

Understanding Social Impact Bonds as a Strategic Approach in Public Finance

By: Lauren Lowe and Seth Williams

Government and nonprofit organizations have increasingly expressed interest in Social Impact Bonds (SIBs) as a means of providing resources to implement initiatives addressing longstanding and emerging social problems in their communities. These social problems can range broadly from reducing homelessness to increasing access to early childhood education to providing employment opportunities for offenders returning from prison to their neighborhoods.

To better advise organizations on how and when to consider SIBs, Public Financial Management, Inc. and PFM Financial Advisors LLC (collectively PFM), the nation's leading independent municipal financial advisory firm (as measured by number of transactions completed and par amount), convened a roundtable discussion including some of the nation's leading experts in SIBs and the expert financial advisors of PFM. The following information is the product of those discussions, and has been put together in an effort to synthesize, frame and contextualize the topic for government officials.¹

What is a SIB?

SIBs – or pay for success initiatives – are a new approach to public finance. Despite the inclusion of "bond" in its name, a SIB is not a security and does not necessarily require a government to access the capital markets. At its most basic level, a SIB is a contract between a government and investors for a performance outcome that seeks to address a given social challenge or challenges. In this approach, investors are willing to pay the costs of a potential solution to address the government's social challenge. In exchange for the investment, the investors are promised a return on investment if the

solution is found to be successful. This method benefits government by removing the financial risk of investing in a new program where success is not guaranteed. Instead of a government identifying a challenge and then using its resources to address those challenges or their symptoms, under the SIB design, investors raise the funds to execute a potential solution and will only see a return if the solution is successful.

Deep rooted and costly social challenges (chronic homelessness, elevated levels of recidivism, etc.) – both remedial and preventative – create significant societal and fiscal costs in governments of all sizes. SIBs seek to pair nongovernment funding and innovative, evidence-based solutions to these challenges.

Within the SIB framework, private and/or philanthropic investors – as opposed to taxpayers – provide the monetary investment necessary to execute the evidence-based program

delivery. If the program delivery meets specific and prescribed goals (e.g., a certain percentage decrease in recidivism over a defined period of time, etc.), the government will reimburse investors for the cost of service delivery plus a return on investment, if required. On the other hand, if the program does not achieve

At its most basic level, a SIB is a contract between a government and investors for performance outcome that seeks to address a given social challenge or challenges.

the defined outcome levels and other specified goals, the government does not reimburse investors for any sum. A SIB's program delivery efforts and results are rigorously measured by an independent evaluator who ultimately decides if the pre-defined measures of success are achieved.

What gaps in traditional government and non-profit financing are SIBs designed to fill?

SIBs have an intriguing potential to play a role in the toolkit

¹The PFM Group wishes to thank the SIB roundtable participants for their time and expertise; however, the content contained herein reflects only the work and opinions of The PFM Group of companies. SIB roundtable participants included: David Eichenthal, PFM Group Consulting LLC; Megan Golden, Institute for Child Success; Dean Kaplan, PFM Group Consulting LLC; Daniel Kozloff, PFM; Jessica Cameron Mitchell, PFM; Susan Musselman, PFM; John Roman, Urban Institute; Sam Schaeffer, Center for Employment Opportunities; and Julia Shin, Enterprise Community Partners.

of government finance officers and government managers. In the traditional conceptualization of government financing options, brick and mortar structures and other long-term tangible investments or obligations have relatively defined and proscribed options for funding and access to capital. However, despite consuming a significant portion of state and local government budgetary resources with mixed success across the nation, no such long-term financing and investment opportunities exist for social program implementation and service delivery.

A SIB's program delivery efforts and results are rigorously measured by an independent evaluator who ultimately decides if the pre-defined measures of success are achieved. In recent years, state and local governments' resource constraints and innovative management developments have started to shift the conversation and conceptualization of government social service provision from "how much do we need to spend" to "what are we achieving for our investment." Put

another way, governments are increasingly shifting from measuring outputs to increasingly measuring outcomes. SIBs are not the only approach governments have utilized to drive greater efficiency and outcomes. Governments like Baltimore, MD; Chattanooga, TN; and New Orleans, LA have adopted Budgeting for Outcomes (BFO) as a cultural and operational shift to successfully increase transparency, increase efficiency and drive results.

This paradigm change is a principal reason why SIBs are garnering attention in the government, private sector and philanthropic sectors – particularly the potential for a more efficient, effective service that delivers identified performance outcomes and shifts from a "treatment" approach to a "prevention" approach.

How can SIBs Change the Risk/Benefit Equation?

SIBs are designed to share the risk that is inherent in piloting new government-sponsored social programs by distributing the fiscal and social risks and benefits between government and interested funders. This model allows communities to scale up proven solutions in a more fiscally responsible, evidence-based manner that can achieve results without the costs of beta-testing.

The structure of a SIB is also intended to comprehensively address what's been called the "wrong pocket" problem that has been challenging government budgets and leaders for decades. The wrong pocket problem occurs when one government entity, or department within a government entity,

invests in a program to improve social outcomes, but the savings and benefits from realized outcomes flow to another government entity, or department within a government entity. For example, evidence-based programming funded by a city to reduce substance abuse among young adults may result in reductions in crime and/or incarceration which, in many locations, would accrue savings to a county- or state-based detention system. A SIB is structured so that a cross-cutting, single payer could be created to take ownership for coordination across multiple government entities (or departments) in order to ensure the costs and savings are truly shared. This example is just one instance of why SIBs have been called the "ultimate silo-busting tool."²

What entities are involved in the structure of a SIB?

Governments. A government is the catalyst behind a SIB. Governments designate the challenge to be addressed, which is then funded by an investor or series of investors with the expectation of achieving targeted, pre-defined, measurable outcomes.

Service Providers. Service providers are the entity or entities, often nonprofit entities, tasked with designing and operating the evidence-based program delivery. The service provider(s) must have demonstrated experience and ability to deliver evidence-based programming that can realistically be expected to achieve the desired outcome(s).

Investors. Investors provide the funding for the evidence-based program delivery. To date, investors have tended to frequently – but not exclusively – be philanthropic entities. Currently an immature market, SIB funding could eventually evolve to include profit-seeking investors playing a greater role in funding service provisions.

Loan Guarantors. Most, though not all, SIBs have included a loan guarantor. The loan guarantor is typically a philanthropic organization serving as a backstop, agreeing to repay the investor funding if the outcome thresholds

...governments are increasingly shifting from measuring outputs to increasingly measuring outcomes.

are not achieved. A loan guarantor may help to enhance the likelihood of social investment because it effectively lessens the risk to the primary investors, making participation more enticing, especially in an uncertain or immature market.

Intermediaries. The role of the intermediary is to coordinate the SIB at all levels on behalf of the government. The intermediary may be responsible for finding investors, vetting service providers, and/or handling all other operational details.

²David Erickson, Federal Reserve Bank of San Francisco, Testimony Prepared for the Robert Wood Johnson Foundation Commission to Build a Healthier America, June 2013. http://www.rwjf.org/content/dam/farm/reports/reports/2013/rwjf406408.

Independent Evaluators. Evaluators will serve as arm's length auditors working with all entities involved to determine the appropriate performance thresholds at the outset and, within the defined period of service delivery, whether or not the predefined performance thresholds and outcomes were achieved.

Technical Assistance Providers. Due to the potential significant fiscal and societal impacts of a SIB, governments may choose to seek guidance and advice to assure

SIBs are structured to be an accountability- and results-oriented tool, not a financing tool. achievement of sound fiscal, programmatic and operational designs. Technical assistance providers are often financial advisory firms and subject matter experts.

What do SIBs allow government to do that more traditional forms of finance do not?

Improve Outcomes Responsibly. SIBs are structured to be an accountability- and results-oriented tool, not a financing tool. Governments only provide funding in the SIBs model when specific outcomes are achieved from evidence-based programming delivery, whereas the principal and interest associated with traditional municipal bonds is a General Obligation pledge backed by a jurisdiction's tax base or a specific dedicated revenue stream.

Reduce and Share Risk. As of July 2016, U.S. state and local governments were actively engaged in more than 10 SIB arrangements, comprised of more than \$100 million in upfront capital investments, and more than 20 states have introduced or passed "Pay for Success" legislation.³ SIBs are a potential, though still immature, financing option for governments to bring together innovative teams to address social issues while transferring most or all of the financial risk to other parties. Specifically, programs with large upfront costs, serving large numbers of citizens, or that are operationally and/or politically precarious, have been targets for investments of private capital rather than government capital.

Spur Innovation. SIBs are an innovative method of using human capital (service delivery), capital and evidence-based results to improve social outcomes in manner that traditional forms of government finance – whether capital or budgetary – are unable to achieve. Meaningful and necessary collaboration between the private, public and non-profit sectors provides a potential opportunity to leverage resources, capital and expertise in a manner to achieve what one national expert calls, "one plus one, equals three."⁴

How should government think about the cost of financing through SIBs?

SIBs are still relatively new and there are not many concrete examples from which to draw broad conclusions. However, in our opinion, there are at least three significant considerations that warrant attention when examining the potential costs of financing:

- Fees paid to third parties (e.g., independent assessors, evaluation advisers, intermediaries)
- Success fees that could be owed to investors (the premium for transferring risk)
- The cost of the program under consideration and duration of the service delivery period subject to evaluation (e.g. when payment may come due)

Third party fees will depend on which third parties the government chooses to involve, the scope of services they will provide, and, naturally, the complexity of those services. For example, if a government uses more third parties (e.g. an intermediary to manage the project, an evaluation adviser, an independent assessor and/or other third parties), it logically follows that the third party fees would be greater than if a government only uses a third party intermediary. Some third parties have suggested that a broader approach to involving many entities in a SIB provides significant value to the process. On the other hand, a recent review in the Stanford Social Innovation Review suggested that governments should consider streamlining the process by engaging only service providers.⁵ Some investors have posited that greater simplicity will result not only in less expensive financing, but also a greater chance of success. In the end, many of the parties may have certain interests that are potentially justified and, in some cases very noble, but may unintentionally overlook the government's best interest.

Due to the immature SIB market, to date, many of the investors have been non-profit entities with a mission/policy interest in achieving the defined outcomes. As a result of the not-for-profit orientation while the market is still evolving and maturing, those who invest in SIBs may not need or desire a market rate of return; however, governments must still provide investors with sufficient "return" for the risk(s) assumed in funding the program service delivery. As the market matures, it will become clear whether investors maintain this mission centric, policy goal orientation ahead of return on investment or whether the market requires a greater return. This creates a consideration – now and in the future – for governments to determine the level of success and rate of return necessary to transfer the risk. In every SIB, the analysis

³Annie Dear, Alisa Helbitz, Rashmi Khare, Ruth Lotan, Jane Newman, Gretchen Crosby Sims, Alexandra Zaroulis, Social Finance Social Impact Bonds: The Early Years July 2016 http://socialfinance.org/content/uploads/2016/07/SIBs-Early-Years_Social-Finance_2016_Final.pdf.

5Art Berman, Stanford Social Innovation Review Pay for Success: What It Will Take to Work June 18, 2013 http://ssir.org/articles/entry/pay_for_success_what_it_will_take_to_work

⁴John Roman, Urban Institute, SIB roundtable discussion

is likely to be nuanced and specific to the particular policy choice and consideration.

Finally, the cost of the program itself depends almost entirely on the ambition and complexity of the program design and delivery. The costs of such program design and delivery must be weighed against the fiscal and social benefits to residents upon achieving a successful program delivery. Additionally, a government must evaluate the duration of the program service delivery that is subject to independent evaluation for achievement of the SIBs predefined goals. The potential, and perhaps significant, payment that may come with desired outcomes is an occurrence that must be affordably assumed by a government. Financial pre-planning will likely be required to ensure that any costs to the government are set aside and readily absorbable in its budget.

Does a SIB approach present non-financial risks to government? How can those risks be mitigated?

While the SIB market is extremely immature and continues to evolve, several non-financial risks warrant consideration for any government contemplating whether a SIB is the right tool to achieve their programmatic and fiscal objectives.

Management and Partnerships. SIBs are operationally complex, with many parties, moving pieces and interests. A government, even when outsourcing management of the SIB, may encounter a significant need for staff time, outside expertise and counsel to ensure the often highprofile partnerships proceed as desired. Additionally, because SIBs require that outcomes be specific, measureable and pre-defined, investors are likely to attempt to minimize the financial risk and may seek to serve populations that are predisposed to achieving the outcomes defined by a government, thereby unintentionally or intentionally, circumventing the programmatic and policy goals of service delivery to the targeted, chronic social challenge. As a result, governments, service providers, intermediaries, and funders need to be clear in the design and definitions of a SIB to ensure the funding provides evidence-based interventions to the right population.

Service delivery. Many programmatic interventions contemplated for SIBs are new or innovative approaches to long-term social challenges. This creates excitement and potential for greater efficiency and efficacy; however, it also creates a level of risk. Individuals receiving the programmatic intervention are participating because the government has identified a certain social challenge it seeks to better address. In the event that a programmatic intervention fails to produce the desired results, there is a potential risk of not only foregoing forward movement on the larger societal challenge, but also risking potential harm to the individuals receiving

services. While many new policies may carry the same risk, a SIB involves more parties with varied interests that create additional layers of risk to service delivery.

Political/Optics. A SIB requires an extensive amount of executive-level sponsorship and involvement in an evolving area that matches non-governmental capital with innovative, new interventions (e.g.

potentially with little-tono track record of success) from service providers. These high-profile and high-dollar arrangements may carry a notable level of political and public relations risk for governments.

...many of the investors have been non-profit entities with a mission/ policy interest in achieving the defined outcomes.

While each of these non-

financial risks can be mitigated to varying degrees, risk associated with a SIB – like many other policy and financial actions – cannot be fully eliminated.

Is there a model for SIB investment that does not include a philanthropic backstop?

Based on the current infancy of SIBs, it is unlikely that nearterm pursuits of SIBs will proceed without investor support stemming from a level of social investment or philanthropic orientation. Because SIB investors carry both the benefit of achieving a return on their investment, and also losing some or all of the invested principal, the market rate of return may be too high for many governments to consider. As a result, in the short-term, it appears likely that governments considering a SIB may be most successful if the social challenge to be addressed contains a broader investor base interested in that particular social challenge.

What has to happen for SIBs to go from pilot to becoming another regular tool in the public finance toolkit?

The maturation of the SIB market will likely need to include most, if not all of the following developments in order for SIBs to be a more frequent approach:

- Successful SIB programs with measurable outcomes
- Dedicated intermediaries to implement the programs
- Stronger and deeper investor base willing to accept uncertain rate of return
- Increased social awareness within the corporate community
- Increased awareness and education within the government and public finance industries

When does the SIB approach make sense for consideration and what should governments think about when considering a SIB?

Government managers and finance professionals may be asked for their thoughts and opinions on SIBs. The following series of questions and considerations may be helpful to assess concepts and proposals:

- Is there a sense for the types of SIBs projects that may be most likely to attract interest and support from local investors?
- Are there projects where there are alternative financing mechanisms to SIBs (e.g. for each possible project, what is the answer to the question "how would we do this without a SIB?")?
- Are there projects that have been or would be considered using a SIB approach?
- What is the government trying to achieve?
- Are the desired financial goals and programmatic outcomes realistic?
- Can the desired financial goals and programmatic outcomes be specifically defined, quantified, reported, measured in time-defined increments and independently analyzed?
- Is there sufficient commitment and capacity in:
 - Government
 - Service delivery providers
 - Measurements/Analysis
 - Funding
 - Scalability
- Is there an evidence-based programmatic intervention and are there non-profit partners that provide sufficient capacity to implement the program?
- Is there an evaluation base around problems identified?
- Is there an easier way to achieve the government's desired financial and programmatic outcome?

If a government decides to use a SIB as a policy option, how should SIBs be considered against other policy options to determine if it should be on the "short-list" for a policy intervention?

Governments that are interested in SIBs, and those who are approached by entities proposing a SIB, must assess whether this is the right approach for a given policy challenge. Because SIBs are still evolving, there is no standard approach for implementation and execution. As a result, policy makers may find it practical to measure the social policy challenge against certain criteria to help determine whether a SIB is among its best options to achieve its goals. Questions may include, but are not limited to:

- Is the social policy challenge one in which other proven interventions already exist – especially those that are sensitive or unpopular?
- Are the preventative interventions likely to cost less than current remedial interventions, and will the programmatic outcomes, if attained, achieve meaningful savings?
- Is the proposed programmatic intervention preventative, as opposed to remedial, in nature?
- Is the social policy area one that will struggle to achieve popular support for funding, and are other means to achieve the outcomes and/or savings available?
- Can the SIB program area outcomes be well defined, and is sufficient, reliable data available for independent evaluation and assessment?
- Will the savings generated from the intervention be realized by the same entity that is responsible for payment if the program is successful?

Because SIBs are still evolving, there is no standard approach for implementation and execution.

- If implemented successfully and desired outcomes are achieved, does the programmatic intervention have a sufficiently high level of net benefit (outcomes and budgetary), and can it be sufficiently leveraged or expanded?
- Can the SIB be structured to address any "wrong pocket" challenge that currently exists and that would result in a more equitable division of the inherent risks and desired benefits?
- Is the government wholly committed to providing significant and public leadership to the SIB process from conceptualization to evaluation?

If the answer to most or all of these questions is "yes," then a government may choose to gather more information to inform its policy makers on whether a SIB is the best (or only) approach to address a given social challenge. However, if the answer to any one of the above questions is "no," then a government may find that a SIB is not the best fit – at least at the current point in time – to address a given social policy challenge.

Closing

As the SIB market continues to mature, PFM will closely monitor new developments, opportunities and risk management strategies. For more information on SIBs – or any other public finance and management need – please contact Lauren Lowe or Seth Williams at SIBS@pfm.com.

Case studies/examples of SIB

As one national expert on SIBs noted, SIBs "are a concept and not a noun." In other words, precisely what a SIB is will be determined as the concept matures. The structure of the SIB will depend on the desired outcomes and the partners who are brought to the table. Examining case studies of previously conceived SIBS is perhaps the easiest way to understand their different structures.

NYC ABLE Project for Incarcerated Youth

The Rikers Island SIB, also known as the NYC ABLE Project, is perhaps the most publicized SIB to date. The SIB, which began in 2012 and ended in 2015, sought to reduce recidivism by 10 percent or more among 16-18 year-olds who entered Rikers Island Prison Complex in 2013 using a cognitive behavioral therapy intervention – including personal responsibility education, decision making and social skills.

Goldman Sachs provided the upfront capital investment of \$9.6 million for the treatment and Bloomberg Philanthropies served as the loan guarantor, by providing a \$7.2 million grant to MDRC, the service provider administering the actual treatment – minimizing the potential financial risk to Goldman Sachs to entice their participation. The Vera Institute of Justice served as the independent evaluator of the treatment.

In the summer of 2015, after three years of administering the treatment, the partners announced that the intervention had failed, as it was unable to produce the predetermined decrease (ten percent) in re-incarceration rates at 12- and 24-month intervals among juveniles who had been exposed to the treatment. The New York City Department of Corrections was not liable for any of the program costs. While the intervention itself failed to achieve the predetermined outcome targets, some have suggested that SIB process was successful because the process prevented the City from the risk of funding a programmatic intervention that did not attain its stated, desired outcomes.

Denver Social Impact Bond Program

Like many large cities, Denver faces challenges with chronic homelessness. As part of efforts to address this challenge, The Corporation for Supportive Housing identified 250 homeless "super-users" of social programs with services including nights in jail and detox beds, emergency room visits and arrests, collectively costing the city an annual sum of \$7.25 million.

In early 2016, a partnership formed to establish a SIB program to fund permanent supportive housing opportunities for these 250 individuals. Foundations invested approximately \$8.6 million toward housing solutions and case management intervention for the so-called homeless "super-users" for an intervention period of up to five years – and an additional \$15 million of federal resources would be utilized during the same period. If the expected outcomes (35-40 percent reduction in days in jail and 83 percent increase in housing stability) are achieved, the government will repay investors their principal with an additional return of investment depending on the degree of success.

If successful, the City will realize substantial savings from reduced costs associated with services associated with the homeless "super users." If the intervention is unsuccessful, the City will not pay for the cost of the program – there is currently no guarantor included in the arrangement and, as such, the investors' capital would not be returned if the SIB does not achieve its predetermined policy outcome measures.

Salt Lake County Early Childhood Education

Receiving a high quality pre-kindergarten education has been linked to lower utilization of costly special education services in a child's subsequent elementary education. As a result, expanding public access for high quality preschool is a goal for many communities nationwide, but, for many jurisdictions, identifying and maintaining sustainable funding sources and structures is a challenge.

In 2013, Salt Lake County sought to address this challenge through a SIB program. Under the SIB structure, Goldman Sachs provided the upfront capital — a \$4.6 million loan to the United Way of Salt Lake, which oversaw the implementation of a high impact preschool curriculum in two Salt Lake County school districts. The J.B. and M.K. Pritzker Family Foundation,

served as the guarantor, providing a subordinate loan of \$2.4 million to the United Way, reducing the risk to Goldman Sachs. The group of 3- and 4-year olds eligible for free lunch who are participating in the program are currently being tracked through 6th grade, and every year that they do not utilize special education services, a pay-for-success payment will be generated to the investors, equal to 95 percent of the school district's cost of administering those special education services. The entirety of the SIB program is expected to last eight to nine years per group.

The first group of students who received the intervention is now entering elementary school and, preliminarily, the group is requiring fewer special education services.

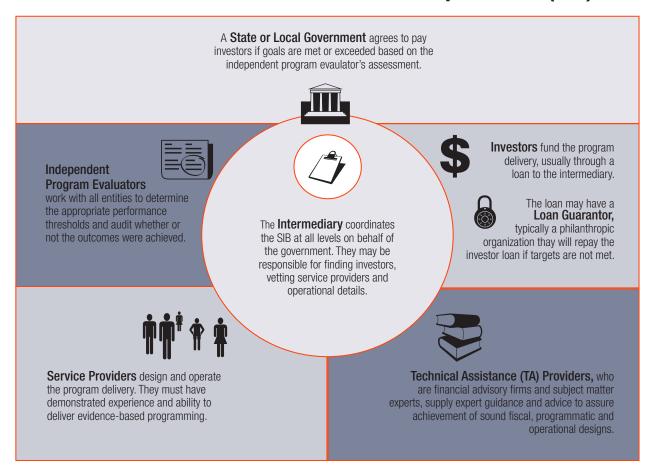
Cuyahoga County Children of Homeless Families Program

For many counties, the social and fiscal challenges and implications of foster care and homelessness are related and demand significant attention. Cuyahoga County designed the nation's first county-level SIB in an effort to make headway on both issues by reducing the number of homeless children in the foster care system with a focus on increased maternal access to mental health care services and increased housing opportunities.

FrontLine, a mental health provider, and the Cuyahoga Metropolitan Housing Authority each functions as a service provider; technical assistance advisory services are provided by Third Sector Capital Partners, and Case Western University's Center on Urban Poverty and Community Development serves as the independent evaluator.

The County's \$5 million, five-year SIB effort is funded by philanthropic and private investments, without a guarantor. For each day that a homeless child does not spend in foster care, the County will pay investors \$75, equal to the savings to the foster care system. These payments are capped at \$5 million in sum. Underscoring the policy-oriented and social investment/ philanthropic orientation that currently exists in the SIB market, one funder in this initiative announced its intention to invest any investment returns from the project into future SIB projects.

The Entities and Structure of a Social Impact Bond (SIB)



About PFM

The PFM Group

The PFM Group of companies, including Public Financial Management, Inc., PFM Financial Advisors LLC, PFM Asset Management LLC, PFM Group Consulting LLC and PFM Swap Advisors LLC is a national leader in providing independent financial advice as well as investment advisory, management and consulting services to public sector, non-profit and institutional entities. We are proud to help clients meet their financial challenges with a broad array of products, backed by unquestioned professionalism.

For more than 40 years, PFM Group has believed that the client's interests always come first. Service is our top priority in everything we do, and it is delivered in every relationship following our core principles of Independence, Initiative, and Integrity.

PFM Financial Advisors LLC and Public Financial Management, Inc.

We are a leader in public finance and have been ranked as the top financial advisory firm in the nation for the past 18 years by Thomson Reuters. In addition to advice on debt structuring and capital raising, PFMFA is also one of the foremost advisors to public sector clients on Public/Private Partnerships (P3).

Knowledge and Experience in All Sectors of Municipal Finance

While PFMFA takes great pride in the breadth of our financial experience, it is our expertise in specific areas that clients value as well. PFMFA is unique in having developed individual practices dedicated to specialized knowledge, combining that with the longstanding relationships we have built in local and regional markets. We understand what our clients face because we have shared their experiences.

We are at the cutting edge of knowledge in the areas we serve, and intensely aware of the challenges that must be addressed by issuers in each of these segments.

- Environmental Finance
- General Municipal Finance
- Waste and Water
- Healthcare
- Higher Education
- Public Power
- Public-Private Partnerships (P3)
- Schools
- Sports, Leisure and Cultural Facilities
- State Revolving Fund Services
- Transportation
- Retirement Plan Finance

Important Disclosures

This material is intended for institutional and/or sophisticated professional investors, is for informational purposes only, and should not be relied upon to make an investment decision, as it was prepared without regard to any specific objectives or financial circumstances. It should not be used or taken as legal or tax advice for specific situations, which depend on the evaluation of precise factual circumstances. The material should not be construed as an offer to purchase/sell any investment. To the extent permitted by applicable law, no member of the PFM Group accepts any liability whatsoever for direct or consequential loss arising from any use of this presentation or its contents, including for negligence. No further distribution is permissible without prior written consent.

The views expressed within this material constitute the perspective and judgment of the author at the time of distribution and are subject to change. Any forecast, projection, or prediction of market or economic trends, or the results of any management decisions are based upon current opinion and information available as of the date of issue, and are also subject to change. Opinions and data presented are not necessarily indicative of future events or expected performance. Information contained herein is based on data obtained from recognized statistical services, issuer reports or communications or other sources believed to be reliable. No representation is made as to its accuracy or completeness. Certain links contained in this document are to third-party websites which are external to the PFM Group, and as such are not controlled by PFM. The PFM Group does not explicitly or implicitly endorse or approve the information on those third party websites.