



# SOUTH SAN ANTONIO INDEPENDENT SCHOOL DISTRICT

## Agenda Item Summary

Meeting Date: September 18, 2019

Purpose:  Presentation/Report  Recognition  Discussion/ Possible Action

Closed/Executive Session  Work Session  Discussion Only  Consent

From: Connie Prado, Board President

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Item Title: Presentation by MR Beal and Company, district Financial Advisor concerning refunding and refinancing options for district long term debt.

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Description:

Recommendation:

District Goal/Strategy:

Select a Goal or Strategy

Funding Budget Code and Amount:

CFO Approval

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APPROVED BY:

SIGNATURE

DATE

Chief Officer:

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\_\_\_\_\_

Superintendent:

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# South San Antonio Independent School District

Overview of Bond Issuance Process, Preliminary Refunding  
Analysis and Current Market Update

September 18, 2019

**STRICTLY PRIVATE AND CONFIDENTIAL**



Capital  
Markets

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2. Preliminary Refunding Analysis
3. Economic Conditions and Market Update

# Overview of Bond Issuance Process

Section 1



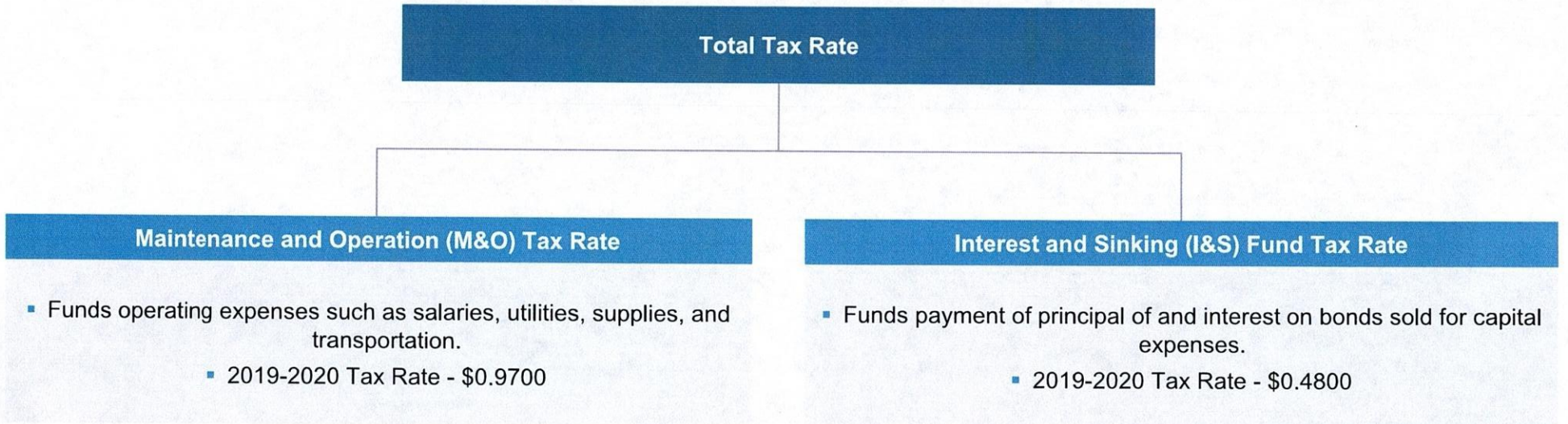
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# Overview of Bond Issuance Process

## Breakout of the Total Tax Rate and Lawful Uses

- The total tax rate is split into two different components:
- Maintenance and Operations (M&O) - Used for the day-to-day operations of the entity, including salaries, utilities, capital outlay, supplies, food, gas, etc.
- Interest and Sinking (I&S) - Funds building and capital outlay expenditures and can only be used to pay principal and interest on construction or refunding bonds.

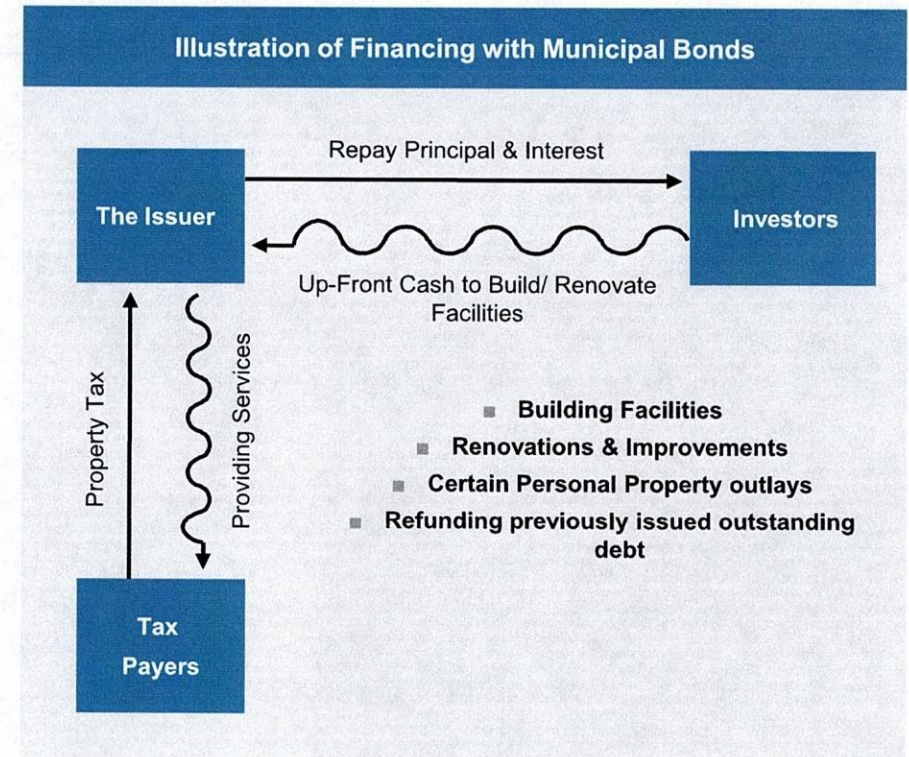




# Overview of Bond Issuance Process

## Overview of Municipal Bonds

- Bonds – similar to a home or car loan; It is a contract to repay borrowed money over time and are sold by municipal entities to raise funds for capital outlay.
- Approval – a bond election is usually required to authorize the sale of bonds.
- A bond is essentially a loan an investor makes to the Issuer for:
  - New buildings
  - Additions and renovations to existing facilities
  - Land acquisition
  - Technology infrastructure
  - Equipment for new or existing buildings or
  - Personal property such as buses or furniture
  - Refunding outstanding debt
- Benefits of Bonds
  - Receive cash up-front to finance capital outlay now
  - Tax-Exempt Rates





# Overview of Bond Issuance Process

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## Financial Team Needed to Complete a Debt Financing

### Issuer's Team

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- **Issuer Administration / Board**
- **Financial Advisor:** Coordinates the overall financing process to assist the Issuer in meeting its long-term goals by attempting to achieve the most cost and tax efficient solution possible. This involves providing a plan of finance, presentations to rating agencies, drafting of Official Statement, coordinating the actual sale and delivery of bonds and other matters related to debt issuance. Has a fiduciary obligation to the Issuer.
- **Bond Counsel:** An attorney representing the Issuer who prepares the legal documentation of the issuance, provides both State Law and Federal tax law opinions and coordinates approval by the Attorney General. Has a fiduciary obligation to the Issuer.

### The "Other Side"

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- **Underwriter(s):** Responsible for distribution, sale, and / or purchase of bonds. The Underwriter commits to purchase the Issuer's debt at certain interest rates, then sells the debt obligations to various institutional and/or retail investors and is responsible for timely delivery of the debt to buyers / proceeds to the Issuer. *DOES NOT HAVE a fiduciary obligation to the Issuer.*
- **Underwriter's Counsel:** Attorneys representing the Underwriter to perform due diligence on the transaction, review disclosure documents and prepare the bond purchase agreements. *DOES NOT HAVE a fiduciary obligation to the Issuer.*

### Other Essential Players

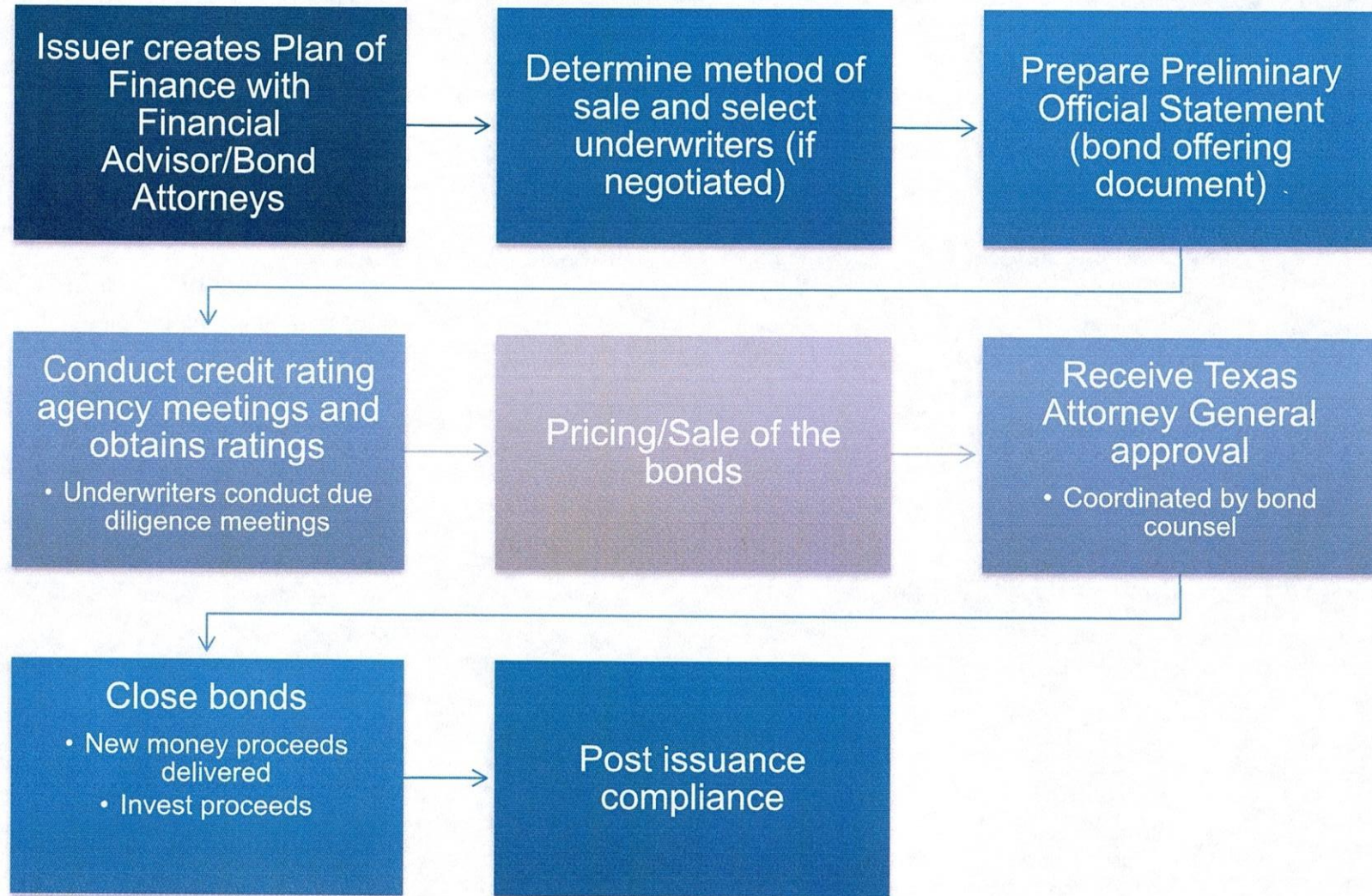
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- **Rating Agencies:** Independent firms that provide opinions on the relative creditworthiness of an issuer and the debt instruments (bonds or otherwise, as discussed later). Despite the PSF guarantee which assures Texas school districts of a AAA rating, underlying bond ratings are important in the bond process.
- **Attorney General:** Provides final approval related to issue's compliance with state law and procedures.
- **Paying Agent/Registrar:** Receives the Issuer's debt service payments prior to debt service dates and distributes these funds to the debt holder.
- **Permanent School Fund (PSF) Guarantee:** Administered by the Texas Education Agency (TEA) this program provides every Texas school district a "AAA" bond rating allowing participating school districts to borrow at lower interest rates.



# Overview of Bond Issuance Process

## Flowchart of the Bond Issuance Process





# Overview of Bond Issuance Process

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## Developing a Plan of Finance

- Consider specific financing alternatives that can achieve the lowest overall costs consistent with the Issuer's requirements for flexibility and its parameters for maintaining an acceptable tax rate.
  
- Key concerns to keep in mind include:
  - Median levels of debt-to-assessed-valuation ratios for Issuers of your size.
  - Debt repayment which will retire 50% or more of your principal halfway through total debt amortization.
  - Structuring of overall debt service requirements to accommodate future borrowing needs.
  - Reasonably aggressive call features to accommodate potential refundings for economic savings or cash flow purposes.
  - Structuring that takes advantage of market vacuums to lower overall costs.

*\*\*\*This is not intended to be an in-depth discussion but only a general guide to help you understand key issues which should be fully explored as you proceed with your financings.*



# Overview of Bond Issuance Process

## The POS – Preliminary Official Statement

- The Issuer's document
- Prepared by Issuer, bond counsel and financial advisor
- Presented to investors by underwriting syndicate to solicit interest in the bonds
- Finalized after pricing

### OFFICIAL STATEMENT Dated December 17, 2014

NEW ISSUE - Book-Entry-Only

ENHANCED/UNENHANCED RATINGS: Fitch: "AAA"/"A+"  
PSF Guaranteed  
(See "THE PERMANENT SCHOOL FUND  
GUARANTEE PROGRAM" and "OTHER  
INFORMATION - Ratings" herein)

*In the opinion of Bond Counsel (defined below), assuming continuing compliance by the District (defined below) after the date of initial delivery of the Bonds (defined below) with certain covenants contained in the Order (defined below) authorizing the Bonds and subject to the matters set forth under "FEDERAL TAX MATTERS" herein, interest on the Bonds for federal income tax purposes under existing statutes, regulations, published rulings, and court decisions (1) will be excludable from the gross income of the owners thereof pursuant to section 103 of the Internal Revenue Code of 1986, as amended to the date of initial delivery of the Bonds, and (2) will not be included in computing the alternative minimum taxable income of the owners thereof who are individuals or, except as hereinafter described, corporations. (See "FEDERAL TAX MATTERS" herein.)*

\$25,835,000  
SOUTH SAN ANTONIO INDEPENDENT SCHOOL DISTRICT  
(A Political Subdivision of the State of Texas located in Bexar County)  
UNLIMITED TAX REFUNDING BONDS, SERIES 2014

Dated Date: December 15, 2014  
(Interest accrues from Delivery Date)

Due: August 15, as shown on inside cover page  
Delivery Date: On or about December 30, 2014

The South San Antonio Independent School District Unlimited Tax Refunding Bonds, Series 2014 described above (the "Bonds") are being issued by the South San Antonio Independent School District (the "District") pursuant to the Constitution and general laws of the State of Texas (the "State"), particularly Chapter 1207, Texas Government Code, as amended, ("Chapter 1207"), and an order (the "Order") adopted by the District's Board of Trustees (the "Board") on December 17, 2014 authorizing the issuance of the Bonds.

The Bonds are direct obligations of the District, issued in part as current interest bonds ("CIBs") and in part as "Capital Appreciation Bonds" on which interest is accreted and paid only at maturity ("CABs"), and are payable from an annual ad valorem tax levied, without legal limitation as to rate or amount, on all taxable property located within the District. (See "THE BONDS - Security and Source of Payment") The District has received conditional approval from the Texas Education Agency for payment of the principal of, Maturity Value (defined herein), and interest on the Bonds to be guaranteed under the Texas Permanent School Fund Guarantee Program, which will automatically become effective when the Texas Attorney General approves the Bonds. (See "THE PERMANENT SCHOOL FUND GUARANTEE PROGRAM"; see also "STATE AND LOCAL FUNDING OF SCHOOL DISTRICTS IN TEXAS" and "CURRENT PUBLIC SCHOOL FINANCE SYSTEM" for a discussion of recent developments in Texas law affecting the financing of school districts in Texas).

Interest on the CIBs will accrue from the Delivery Date, specified below, and will be payable on February 15 and August 15 of each year, commencing on August 15, 2015, until maturity or prior redemption, and will be calculated on the basis of a 360-day year of twelve 30-day months. Interest on the CABs will accrete from the Delivery Date to the initial purchaser of the Bonds named below (the "Underwriter"), will compound semiannually on February 15 and August 15 (each an "Accretion Date"), commencing August 15, 2015, and will be payable upon maturity. The definitive CIBs will be issued as fully registered obligations in the principal denomination of \$5,000 for any one stated maturity. The CABs will be issued in denominations of \$5,000 of Maturity Value, or any integral multiple thereof within a maturity. The Bonds will be initially registered and delivered only to Cede & Co., the nominee of The Depository Trust Company, New York, New York ("DTC"), pursuant to the Book-Entry-Only System described herein. Book-entry interests in the Bonds may be acquired in denominations of \$5,000 or integral multiples thereof. No physical delivery of the Bonds will be made to the owners thereof. Principal of and interest on the CIBs and Maturity Value on the CABs will be payable by the Paying Agent/Registrar to Cede & Co., which will make distribution of the amounts so paid to the participating members of DTC for subsequent payment to the beneficial owners of the Bonds. (See "THE BONDS - Book-Entry-Only System" herein.) The initial Paying Agent/Registrar is The Bank of New York Mellon Trust Company, N.A., Dallas, Texas. (See "THE BONDS - Paying Agent/Registrar".)

Proceeds from the sale of the Bonds will be used for (i) refunding a portion of the District's currently outstanding obligations identified in Schedule I attached hereto (the "Refunded Obligations") and (ii) paying the costs of issuing the Bonds. (See "PLAN OF FINANCING - Purpose".)

SEE STATED MATURITIES, PRINCIPAL AMOUNTS, MATURITY VALUE, INTEREST RATES, INITIAL YIELDS, CUSIP NUMBERS, AND REDEMPTION PROVISIONS ON PAGE ii HEREIN

*The Bonds are offered for delivery when, as, and if issued and received by the Underwriter and subject to the approving opinion of the Attorney General of the State of Texas and the legal opinion of Winstead PC, San Antonio, Texas, Bond Counsel, and Bracewell & Giuliani LLP, San Antonio, Texas, Disclosure Counsel. Certain legal matters also will be passed upon for the Underwriter by its counsel West & Associates, L.L.P., Dallas, Texas. It is expected that the Bonds will be available for initial delivery through the services of DTC on or about December 30, 2014 (the "Delivery Date").*



# Overview of Bond Issuance Process

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## Overview of Credit Ratings

- Approximately four weeks prior to the sale of bonds, an application will be submitted to one or more of the rating agencies to assign an independent rating to the Issuer's debt obligations. The rating is a reflection of the Issuer's creditworthiness and is relied upon by investors that purchase the Issuer's debt obligations. The major rating agencies are:
  - Moody's Investors Service;
  - Standard & Poor's; and
  - Fitch Ratings.
- In examining the Issuer's financial stability, the rating agencies will consider such things as:
  - The Issuer's local economy and tax base;
  - Administrative factors;
  - Issuer's debt policies; and
  - The Issuer's overall financial condition.
- After considering all factors, the rating agencies will assign a rating to the debt obligations. In general, the higher a Issuer's rating, the lower the interest rate demanded by investors. This is due to the lower degree of risk associated with a higher rated debt obligation.



# Overview of Bond Issuance Process

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## Credit Rating Categories

- The categories of long-term credit ratings are provided below. It is important to emphasize that most Texas school districts may potentially have their voted bonds secured by the Permanent School Fund Guarantee of the State of Texas (“PSF”) and thereby receive the highest bond rating available, “Aaa/AAA”

### “Aaa / AAA”

- Issuers rated “AAA” offer exceptional financial security. The Issuers’ capacity to meet its financial commitment on its obligations is extremely strong. While the creditworthiness of these entities is likely to change, such changes as can be visualized are most unlikely to impair their fundamentally strong position. This is the enhanced rating on all PSF secured debt.

### “Aa / AA”

- Issuers rated “AA” offer excellent financial security. Together with the “AAA” group, they constitute what are generally known as high-grade entities. They are rated lower than “AAA” rated entities because long-term risks appear somewhat larger. The Issuers’ capacity to meet its financial commitment on its obligations is very strong.

### “A / A”

- Issuers rated “A” offer good financial security. Issuers rated “A” are somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than issuers in higher-rated categories. However, the Issuers’ capacity to meet its financial commitment on its obligations is still strong.

### “Baa / BBB”

- Issuers rated “BBB” offer adequate financial security. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the issuer to meet its financial commitment on its obligations.

### “Ba / BB,” “B / B,” “Caa / CCC,” “Ca / CC,” and “C / C”

- Issuers are regarded as having significant speculative characteristics. “BB” indicates the least degree of speculation and “C” the highest. While such issuers will likely have some quality and protective characteristics, these may be outweighed by large uncertainties or major exposures to adverse conditions.



# Overview of Bond Issuance Process

## Credit Rating Categories

- Moody's Investors Service applies numerical modifiers "1", "2", and "3" in each generic rating category from Aa to Caa.
- Fitch Ratings, and Standard & Poor's Rating Service applies modifiers "+" and "-" in each generic rating category from "AA" to "CCC."
- Modifiers "1" and "+" indicate that the Issuer is in the higher end of its letter rating category; the modifier 2 indicates a mid-range ranking; and modifiers "3" and "-" indicate that the issuer is in the lower end of the letter ranking category.

	Moody's	Standard & Poor's	Fitch
<b>Highest Quality (Lowest default risk)</b>	Aaa	AAA	AAA
<b>High Grade / High Quality</b>	Aa1	AA+	AA+
	Aa2	AA	AA
	Aa3	AA-	AA-
<b>Upper Medium Grade</b>	A1	<b>A+</b>	<b>A+</b>
	A2	A	A
	A3	A-	A-
<b>Minimum Investment Grade</b>	Baa1	BBB+	BBB+
	Baa2	BBB	BBB
	Baa3	BBB-	BBB-
<b>Speculative Grade</b>	Ba1	BB+	BB+
	Ba2	BB	BB
	Ba3	BB-	BB-
	B1	B+	B+
	B2	B	B
<b>Highly Speculative Grade Imminent default or in default</b>	B3	B-	B-
	Caa (1,2 or 3) or Ca	CCC (+,-), CC or C	CCC (+,-), CC or C
	C	SD or D	SD or D
<b>PSF Enhanced Ratings</b>			
<b>South San Antonio ISD's Ratings</b>			

# Preliminary Refunding Analysis

## Preliminary Timeline of Events



### South San Antonio Independent School District Unlimited Tax and Taxable Refunding Bonds, Series 2019 Calendar of Events

September							October							November						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7			1	2	3	4	5						1	2
8	9	10	11	12	13	14	6	7	8	9	10	11	12	3	4	5	6	7	8	9
15	16	17	18	19	20	21	13	14	15	16	17	18	19	10	11	12	13	14	15	16
22	23	24	25	26	27	28	20	21	22	23	24	25	26	17	18	19	20	21	22	23
29	30						27	28	29	30	31			24	25	26	27	28	29	30

  Board Meeting

  Holiday

  Bond Dates

Date	Action
09/18/2019	Board Meeting - Information Item
09/20/2019	Circulate 1st draft of Preliminary Official Statement ("POS")
09/25/2019	Board Meeting - To Approve Refunding
09/26/2019	Comments due on 1st draft of POS
09/27/2019	Circulate 2nd draft of POS
09/27/2019	Rating Agency Calls
10/01/2019	Final Comments Due on POS
10/02/2019	Post POS
10/03/2019	Receive ratings
10/08/2019	Bond Pricing
10/28/2019	Bond Closing

Preliminary; subject to change.



# Preliminary Refunding Analysis

Section 2



Capital  
Markets



# Preliminary Refunding Analysis

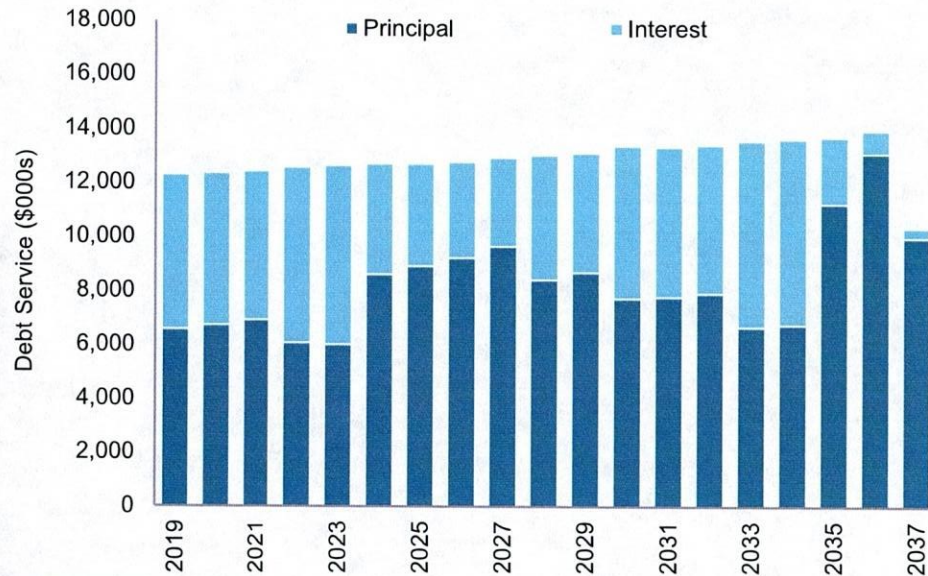
## Outstanding Debt Profile ("A+ / A+")

South San Antonio ISD Debt Profile

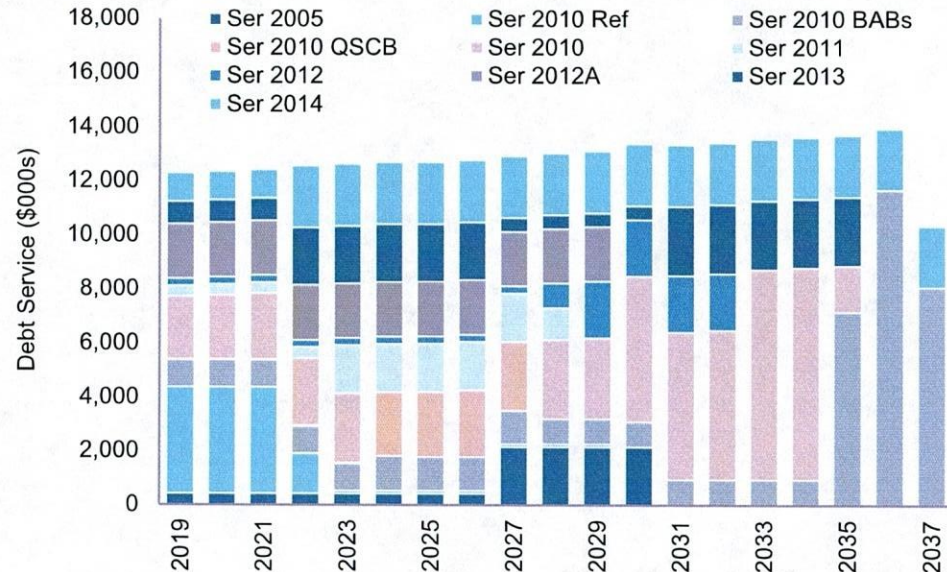
Issue	Issued Par Amount	Outstanding Par Amount	Interest Rate Range	First Call Date	Final Maturity	Structure	Use of Proceeds
U/L Tax Sch Bldg Bds Ser 2005	\$40,500,000	\$7,510,000	5.500%	N/A	08/15/2030	Fixed Rate	School Building
<b>U/L Tax Ref Bds Ser 2010</b>	<b>23,475,000</b>	<b>12,545,000</b>	<b>4.000% - 5.000%</b>	<b>02/15/2020</b>	<b>08/15/2029</b>	<b>Fixed Rate</b>	<b>Refunding</b>
U/L Tax Sch Bldg Taxable Ser 2010 (BABs)	26,095,000	26,095,000	4.607% - 5.740%	08/15/2020	08/15/2037	Fixed Rate	School Building
U/L Tax Sch Bldg QSCB Taxable Ser 2010	9,785,000	9,785,000	5.190%	N/A	08/15/2027	Fixed Rate	School Building
U/L Tax Sch Bldg Bds Ser 2010	22,116,909	22,116,909	3.250% - 5.020%	N/A	08/15/2035	Fixed Rate	School Building
<b>U/L Tax Ref Bds Ser 2011</b>	<b>8,684,990</b>	<b>8,324,990</b>	<b>3.000% - 3.600%</b>	<b>02/15/2021</b>	<b>08/15/2028</b>	<b>Fixed Rate</b>	<b>Refunding</b>
<b>U/L Tax Ref Bds Ser 2012</b>	<b>8,390,000</b>	<b>8,390,000</b>	<b>3.000% - 3.500%</b>	<b>08/15/2020</b>	<b>08/15/2032</b>	<b>Fixed Rate</b>	<b>Refunding</b>
<b>U/L Tax Taxable Ref Bds Ser 2012A</b>	<b>24,815,000</b>	<b>17,845,000</b>	<b>3.250% - 4.250%</b>	<b>08/15/2022</b>	<b>08/15/2029</b>	<b>Fixed Rate</b>	<b>Refunding</b>
<b>U/L Tax Ref Bds Ser 2013</b>	<b>18,815,000</b>	<b>18,465,000</b>	<b>3.000% - 5.000%</b>	<b>08/15/2023</b>	<b>08/15/2035</b>	<b>Fixed Rate</b>	<b>Refunding</b>
U/L Tax Ref Bds Ser 2014	25,835,000	25,510,000	2.440% - 5.000%	08/15/2024	08/15/2037	Fixed Rate	Refunding
<b>Total</b>	<b>\$208,511,899</b>	<b>\$156,586,899</b>					

T/E Current Refunding Candidates    Taxable Advance Refunding Candidates

Outstanding Unlimited Tax Debt by Principal & Interest



Outstanding Unlimited Tax Debt by Series





# Preliminary Refunding Analysis

## Tax-Exempt Current Refunding Analysis

### Summary of Assumptions

Current refunding of the District's debt listed below on a tax-exempt basis to create level debt service savings in years 2021 – 2029. The refunding assumes current PSF rates with the District's underlying "A+/A+" ratings. The refunding bonds have substantially the same structure, maturity, and debt service schedule as the refunded bonds with a delivery date of November 17, 2019.

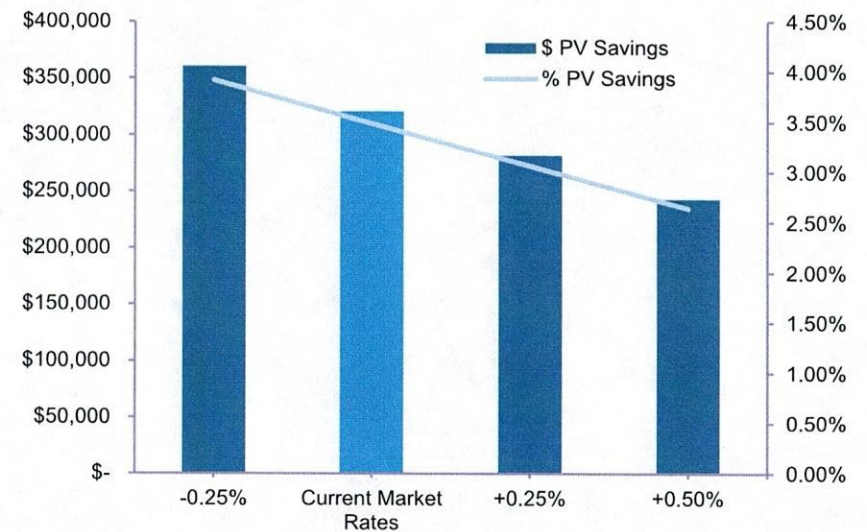
### Refunding Candidates

Series	Maturities to be Refunded	Refunded Par Amount	Coupon Range	Call Date	Call Price
U/L Tax Ref Bds Ser 2010	2020 - 2029	\$9,205,000	4.000% - 5.000%	02/15/2020	100.00%
<b>Total</b>		<b>\$9,205,000</b>			

### Refunding Results

Delivery Date	11/17/2019
Refunded Par Amount	\$9,205,000
Average Coupon of Refunded Bonds	4.71%
All-In TIC	2.40%
Arbitrage Yield	1.11%
Escrow Yield	1.11%
Net Debt Service Savings	\$337,750
Average Annual Debt Service Savings	\$37,528
<b>Present Value Savings</b>	<b>\$321,070</b>
<b>PV Savings as % of Refunded Par</b>	<b>3.49%</b>
<b>Negative Arbitrage</b>	<b>\$3</b>
<b>Negative Arbitrage as % of PV Savings</b>	<b>0.00%</b>

### Sensitivity Analysis



Preliminary; subject to change.



# Preliminary Refunding Analysis

## Taxable Advance Refunding Analysis

### Summary of Assumptions

Advance refunding of the District's debt listed below on a taxable basis to create level debt service savings in years 2021 – 2034. The refunding assumes current PSF rates with the District's underlying "A+/A+" ratings. The refunding bonds have substantially the same structure, maturity, and debt service schedule as the refunded bonds with a delivery date of November 17, 2019.

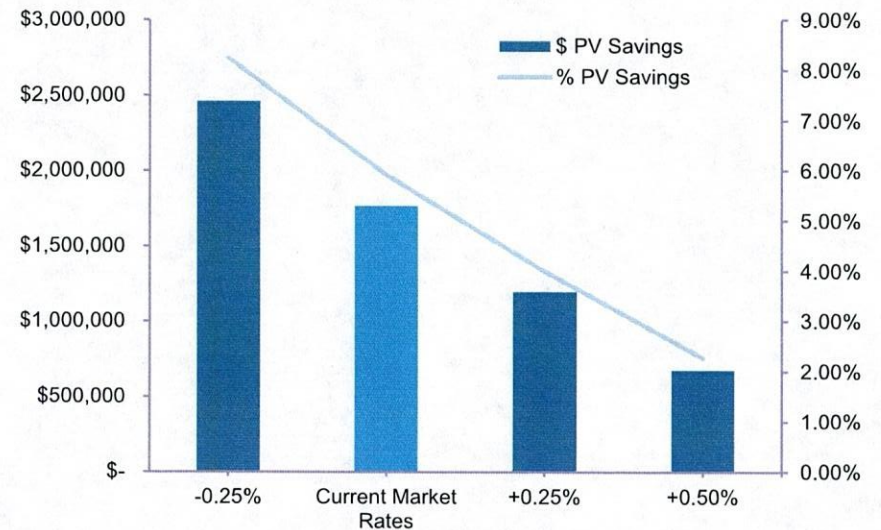
### Refunding Candidates

Series	Maturities to be Refunded	Refunded Par Amount	Coupon Range	Call Date	Call Price
U/L Tax Ref Bds Ser 2011	2024 - 2028	\$7,560,000	3.125% - 3.600%	02/15/2021	100.00%
U/L Tax Ref Bds Ser 2012	2028 - 2029; 2032	4,525,000	3.000% - 3.500%	08/15/2020	100.00%
U/L Tax Taxable Ref Bds Ser 2012A	2025 - 2029	8,990,000	3.750% - 4.000%	08/15/2022	100.00%
U/L Tax Ref Bds Ser 2013	2031 - 2034	8,790,000	5.000%	08/15/2023	100.00%
<b>Total</b>		<b>\$29,865,000</b>			

### Refunding Results

Delivery Date	11/17/2019
Refunded Par Amount	\$29,865,000
Average Coupon of Refunded Bonds	4.18%
All-In TIC	2.69%
Arbitrage Yield	2.56%
Escrow Yield	1.57%
Net Debt Service Savings	\$2,168,140
Average Annual Debt Service Savings	\$154,867
<b>Present Value Savings</b>	<b>\$1,765,380</b>
<b>PV Savings as % of Refunded Par</b>	<b>5.91%</b>
<b>Negative Arbitrage</b>	<b>\$700,708</b>
<b>Negative Arbitrage as % of PV Savings</b>	<b>39.69%</b>

### Sensitivity Analysis



Preliminary; subject to change.



# Preliminary Refunding Analysis

## Cash Flow Savings

### Tax-Exempt Current Refunding

Date (8/31)	Prior Debt Service	Refunding Debt Service	Net Savings	Present Value Savings
2020	\$3,919,442	\$3,919,442	\$0	\$3,815
2021	3,948,550	3,910,000	38,550	37,835
2022	1,480,050	1,443,000	37,050	35,959
2023	110,800	75,250	35,550	34,119
2024	107,400	67,500	39,900	37,869
2025	109,000	70,000	39,000	36,604
2026	105,400	67,250	38,150	35,410
2027	106,800	69,500	37,300	34,237
2028	108,000	71,500	36,500	33,132
2029	104,000	68,250	35,750	32,091
<b>Total</b>	<b>\$10,099,442</b>	<b>\$9,761,692</b>	<b>\$337,750</b>	<b>\$321,070</b>

### Taxable Advance Refunding

Date (8/31)	Prior Debt Service	Refunding Debt Service	Net Savings	Present Value Savings
2020	\$1,067,845	\$1,067,845	\$0	\$4,927
2021	1,199,555	1,079,965	119,590	115,127
2022	1,199,555	1,079,965	119,590	112,233
2023	1,199,555	1,079,965	119,590	109,411
2024	2,729,555	2,564,965	164,590	146,540
2025	4,391,743	4,227,990	163,753	142,155
2026	4,393,143	4,225,990	167,153	141,436
2027	4,389,410	4,223,590	165,820	136,806
2028	4,428,635	4,265,990	162,645	130,860
2029	4,438,675	4,276,190	162,485	127,494
2030	510,375	347,440	162,935	124,902
2031	2,550,375	2,386,418	163,957	122,524
2032	4,578,375	4,415,828	162,547	118,233
2033	2,475,250	2,309,210	166,040	117,467
2034	2,478,000	2,310,554	167,446	115,266
<b>Total</b>	<b>\$42,030,045</b>	<b>\$39,861,905</b>	<b>\$2,168,140</b>	<b>\$1,765,380</b>

Preliminary; subject to change.



# Economic Conditions and Market Update

Section 3



Capital  
Markets



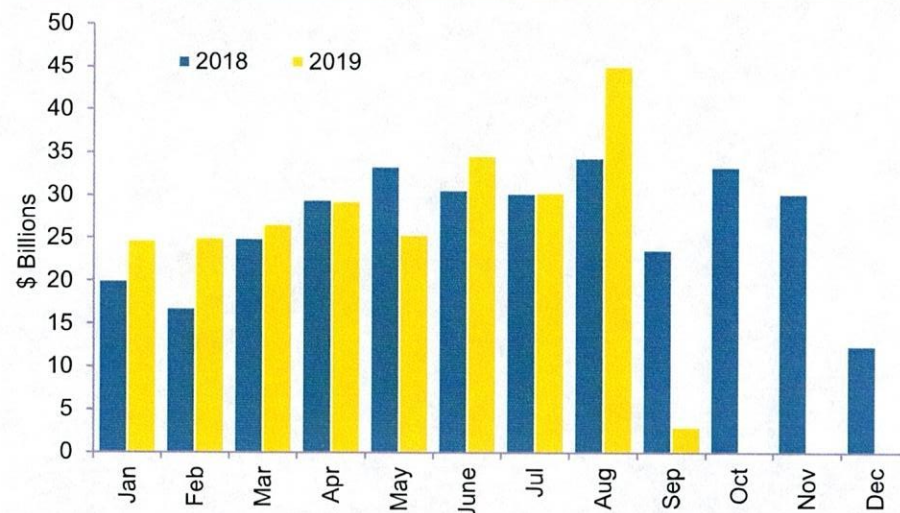
# Economic Conditions and Market Update

## Municipal Market Update

### Municipal Market Overview

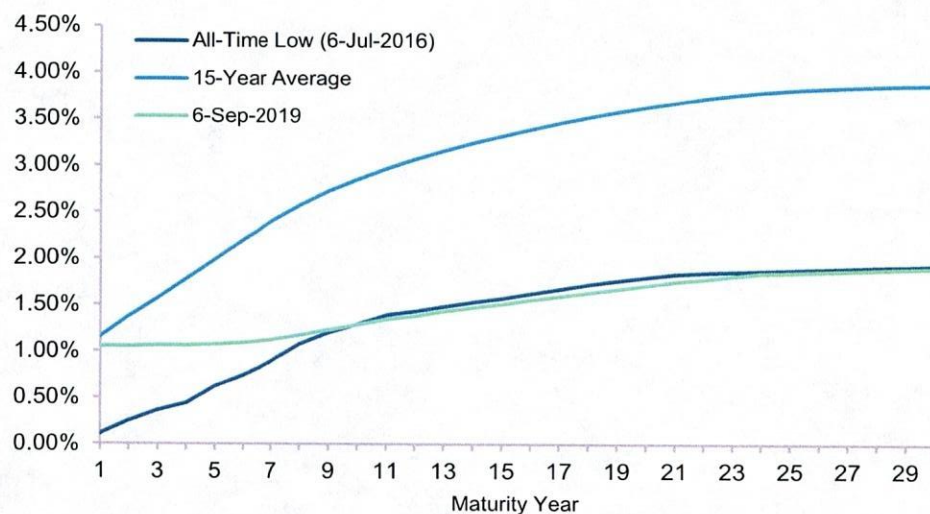
- **2018 Municipal Supply:** \$318 billion
- **2019 Municipal Supply (Forecast):** \$340 - \$350 billion
- Municipal supply totaled \$9.5bn last week, and taxable transactions comprised 12% of the volume.
- This week's municipal calendar is expected to total \$10.6bn, marking the third-largest weekly calendar of the year.
- Taxables are expected to account for 15% of this week's calendar; last week's taxable muni deals were generally well-received.
- Municipal bond funds reported their 35th consecutive week of inflows, bringing in \$820mm last week.
- Cumulative year-to-date inflows to weekly and monthly-reporting funds total nearly \$61bn.

### 2018 – 2019 YTD Monthly Supply\* (\$ Billions)



\* Publicly offered municipal debt; excludes private placements.

### Today's MMD Curve in Context



### Tax-Exempt and Taxable Yield Trends: November 1, 2016 - Present





# Economic Conditions and Market Update

## BBI 20 Index and Municipal Fund Flows

### Bond Buyer 20 GO Bond Index Since 1961



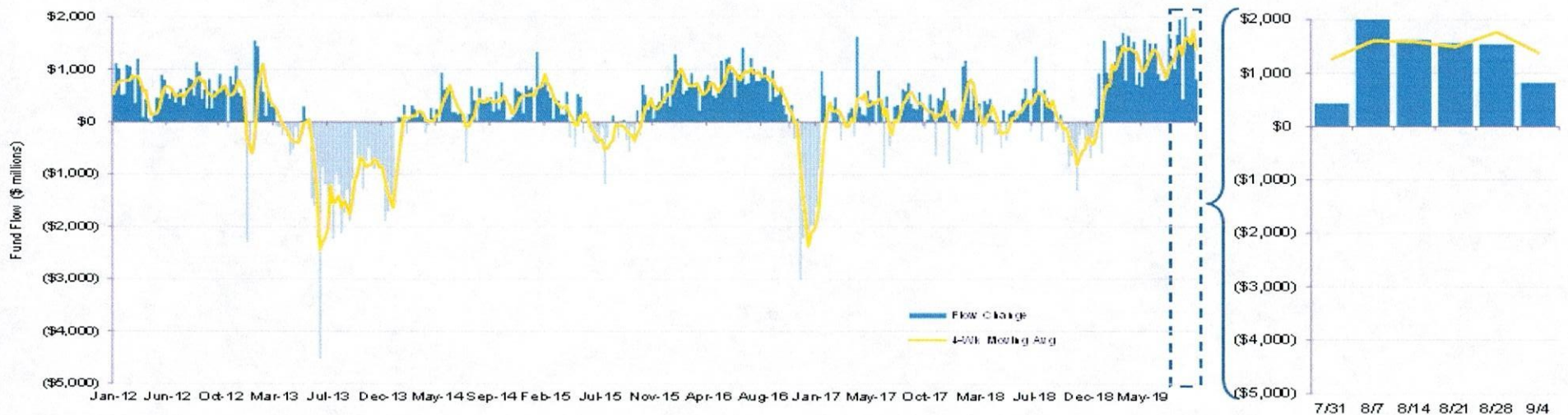
### % of Time in Each Range Since 1961

#### Yield Range

Less than 3.50%	10.25%	
3.50% - 4.00%	11.01%	
4.01% - 4.50%	11.46%	
4.51% - 5.00%	9.86%	
5.01% - 5.50%	13.75%	
5.51% - 6.00%	9.57%	
6.01% - 6.50%	7.41%	
6.51% - 7.00%	6.76%	
7.01% - 7.50%	6.11%	
7.51% - 8.00%	3.59%	
Greater than 8.00%	10.22%	
<b>Total</b>	<b>100.00%</b>	

Today's 2.97% level is lower than 99.58% of historical rates since January 1961.

### Lipper Municipal Fund Flows



Source: Bloomberg as of September 4, 2019  
Thomson Municipal Market Data

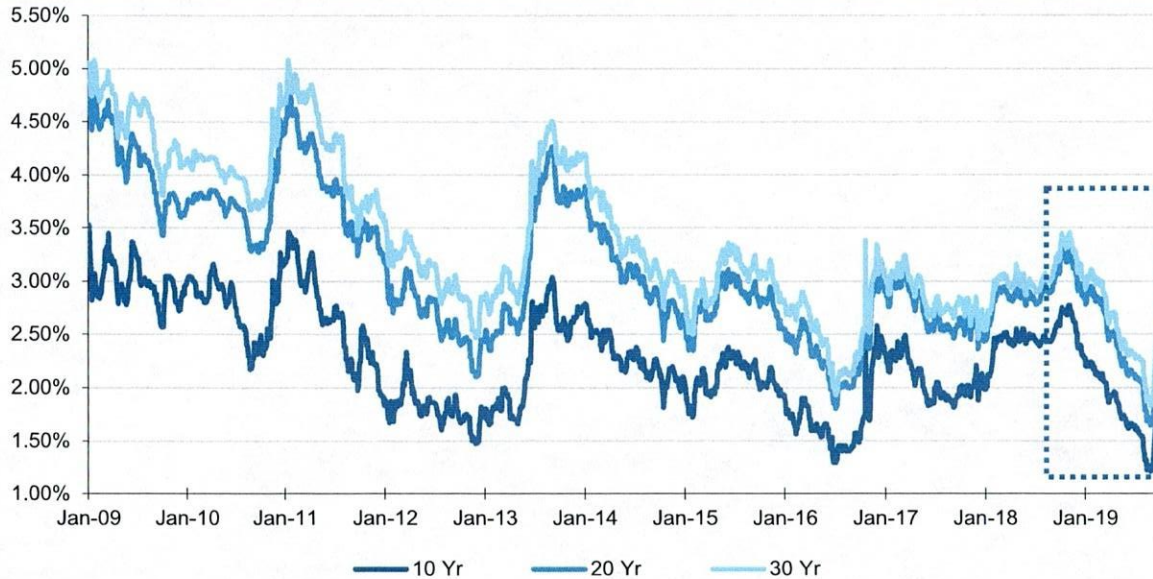


# Economic Conditions and Market Update

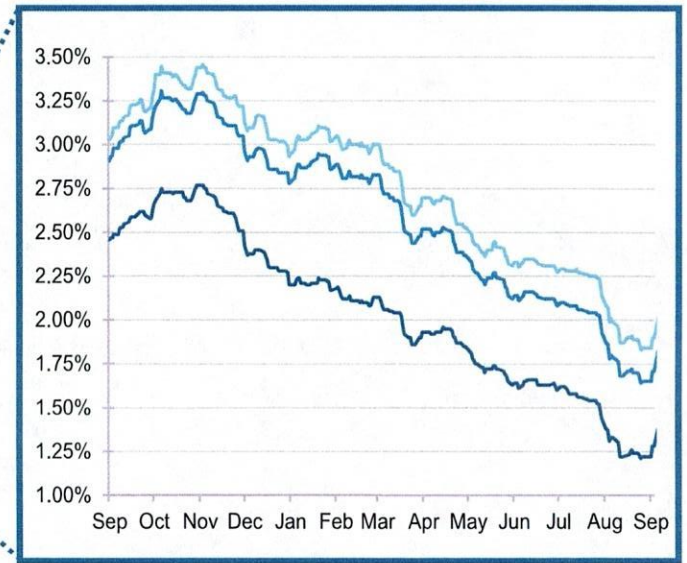
## Municipal Market Data – 30 Year "AAA" Rates

- After closing at 1.84% the previous week, the 30-year "AAA" MMD increased 6 bps from August 30 – September 6, closing at the current rate of 1.90%.

"AAA" MMD January 1, 2009 to Present



Shift in "AAA" MMD Since September 2018



**January 1, 2009 to Present**

	10-Year	20-Year	30-Year
Maximum	3.530%	4.890%	5.080%
Minimum	1.210%	1.640%	1.830%
Current	1.280%	1.710%	1.900%

**Shift in 30-year "AAA" MMD**

	2012	2013	2014	2015	2016	2017	2018
	-0.740%	1.330%	-1.340%	-0.010%	0.270%	-0.51%	0.47%

**September 1, 2018 to Present**

	10 Yr	20 Yr	30 Yr
Maximum	2.770%	3.310%	3.460%
Minimum	1.210%	1.640%	1.830%
Average	2.044%	2.594%	2.763%

Source: TM3, Thomson Reuters  
10, 20, and 30 year "AAA" MMD shown to represent different average lives of municipal transactions  
Rates as of September 6, 2019



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