

PAY-FOR-PERFORMANCE FINANCING TO EXPAND COST-EFFECTIVE SOCIAL SERVICES:

Lessons learned in Minnesota

December 2015

EXECUTIVE SUMMARY

In 2011, the Minnesota Pay for Performance law was signed into law, ushering in a new experiment in public, private and nonprofit partnerships. It was the first state in the union to pass legislation authorizing social impact financing through a state bond. However, as other pay-for-performance initiatives have moved forward, as of August 2015 the state has failed to close an agreement to issue the appropriations bonds authorized in the Minnesota Pay for Performance Act of 2011. What happened? Why, after 4 years, hasn't the state implemented the pilot program?

This report outlines the background and activities related to the adoption and planning for the pilot program in order to offer insights aimed at assisting other entities as they explore the possibility of using a pay-for-performance/social impact financing method. The report draws on documents and interviews with a dozen key informants in Minnesota and other states. To understand the scope of the social impact financing landscape, the report is also informed by the wealth of reports and journal articles that have been written on successfully-launched social impact financing projects in the last five years.

The report concludes with lessons learned from the four years of planning and attempts to launch the Minnesota Pay for Performance Pilot and a few general recommendations for what comes next. At the heart of both the lessons learned and the recommendations are some critical structural and model distinctions between the Minnesota Pay for Performance bond pilot and other versions of Social Impact Bond or Pay for Success transactions that have been implemented elsewhere.

LESSONS LEARNED:

1. Social impact financing initiatives require a strong public sector champion. A lack of a champion cannot be overcome.



2. Administrative costs associated with social impact financing are high.



3. Strict adherence to the appropriations bond model limits flexibility in the selection of particular services to fund.



4. The complexity of funding streams from multiple levels of government limits the ability to capture savings.



5. The assumption of risk and risk-aversion are important limiting factors.



6. Issues of cash flow need to be considered closely, especially from the service provider's perspective.



7. There are alternative ways of thinking about the government's role in promoting social impact financing.



This report was a collaborative project of Judy A. Temple and Maria Victoria Punay, a research team at the Humphrey School of Public Affairs, and Allison Wagstrom and Kate Barr, staff at Nonprofits Assistance Fund. Temple served on the Pay for Performance Oversight Committee. We thank all of the individuals who participated in interviews, answered questions and supplied information, or provided perspective and insights.

INTRODUCTION

Social impact financing could represent an innovation in the funding of social services.

This report describes social impact financing as an innovative contracting and financing mechanism for funding proven or promising social services and service providers. Rather than relying on higher taxes to expand these cost-effective services, social impact financing relies on capital from private investors.

Social impact financing is a new mechanism for financing social services that generate cost savings to state, local, or federal governments. In the current political environment where raising tax revenues are difficult, coalitions emerged to promote and facilitate the use of private funds to expand the provision of cost-effective services. The memberships of these coalitions are diverse: private sector investors, public leaders, nonprofit intermediaries, public finance analysts, and program evaluators. Proponents of social impact financing argue that current methods of funding social, health, or education services provide few opportunities or incentives for innovation, and that reliance on limited public funding prevents many promising interventions from being brought to scale. They say that social impact financing can help shift government spending priorities toward prevention and away from spending on programs intended to provide assistance after problems already have occurred. A glossary of terms commonly used in social impact financing is included in the Appendix A on page 18.

Many of the human, educational, or health services chosen for expansion by social impact financing in the seven main U.S. initiatives (*see Table A*) currently underway are evidence-based programs with demonstrated records of effectiveness. These services, most frequently provided by nonprofits, help participants earn higher incomes, experience improved health, reduce their reliance on government welfare services, and avoid criminal behavior. Traditionally, government agencies pay nonprofit service providers based on the number of participants served or the amount of services provided to each participant. Performance-based contracts place emphasis on outcomes that generate cost savings or higher tax revenues for governments. As an innovation in contracting, social impact financing improves accountability in government spending by ensuring that only cost-effective, evidenced-based programs are chosen for expansion. Moreover, the deliberation over which services to expand with social impact financing, as well as the resulting needs for data management systems and rigorous evaluation all create valuable information on the economic effectiveness of various programs that can inform policy decisions around the nation.

Social impact financing could represent an innovation in the funding of social services. In current pilots, governments have attracted private investments ranging from \$4 million to \$17 million to expand social services. State or local governments only pay the private investors if the service providers, often nonprofits, have met pre-determined success targets. These outcomes are determined, in advance, to generate sufficient cost savings to state or local governments. The government savings allow for payments to investors without the need to increase taxes. In virtually all of the social impact financing initiatives in progress the private investors bear the entire risk if the performance targets are not met.



SOCIAL IMPACT FINANCING HISTORY

The first social impact financing initiative was issued to expand services to soon-to-be-released male offenders in the Peterborough prison in the U.K. (Disley et al., 2011). Seventeen investors contributed to finance rehabilitative services for male offenders who had been in prison for less than a year. Historically, 60% of these newly-released ex-offenders were likely to return to prison in less than a year. To pay off the investors, success payments were to be made by the Ministry of Justice if the number of reconviction events within two years was 10 percentage points lower in the intervention group compared to a nationally-representative sample of ex-offenders released from other prisons.

Despite the tremendous enthusiasm for the Peterborough prison program, the evaluation report for the first cohort found that the reduction in reconvictions failed to reach the 10 percentage point threshold (Jolliffe and Hedderman, 2014) falling by only 8.4%. In spring 2014 the Ministry of Justice announced that the Peterborough pilot will be discontinued a year early (after serving only two cohorts) due to national changes in probation policies that were likely to affect the evaluation results.

SOCIAL IMPACT FINANCING INITIATIVES IN THE U.S.

Following the goals of the Peterborough prison pilot, the City of New York launched the first social impact financing initiative in the U.S. The pilot was to expand services to youthful male offenders at Riker's Island correctional facility. This project is described in detail by Olson and Phillips (2013) and by Rudd et al. (2013). Nonprofit service providers were contracted to deliver a social and emotional skills intervention. Once the evaluator (the Vera Institute of Justice) determined that the services had generated benefits in the form of government savings, then the City of New York was to pay the investor Goldman Sachs. Success of the program was based on an assessment of the program's effect on reducing the number of jail days experienced by program participants in the two years after being released from Riker's Island. These data were compared to the number of subsequent jail days for a similar comparison group released from the facility right before the intervention program was initiated. A portion of the success payments were based on the number of participants served. The first evaluation on the success measures, released in July 2015, reported that the services did not reduce recidivism and therefore did not meet the pre-defined threshold of success required to trigger a payment to the investor. The pilot was discontinued on August 31, 2015. The lessons learned and next steps for the program are important topics of discussion in the field.

While social impact financing was first used in the U.K. and in the U.S. to expand services to ex-offenders or currently-incarcerated individuals with a high risk of recidivism, in the last five years the range of services funded has expanded. Pilots now include programs focused on early childhood education, supportive housing, job training and housing for homeless families. Dozens of social impact financing initiatives are in the planning stages with a wide range of the targeted services being considered. These include prenatal and infant care, adult education for immigrants, and housing improvements to reduce health care costs due to asthma.



CURRENT STATE INITIATIVES

While all social impact financing initiatives are different, the seven projects listed in Table A have some aspects in common. All are funded by private funds raised by either an investment bank and/or private foundations. All were developed through committed, active participation of a public agency and a nonprofit service provider. All rely on an intermediary to obtain the private working capital, monitor the provision of services, and communicate with the external evaluator. Additional descriptive information is provided below about three of the seven pilots.

Utah High Quality Preschool Program: After Riker’s Island, Goldman Sachs and the Pritzker Foundation helped fund the Utah High Quality Preschool program starting in June of 2013. Almost \$5 million was raised to expand the number of preschool slots in the Salt Lake and Granite counties. Success payments are based solely on the avoidance of special education placement for children who entered preschool with especially low scores on a verbal and vocabulary test. Salt Lake County agreed to make the first year’s success payments and then legislation was enacted to allow the state to make the success payments based on special education avoidance in years two through five.

Chicago Early Childhood Program: Goldman Sachs continues to promote the use of private funds to expand early education services (Temple and Reynolds, 2015). In Chicago, Goldman Sachs, along with the Northern Trust and the Pritzker Foundation, invested almost \$17 million to expand the number of sites that offer an ongoing evidence-based early childhood program called the Chicago Child Parent Centers (CPC). Offered as part of the Chicago Public Schools, the Child Parent Centers offer a high-quality preschool through third grade education intervention offering small class sizes, well-trained teachers, and an emphasis on parent involvement and family engagement activities. Success payments will be made by the school district based on the district’s share of avoided special education costs as determined by a research design that compares the CPC children to other public school children not participating in preschool. The City of Chicago agreed to make success payments based on the number of children deemed as kindergarten ready, as well as the number of children who test as proficient in reading in third grade.

Cuyahoga County (OH) Homeless Families Initiative: In Ohio, Cuyahoga County has partnered with The Reinvestment Fund, The George Gund Foundation, the Cleveland Foundation, Sisters of Charity Foundation of Cleveland and Nonprofit Finance Fund to invest \$5 million to support a FrontLine, a nonprofit that provides services for homeless families to help find housing and improve daily living skills. Recognizing that children in homeless families have a high likelihood of ending up in foster care and children in homeless families cannot leave foster care unless their families obtain stable housing, the evaluator will determine if the number of days placed in foster care is lower for children in families served by the intervention versus children in homeless families who were not offered the chance to participate. The success payments made by the county to the investors will be \$75 for each day of foster care averted through participation in the program.

WHO GETS PAID WHEN THE TARGETS AREN'T REACHED

But who doesn't get paid but when targets are not met? In the Riker's Island project, Bloomberg Philanthropies provided a guarantee to back a substantial portion of the investors' capital, which reduced the loss that Goldman Sachs would have borne. In both of the early childhood social impact initiatives, the Pritzker Foundation has agreed to be the subordinate lender, meaning that the foundation agrees to be last in line for repayment. In the New York State project, the Rockefeller Foundation has agreed to guarantee up to 10% of the invested capital.

In the current U.S. projects, performance risk is accommodated through investments that contain a mixture of philanthropy and debt. The primary investors expect to be repaid principal plus interest. Foundations making program-related investments may provide the junior or subordinate debt. There are often philanthropic grants to serve as first-loss capital. In these projects, there are multiple instances of pro bono contributions of services and expertise that help lower the hurdle rate that outcomes must satisfy to be able to cover the costs of the intervention and associated administrative costs, thereby increasing the chance of success.



The Act directed that the Oversight Committee would include the Commissioners of the Departments of Human Services, Administration, and Employment and Economic Development, as well as representatives from the nonprofit community.

2011 MINNESOTA PAY FOR PERFORMANCE ACT

In the 2011 special session, the Minnesota state legislature approved funding for a Pay for Performance pilot project. The passing of the bill was tenuous. Two previous attempts had been made in the 2011-2012 regular session. HF 681/SF434 were tabled and not taken up again. On May 18, 2011, pay for performance language was added to the Omnibus State Government, Military Affairs and Veteran Affairs appropriation bill (SF 1047). The bill passed and was presented to Governor Mark Dayton on May 21, 2011. On May 24, 2011 the governor vetoed the bill. The fate of the Minnesota Pay for Performance Act was uncertain.

In the 2011 special session, the Pay for Performance Act was included in the Omnibus Government Innovation and Veterans bill, introduced on July 19, 2011 and moved quickly through the senate and the house. Governor Dayton signed the Omnibus Government Innovation and Veterans Bill into law on July 20, 2011. The Minnesota Pay for Performance Act was now law.

The bill approved issuing up to \$10 million in state appropriation bonds to fund success payments that would only be made if nonprofit service providers met pre-determined performance and outcome targets. The Minnesota model intended to be an innovation in funding social programs through the use of an actual fixed term, fixed interest rate issued bond dubbed a human capital performance bond (Rothschild, 2013; Becker, 2012; Perry, 2011). As a state bond, both interest costs and risks to investors are expected to be lower than the alternative “social impact bond” approach. The two critical distinguishing characteristics of human capital performance bonds involved (1) using an actual bond instrument rather than social impact loans to finance the expansion in social services, and (2) having service providers bear the performance risk rather than private investors.

THE OVERSIGHT COMMITTEE

Minnesota’s Pay for Performance Act of 2011 assigned responsibility for implementation to the Commissioner of Minnesota Management and Budget (MMB) and also specified the creation of a Pay for Performance Oversight Committee. The Act directed that the Oversight Committee would include the Commissioners of Department of Administration, Department of Human Services, and the Department of Employment and Education, as well as a representative from the nonprofit community with experience in performance contracting and other members selected by the Commissioner. The Oversight Committee roster included three state legislators and individuals working in government, banking, nonprofits, and universities.

The Oversight Committee met for the first time in February 2012. To aid the committee in identifying suitable programs for financing via the Pay for Performance bond, researchers and evaluators were invited to present to the committee evidence supporting the existence of likely sizeable saving to the government relevant to the costs of interventions. Objectives included identifying key program areas and particular social services that would generate sufficient cost savings within the bond period. The Commissioner and staff members from MMB and other state agencies participated by addressing issues relevant for a state bonding effort. The agencies provided calculations forecasting estimates of the cost savings from social programs under various assumptions might enable the state to repay the bondholders with interest, as well as recoup administrative and evaluation costs.

The Oversight Committee proved to be a valuable forum to present and explore ideas for interventions for which the costs, savings, and data would cross state agencies.

In June 2011, requests for information were released intended to solicit questions and collect ideas from interested service providers. Progress on the bond project was stalled during part of 2012 until the Minnesota Supreme Court ruled on the constitutionality of a different appropriations bond. The committee chose two service areas as the focus of the Pay for Performance pilot. These projects were (1) workforce training programs and (2) supportive housing.

While the Pay for Performance Act of 2011 specifically required the creation of an oversight committee, the act did not make reference to an intermediary organization. During the pilot development, the Minnesota Management and Budget Office recommended the use of an intermediary organization. In the ongoing social impact financing initiatives around the U.S., intermediaries serve a number of roles including confirming the economic assumptions, attracting capital from investors, selecting and monitoring service providers, communicating with evaluators and government agencies, and distributing success payments.

Applications for intermediaries for pilot projects for workforce and supportive housing were requested in December 2012. The prospective intermediaries that emerged from the process were the Greater Twin Cities United Way (workforce) and the Corporation for Supportive Housing (housing.)

The oversight committee met ten times between February 2012 and August 2014, with several long stretches between meetings. During those periods, working teams from the prospective intermediaries and representatives from state agencies including the Departments of Employment and Economic Development, Corrections, Human Services, and Minnesota Housing worked together to discuss potential programs; identify data sources areas; forecast savings and costs; and develop proposals for the Oversight Committee's consideration. The Oversight Committee proved to be a valuable forum to present and explore ideas for interventions for which the costs, savings, and data would cross state agencies. Having commissioners at the table helped to engage staff and various agencies and identify potential high level champions. Among the relevant workforce programs, the EMPLOY program (Duwe, 2011), which worked with soon-to-be- released prisoners in a controlled environment, had the greatest potential returns and was chosen as the most suitable prospect for the pilot. In the case of the supportive housing pilot, Minnesota Housing contributed detailed calculations supporting the existence of significant likely cost savings to the state. However, for the housing project it was determined that there was a need for new legislation ensuring that program participants would not lose eligibility for public services if they were moved from costly state programs to less expensive community-based housing. The relevant legislative committee was not receptive to the request. The plans for the supportive housing project were set aside.

Neither pilot has been able to reach the next stage of development. The oversight committee has not met since March 2014 and there are no plans on the horizon to issue the authorized appropriations bonds.

Unlike the other state, county or local social impact financing projects enacted in the U.S. since 2011, the Minnesota pilot lacked a strong public champion. Administrative costs seemed to be higher than originally projected in Rothschild's original case (2011). This was coupled with a desire to adhere strictly to the bond model. In the bond model the return on investment to the state must be sufficient to pay back the investors plus interest and cover the costs of the intermediary, the evaluator, and the state's bonding costs.



LESSONS LEARNED FROM MINNESOTA AND OTHER STATES

1. Social impact financing initiatives require a strong public sector champion. A lack of a champion cannot be overcome.



Observers and participants in ongoing projects note the need of a strong public champion. Without the strong public support of a mayor, governor, or county executive, their social impact financing initiatives would not have gotten off the ground. In the Riker's Island, Utah, and Chicago projects, strong mayors led the push toward using social impact financing. The projects in Massachusetts are supported by a highly enthusiastic governor, and the county-level project in Ohio was championed by a keenly-interested county executive. While in Minnesota the governor expressed support in his recent budget proposal for legislative changes facilitating a social impact financing project for supportive housing, he has not been a visible advocate for that or for the 2011 initiative. While the Minnesota Pay for Performance Act received initial bipartisan support, the elected officials who championed the bill are no longer in the legislature or have moved onto new priorities. While Management and Budget Commissioner James Schowalter was assigned the responsibility for implementing the Act, he had, ironically, appeared previously before a conference committee to testify against the use of a state bond.

As Liebman and Sellman (2013, p. 17) state, "it is unlikely that an initiative will succeed unless it is directly aligned with one of the governor's, mayor's or chief executive's top priorities." And while there is general recognition that incarceration costs are a significant social and fiscal concern, the project selected was not to be well-aligned with any public leader's top priorities. The project did not receive high priority from within the Department of Corrections either. A couple of observers remarked that the Minnesota-proposed bond mechanism appeared to be solution in search of a problem. There were other attempts, they said, that could have been made to engage relevant state department heads (especially in Corrections and Human Services) earlier on in the process.

2. Administrative costs associated with social impact financing are high.

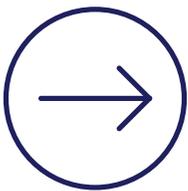


Social impact financing projects are complex. The estimated cost savings and higher tax revenues must cover the original investment, the interest paid to bondholders and the administrative costs to the state of issuing the bonds. It must also cover the administrative costs incurred by the intermediary conducting its multiple tasks. The costs to develop and execute the initial transaction for a pilot will be disproportionately high because of the research and development for the model. As suggested by Azemati et al. (2013), the current social impact financing initiatives are not likely to result in supernormal rates of return. In discussions of the Minnesota bond model, the interest rate to be paid to the bondholders was projected to be 4%, but the total return to the state would also have to cover the costs of evaluation and administering the pilot. The costs to intermediaries are likely to be significant. They must attract working capital to address cash flow issues. They must contract with and monitor the service providers, work with relevant agencies to create a project-specific data system, and pay the evaluator. Some of the impact investor projects in other states need to oversee between 17 and 40 separate funders who expect regular communications.

A number of projects in other states were aided by an award of a full-time Government Innovation Fellow from the Harvard Social Impact Bond Technical Assistance lab. These fellows move to the state in which they are assigned and offer valuable technical assistance in helping to identify service areas, measure potential cost savings, and help set up the relevant cash flow models. Unfortunately, while Minnesota Management and Budget did apply for Government Innovation Fellow, their application was not successful.

Other projects have lowered administrative costs by relying on philanthropic contributions of expertise and funding for capital, and this was possible in Minnesota as well. In Chicago, the Finnegan Family Foundation helps finance the external evaluation. The Minnesota Pay for Performance Act of 2011 authorized the state to issue \$10 million in appropriations bonds and the general plan was to split this financing authority fairly equally across the EMPLOY recidivism and workforce pilot and the supportive housing pilot allowing them \$5 million each. Recently, however, Jeffrey Liebman and his associates at the Harvard Social Impact Bond Technical Assistance Lab have recommended that due to significant fixed costs, future social impact financing projects should be a minimum of \$20 million.

3. Strict adherence to the appropriations bond model limits flexibility in the selection of particular services to fund.



While social impact financing advocates emphasize its potential for innovation and ability to scale promising programs, the reality does not meet this expectation. The needed cost savings to repay investors and cover administrative costs may bias the selection to only proven, relatively small-scale projects with demonstrated results. The variety of ongoing and proposed social impact financing projects around the U.S. suggests that the state might have multiple attractive preventative social services projects to consider. However, in Minnesota it was difficult to find projects that would meet the Oversight Committee's established criteria for project selection, including the requirement to capture savings from state agency budgets. This, coupled with the need for detailed calculations on their likely cost savings, resulted in only one viable project being identified and the potential for large scale expansion was unclear.

Given the newness of social impact financing and the desire to design programs that have a high likelihood of success, it is not surprising that concern about performance risk and administrative costs might narrow the range of possible projects for the pilot program. However, Azemati et al. (2013) observe that contrary to the predictions of those at the Harvard Social Impact Lab, the interventions chosen for expansion in the ongoing impact investor funded projects in other states seem riskier and more innovative than expected.

4. The complexity of funding streams from multiple levels of government limits the ability to capture savings.



The economics underlying every pay for success initiative requires analysis of both the public costs of the chosen social problem, such as incarceration, and the projected savings to the public entity if those costs can be avoided. When viewed at the full system level, including federal, state, and local budgets, the calculation may yield significant savings and "return on investment" to the public. In order to create a financial transaction, though, the specific source of the funding must be identified and then captured in a way that can be used to pay the investor when the outcomes have been documented. In many cases, the government agency paying for the intervention is not the same one that might benefit from the savings. One example that came up several times for the Minnesota pilot were interventions to be paid by a State agency that would result in some direct savings for the state, but much more substantial savings to the Federal Medicaid program. Because of government budget structures and regulations, those savings could not be diverted for a different use (even though the savings could be demonstrated.) The problem exists even within the state budget, since many state agencies have sources of revenue that are dedicated or restricted in various ways. Savings that accrue to one state agency cannot necessarily be easily redirected

for a different agency to pay a provider who has demonstrated outcomes. Sometimes called the “wrong pockets problem,” this is particularly important for the Minnesota pilot because the legislation specified that the calculations be based on the return on investment to the state. The complexity of funding streams limits the choices for interventions that will produce sufficient savings for a return on investment within a single level of government. In several of the social impact financing initiatives elsewhere in the U.S., public officials and investors have been willing to include saving from multiple levels of government when calculating returns, even if they would not be able to capture those saving for the transaction.

5. The assumption of risk and risk-aversion are important limiting factors.



There is risk aversion on the part of the state, the investors, and the nonprofits in testing out a new model of financing. In the successfully-launched social impact financing in the UK and U.S., the risk is borne almost entirely by the investor. The performance bond approach shifts the risk away from the investor/ bond purchaser towards the service provider or the intermediary. Conceptually, though, risk could be shared in various ways among the investors, intermediaries, service providers and the government. A financing plan in which the service providers have the most to lose presents ethical concerns. In her critique of the pay-for-performance aspect of social impact bonds, Warner (2013) expresses concern that risk would be borne by those who are trying to help the most vulnerable in society such as disadvantaged children and prisoners.

More discussion of risk sharing is important, and more service providers need to be invited to weigh in on these issues. Moreover, in the future more efforts could be made to determine how governments could help share the performance risk, especially through accelerating the timing of success payments based on early indicators and creating hybrid pay-for-performance payment systems where some of the payments are made for services delivered rather than basing payments entirely on outcomes. Liebman and Sellman (2013) explain that pure pay-for-performance contracts are rarely optimal in economic theory due to the fact that outcomes are not entirely under the service providers' control.

6. Issues of cash flow need to be considered closely, especially from the service provider's perspective.

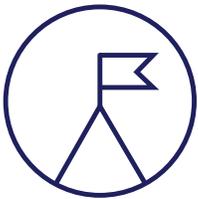


In U.S. social impact financing projects, investors have provided \$4 to \$18 million to finance the expansion of the selected social or educational interventions. The intermediary raises these funds and pays the service providers. The investors get paid back after several years when pre-determined outcome targets have been reached. In the first social impact financing project launched in the U.K. in 2010, the first success payments would have been paid out in 2014. As described in Jolliffe and Hedderman (2014), the first evaluation for the first social impact financing initiative in the U.K. took 11 months to complete. Cash flow under the bond model is different. While the appropriations bonds likely would be issued at the time that the social service interventions were being launched, the bond proceeds would not be released by the state until after the evaluator had determined that the measured cost savings and higher tax revenues were sufficiently high to trigger the success payments.

Who would pay for the upfront provision of services in the bond model? In the Minnesota case, the initial expectation was for nonprofit service providers to secure funding from foundations, use their own reserves, or for the intermediary to provide working capital. As the pilot developed it became clear that these were unrealistic demands on providers. Nonprofits Assistance Fund sought to create a pool of

loan funds to support the pilot, though some nonprofit service providers expressed reluctance to take on loan obligations if there was uncertainty about the amount or timing of success payments.

7. There are alternative ways of thinking about the government's role in promoting social impact financing.



Recognizing that the role of the intermediary would add another layer of cost to the model, a few observers commented that the state could take over this role. We argue that the intermediary provides value and that locating these service activities within the government would not necessarily lower these costs. The pay-for-performance mechanism itself can enhance the efficiency of the intermediary, although in the pilots the intermediaries were likely chosen on the basis of their reputations for good work.

An independent intermediary has advantages. The objective of the intermediary is to bring expertise and management structure to increase the likelihood of success. The government may also have objectives in addition to the financial success of the pilot. In the Minnesota case, several participants pointed out that MMB identified additional policy and economic goals, including expanding the EMPLOY intervention to a wide geographic distribution around the state in order to create a larger participant pool. The intermediary, Greater Twin Cities United Way, operated in the seven-county metro area. Ideally, an independent intermediary would be free to make decisions that would help make the project successful without having to trade off success for concerns about geographic equity that did not need to be satisfied by the pilot. Having the government assume the role of the intermediary would make the problem of other non-essential interests intervening in the operation of the pilot worse.

Should the government issue bonds or rely upon impact investors for these types of projects? None of the successfully-launched initiatives used a government issued bond for funding; rather they are a mix of public, private and foundation dollars. For pilot projects of less than 20 million dollars, the role of government could include appropriations fund in which monies for potential success payments will be set aside, and in some cases passing legislation that removes barriers to cooperation across agencies or levels of government.



The state should follow the lead of the other pilots that have successfully enlisted impact investors to contribute private funds.

RECOMMENDATIONS

As a new and innovative way to expand cost-effective preventive services without incorporating it into state budgets, social impact financing has caught the attention of policymakers, nonprofit organizations, foundations, and investors across the nation. There are two basic directions in which to head if Minnesota wants to become involved in this process.

1. Design a pilot that does not include a state bond.

The state should follow the lead of the other pilots that have successfully enlisted impact investors to contribute private funds. This could take place at the city, county, or state level. Investors make early contacts with relevant state or local departments (such as corrections, human services, housing finance, or education) to get input about pressing fiscal concerns caused by preventable and rising government costs. Relevant proven or promising social interventions are identified. A public leader emerges or is recruited. Statutory changes might be needed for government involvement in pay-for-performance contracting or to remove barriers preventing collaboration across agencies or across levels of government. In other states, legislation has been needed to create an appropriations fund that holds the money needed to distribute success payments when needed. Importantly, new bonding authority is not required. Impact investors, philanthropic or otherwise, could be encouraged to help reduce performance risk by making a program-related impact investment. This would help cover the primary investors' or service provider's losses or to lower the threshold needed for making success payments by making pro bono contributions to provide or pay for professional legal or evaluation assistance. A schedule of graduated success payments could be specified (including some lesser payments if service providers "almost" make the performance targets) to reduce performance risk and lessen concern about the small degree of uncertainty associated with the evaluation process.

Minnesota Housing, DHS, and MMB are on this first path. There are efforts underway, in collaboration with the Corporation for Supportive Housing, to engage private investors to expand evidence-based programming that would help supportive housing residents currently served by costly state programs to be served in less costly local settings. Evidence suggests that the resulting significant Medicaid savings would allow for success payments to be made and efforts to move individuals with disabilities out of state institutional care into less-restrictive local settings is consistent with the dictates of the 1999 U.S Supreme Court Olmstead decision. In 2015, the Governor's budget included requests for the statutory changes needed for this pay-for-performance pilot but the recommendations were not adopted.

2. Revisit the process for issuing pay-for-performance appropriations bonds.

What could be done differently next time? Efforts should focus on: (1) identifying a public champion, (2) making efforts from the beginning to bring impact investors in to help ensure the success of the bond pilot, and (3) reconsidering the assignment of performance risk. As the first suggestion has been discussed already, we elaborate on the second and third suggestions.

In the Minnesota case, strict adherence to the bond model led to very few feasible social service programs being identified for expansion due to the compelling need to find a program that had a very high likelihood of sizeable cost savings to the state. A key benefit of the bond form

Another change to explore would reevaluate the relative assignment of risk between parties to the contract.

is that they can be sold to ordinary investors using the existing bonding apparatus of the state government. However, selling to impact investors who are willing to accept a lower rate of return will help lower the hurdle rate for cost savings that social interventions need to satisfy. Seeking philanthropic support for the initial proof-of-concept of the pay-for-performance bond model also can help lower the administrative costs in various ways through contributions to fund legal, contracting, or evaluation expertise. As a result, a wider variety of social programs could be considered for funding. A project could be selected that would be aligned with the priorities of a strong public leader.

Another change to explore would reevaluate the relative assignment of risk between parties to the contract. While keeping interest rates low to manage overall costs prevents assigning performance risk to the bond holders, is it possible to issue bonds without expecting service providers or the intermediary to bear so much of the performance risk? Government can lower the risk for service providers and investors by accelerating the timing of the success payments by basing them on early indicators of success (such as early employment rates or kindergarten readiness scores) rather than requiring exclusively longer-term information on earnings trajectories or graduation rates. In the contracting deliberations with the Twin Cities United Way as the intermediary, the general plan was for the intermediary to bear the performance risk in the EMPLOY scale up. Some of the discussions centered on the United Way's preferences for the state to share some of the intermediary's risk by being willing to make early success payments based on early indicators of program success.

Relevant for both the bond and non-bond version of social impact financing, the willingness for various parties to bear risk can be altered by creating graduated scales for making success payments where different payment amounts can be made for different levels of performance. Importantly, in these graduated schedules there should be an avoidance of great discontinuities in payments. In the Riker's Island case, Rudd et al. (2013) describe the rates of payment to investors based on reductions in recidivism at different levels, from a 100% payment trigger down to only 50%. No payment for this outcome was to be made if the reduction in recidivism was only 8.4%, which was the actual result. Avoidance of steep discontinuities in performance schedules helps to address the uncertainty inherent in any evaluation and may lessen adverse incentives that may exist for service providers in pay-for-performance contracts for misrepresentation of results or for not being willing to serve certain eligible candidates in the applicant pool.

In addition, performance risk can be reduced by making some of the success payments based on traditional output measurements of the number of clients served or the number of hours each client spends in training sessions. As explained by Liebman and Sellman (2013), economic theory does not suggest that 100% performance-based payments are optimal when some of the service providers' outcomes are not under the provider's control. Reconsidering risk assignment, the use of graduated performance payment schedules including partial payments for partial success, and creating hybrid payment systems that are only partially pay-for-success based is especially important if service providers are to be assigned any portion of the performance risk.

CONCLUSION

Proponents of social impact financing highlight a number of advantages of bringing in private investors to expand promising preventive services without the need to raise taxes. By accessing private sources of funding, social impact financing increases the pool of capital available to fund promising social programs. Even though cost-benefit analysts have identified a sizeable number of social services that generate benefits well in excess of costs, policymakers often lack funding to expand these effective programs. Second, because only services that promise to generate savings for federal, state, or local governments are considered for this funding, the social impact financing model is a contracting innovation that increases accountability and efficient public decision-making by only allocating funding to effective programs.

Because none of the successfully-launched social impact financing projects in operation around the U.S. involve the use of pay-for-performance appropriations bonds, it is easy to conclude that Minnesota's stalled pilot failed because of the bond mechanism. Some complexities in the pilot do seem to be greater in the bond form of social impact financing. In the near future, it's likely that social impact financing proposals will emerge in Minnesota that rely on social impact investors rather than bond holders.

Recognizing that the bond form of social impact investing may re-appear and be reconsidered in Minnesota and elsewhere in the future, this report identifies some obstacles that limited the feasibility of creating a state-issued social impact bond. These obstacles affected the attractiveness of the bond pilot. One of the arguments for the bond model was the promise of a potentially large pool of capital from the bond market that could scale preventative social services substantially. If this is the case, then these obstacles will need to be addressed from several angles. Relying on state bond markets rather than a more limited pool of impact investors may provide a critical advantage in the future if policy advocates want to develop capacity in a state to support \$200 million in preventative social services rather than funding \$20 million projects. A key appeal of social impact financing is its ability to facilitate a shift in government spending priorities from costly remediation of problems after they have occurred to preventive interventions. Actual social impact bonds may play a part in the future in the scale up of this shift.

TABLE A: RECENT SOCIAL IMPACT FINANCING INITIATIVES IN THE U.S.

Initiatives and policy area	Private investment	Outcomes triggering success payments
1. New York City ABLE Project for Incarcerated Youth (Riker's Island) August 2012 <i>Policy area: recidivism</i>	\$9.6 million	<ul style="list-style-type: none"> • Number of jail days avoided
2. Utah High Quality Preschool Program June 2013 <i>Policy area: early childhood education</i>	\$4.6 million	<ul style="list-style-type: none"> • Reductions in rates of placement in special education
3. New York State Increasing Employment and Improving Public Safety June 2013 <i>Policy areas: recidivism and job training</i>	\$13.5 million	<ul style="list-style-type: none"> • Increase in employment rates • Number of jail days avoided • Increase in placement rates in transition jobs
4. Massachusetts Juvenile Pay for Success Initiative January 2014 <i>Policy areas: Recidivism and employment</i>	\$18 million	<ul style="list-style-type: none"> • Number of jail days avoided • Increase in job readiness • Increases in employment rates
5. Chicago Child-Parent Centers December 2014 <i>Policy area: early childhood education</i>	\$16.9 million	<ul style="list-style-type: none"> • Reduction in special education placement • Increase in kindergarten readiness • Increase in third grade test scores
6. Massachusetts Chronic Homelessness Pay for Success Initiative December 2014 <i>Policy areas: homelessness</i>	\$3.5 million	<ul style="list-style-type: none"> • Achievement of stable housing for one year
7. Cuyahoga Partnership for Family Success Program December 2014 <i>Policy areas: homeless and child welfare</i>	\$ 4 million	<ul style="list-style-type: none"> • Reductions in days spent in foster care

Based on information from payforsuccess.org.

APPENDIX A: KEY DEFINITIONS

A brief description of terms that describe the motivations and mechanisms for funding social services. Some of these terms can be read about in more detail in Liebman (2011), Cox (2011-2012) and Liebman and Sellman (2013).

Impact investing or **social impact investing** describes the motivation of investors who are willing to financially support the promotion of socially-beneficial outcomes while being willing to accept a lower rate of return. Impact investments support specific programs that serve unmet needs or help fund goods or activities that generate positive externalities to others in society. Impact investors help finance organizations or support socially-responsible investment funds that promote social and environmental programs in a wide range of programmatic and geographic areas.

Pay-for-performance contracts specify a detailed plan for the quantity and timing of government payments to service providers or investors in which payments are linked closely to measurable and sometimes monetize program outcomes observed at pre-determined dates. In other contracts, service providers are paid for services rendered in terms of staff time or are paid based on various program outputs such as the number of participants enrolled. Pay-for-performance contracts may link a portion or all of the service providers' payments to the satisfaction of certain pre-determined outcomes; specifically outcomes that are directly related to government cost savings or higher tax revenues. Failing to meet the pre-determined targets or exceeding these targets may result in lower or higher government payments. The terms of some contracts may specify that the government makes no payment if targets are not met.

Social impact bond or **social impact financing** in practice refers to impact investments accompanied by a pay-for-performance contract specifying when and how investors will be repaid. Private investors provide funding to allow nonprofit service providers to expand cost-effective human, educational, or health services. Repayment is made when the investments have been determined to generate cost savings or higher tax revenues for governments. While the term "social impact bond" is commonly used, in most instances these financing initiatives do not involve the issuance of a bond and investors do not become creditors until after the success of the program has been determined by the evaluator. Government cost savings motivate the use of social impact financing. Private investors agree to finance the expansion of certain preventative social services with the expectation that the provision of these services actually may save the government money in terms of reduced criminal justice costs, reduced health care costs or reductions in welfare expenditures. The resulting future reduction in needed public expenditures then frees up money in the government budget that could be used to make success payments to the investors. Along with higher tax revenues, the magnitude and timing of government cost savings determines the feasibility of social impact financing.

Intermediary is a private or nonprofit organization that contracts with the government to select and monitor service providers, raises working capital, is involved with the selection and communication with the outside evaluator, and makes sure that success payments are made. The intermediary sometimes is called the lead contractor. While a social impact financing initiative could be implemented without an intermediary, all of the current social impact bond programs involve an intermediary organization such as United Way, Social Finance, or other organizations.

Evaluator is the individual or organization that is hired to provide the impartial determination of whether service providers have met their pre-determined objectives. The evaluator obtains the necessary data and conducts research following an evaluation plan that is specified in significant detail as part of the original social impact bond contract. The evaluator provides the official determination of whether success payments should be paid. In some social impact financing projects, a validator is engaged to oversee the work of the evaluator.

Appropriations bond is a state or local government-issued bond that is backed by the legislature's agreement to appropriate funds for debt service in each fiscal year. This debt instrument differs from state and local general obligation bonds or revenue bonds. General obligation bonds frequently are issued to pay for long-lived capital projects or purchases or improvements to land. Those bonds are backed by the full faith, credit, and taxing power of the issuing government and hence debt service is funded by general government revenues. Revenue bonds are issued to finance projects that generate project-specific revenue that can be used as the source of debt service. For example, hospitals and college dormitories produce revenues that can be used to repay the bonds issued to finance their construction. Appropriations bonds represent a third type of state or local debt.

Success payments are financial payments made by the government to private investors in the typical social impact financing initiative or to service providers in the human capital performance bond model. These payments correspond to the realized cost savings and higher tax revenues resulting from the expansion of social services funded by the social impact bond. Success payments may be graduated in size based on how closely the service providers are able to meet their performance targets. Investors or service providers may receive a bonus when the providers exceed their targets. In the various ongoing initiatives, once success payments have paid off the investors the excess amount is to be distributed in pre-determined amounts to the investor, the intermediary, or the service providers. In most of the current initiatives, the success payments are zero if performance targets are not met. Notably, in the first U.S. social impact financing project funding an expansion of services to offenders in Riker's Island, part of the success payment is determined by program outputs while the majority is based on program outcomes.

APPENDIX B: LIST OF INTERVIEWEES

Ryan Baumtrog
Janis Dubno
Grant Duwe
Frank Forsberg
Bill Gabler
Jeremy Keele
Brian Paulson
Britta Reitan
Raymond Robertson
Steve Rothschild
Timothy Rudd
James Schowalter
Susan Strandberg

APPENDIX C: MINNESOTA PAY FOR PERFORMANCE ACT OF 2011.

Sec. 27. [16A.94] PAY-FOR-PERFORMANCE PROGRAM.

Subdivision 1. Pilot program established. The commissioner shall implement a pilot program to demonstrate the feasibility and desirability of using state appropriation bonds to pay for certain services based on performance and outcomes for the people served.

Subd. 2. Oversight committee. (a) The commissioner shall appoint an oversight committee to: (1) identify criteria to select one or more services to be included in the pilot program; (2) identify the conditions of performance and desired outcomes for the people served by each service selected; (3) identify criteria to evaluate whether a service has met the performance conditions; and (4) provide any other advice or assistance requested by the commissioner. (b) The oversight committee must include the commissioners of the Departments of Human Services, Employment and Economic Development, and Administration, or their designees; a representative of a nonprofit organization with experience in performance contracting; and any other person or organization that the commissioner determines would be of assistance in developing and implementing the pilot program.

Subd. 3. Contracts. The commissioner and the commissioner of the agency with a service to be provided through the pilot program may enter into a pay-for-performance contract with a provider that meets the criteria identified by the oversight committee.

The contract must specify the service to be provided, the time frame in which it is to be provided, the outcome required for payment, and any other terms deemed necessary or convenient for implementation of the pilot program. The commissioner shall pay a provider that has met the terms and conditions of a contract with money appropriated to the commissioner from the special appropriation bond proceeds account established in section 16A.96. At a minimum, before the commissioner pays a provider, the commissioner must determine that the provider has met the return on investment criteria in subdivision 4.

Subd. 4. Return on investment calculation. The commissioner, in consultation with the oversight committee, must establish the method and data required for calculating the state's return on investment. The data at a minimum must include:

(1) state income taxes and any other revenues collected in the year after the service was provided that would not have been collected without the service; and (2) costs avoided by the state by providing the service. Prior to entering into a contract under subdivision 3, the commissioner in consultation with the oversight committee must determine that the services provided under the contract will yield a positive return on investment for the state that will cover the estimated state costs in financing and administering the pilot program through documented increased state tax revenue or cost avoidance.

Subd. 5. Report to governor and legislature. The commissioner must report to the governor and legislative committees with jurisdiction over capital investment, finance, and ways and means, and the services included in the pilot program, by January 15 of each year following a year in which the pilot program is operating. The report must describe and discuss the

criteria for selection and evaluation of services to be provided through the program, the net benefits to the state of the program, the state's return on investment, the cost of the services provided by other means in the most recent past, the time frame for payment for the services, and the timing and costs for sale and issuance of the bonds authorized in section 16A.96.

EFFECTIVE DATE. This section is effective the day following final enactment. Sec. 28. [16A.96]

MINNESOTA PAY-FOR-PERFORMANCE PROGRAM; APPROPRIATION BONDS.

Subdivision 1. Definitions. (a) The definitions in this subdivision apply to this section.

(b) "Appropriation bond" means a bond, note, or other similar instrument of the state payable during a biennium from one or more of the following sources:

(1) money appropriated by law in any biennium for debt service due with respect to obligations described in subdivision 2, paragraph (b);

(2) proceeds of the sale of obligations described in subdivision 2, paragraph (b);

(3) payments received for that purpose under agreements and ancillary arrangements described in subdivision 2, paragraph (d); and

(4) investment earnings on amounts in clauses (1) to (3).

(c) "Debt service" means the amount payable in any biennium of principal, premium, if any, and interest on appropriation bonds.

Subd. 2. Authority. (a) Subject to the limitations of this subdivision, the commissioner of management and budget may sell and issue appropriation bonds of the state under this section for the purposes of the Minnesota pay-for-performance program established in sections 16A.93 to 16A.96. Proceeds of the bonds must be credited to a special appropriation bond proceeds account in the state treasury. Net income from investment of the proceeds, as estimated by the commissioner, must be credited to the special appropriation bond proceeds account.

(b) Appropriation bonds may be sold and issued in amounts that, in the opinion of the commissioner, are necessary to provide sufficient funds for achieving the purposes authorized as provided under paragraph (a), and pay debt service, pay costs of issuance, make deposits to reserve funds, pay the costs of credit enhancement, or make payments under other agreements entered into under paragraph (d); provided, however, that bonds issued and unpaid shall not exceed \$10,000,000 in principal amount, excluding refunding bonds sold and issued under subdivision 4. During the biennium ending June 30, 2013, the commissioner may sell and issue bonds only in an amount that the commissioner determines will result in principal and interest payments less than the amount of savings to be generated through pay-for-performance contracts under section 16A.94. For programs achieving savings under a pay-for-performance contract, the commissioner must reduce general fund appropriations by at least the amount of principal and interest payments on bonds issued under this section.

(c) Appropriation bonds may be issued in one or more series on the terms and conditions the commissioner determines to be in the best interests of the state, but the term on any series of bonds may not exceed 20 years.

(d) At the time of, or in anticipation of, issuing the appropriation bonds, and at any

time thereafter, so long as the appropriation bonds are outstanding, the commissioner may enter into agreements and ancillary arrangements relating to the appropriation bonds, including but not limited to trust indentures, liquidity facilities, remarketing or dealer agreements, letter of credit agreements, insurance policies, guaranty agreements, reimbursement agreements, indexing agreements, or interest exchange agreements. Any payments made or received according to the agreement or ancillary arrangement shall be made from or deposited as provided in the agreement or ancillary arrangement. The determination of the commissioner included in an interest exchange agreement that the agreement relates to an appropriation bond shall be conclusive.

Subd. 3. Form; procedure. (a) Appropriation bonds may be issued in the form of bonds, notes, or other similar instruments, and in the manner provided in section 16A.672. In the event that any provision of section 16A.672 conflicts with this section, this section shall control.

(b) Every appropriation bond shall include a conspicuous statement of the limitation established in subdivision 6.

(c) Appropriation bonds may be sold at either public or private sale upon such terms as the commissioner shall determine are not inconsistent with this section and may be sold at any price or percentage of par value. Any bid received may be rejected.

(d) Appropriation bonds may bear interest at a fixed or variable rate.

Subd. 4. Refunding bonds. The commissioner from time to time may issue appropriation bonds for the purpose of refunding any appropriation bonds then outstanding, including the payment of any redemption premiums on the bonds, any interest accrued or to accrue to the redemption date, and costs related to the issuance and sale of the refunding bonds. The proceeds of any refunding bonds may, in the discretion of the commissioner, be applied to the purchase or payment at maturity of the appropriation bonds to be refunded, to the redemption of the outstanding bonds on any redemption date, or to pay interest on the refunding bonds and may, pending application, be placed in escrow to be applied to the purchase, payment, retirement, or redemption. Any escrowed proceeds, pending such use, may be invested and reinvested in obligations that are authorized investments under section 11A.24. The income earned or realized on the investment may also be applied to the payment of the bonds to be refunded or interest or premiums on the refunded bonds, or to pay interest on the refunding bonds. After the terms of the escrow have been fully satisfied, any balance of the proceeds and any investment income may be returned to the general fund or, if applicable, the appropriation bond proceeds account for use in any lawful manner. All refunding bonds issued under this subdivision must be prepared, executed, delivered, and secured by appropriations in the same manner as the bonds to be refunded.

Subd. 5. Appropriation bonds as legal investments. Any of the following entities may legally invest any sinking funds, money, or other funds belonging to them or under their control in any appropriation bonds issued under this section:

(1) the state, the investment board, public officers, municipal corporations, political subdivisions, and

public bodies;

(2) banks and bankers, savings and loan associations, credit unions, trust companies, savings banks and institutions, investment companies, insurance companies, insurance associations, and other persons carrying on a banking or insurance business; and

(3) personal representatives, guardians, trustees, and other fiduciaries.

Subd. 6. No full faith and credit; state not required to make appropriations.

The appropriation bonds are not public debt of the state, and the full faith, credit, and taxing powers of the state are not pledged to the payment of the appropriation bonds or to any payment that the state agrees to make under this section. Appropriation bonds shall not be obligations paid directly, in whole or in part, from a tax of statewide application on any class of property, income, transaction, or privilege. Appropriation bonds shall be payable in each fiscal year only from amounts that the legislature may appropriate for debt service for any fiscal year, provided that nothing in this section shall be construed to require the state to appropriate funds sufficient to make debt service payments with respect to the bonds in any fiscal year.

Subd. 7. Appropriation of proceeds. The proceeds of appropriation bonds and interest credited to the special appropriation bond proceeds account are appropriated to the commissioner for payment of contract obligations under the pay-for-performance program, as permitted by state and federal law, reasonable administrative costs of the program that are directly attributable to the program, issuance costs, and nonsalary expenses incurred in conjunction with the sale of the appropriation bonds.

Subd. 8. Appropriation for debt service. The amount needed to pay principal and interest on appropriation bonds issued under this section is appropriated each year to the commissioner from the general fund subject to the repeal, unallotment under section 16A.152, or cancellation otherwise pursuant to subdivision 6.

Subd. 9. Administrative costs. The commissioner may accept donations from private sources to defray administrative costs under this section. Amounts received are appropriated to the commissioner.

EFFECTIVE DATE. This section is effective the day following final enactment.

ADDITIONAL SOURCES FOR LESSONS LEARNED

Other discussions of “lessons learned” from social impact financing pilots are emerging. Jeffrey Liebman and his colleagues at the Harvard Social Impact Bond Lab discuss lessons from the U.S. experience in general (Azemati et al., 2013) while Rudd et al. (2013) and Disley et al. (2011) focus on the Riker’s Island and Peterborough prison projects specifically. Hughes and Scherer (2014) focus more narrowly on what foundations have learned about their potential role in social impact financing.

REFERENCES

- Azemati, Hannah, Michael Belinsky, Ryan Gillette, Jeffrey Liebman, Alina Sellman, and Angela Wyse (2013) Social impact bonds: lessons learned so far. Community Development Investment Review, 9 (1) 23-33.
- Becker, Stacy (2012) Human capital performance bonds: breaking the human services mold, MinnPost, May 21. (<https://www.minnpost.com/community-voices/2012/05/human-capital-performance-bonds-breaking-human-services-mold>)
- Chase, Richard, Omar Da’ar, and Jose Diaz (2011) Economic analysis of programs that could qualify for a human capital performance bond pilot. Wilder Research report. May (Part 1) and June (Part 2).
- Disley, Emma, Jennifer Rubin, Emily Scraggs, Nina Burrowes and Deirdre Culley (2011) Lessons learned from the planning and early implementation of the social impact bond at HMP Peterborough. Report prepared for the Ministry of Justice. RAND Europe.
- Duwe, Grant (2011) The benefits of keeping idle hands busy: an outcome evaluation of a prisoner reentry employment program, Crime and Delinquency, 20, 1-18.
- Hughes, Jane and Jill Scherer (2014) Foundations for social impact bonds. Social Finance.
- Jolliffe, Darrick and Carol Hedderman (2014) Peterborough Social Impact Bond Final Report on Cohort 1 Analysis. Prepared for Ministry of Justice. University of Leicester.
- Liebman, Jeffrey and Alina Sellman (2013) Social Impact Bonds: A Guide for state and local governments. Harvard Kennedy School Social Impact Bond Technical Assistance Lab.
- Liebman, Jeffrey (2011) Social impact bonds: A promising new financing model to accelerate social innovation and improve government performance. Center for American Progress.
- Olson, John and Andrea Phillips (2013) Riker’s Island: The first social impact bond in the US, Community Development Investment Review, 9 (1), 97-101.
- Perry, Suzanne (2011) Minnesota explores ‘Pay for performance bonds,’ Chronicle of Philanthropy, March 24. (<https://philanthropy.com/article/Minnesota-Explores-Pay-for/227307/>)

REFERENCES CONTINUED

Reynolds, Arthur J., Judy A. Temple, Barry A. White, Suh-Ruu Ou and Dylan L. Robertson (2011b) Age 26 cost benefit analysis of the Chicago Child Parent Center early education program, Child Development, 82, 379-404

Rothschild, Steve (2013) Human capital performance bonds, Community Development and Investment Review, 9, 103-108.

Rothschild, Steve (2012) The Non Nonprofit: For-Profit Thinking for Nonprofit Success. Jossey-Bass. San Francisco, CA.

Rudd, Timothy, Elisa Nicoletti, Kristin Misner, Janae Bonsu (2013) Financing promising evidence-based programs: early lessons from the New York City social impact bond. New York: MDRC.

Temple, Judy and Arthur J. Reynolds (2015) Using benefit-cost analysis to scale up early childhood programs through pay for success financing. Humphrey School of Public Affairs, University of Minnesota.

Warner, Mildred (2013) Private finance for public goods: social impact bonds, Journal of Economic Policy Reform, 16, 303-19.

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Nonprofits Assistance Fund

Nonprofits Assistance Fund strengthens the community by investing capital and expertise in nonprofits. A Certified Community Development Financial Institution (CDFI), NAF works with nonprofits in all fields of service by offering loans, training, and financial management advice and resources to help them address unexpected events, finance new opportunities, and realize strategic goals. The organization is also a leader in the nonprofit sector, with research and reports on issues and topics that impact that sustainability and effectiveness of nonprofit organizations. For more information about all programs and activities, visit www.nonprofitsassistancefund.org.