of the tiers are estimated to be $6,400, $12,500, and $18,601, respectively, per bed-year saved.

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25 Details on this model are provided by the Massachusetts PFS Technical Proposal (also called the Massachusetts Juvenile Employment and Recidivism Initiative Technical Narrative)

26 The Massachusetts PFS pilot grant application included a calculation in the technical narrative showing that if 100 prison beds could be eliminated eventually through the intervention, then "additional savings from closing a wing or adjusting staffing levels could occur, resulting in savings of $28,470 per bed-year." (See Massachusetts Juvenile Employment and Recidivism Initiative Technical Narrative)

27 K. E. McCollister, M. T. French, and H. Fang, "The Cost of Crime to Society: New Crime-Specific Estimates for Policy and Program Evaluation," *Drug and Alcohol Dependence* 108 (2010). Details on these calculations are provided in the Massachusetts PFS Technical Proposal. (See Massachusetts Juvenile Employment and Recidivism Initiative Technical Narrative)

Overall, for each bed-year saved due to the Massachusetts PFS pilot, the total budgetary savings are estimated to be the sum of the incarceration savings and the victim costs savings. As shown in Exhibit 7-2, these savings could range from $18,800 to $66,101 per bed-year saved, with the largest savings resulting from the closure of a prison wing or of a complete facility.

Measures and Value of Increased Employment

To examine whether the service intervention increases employment levels, the Massachusetts PFS pilot uses a measure of post-release employment and earnings. Specifically, the measure is the percentage of treatment and control group members who are employed with earnings of more than $1,000 each quarter during the study follow-up period. Pilot partners reported that the employment threshold measure of $1,000 earned in a quarter was equivalent to working half-time in a relatively low-paying position and was selected to focus on achieving a "substantial" level of employment. Again, the impact, or the difference between the treatment and control group on this outcome, provides a measure of the increase in employment due to the service intervention.

The calculation of budgetary savings related to this employment outcome is based on increases in payroll tax, sales tax, and income tax revenue and the corresponding reductions in the payment of public benefits that occurs due to the increased employment levels. Overall, the Massachusetts pilot estimates annual government savings of $3,000 per individual for any increases in employment level due to the service intervention. To determine this savings level, the PFS partners in Massachusetts used prior research on average effective marginal tax rates conducted by the Congressional Budget Office. This research showed that, reflecting both taxes paid and benefits received, the effective marginal tax rate was 67 percent of earnings for low-income households with children and 30 percent for low-income households without children.[28] Because the PFS pilot is targeting young males, the PFS partners chose a conservative tax rate of 33 percent as the incremental government benefit of any additional earnings resulting from the service intervention. Based on an analysis of historic earnings patterns of Roca enrollees and the target population, the PFS pilot projected average annual earnings for any increased employment level due to the intervention of approximately $9,000 per individual. This results in $3,000 in annual government savings or $750 per quarter (reflecting a marginal tax rate of 33 percent on $9,000 of earnings).

Engagement in Services

To provide a measure of the engagement of participants in the program services, the Massachusetts pilot uses a measure of the strength of the relationship between program staff and participants, a key feature of the Roca program. This measure only applies to those receiving program services (not the control group) and is based on achieving a threshold of nine or more meetings with a youth worker in a quarter. This measure is not used to determine any budgetary savings but, as discussed in the next section, is used to determine payouts to investors.

7.1.2 New York Outcome Measures and Projected Savings

The PFS partners in New York established several measures to determine the impacts of the service intervention and its potential cost savings. As in Massachusetts, New York established measures to determine the impacts of the service intervention on reducing recidivism and increasing employment and

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[28] Congressional Budget Office, *Effective Marginal Tax Rates for Low and Moderate Income Households*, 2012.

then determined the savings associated with achieving specified levels of impacts. New York includes a third measure of program engagement that also contributions to the budgetary savings.

As described in Chapter 1, the New York PFS pilot also is structured in two phases, which has implications for the timing of performance measurement and investor payments.

- A total of 1,000 individuals are targeted to receive services through CEO in Phase I of the New York pilot, during which the services provided are being by the DOL grant. Enrollment in Phase I and the RCT started in January 2013 and is scheduled to end by December 2015. To allow time for the last individual enrolled in the pilot to receive services, the pilot will estimate performance for Phase I starting in fall 2016, with a goal of providing a payment to investors in 2017 if targets are achieved. This allows for a follow-up period of approximately 3 to 11 quarters (called the study period), depending on when the individual enrolled in the pilot, to measure individuals recidivism, employment, and program engagement outcomes.
- A total of 1,000 individuals are targeted to receive services through CEO in Phase II when the services will be financed by New York state funds. Impacts and savings for Phase II will be determined based on the outcomes of individuals enrolled in Phase I and Phase II (a total of 2,000 individuals in the treatment group). Enrollment in Phase II will start in January 2016 and is scheduled to end by December 2018. In a time frame similar to that of Phase I, the pilot will estimate performance for Phase II starting in fall 2018 to allow time for the last individual enrolled in the pilot to receive services, with a goal of providing a payment to investors in 2019 if targets are achieved. This allows for a follow-up period of approximately 3 to 19 quarters, depending on when the individual enrolled in the pilot, to measure recidivism, employment, and program engagement outcomes.

Phase I and Phase II will use the same approach for calculating performance measures and budgetary savings, which is described below. However, in New York the savings will be adjusted for inflation in Phase II.

Measures of and Savings from Reductions in Recidivism

For the New York PFS pilot, reductions in recidivism will be measured by comparing, for treatment and control group members, the sum of (1) the number of days an individual spends in jail or prison between initial release from prison and the end of the relevant study period, if an individual is in prison at the end of the study period, and (2) the number of days remaining in his sentence capped at five years from the first release date. The impact, or the difference between the treatment and control group on this measure, will provide a measure of "bed-days avoided" as a result of the service intervention. As in Massachusetts, the estimate of days of incarceration includes actual sentences issued during the study period, scaled up to five years, and imputed sentences for any open arraignments that have occurred but not yet been fully adjudicated by the end of the study period. [29]

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[29] New York is using the same approach as Massachusetts. Because of the timing for producing results, the pilots will not have five years of post-enrollment recidivism data for most participants. So, both pilots are using a "scaling factor" to estimate five-year bed-day impacts. The scaling factors were developed in collaboration with the Harvard SIB Lab and use historical incarceration data from both states to generate estimates of a participant's total number of incarceration bed-days based on the number of observed bed-days and the length of the observation period.

Using a cost-benefit model developed in collaboration with the Pew Charitable Trusts, the New York PFS pilot estimates a total savings of $85 per bed-day avoided, which includes both incarceration savings of $56 per bed-day and victim cost savings of $29 per bed-day. [30] Savings estimates for Phase II follow the same methodology, except that they are adjusted for inflation.

- **Savings from incarceration.** Based on analysis of recidivism patterns of high-risk formerly incarcerated individuals released in New York, the New York PFS pilot partners estimate that the state will save $18,706 and $25,550 in annual costs from avoiding a year of incarceration in prison and local jail, respectively, and that 73 percent of recidivism reductions will be in prisons, with the remainder in local jails.[31] Taking a weighted average of the two and converting to a daily metric, savings per avoided bed-day are estimated to be $56.

Exhibit 7-3: Summary of Potential Budgetary Savings for New York PFS Pilot

<table>
<tr><th></th><th>Performance Measure</th><th colspan="2">Savings Phase I</th><th colspan="2">Savings Phase II</th></tr>
<tr><td>Recidivism</td><td>Impact on average number of bed-days avoided over five years</td><td colspan="2">$85 per bed-day avoided</td><td colspan="2">$90.10 per bed-day avoided</td></tr>
<tr><td>Employment</td><td>Impact on employment levels in the fourth quarter after release from incarceration</td><td colspan="2">$6,000 per person (beyond control group employment levels)</td><td colspan="2">$6,360 per person (beyond control group employment levels)</td></tr>
<tr><td>Transitional Employment</td><td>Hours worked in transitional jobs (treatment group only)</td><td>$3,120 per person (If average hours worked is equal to or over 111)</td><td>$20 per hour worked per person (If average hours worked is under 111)</td><td>$3,307 per person (If average hours worked is equal to or over 111)</td><td>$21.20 per hour worked per person (If average hours worked is under 111)</td></tr>
</table>

SOURCE: New York PFS Technical Proposal

- **Savings from victim costs.** The New York pilot also includes reductions in the costs for crime victims as part of its budgetary savings. Using the same established methodology used in Massachusetts for estimating victim costs, the New York pilot partners estimate an average expected victim cost savings of $21,400 per formerly incarcerated person.[32] To be conservative, only half of the expected costs are included in the benefit calculation, and the victim cost savings resulting from the reduction in recidivism are estimated at $29 per bed-day avoided.

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30 The Pew Charitable Trusts, *The Pew-MacArthur Results First Initiative in New York* (October 2013). Retrieved from http://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2013/10/04/the-pewmacarthur-results-first-initiative-in-new-york

31 The Massachusetts Juvenile Employment and Recidivism Initiative Technical Narrative includes details on these calculations.

32 McCollister et al. "The Cost of Crime to Society: New Crime-Specific Estimates for Policy and Program Evaluation," 2010. The Massachusetts Juvenile Employment and Recidivism Initiative Technical Narrative includes details on these calculations.

Measures and Value of Increased Employment

To examine whether the service intervention increases employment levels, the New York pilot uses a measure of post-release employment and earnings. Specifically, the PFS pilot measures the impact, or the difference between treatment and control group members, on employment rates in the fourth quarter after release from incarceration. This measure was selected because prior research on CEO's program shows this time period is typically when the highest nonsubsidized earnings are reported.

As in Massachusetts, the PFS pilot in New York calculated the budgetary savings of the increased employment resulting from greater tax revenue and reduced public benefit receipt. This is estimated to be $6,000 per person for any increased level of employment due to the service intervention. The New York PFS pilot partners drew on a number of sources to make this calculation. First, an analysis of employment data from a 2008–2010 group of high-risk formerly incarcerated individuals showed average annual earnings of $10,000 among those who were working.[33] Using the same Congressional Budget Office study as the Massachusetts pilot, the New York pilot estimates an annual government benefit in terms of increased taxes and reduced benefit receipt of $3,000. Finally, in contrast to Massachusetts, the New York pilot estimates the net present value of these annual savings rather the one-year amount. Specifically, the net present value of the budgetary savings is $6,000, reflecting the long-run discounted value of these savings.[34]

Engagement in Services

To measure engagement in CEO's primary program activity, the New York PFS pilot includes a performance measure based on the number of individuals who held a transitional job and the number of hours they worked during the study period (see Exhibit 7-3). This measure only applies to those receiving program services (not the control group). The partners for the New York pilot estimated the cost savings resulting from transitional jobs held by individuals in the treatment group due to a reduction in public sector payroll costs.

To calculate these savings, the PFS partners drew on several sources. First, the previous evaluation of CEO's program found that participants worked transitional jobs for 6.5 hours per day over 24 days on average, or 156 hours total.[35] Other data from the previous study showed the payment for similar services (e.g. janitorial and maintenance jobs in public sector buildings) in a typical government contract was $20 per hour. From this, the value of the services rendered to the public sector per transitional job participant was estimated at $3,120 (156 hours x $20 per hour). However, recognizing that all individuals may not work this many hours, two savings levels were included. Specifically, for those who work less than 111 hours in a transitional job, the value of savings is calculated by multiplying the number of hours worked by its value of $20 per hour. For those working, more than 111 hours, the $3,120 estimate is used.

Exhibit 7.3 summarizes the estimates of the total cost savings for the New York pilot for both Phase I and Phase II of the project. The costs savings are slightly higher during the second phase of the project to account for inflation. For Phase I, New York estimates savings of $85 per bed-day avoided, $6,000 per

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33 New York State Department of Labor, *Pay for Success Intermediary Contract* (October 2013). Retrieved from http://www.budget.ny.gov/contract/ICPFS/PFSMainAgreement_Sched_0314.pdf

34 A standard discounted formula was applied to derive this estimate: $\sum_{t=0}^{\infty} \$3{,}000x \left(\frac{50\%}{1.02}\right)^t \approx \$6{,}000$

35 Redcross et al. *More Than a Job,* 2012

individual for any increases in employment due to the intervention, and approximately $3,120 in public sector payroll savings per treatment group member that participates in transitional employment.

While the estimated savings are rooted in comparable program objectives, the pilots' approaches to calculating cost savings have both similarities and differences. In terms of recidivism savings, both Massachusetts and New York estimate that greater savings will result from reductions in recidivism compared to increased employment. However, while New York maintains a constant savings estimate, Massachusetts established tiers of savings that increase when greater impacts are achieved. Both pilots use similar average annual earnings for workers and the Congressional Budget Office analysis to estimate the increased tax revenues and reduced public assistance to be gained from the increased earnings. However, New York extrapolates the value of the savings beyond one year and estimates the long-run discounted value of the savings. And while both pilots include savings resulting from reduced victim costs, New York also includes the public sector payroll savings resulting from participation in transitional employment as government savings.

Overall, the PFS pilot partners reported that determining how to measure the outcomes of the service interventions and the potential budgetary savings associated with the outcomes were difficult tasks. Partners reported that determining future costs and budgetary savings required assumptions and estimations, not all of which could be accounted for, let alone accurately monetized. Each pilot will use similar measures to gauge the success of their service interventions based on the RCT, but they will use different methodologies to determine the budgetary savings, in part reflecting that there is not an established way to do this. Partners also reported that it was important to first reach consensus about the type of outcomes they expected the interventions could achieve and then focus on how the outcomes would be measured.

7.2 Determining the Payment Structure for PFS

The previous section of this chapter described the first two steps in developing a payment structure: (1) the selection of outcome measures and (2) the calculation of the projected savings that would be realized at different levels of performance. The final step is to develop a payment structure tying the achievement of established outcome targets to specific payments. This final step required significant time and attention by the PFS pilot partners as it established the basic parameters for determining the return on the private capital that was invested in the initiatives. As noted, defining these payment structures was initially undertaken as part of the grant applications developed and submitted to DOL.

Partners at both pilots reported the need to focus on finding the right balance between investor returns that looked too high given that public dollars were providing the returns and those that were viewed as so low that investors would not be interested. To address this, as described below, both pilots determined that a cap on payments to investors was needed. State agency and intermediary staff reported this was important because it aligned with the state's interest in covering all project costs and also providing investor returns that are reasonable relative to the savings. However, the caps were designed so that DOL and state resources would not be used to pay more to investors than what was saved through the service interventions. In addition to this overall cap, both pilots placed a cap on payments for employment-related outcomes. This second cap assures that a majority of the payments will be made from reductions in recidivism, where larger impacts are expected and where the greatest potential savings can be realized.

As discussed below, payments to the investors are based on whether specified levels of impacts (and statistical precision) are attained, as measured by the RCT. To conform with the specifications of the

DOL funded pilots, initial payments to investors (if warranted) will be based on performance over a three period after the start of the project. The results would be evaluated and validated during the fourth year. There will be a single federal payment made at the end of the fourth year, and federal involvement in the project will end as required at the end of the year. The calculation of impacts and payments will continue into Phase II using the same criteria and methodologies. However, these determinations of impacts and savings will be done with increasing precision as the sample sizes expand. As discussed, because investor resources were not earmarked to support a specific phase of funding source of the pilot, the payment will also be handled “blindly”. That is, all funders support all phases of pilot and thus financing is blind to the source of the payment dollars.

This section describes the payment structures for the Massachusetts and New York PFS pilots. As discussed above, the payment structures differ in large part due to the greater cost of the service intervention in Massachusetts, meaning that Massachusetts must generate higher budgetary savings to offset intervention costs.

7.2.1 The Massachusetts Payment Structure

While the loan financing structure used in the Massachusetts pilot was primarily developed by Goldman Sachs (see Chapter 5), the payment structure involved more partners and perspectives. New Profit, one of the philanthropic investors that had been retained by the intermediary (Third Sector) to help recruit other investors, worked with staff at Goldman Sachs to determine the payment structure, with input from Third Sector, Roca, and the state of Massachusetts. In addition, the Harvard SIB Lab provided technical assistance.

To ensure payments to the private investors were reasonable, the Massachusetts pilot partners determined that a cap on payments to investors was needed. The pilot set a cap on payments to investors for Phase I and Phase II combined at $27 million, which the PFS partners reported was a reasonable rate of return given the project costs. In addition to this overall cap, payments related to employment outcomes were capped at $1.6 million. As discussed previously, payment will be made separately for Phase I and Phase II. Massachusetts’s PFS pilot investors will be repaid based on Roca’s performance on three outcome measures, with a separate payment made for each.

Reductions in recidivism. One payment is based on the percent reduction in incarceration as measured by bed-days avoided, based on the RCT. Specifically, the measure reflects the percent reduction in the five-year average of days incarcerated for the treatment group members compared to the five-year average of days incarcerated for the control group members. As for the savings tiers shown in Exhibit 7-3, payment is based on the level of impact on recidivism, with low, medium, and high payment levels. Each tier of the payment structure has a fixed payment amount with a marginal payment tied to exceeding the minimum within each tier.[36] For example, for medium impact (representing reductions of between 88 and 243 bed-days), the payment ranges from $4,016 to $26,491 per treatment group member served (see Exhibit 7-4). These payment amounts are derived from the government savings resulting from the reduced bed-days (see Exhibit 7-2 above).

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36 The fixed payments are $785 for the low impact threshold, $4,016 for the medium impact threshold, and $6,639 for the high impact threshold per treatment group member served. The marginal payments are ((bed-days avoided– 9) x $55) for low impact, ((bed-days avoided – 88) x $145) for medium impact and ((bed-days avoided – 244) x $16) for high impact. The amounts of $55, $145, and $16 represent the marginal payment per treatment group member served.

Exhibit 7-4: Payment Amounts for Recidivism Measures in Massachusetts

Recidivism Calculations					
	No Impact	Low impact	Medium impact	High impact	Maximum
Performance Thresholds	Less than 5 percent reduction in bed-days	5 percent–14 percent reduction (29 to 87 bed-days)	15 percent–42 percent reduction (88 to 243 bed-days)	43 percent–66 percent reduction (244 to 358 bed-days)	67 percent or more reduction (359 or more bed-days)
Payment Amount per Treatment Group Member Served	No Payment	Ranges from $785 to $3,975	Ranges from $4,016– $26,491	Ranges from $26,639–$28,463	$28,540

SOURCE: The Massachusetts PFS Technical Proposal
NOTES: Impacts must be statistically significant for payment to be made.

Increases in employment. As shown in Exhibit 7-5, another separate payment is based on the percentage of quarters with earnings exceeding $1,000 for treatment group members compared to the percentage of quarters with earnings exceeding $1,000 for control group members. The payment of $750 per quarter employed (above the control level) is based on $3,000 in annual government savings per employed individual as outlined above (or $750 per quarter).

Exhibit 7-5: Payment Amounts for Employment Measures in Massachusetts

Employment Measure Calculations		
	No Impact	Impact
Performance Thresholds	Less than 5 percentage point difference between treatment and control group members who were employed in quarters with earnings of less than $1,000	At least 5 percentage point difference between treatment and control group members who were employed in quarters with earnings of with more than $1,000
Payment Formula	No Payment	Total quarters with earnings more than $1,000 for treatment group members x percentage point difference between treatment and control group x $750 up to $1.6 million

SOURCE: The Massachusetts PFS Technical Proposal
NOTES: Impacts must be statistically significant for payment to be made.

Engagement with a youth worker. A third, separate payment is based on the number of treatment group members who engage with a Roca youth worker at least nine times per quarter. As shown in Exhibit 7-6, a payment of $789 is made for each treatment group member who achieves this target each quarter (this amount was determined by the PFS pilot partners).

Exhibit 7-6: Payment Amounts for Youth Worker Engagement Measures in Massachusetts

Youth Worker Engagement Calculations		
	No Impact	Impact
Performance Thresholds	Less than 9 meetings between a treatment group member and a Roca youth worker	9 or more meetings between a treatment group member and a Roca youth worker
Payment Formula	No Payment	$789 per qualifying treatment group member per quarter

SOURCE: The Massachusetts PFS Technical Proposal
NOTES: Impacts must be statistically significant for payment to be made.

The Massachusetts PFS pilot also set up a payment structure based on the types of investors. As discussed in Chapter 5, as the sole senior investor in the Massachusetts PFS pilot the Goldman Sachs high-net-worth investor group will be repaid for the entire $9 million before any other investor receives a return. After the senior lender is fully repaid, the junior lenders (Living Cities and the Kresge Foundation) will be repaid, and finally those deferring payment (Roca and Third Sector) will be compensated. If the levels of impact are high enough, payment levels could be large enough to repay the grants provided by the Laura and John Arnold Foundation, New Profit, and the Boston Foundation.

7.2.2 New York's Payment Structure

Representatives from Bank of America Merrill Lynch (BAML), Social Finance, and the state of New York worked together to determine the payment structure for the PFS pilot. As in Massachusetts, the Harvard SIB lab provided technical assistance to help New York determine these relatively complex calculations.

In New York, the total payment to investors is capped for at $21.5 million: $11 million for Phase I and for $10.5 million for Phase II. The New York pilot's partners agreed that payments to investors would directly match government savings up until the point at which the original private sector investment of $13.5 million is reached ($6.8 million for Phase I and $6.7 million for Phase II). At that point when the investors have fully recouped their initial investment, the investors and the state would split the savings generated equally until the maximum cap is reached. Finally, the New York pilot also set a cap of $2 million on payment to investors for employment-related outcomes, an amount negotiated by the partners. Within these parameters, New York is distributing payments based on CEO's performance on three outcome measures, with separate payments for each.

Reductions in recidivism. One payment is based on the five-year bed-day usage for treatment group members compared to control group members. As shown in Exhibit 7-7, the New York PFS pilot must achieve at least an 8 percent impact on five-year average bed-days based on the RCT for a payment to be made to investors. Using the cost savings estimates provided in Exhibit 7-3 above, for impacts above 8 percent, the payment will be determined by the average reduction in bed-days of the treatment group multiplied by $85 for Phase I ($90.10 for Phase II) to determine payment. For Phase I, this formula will be used to determine payment until the pilot reaches the public sector savings cap of $6.7 million. After this level is met, the payment is split evenly between the investors and the state until the total performance-based cap of $11.1 million is reached. (The payment structure is similar for Phase II).

Exhibit 7-7: Payment Amounts for Recidivism Measures in New York

Recidivism Calculations in New York		
Performance Threshold	At least an 8 percent reduction in average bed-days for treatment group members relative to the control group	
Payment Formula	Phase I	Phase II
	Average reduction in bed-days x $85 x number of participants up to $6.8 million (then $42.50 per bed-day avoided up to $11.1 million)	Average reduction in bed-days x $90.10 x number of participants up to $6.7 million (then $45.05 per bed-day avoided up to $10.5 million)

SOURCE: New York PFS Technical Proposal
NOTES: Impacts must be statistically significant for payment to be made. Phase I refers to the Federal portion of the pilot and Phase II refers to the state portion.

Increases in employment. Another separate payment will be based on the employment rates of the treatment group compared to the control group in the fourth quarter after an individual's enrollment in the pilot. As shown in Exhibit 7-8, payments will be made for impacts above a five percentage point difference between the treatment and control groups in their employment rates. Above the five percentage point threshold, the percentage point difference will be multiplied by $6,000 ($6,360 in Phase II). As discussed, payments on these measures for both phases are capped at $2 million.

Exhibit 7-8: Payment Amounts for Employment Measures in New York

Employment Calculations in New York		
Performance Threshold	At least a five percentage point increase in employment rate in fourth quarter after release for treatment group members compared to the control group	
Payment Formula	Phase I	Phase II
	Percentage point difference in employment rates x $6,000 x number of treatment group members served (up to $2 million)	Percentage point difference in employment rates x $6,360 x number of treatment group members served (up to $2 million)

SOURCES: SOURCE: New York PFS Technical Proposal
NOTES: Impacts must be statistically significant for payment to be made. Phase I refers to the Federal portion of the pilot and Phase II refers to the state portion.

Engagement in a transitional job. A final and separate payment is based on the number of treatment group members who engage in a CEO transitional job during the study period. However, these payments will be made only if the performance threshold for recidivism is met. Specifically, if the 8 percent reduction in recidivism is not reached, investors will not be eligible for payment for treatment group members' participation in transitional jobs. As discussed above, the payment is $3,120 per participant for those working over 111 hours in total in the transitional job (the payment is based on $20 per hour for those who work less than 111 hours).

Exhibit 7-9: Payment Amounts for Participation in Transitional Jobs in New York

Transitional Employment Calculations in New York		
Performance Threshold	Number who worked in transitional job during study period (no threshold or control group) but only available if recidivism threshold met	
Payment Formula	Phase I	Phase II
	Number of participants engaged in transitional jobs x $3, 120 (if average hours worked *is equal to or over* 111)	Number of participants engaged in transitional jobs x $3, 307 (if average hours worked *is equal to or over* 111)

SOURCES: SOURCE: New York PFS Technical Proposal
NOTES: For participants who work fewer than 111 hours in a transitional job, the payment amount will be calculated by multiplying the number who worked less than111 hours by the average number of hours worked by this group x $20. Phase I refers to the Federal portion of the pilot and Phase II refers to the state portion.

In the proposal submitted to DOL by the state of New York, the minimum thresholds for recidivism payments and employment were higher than the thresholds given above. Based on the interviews conducted for this report, New York reexamined the payment thresholds while negotiating the award with DOL because of concerns raised by BAML about the level of interest in the investment opportunity. The thresholds were ultimately negotiated downward to the thresholds presented here. Overall, determining investor payouts was a complex, technical, and time consuming part of the planning process, with each pilot taking similar but distinct approaches. The technical assistance provided by the Harvard SIB Lab in this area helped the partners reach a consensus on this critical element of the PFS pilot. This study will document any future changes in the payment structures and report whether investors are ultimately repaid for their investments using the payment structures developed by the pilots.

8. Observations from the Early Implementation of the DOL PFS Pilots

This report documents the early efforts of Massachusetts and New York as they designed and implemented the PFS pilots funded under DOL's Workforce Innovation Fund. The report examines the seven-month period grantees had to develop their grant applications after the SGA was announced, the four months of planning once awards were made, and the initial approximately 10 months of operation. Specifically, the report examines the pilots' early activities in identifying a problem and target population, developing working partnerships and management structures to address that problem within a PFS structure, securing private and philanthropic capital and financing mechanisms, developing the service intervention, setting up the evaluation design, and establishing outcome measures, targets, and payment amounts. Considering the inclusion of the state projects that increased the enrollment levels and extended the operational period of the pilots, the pilots are scheduled to operate for approximately five-and-a-half years, with the first evaluation results available in mid-2017 and the potential payments to investors from the federal grant funding to come at the end of 2017. The pilots are scheduled to end in 2019 when a final set of payments from the state funding to investors could potentially be made.

Because this report summarizes the development and early stages of the implementation of the two pilots, it is too early to draw formal conclusions or lessons. Nonetheless, the experience of launching these PFS pilots provides valuable information, particularly to those interested in developing a PFS approach to project financing and service delivery. The following preliminary observations are based on the early experiences of the pilots in implementing the PFS approach, as reported by grantees and their partners.

The support and influence of each state's Governor's Office, as well as other state leaders, was important in launching the initiative. Before the announcement of DOL's PFS SGA, both states had begun to explore PFS initiatives on their own, with interest from both the governor in each state as well as other executive-level state leadership. This leadership was viewed by the PFS partners as important in developing and launching the PFS projects, as it generated visible and influential support for the approach. The PFS partners report that this early interest in PFS and high-level support were particularly helpful given the relatively short planning period established by the SGA.

Educating pilot partners about the PFS approach was a necessary part of the planning process. The implementation of the PFS pilots required knowledge of technically complex concepts and design issues. These included, for example, defining and measuring the outcomes to determine the effectiveness of the service intervention, estimating budgetary savings that result from any improved outcomes, determining payment points and potential returns on investment, and designing and implementing rigorous evaluations. PFS partners reported that they dedicated significant time to helping their partners fully understand these concepts and issues and that this effort was necessary to establish the working partnerships for the pilots.

Carefully structured contracts and a strong management and communication process are needed to guide the organizational PFS partnerships. The PFS partners reported that developing the partnerships between state agencies, intermediaries, service providers, investors, and evaluators that were needed to plan and implement a PFS initiative required significant attention and a structured approach. Many of the organizational relationships required by PFS had to be formed from scratch, while existing relationships had to be revisited given the nature of the PFS approach. PFS partners reported that they had few established models to work from and even those who had worked successfully together in other settings now were working with new concepts, relationships, timelines, and incentives. Moreover, the partners brought different perspectives and goals. For example, the state agencies did not want to create an overly profitable investment opportunity for the private sector, while the private investment partners sought a return big enough to generate interest in the initiative. To address these issues, PFS partners for both states negotiated and established structured and detailed contracts that specified all aspects of the pilots, including the service intervention and its cost, outcome targets, measures and levels of performance, the RCT design, and the payout schedule for investors. The contracts established specific structures for managing the pilots, primarily through committees responsible for broad oversight as well the day-to-day operations of the pilots.

While private capital remains the cornerstone of the PFS approach, partners reported the value of a diverse funding base. Engaging the philanthropic community provided additional legitimacy and helped secure private investment for both pilots. Both the financial commitment and the visibility of the philanthropic investors allayed some of the concerns of private investors about risks associated with the initiative. In addition, the philanthropic investors' willingness to demonstrate their confidence by, for example, reinvesting their returns or guaranteeing a portion of the private investment allowed for shared risk and greater support for the PFS approach.

Recognizing the need for rigorous evaluation was an important milestone that was eventually reached by both projects, but implementing these designs has been challenging. The implementation of a rigorous random assignment or quasi-experimental evaluation methodology was a required element of the DOL grant proposal. However, stakeholder understanding of the complex designs and methodologies was limited. Over time, however, partners reported that they came to value the rigorous evaluation approach because it helped to maintain investors' confidence. To strengthen the evaluations, both states provided resources to expand the scale of the pilots so that larger sample sizes could be achieved.

Determining how to measure the outcomes of the service interventions and the potential budgetary savings associated with them was a difficult task. Partners reported that determining future costs and budgetary savings required assumptions and estimations, not all of which could be accounted for, let alone accurately monetized. The pilots established similar measures to gauge the success of their service interventions based on the RCTs, but they will use different methodologies to determine the budgetary savings, in part reflecting that there is not an established way to do this. Partners reported that it was important to reach consensus regarding the type of outcomes they expected the interventions could achieve and then focus on how the outcomes would be measured.

Establishing payout thresholds and amounts for the private investment required significant time and negotiation. Determining investor payouts was a complex, technical, and time consuming part of the planning process, with each pilot taking similar, but distinct, approaches. For both pilots, the result is a set of detailed formulas that specify under what circumstances and when payouts will be made to investors. The technical assistance provided by the Harvard SIB Lab was particularly important for reaching consensus between the partners on this critical element of the PFS pilots.

Overall, both Massachusetts and New York were able to develop and launch their PFS pilots in the relatively short time frames specified by DOL. Thus far, both pilots have recruited investors, established detailed contracts to guide the initiative, implemented a management structure to oversee the effort, started enrollment into program services, and set up RCTs. This study will continue to document the services provided through the initiative and the progress of the pilots as they begin to serve higher volumes of participants and generate evidence from the RCTs. A future report will document continued implementation of the PFS model, including management actions and decisions, to fully illustrate what we have learned about using PFS as a new way of doing business (particularly for populations not currently being served by existing programs and for new, preventative programs that can reduce burden on existing programs), and whether the services provided by the pilots generate impacts for participants that allow for payment of the investments.

Appendix A: Organizations Included in PFS Site Visit Interviews

Interviewees for the Massachusetts PFS Pilot

- Lead state agency: Office of Administration and Finance
- State corrections agency: Probation and Department of Youth Services
- State workforce agency: Executive Office of Labor and Workforce Development
- Intermediary: Third Sector Capital Partners
- Independent validator: Public Consulting Group
- Service Provider: Roca
- Investors: Living Cities, New Profit Inc., and Goldman Sachs
- Evaluator: Sibalytics

Interviewees for the New York PFS Pilot

- Lead state agency: New York State Department of Labor’s Administrative Finance Bureau
- State corrections agency: Department of Corrections and Community Service (also the evaluator)
- State workforce agency: New York State Department of Labor’s Division of Employment and Workforce Solutions and Division of Research and Statistics
- Intermediary: Social Finance Inc.
- Independent validator: Chesapeake Research Associates
- Service provider: Center for Employment Opportunities
- Investors: Bank of America Merrill Lynch
- Governor’s Office: New York State Executive Chamber Pay for Success Director