



Alternatives to Tax-Exempt Advance Refundings

February 15, 2018



Presenters



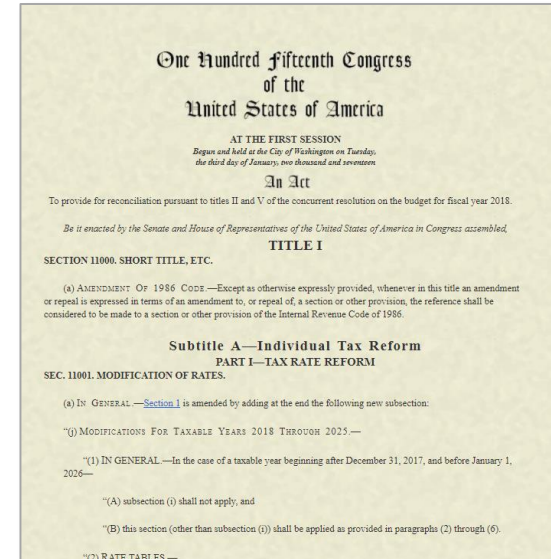
- PFM
 - Daniel Kozloff, Managing Director
 - Jeff Pearsall, Managing Director
 - Todd Fraizer, Managing Director
- Squire Patton Boggs
 - David S. Goodman, Partner
 - Robyn L. Helmlinger, Partner
 - John W. Hutchinson, Partner
 - L. Todd Gibson, Principal

- When President Trump signed H.R.1 (the “Tax Cuts and Jobs Act”) on December 22, 2017, that tax legislation eliminated tax-exempt advance refundings of tax-exempt bonds after December 31, 2017. Some issuers of outstanding bonds rushed to complete advance refundings before the deadline. Now, these questions remain:
 - For outstanding bonds, what options remain to achieve or simulate the economic benefits of refundings?
 - When state and local governments issue bonds in 2018 and future years, what features might they incorporate into their financing structures and bond documents to enable them to maximize the opportunities for achieving or simulating economic refundings (either advance or current) in the future?

Municipal Bond Market Impacts of Tax Cuts and Jobs Act of 2017



- The initial legislative tax reform proposals included the elimination of:
 - Tax-exempt private activity bonds
 - Tax-exempt advance refundings
 - Tax credit bonds
 - Tax-exempt governmental bonds for stadiums
- The final Tax Cuts and Jobs Act:
 - **Spared**
 - Tax-exempt private activity bonds
 - Stadium bonds
 - **Eliminated**
 - Tax-exempt advance refundings
 - Tax credit bonds
- Additionally, lower tax rates for corporations (21% from 35%) and individuals could lead to a drop in demand for municipal bonds or higher return requirements (i.e., higher rates) from investors
- Tax legislation provisions impacting municipal bonds became effective starting January 1, 2018



For outstanding bonds, what options remain to achieve the economic benefits of refundings?



- **Tax-Exempt Current Refunding:** Wait out the call protection period and, if market conditions permit, execute a current refunding not more than 90 days before the bonds become subject to optional redemption.
- **Taxable Advance Refunding:** If market conditions permit, execute an advance refunding using taxable bonds.
- **Forward-Starting Swap:** Consider using an interest rate swap, either current or forward-starting, to lock in current rates and achieve some benefits that might otherwise be available through an advance refunding.
- **Forward Delivery Bonds:** Issue “forward delivery” bonds to lock in savings prior to the allowable tax-exempt current refunding date.
- **Cinderella Bonds:** Consider the possibility of refunding outstanding bonds with taxable “Cinderella Bonds” that might be converted to tax-exempt obligations in the future.
- **Cash Optimization:** Utilize cash on hand to defease outstanding bonds (versus a bond-funded refunding transaction) and fund new money capital projects with tax-exempt bonds instead of cash-funding.
- With respect to outstanding taxable **Build America Bonds**, consider the possibility of a tax-exempt refunding.

Economic and Debt Management Considerations



- **Additional borrowing costs:** investors and/or underwriters demand additional compensation for new / uncommon structures in the market
- **Interest rate risk:** the risk that interest rates move unfavorably for issuers
- **Opportunity cost:** similar to interest rate risk, the risk that interest rates move favorably for issuers but that issuers are unable to benefit from these movements
- **Tax risk:** further changes to the tax code result in lost opportunities or change interest rate relationships to negatively impact issuers
- **Counterparty risk:** issuer exposure to counterparties and their underlying financial condition
- **Credit risk:** risks that issuer credit movements negatively impact structure / future issuance costs and capabilities
 - Use of derivatives and/or non-traditional debt structures may affect issuer risk profile and perception among investors and with rating agencies
 - **Increased transactional costs** for non-traditional structures
 - **Market dislocation** creates additional costs / barriers to market access at time of execution

- **State law:** The state laws applicable to an issuer may restrict the issuer's ability to employ these features and techniques
- **Federal tax law:** Several of the features and techniques may be subject to restrictions or raise unresolved issues under federal tax law
- **Existing trust agreements:** An issuer's existing trust agreements may prevent or restrict the use of these features and techniques; for example:
 - Parity debt restrictions
 - Additional bonds tests
 - Lack of authority for or restrictions on swaps and other derivative products

Financing Features and Techniques: Tax-exempt Current Refunding



Strategy: Wait until existing bonds become currently callable (i.e., 90 days prior to the call date) to execute a tax-exempt current refunding.

Benefits: Traditional structure with tax-exempt issuance, no legal restrictions or considerations, limited negative arbitrage, ability to capture benefit of potential lower interest rates at time of current refunding.

Risks: Issuers are exposed to interest rate risk (i.e., higher interest rates) - loss of ability to lock in current borrowing levels, issuer exposed to credit risk if credit deteriorates while awaiting current refunding period, issuance will be subject to market access at time of current refunding.

Legal Considerations: No unique legal considerations. Customary tax-exempt bond rules apply.

Financing Features and Techniques: Taxable Advance Refunding



Strategy: Issue taxable refunding bonds on an advance refunding basis (more than 90 days prior to call date).

Benefits: Locks in current interest rate levels, limited legal restrictions and considerations, allows for potential arbitrage in refunding escrows (rates permitting).

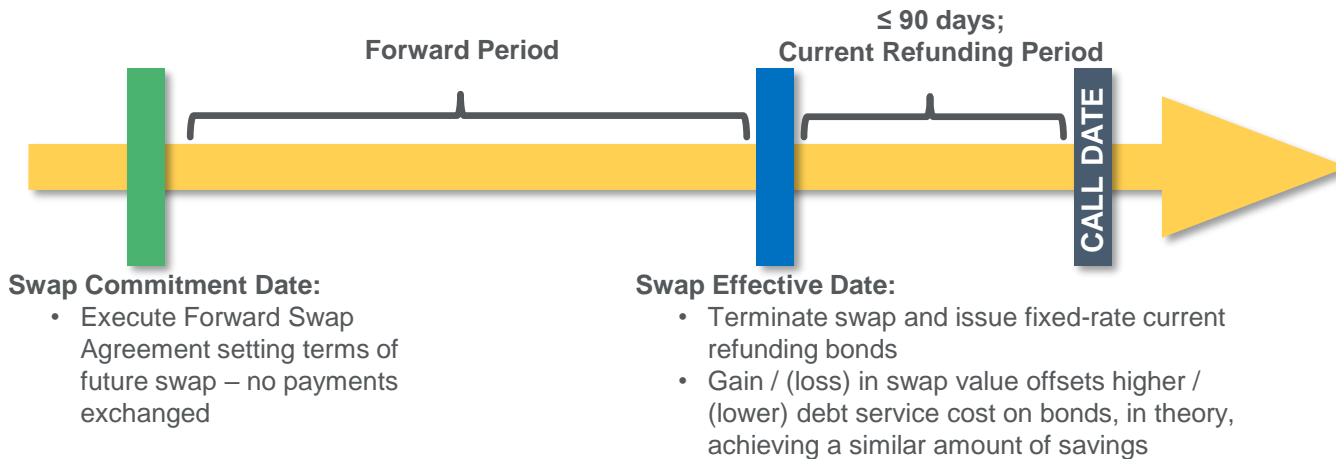
Risks: Typically higher costs associated with taxable bonds (versus tax-exempt bonds), limited ability to benefit from lower interest rates or improved credit position at call date (opportunity cost), potential for more restrictive / costly redemption features associated with taxable bonds, inability to benefit from future changes to tax law.

Legal Considerations: Because the refunding issue bears taxable interest, there are few tax considerations. A further question is: under what circumstances can the issuer further refund the taxable advance refunding bonds? If the taxable bonds have no call protection, then they can be currently refunded with tax-exempt bonds, as long as the original refunded tax-exempt bonds and the third-generation, tax-exempt current refunding bonds are not outstanding concurrently for more than 90 days. If the taxable refunding bonds have call protection of their own, there may still be a technical possibility for a tax-exempt advance refunding of that taxable issue – look for future guidance from the IRS on this point.

Financing Features and Techniques: Forward Starting Swaps



Strategy: Enter into a forward-starting, cash-settle swap in current market; at current refunding date terminate swap and issue tax-exempt bonds. Receipt / payment of termination payment from / to counterparty is partially offset by higher / lower interest rates at time of termination and refunding issuance.



Swap Commitment Date:

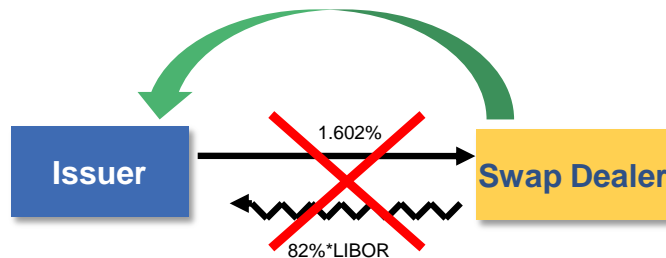
- Execute Forward Swap Agreement setting terms of future swap – no payments exchanged

Swap Effective Date:

- Terminate swap and issue fixed-rate current refunding bonds
- Gain / (loss) in swap value offsets higher / (lower) debt service cost on bonds, in theory, achieving a similar amount of savings

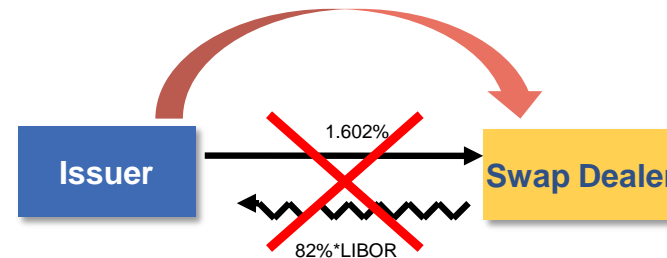
At-Market Swap Rate > Executed Swap Rate¹

Issuer Receives Termination Payment



At-Market Swap Rate < Executed Swap Rate¹

Issuer Makes Termination Payment



Financing Features and Techniques: Forward Starting Swaps



Benefits: Allows issuer to lock in interest rates at close to current levels for a future time of issuance, efficient structure driven by liquidity of swap market.

Risks: No ability to benefit from lower interest rates or improved credit position at call date (opportunity cost), tax and issuer credit risk results in basis risk (mismatch of swap and bond issuance rates), exposure to counterparty credit risk, risk of potential out-of-pocket termination payment even if bonds not ultimately issued, extended forward period may erode economic benefit.

Legal Considerations: Issuer's termination payment obligation will be required to be a parity payment obligation, but existing trust agreement or bank agreements may subordinate such payments; swap will need to be "identified" by issuer for tax integration purposes; consider whether a forward-starting swap fits within the issuer's debt management policy; swap dealer will require extensive legal opinions of issuer's counsel (e.g., enforceability, no conflict, security interest); consider accounting and disclosure treatment; if no recent swap activity, issuer will need to sign or adhere to ISDA Dodd-Frank Protocols.

From a tax perspective, if the forward-starting swap is "integrated" with the later bond issue, any termination payment on the swap will be treated as an adjustment to the issue price (which will affect the bond yield and the amount of sale proceeds of the bond issue).

Financing Features and Techniques: Forward Delivery Bonds



Strategy: Enter into agreement with financial institution to purchase bonds, on a forward basis, that will have delivery once a current refunding becomes possible, locking in current market rates (plus a forward premium).

Benefits: Allows issuer to lock in rates at levels close to current market rates for a future current refunding.

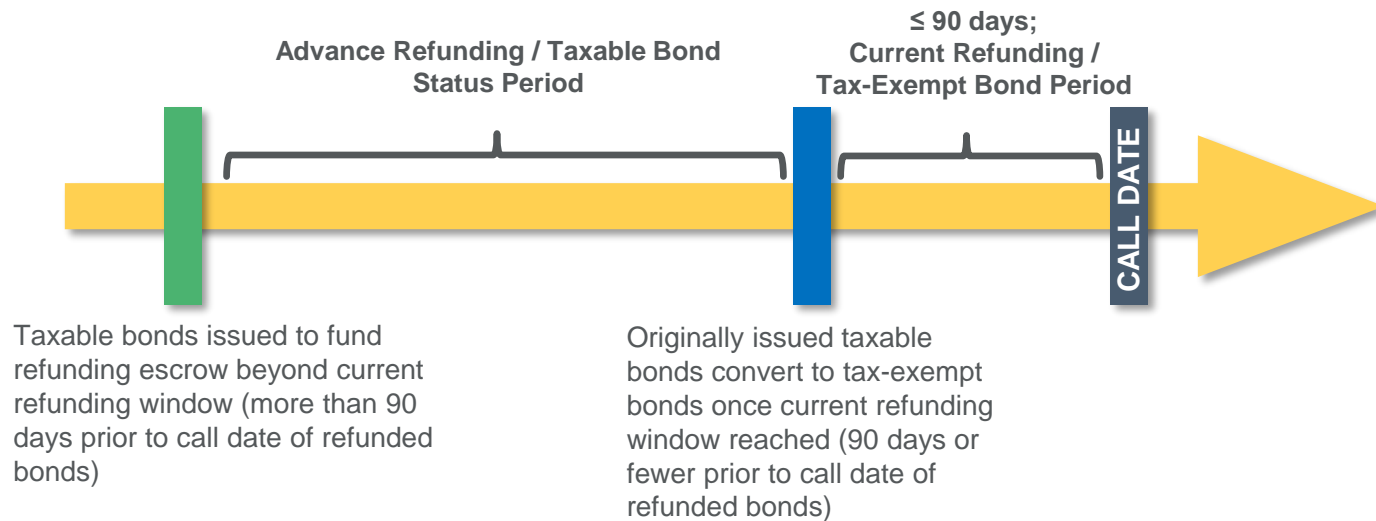
Risks: Depending on forward period, forward premium could erode economic benefit, no ability to benefit from lower interest rates or improved credit position at call date (opportunity cost), risk that tax law changes make forward strategy unnecessary, exposure to counterparty risk / market access, future market dislocation could create challenges to selling bonds in future.

Legal Considerations: Minimal tax concerns (other than change in law risk). Seek to minimize the additional conditions to closing and underwriter/purchaser “outs” that may prevent the eventual closing.

Financing Features and Techniques: “Cinderella” Bonds



Strategy: Issue taxable bonds in current market that convert to tax-exempt bonds at current refunding date.



Financing Features and Techniques: “Cinderella” Bonds



Benefits: Allows issuer to lock in rates at levels close to current market rates for a future current refunding.

Risks: Non-traditional structure will carry additional costs / limited liquidity in market, reduced ability to benefit from lower interest rates at time of conversion due to “sunk costs” of advance taxable borrowing (opportunity cost), risk that tax law changes make conversion strategy unnecessary, changes to issuer credit could negatively impact tax-exempt conversion economics, future market dislocation could create challenges at conversion to tax-exempt structure.

Legal Considerations: Documents may need to be structured so that a “reissuance” can be triggered to cause the conversion. (In other words, it may not be as simple as filing an 8038-series form with the IRS and getting a bond counsel opinion.)

Financing Features and Techniques: Cash Optimization



Strategy: Utilize existing cash on hand to defease outstanding bonds instead of issuing refunding bonds. Issue tax-exempt bonds to fund new money projects.

Benefits: Economics can mimic results of an advance refunding. In optimal conditions, new money debt service will be less than the defeased debt service of refunded bonds, generating overall debt service savings for the issuer. When available, issuers may take advantage of relationship between tax-exempt new money borrowing costs and taxable investment rates in the defeasance escrow, which is capped by the arbitrage yield of the defeased bonds. Economics improve as prior arbitrage yield and escrow yield of defeased bonds exceed yield of new money bonds.

Risks: Issuers must consider the impacts of exercising call options on outstanding bonds and the associated opportunity risk related to defeasing bonds in the current market.

Legal Considerations: Strategy avoids issuance of any refunding bonds (advance or current). Issuers must consider any nexus between funds used to defease existing debt and the issuance of new money bonds or risk creating replacement proceeds, which are limited to the arbitrage yield of the new money bonds (versus yield of defeased bonds). For successful execution of cash optimization strategy, issuers should issue new money bonds to pay post-issuance capital expenditures, rather than to reimburse prior capital expenditures, which would lead to replacement proceeds.

Risk & Considerations Matrix



	Added Borrowing Costs / Features for Non-traditional Structures	Interest Rate Risk	Opportunity Cost	Tax Risk	Counterparty Risk	Issuer Credit Risk (change to rating)	Issuer Risk Profile Change / Market Perception Risk	Increased Transactional Costs	Market Dislocation
Tax-exempt current refunding		✓		✓		✓			✓
Taxable advance refunding	✓		✓	✓				✓	
Forward-starting swap	✓		✓	✓	✓	✓	✓	✓	✓
Forward delivery bonds	✓		✓	✓	✓	✓	✓	✓	✓
"Cinderella" bonds	✓	✓	✓	✓		✓	✓	✓	✓
Cash optimization			✓						

Post-Tax Reform Issuance Strategies and Structures



Future tax-exempt bonds may also be issued with a variety of different features to allow for more flexible redemption options in the absence of the ability to advance refund newly issued bonds on a tax-exempt basis:

- Provisions to allow for future use of swaps and other derivative products that may synthetically create some of the benefits of advance refundings

- Variable rate debt (VRDNs and VRDBs)
 - Callable anytime
 - Issuer stays shorter on the curve to lower interest costs
 - Liquidity needed, LOC or liquidity provider
 - Assumes additional interest rate risk

- Shorter-term fixed rate debt
 - Issuer stays shorter on the curve to lower interest costs
 - Debt coverage constraints may limit this structure
 - Roll-over / market access risk at maturity

- Make-Whole to Par Call (MWPC)
 - The MWPC provision permits the issuer to achieve “advance refunding like” debt service savings while remaining consistent with the tax code requirement of a current refunding since the escrow is 90 days or less
 - In addition to a traditional 10-year or shorter par call redemption provision, the newly issued bonds include a Make-Whole Call provision that provides for calling the bonds any time prior to the Par Call Date at the greater of:
 - 102% of the Amortized Value (the bond’s price at stated yield with the Make-Whole Call Date as delivery and the Par Call Date as maturity)
 - The Make-Whole Call Price
 - The Make-Whole Call Price is the present value of the bonds’ cash flows from and including the redemption date to the Par Call Date discounted at a tax-exempt rate (MMD) that corresponds to the Par Call Date
 - Limited investor acceptance to date
 - Investor / Broker dealer proposed enhancements:
 - Add 3-5 year lock out
 - Change discount rate to AAA MMD minus a spread vs. current flat to MMD

Post-Tax Reform Issuance Strategies and Structures



- Shorter call features (call dates less than 10 years out)
 - Relative value vs. 10-year par call
 - Impact on gross proceeds
 - Shorter call dates do not always equate to greater optionality
 - Option value = Time value + Intrinsic value
 - To date, the increase in time value is more than offset by the loss in intrinsic value
 - Decision should be based on current relative value (i.e., relationship between short-, medium- and long-term rates) and dependent on future rate movement
 - Analysis to determine proper valuation and direction on timing of call date provision should be completed on a case-by-case basis

Refunding Strategies for Build America Bonds



- Prior to the passage of the Tax Cuts and Jobs Act, an issuer could advance refund an original governmental bond or an original qualified 501(c)(3) bond, but could do so only once (taking into account re-refundings).
- The Tax Cuts and Jobs Act eliminated the tax-exempt status of any “bond” issued to advance refund another “bond.” Thus, the “one advance refunding only” rule was eliminated because it was no longer necessary.
- The definition of “bond” generally includes both tax-exempt and taxable debt.
- For purposes of the old “one advance refunding only” rule, Treasury issued regulations that said that an issuer could generally ignore advance refundings of taxable debt.
- The “one advance refunding only” rule is gone, but the Treasury Regulation remains.
- Query whether the regulation is still valid for purposes of the new “zero advance refundings” rule, and, if it is, whether the issuer must take action to relinquish the federal subsidy if the advance refunded bond is a BAB.
- Either way, there is also a question of what happens to the subsidy payments on the BABs when they are defeased. IRS has previously taken the position that the subsidy payments must end on the defeasance date.

PAYGO Act of 2010 Waived – BAB Subsidies Safe For Now



- The PAYGO Act of 2010 mandated spending cuts to federal programs to offset any increase in the federal deficit resulting from new legislation, such as the Tax Cuts and Jobs Act.
 - Subsidies for America Recovery & Reinvestment Act (“ARRA”) Bonds, including Build America Bonds are included in PAYGO Act spending cuts.
 - The cuts for 2018 would total \$136 billion and will be similar in size over the ensuing 10 years.
 - Due to the estimated cost of the tax reform legislation (\$1.5 trillion), were the full PAYGO spending cuts to occur, ARRA bond subsidies would be eliminated in their entirety.
- As part of the Continuing Resolution that was passed on December 21, 2017 to fund the federal government, the PAYGO Act cuts resulting from the Tax Cuts and Jobs Act were waived, removing BAB and other ARRA subsidies from the threat of complete elimination.
 - **THIS ALLOWS BABs AND OTHER ARRA SUBSIDY BONDS TO CONTINUE TO RECEIVE FEDERAL SUBSIDIES AT THEIR CURRENT LEVELS.**
- It is important to note that ARRA (including BAB) subsidies could continue to be threatened beyond their current levels of sequestration as Congress seeks ways to reduce federal spending.
 - The current federal fiscal year (10/1/2017 – 9/30/2018) sequestration amount for ARRA subsidies is 6.60% and has ranged from this level to 8.7% since 2013.

Future Reforms and Risks for Tax-Exempt Programs



- Ongoing messages and intent from Congress and the Administration surrounding further alterations to the municipal bond landscape have been mixed.
 - Additional concerns and risks remain related to the status of what some consider “non-core” tax-exempt PABs.
 - Others suggest that PABs and reforms surrounding them remain important components for federal infrastructure initiatives and warrant protection and even beneficial treatment.
- Additionally, Congress may need to seek ways to offset the costs of various legislative actions and initiatives (e.g., further tax reform, infrastructure). Municipal bond programs such as ARRA bond subsidies (including BABs) may factor into the identification of cost-saving measures.
- Summary: much remains in flux but municipal bonds are considered by many to be “low-hanging fruit” for Congress and the Federal Government to offset the costs of federal initiatives.

- The Tax Cuts and Jobs Act includes significant reforms for the municipal markets and bond issuers.
- While some changes remain unknown (e.g., eventual impacts to borrowing rate levels and issuance volume), municipal bond issuers have lost the use of tax-exempt advance refundings, a valuable tool for realizing debt service savings in low interest rate environments.
- While different strategies and tools exist to generate similar economics as advance refundings and allow for redemption flexibility on newly issued bonds, these strategies and tools are not without their inherent risks.
- It is important that bond issuers evaluate and consider both the financial and legal implications of the risks and cost/benefit dynamics.
- PFM and Squire Patton Boggs stand ready to assist municipal bond issuers in this process as their trusted partners.

Presenters and Contact Information



- PFM – pfm.com
 - Daniel Kozloff, Managing Director
kozloffd@pfm.com
 - Jeff Pearsall, Managing Director
pearsallj@pfm.com
 - Todd Fraizer, Managing Director
fraizert@pfm.com

- Squire Patton Boggs – squirepattonboggs.com
 - David S. Goodman, Partner
david.s.goodman@squirepb.com
 - Robyn L. Helmlinger, Partner
robyn.helmlinger@squirepb.com
 - John W. Hutchinson, Partner
johnny.hutchinson@squirepb.com
 - L. Todd Gibson, Principal
todd.gibson@squirepb.com

The views expressed within this material constitute the perspective and judgment of PFM at the time of distribution and are subject to change. Information is obtained from sources generally believed to be reliable and available to the public; however, PFM cannot guarantee its accuracy, completeness, or suitability. This material is for general information purposes only and is not intended to provide specific advice or recommendation. PFM is the marketing name for a group of affiliated companies providing a range of services. All services are provided through separate agreements with each company. Financial advisory services are provided by PFM Financial Advisors LLC and Public Financial Management, Inc. Both are registered municipal advisors with the Securities and Exchange Commission (SEC) and the Municipal Securities Rulemaking Board (MSRB) under the Dodd-Frank Act of 2010. Investment advisory services are provided by PFM Asset Management LLC which is registered with the SEC under the Investment Advisers Act of 1940. Swap advisory services are provided by PFM Swap Advisors LLC which is registered as a municipal advisor with both the MSRB and SEC under the Dodd-Frank Act of 2010, and as a commodity trading advisor with the Commodity Futures Trading Commission. Additional applicable regulatory information is available upon request. Consulting services are provided through PFM Group Consulting LLC. Institutional purchasing card services are provided through PFM Financial Services LLC. PFM's financial modeling platform for strategic forecasting is provided through PFM Solutions LLC. For more information regarding PFM's services or entities, please visit www.pfm.com.