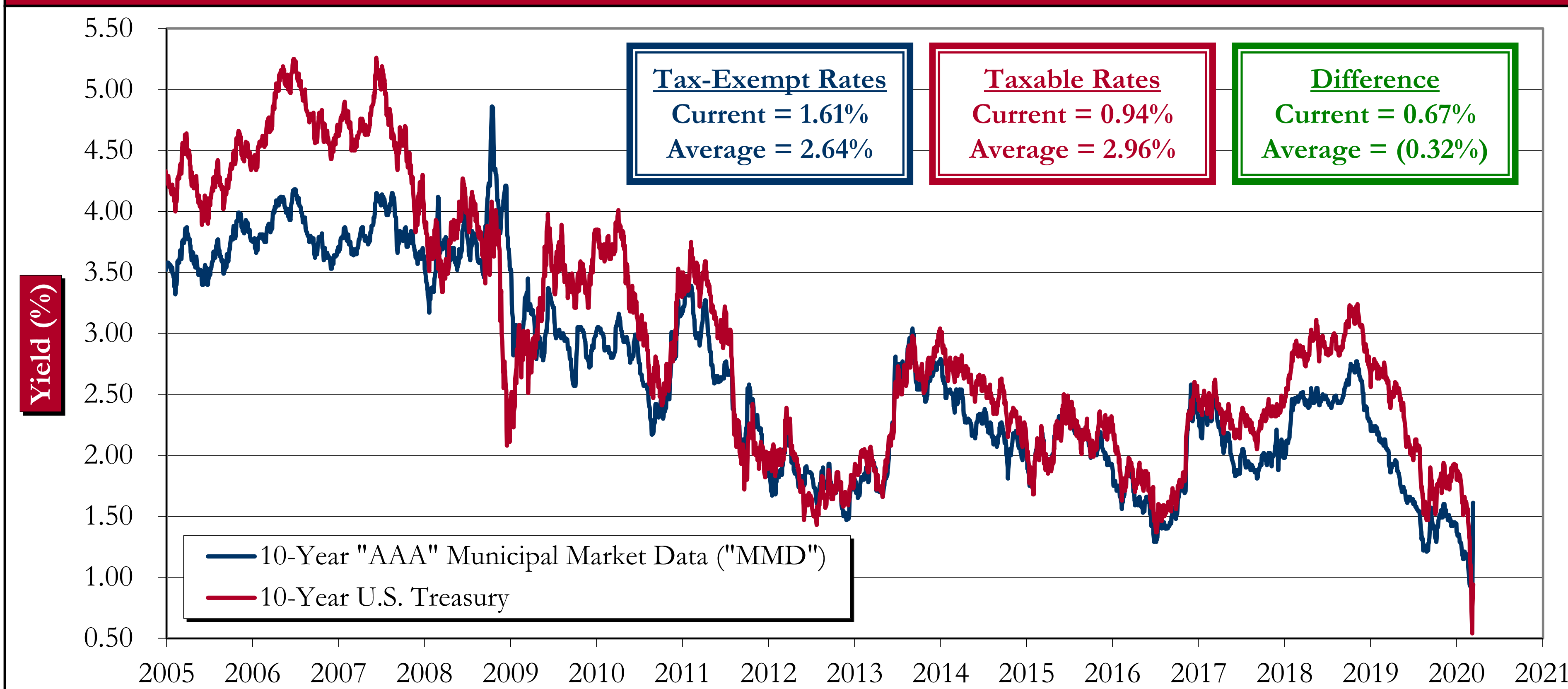
Update of Potential "Taxable" Refunding Opportunity

Monday, March 16, 2020

Current Tax-Exempt Vs. Taxable Interest Rates

- As shown below, tax-exempt and taxable interest rates have experienced a significant rally since the beginning of year 2019, most recently plummeting due to fears of the coronavirus outbreak. As a result, the 10-Year U.S. Treasury yield is currently 2.02% below the historical average experienced since year 2005.

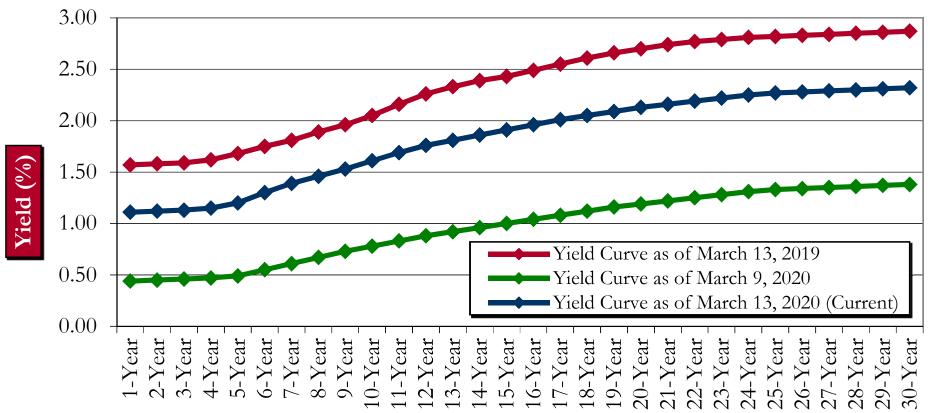
Overview of 10-Year Tax-Exempt and Taxable Interest Rates
January 1, 2005 To The Present



Municipal and Taxable Market Overview – Week of March 9 – 13, 2020

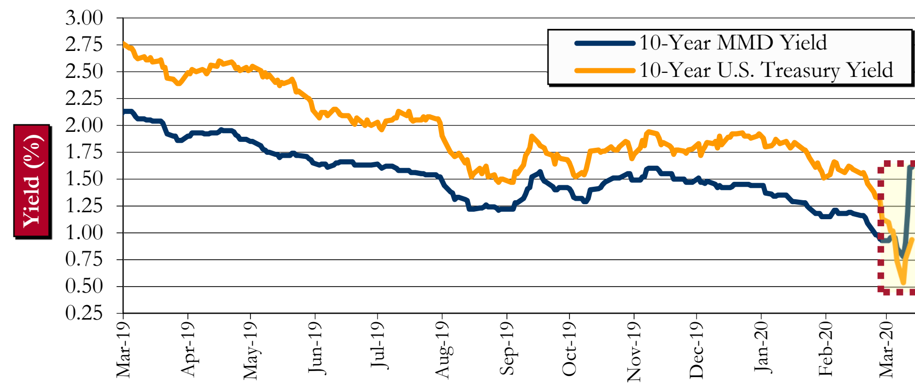
MMD Yield Curve Comparison

During the week of March 9, 2020, Municipal Market Data ("MMD") rates increased anywhere from 0.67% to 0.94% across the yield curve.

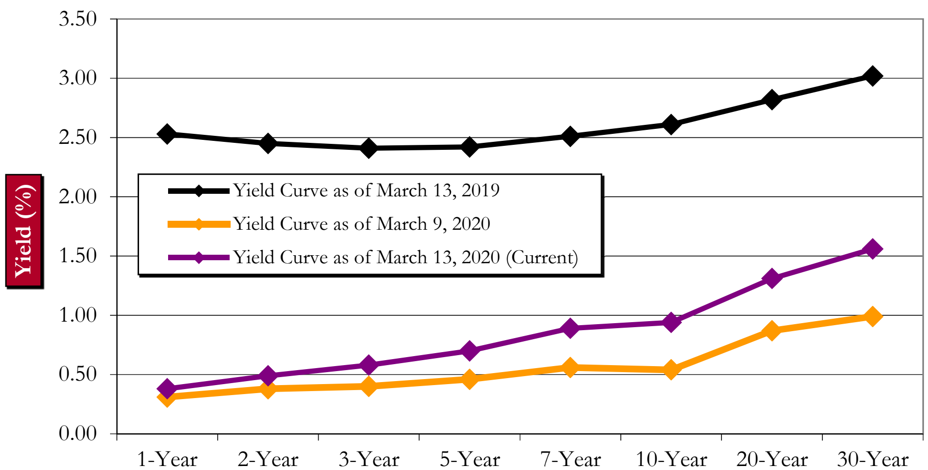


Historical 10-Year MMD and Treasury Yields

The 10-year MMD yield increased by 0.83% from March 9 to March 13. While enduring significant volatility, the 10-year U.S. Treasury yield also increased by 0.40% during this time.



U.S. Treasury Yield Curve Comparison



Municipal Vs. U.S. Treasury Yield Ratios

As further evidence of the severe "dislocation" in recent days, the 10-year MMD yield increased to over 171% of the 10-year U.S. Treasury yield, representing a 85.16% increase over the average experienced since 2016 and more than a 26% increase this week alone.

	Average – Since 2016	March 13, 2019	March 9, 2020	March 13, 2020
10-Year MMD	1.94%	2.05%	0.78%	1.61%
10-Year Treasury	2.27%	2.61%	0.54%	0.94%
10-Year MMD/U.S. Treasury	86.12%	78.54%	144.44%	**171.28%**

Source: U.S. Department of the Treasury and Thomson Reuters.

Extreme Market Volatility – Past and Present

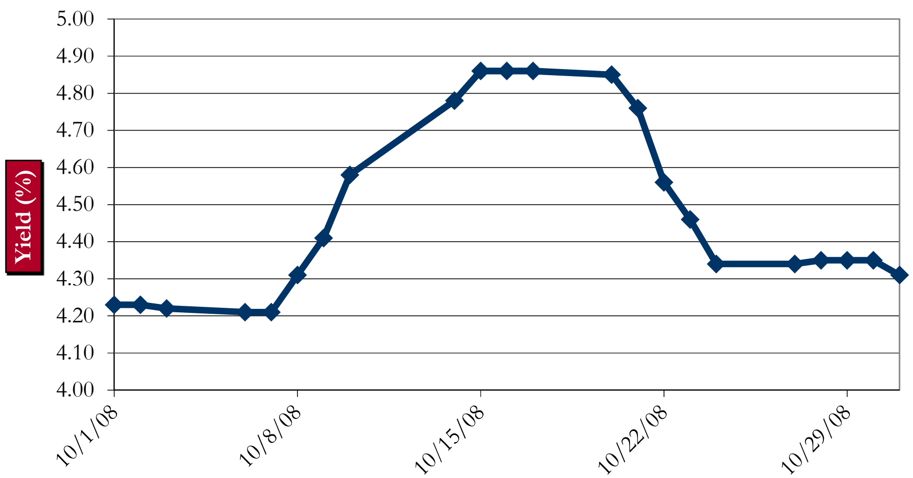
- While the degree of market volatility experienced during the week of March 9, 2020 was unprecedented, fixed income markets have previously experienced extreme volatility in short time periods.
- For example and as depicted in the graph below, interest rates increased sharply as a result of the market "dislocation" brought on by the "2008 Financial Crisis," but also returned to similar levels prior to the dislocation within a short time span.

Economic Events and Interest Rate Volatility

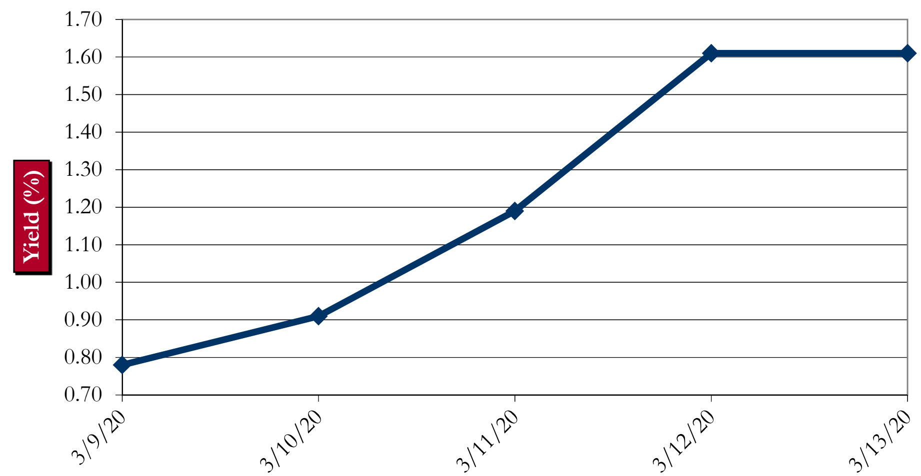
Event Description	10-Year MMD Volatility	10-Year U.S. Treasury Volatility
COVID-19 Outbreak	1.01%	0.76%
November 2016 Presidential Election	0.50%	0.44%
2016 Brexit Vote	0.32%	0.39%
2013 Taper Tantrum	0.73%	0.40%
2008 Financial Crisis	0.65%	0.70%

"Volatility" herein is calculated by the sum of absolute daily yield changes over a 5-day period.

2008 Financial Crisis
10-Year MMD – Month of October 2008



COVID-19 Outbreak
10-Year MMD – Week of March 9, 2020



Source: U.S. Department of the Treasury and Thomson Reuters.

Summary of the District's Outstanding Callable Bonds

- Stephenville Independent School District ("SISD" or the "District") currently has $66,010,000 of existing bonds eligible to be repaid or refinanced prior to maturity, as summarized in the table below.

- As a direct result of "The Tax Cuts and Jobs Act of 2017," SISD may no longer complete a so-called "tax-exempt" advance refunding of its outstanding bonds, limiting the District's ability to lock-in today's attractive interest rates. As an alternative to a "tax-exempt" advance refunding, SISD may complete a "taxable" refunding of its bonds.

Stephenville ISD - Summary of Callable Bonds Outstanding - As of March 16, 2020

Issue Description	Call Date	Principal Amount Outstanding	Principal Amount Callable	Callable Maturities	Final Maturity	Coupons: Callable Maturities
Unlimited Tax QSCBs, Taxable Series 2012-A (Direct-Pay Subsidy)	02/15/2022	$ 6,575,000	$ 6,575,000	2032	2032	3.650%
Unlimited Tax School Building Bonds, Series 2012-B	02/15/2022	14,995,000	13,975,000	2023 - 2037	2037	3.000% - 5.000%
Unlimited Tax School Building Bonds, Series 2018 [Mats. 2036 - 2039]	02/15/2026	15,100,000	15,100,000	2036 - 2039	2039	3.500% - 3.650%
Unlimited Tax School Building Bonds, Series 2018	02/15/2027	40,950,000	30,360,000	2028-35; 2040-42	2042	4.000% - 5.000%
Totals	---	**$ 77,620,000**	**$ 66,010,000**	---	---	---

Potential "Taxable" Advance Refunding Opportunity

- Based upon prevailing market conditions, Stephenville ISD has an opportunity to complete a "taxable" refunding of a portion of its outstanding Unlimited Tax School Building Bonds, Series 2012-B (the "Series 2012-B Bonds") at a lower interest rate.

- For purposes of this analysis, the table below summarizes the District's outstanding Series 2012-B Bonds which generate sufficient savings based upon prevailing market conditions to be considered for a potential "taxable" refunding program.

Summary of Series 2012-B Bonds to be Refunded

Issue Outstanding	Principal Amount To Be Refunded	Maturities To Be Refunded	Interest Rate	Redemption Date	Redemption Price
Unlimited Tax School Building Bonds, Series 2012-B	$ 13,975,000	02/15/2023 – 2037	4.74%	02/15/2022	100.0%

Potential "Taxable" Advance Refunding Opportunity

- The table below summarizes the savings currently available to SISD by refunding a portion of its existing Series 2012-B Bonds on a "taxable" basis (net of all costs).

Summary of Potential Savings Available

Description	Summary Of Results
Principal Amount of Series 2012-B Bonds to be Refunded	$ 13,975,000
Interest Rate on the Series 2012-B Bonds to be Refunded	4.74%
"All-In" True Interest Cost on the Refunding Bonds	2.41%
Escrow Yield	0.48%
Total Debt Service Savings	$2,635,644
Average Annual Savings (Years 2020/21 – 2036/37) (i.e. 17 Years)	155,038
Present Value Debt Service Savings (@ All-In TIC)	2,136,334
Present Value Savings as a Percentage of the Principal Amount of the Series 2012-B Bonds to be Refunded	15.29%
Opportunity Cost of Advance Refunding (i.e. "Negative Arbitrage")	$ 446,806
"Negative Arbitrage" as a Percentage of Present Value Savings	20.91%
Maturity Amount of Capital Appreciation Bonds Needed	$ 655,000
Current Refunding Alternative – Estimated Rate Movement to Provide Same Dollar Savings	0.45%

"Taxable" Refunding Programs – Summary of Pros and Cons

- **Pros**
  - **"Bird in the Hand"** – Due to historically low interest rates, the potential savings from a "taxable" refunding are meaningful and, thus, warrant serious consideration.
    - **Refunding Matrix:** As an alternative to the historical guideline used by many municipal issuers of 3%-5% of Present Value Savings, the refunding matrix below may be helpful as a general guideline for evaluating bond maturities for a potential refunding, while considering the "Negative Arbitrage" (see next page) applicable to the particular existing bond maturity.

Refunding Matrix – Required Minimum Percentage of Present Value Savings

Years After Call Date	Years to Call Date 0 – 2	3 – 6	7 – 10
0 – 3	1.0%	2.0%	4.0%
4 – 7	2.0%	3.5%	5.0%
8 – 12	4.0%	6.0%	8.0%
13 – 20	5.0%	7.0%	9.0%
20-plus	5.0%	8.0%	10.0%
"Negative Arbitrage" may not exceed 50% of the Present Value Savings.			

    - Based upon the above matrix, a refunding that produces in excess of 10% Present Value Savings and a ratio of "Negative Arbitrage to Present Value Savings" of less than 50% should be strongly considered, but evaluated in its totality given certain byproducts of advance and/or "taxable" refundings.

"Taxable" Refunding Programs – Summary of Pros and Cons

- **Cons**
  - **Opportunity Cost of Advance Refunding (i.e. "Negative Arbitrage")**
    - As previously experienced with "tax-exempt" advance refundings, there are inefficiencies in the escrow account to repay the District's Series 2012-B Bonds to be refunded until their redemption date since short-term investment rates generate less investment income than is permitted under Federal tax law (i.e. "Negative Arbitrage").
    - Please note, "Negative Arbitrage" does not change the savings summarized herein as it is not an "actual" cost – It is solely an opportunity cost.
    - In other words, based upon the "taxable" refunding program previously depicted, Stephenville ISD, while saving approximately $2.636 million, would potentially save an estimated $3.082 million if there was no "Negative Arbitrage."
  - **Interest Rate Sensitivity of Current Refunding Alternative**
    - In lieu of a "taxable" refunding, Stephenville ISD retains the option to wait until 90 days prior to when its outstanding bonds are callable to complete a current refunding on a "tax-exempt" basis.
    - For example, current "tax-exempt" interest rates would need to increase by approximately **0.45%** between now and November 2021 for SISD to achieve a greater benefit by completing a "taxable" refunding of its Series 2012-B Bonds herein.

"Taxable" Refunding Programs – Summary of Pros and Cons

- **Cons (Continued)**

  - **Capital Appreciation Bonds ("CABs")**

    - Based upon the coupon structure of "taxable" securities demanded by potential investors, the "taxable" refunding program herein would require the use of CABs, something Stephenville ISD has historically tried to avoid.

  - **Legislation to Reinstate "Tax-Exempt" Advance Refundings**

    - Ever since "tax-exempt" advance refundings were eliminated by the "The Tax Cuts and Jobs Act of 2017," municipal market participants have been pushing to reinstate the financing mechanism through an appropriations bill or similar legislation.

    - While not available under current Federal tax law, completing an advance refunding of the District's bonds on a "tax-exempt" basis may become an available option in the future, potentially providing a lower-cost alternative.

Use of a "Parameters Bond Order" for Approval of Refunding Bond Sale

- As previously utilized for prior bond sales, Stephenville ISD's Board of Trustees may adopt a "Parameters Bond Order" designating the ability to approve the issuance of the Series 2020 Refunding Bonds to the District's Administration.

- The following is a representative listing of the primary parameters we would currently recommend for the Series 2020 Refunding Bonds:

  1) The District achieves a savings of at least $2,250,000;

  2) The maximum principal amount of Refunding Bonds that may be issued is $13,975,000 – The principal amount of the Series 2012-B Bonds to be refunded;

  3) The maximum interest rate (All-In TIC) on the Refunding Bonds is 2.75%;

  4) The final maturity of the Refunding Bonds may not exceed February 15, 2037 – The same final maturity as the Series 2012-B Bonds to be refunded; and

  5) The Refunding Program must be completed within 180 days of the Board of Trustees adopting the "Parameters Bond Order" (e.g. September 12, 2020).

- Unless each parameter listed above is achieved, the Refunding Bonds would not be issued until additional direction is received from the District's Board of Trustees.

Preliminary Timetable – Series 2020 Refunding Bond Sale

March 2020						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

April 2020						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

May 2020						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

June 2020						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

Board Meeting   Closing – Receipt of Funds

Preliminary Timetable – Sale of the Series 2020 Refunding Bonds

Date*	Action Necessary
March 16, 2020	Board Meeting – Consider "Parameters Bond Order" Authorizing Issuance Of Unlimited Tax Refunding Bonds, Taxable Series 2020 (the "Series 2020 Refunding Bonds").
April 17, 2020	Completion of All Items Necessary to Sell the Series 2020 Refunding Bonds (i.e. Preliminary Official Statement Completed, Permanent School Fund Guarantee Received, Ratings Received, etc.).
To be determined.	Pricing – Sale of the Series 2020 Refunding Bonds Within The Specified Parameters – Savings And Interest Rates Locked-In At This Time.
On or Prior to September 12, 2020	Closing – The 2020 Refunding Program is Completed And the District Begins Repaying the Lower Interest Rate Series 2020 Refunding Bonds.

* Preliminary, subject to change.

Questions