



**EHLERS**  
LEADERS IN PUBLIC FINANCE

October 16, 2018

## Pre-Sale Report for

City of West Allis, Wisconsin

\$8,715,000 General Obligation Corporate Purpose Bonds  
Series, 2018A



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## Executive Summary of Proposed Debt

Proposed Issue:	\$8,715,000 General Obligation Corporate Purpose Bonds Series, 2018A
Purposes:	<p>The proposed issue includes financing for the following purposes: Streets, Sanitary Sewer, Water System Improvements and Equipment</p> <ul style="list-style-type: none"> <li>• Sewer System Improvements. Debt service will be paid from sewer revenues.</li> <li>• Street Infrastructure. Debt service will be paid from ad valorem property taxes.</li> <li>• Water Equipment, Meters, software. Debt service will be paid from water revenues.</li> <li>• Water Infrastructure. Debt service will be paid from water revenues.</li> </ul>
Authority:	<p>The Bonds are being issued pursuant to Wisconsin Statute(s):</p> <ul style="list-style-type: none"> <li>• 67.04</li> </ul> <p>The Bonds will be general obligations of the City for which its full faith, credit and taxing powers are pledged.</p> <p>The Bonds count against the City’s General Obligation Debt Capacity Limit of 5% of total City Equalized Valuation. Following issuance of the Bonds, the City’s total General Obligation debt principal outstanding will be approximately \$75 million, which is 39% of its limit. Remaining General Obligation Borrowing Capacity will be approximately \$115.8 million.</p>
Term/Call Feature:	<p>The Bonds are being issued for a term of 15 years. Principal on the Bonds will be due on April 1 in the years 2019 through 2033. Interest is payable every six months beginning April 1, 2019.</p> <p>The Bonds will be subject to prepayment at the discretion of the City on April 1, 2025 or any date thereafter.</p>
Bank Qualification:	<p>Because the City is expecting to issue no more than \$10,000,000 in tax exempt debt during the calendar year, the City will be able to designate the Bonds as “bank qualified” obligations. Bank qualified status broadens the market for the Bonds, which can result in lower interest rates.</p>



<p><b>Rating:</b></p>	<p>The City’s most recent bond issues were rated by Moody’s Investors Service. The current ratings on those bonds are “Aa2”. The City will request a new rating for the Bonds.</p> <p>If the winning bidder on the Bonds elects to purchase bond insurance, the rating for the issue may be higher than the City's bond rating in the event that the bond rating of the insurer is higher than that of the City.</p>
<p><b>Basis for Recommendation:</b></p>	<p>Based on our knowledge of your situation, your objectives communicated to us, our advisory relationship as well as characteristics of various municipal financing options, we are recommending the issuance of Bonds as a suitable option based on:</p> <ul style="list-style-type: none"> <li>• The expectation this form of financing will provide the overall lowest cost of funds while also meeting the City’s objectives for term, structure and optional redemption.</li> <li>• The City having adequate General Obligation debt capacity to undertake this financing.</li> <li>• The nature of the projects being financed, a portion of which will yield fees sufficient to abate the property tax required for that share of the issue.</li> <li>• The City’s current Capital Improvements Plan/Utility Financial Plan which identified issuance of General Obligation Bonds to finance these projects.</li> </ul>
<p><b>Method of Sale/Placement:</b></p>	<p>We will solicit competitive bids for the purchase of the Bonds from underwriters and banks.</p> <p>We will include an allowance for discount bidding in the terms of the issue. The discount is treated as an interest item and provides the underwriter with all or a portion of their compensation in the transaction.</p> <p>If the Bonds are purchased at a price greater than the minimum bid amount (maximum discount), the unused allowance may be used to reduce your borrowing amount.</p>
<p><b>Premium Pricing:</b></p>	<p>In some cases, investors in municipal bonds prefer “premium” pricing structures. A premium is achieved when the coupon for any maturity (the interest rate paid by the issuer) exceeds the yield to the investor, resulting in a price paid that is greater than the face value of the bonds. The sum of the amounts paid in excess of face value is considered “reoffering premium.” The underwriter of the bonds will retain a portion of this reoffering premium as their compensation (or “discount”) but will pay the remainder of the premium to the City.</p> <p>For this issue of Bonds, any premium amount received that is in excess of the underwriting discount and any capitalized interest amounts must be placed in the debt service fund and used to pay a portion of the interest payments due on the Bonds. We anticipate using any premium amounts received to reduce the issue size.</p>



	<p>The amount of premium allowed can be restricted in the bid specifications. Restrictions on premium may result in fewer bids, but may also eliminate large adjustments on the day of sale and unintended results with respect to debt service payment impacts. Ehlers will identify appropriate premium restrictions for the Bonds intended to achieve the City’s objectives for this financing.</p>
<p><b>Other Considerations:</b></p>	<p>The Bonds will be offered with the option of the successful bidder utilizing a term bond structure. By offering underwriters the option to “term up” some of the maturities at the time of the sale, it gives them more flexibility in finding a market for your Bonds. This makes your issue more marketable, which can result in lower borrowing costs. In the event that the successful bidder utilizes a term bond structure, we recommend the City retain a paying agent to handle responsibility for processing mandatory redemption/call notices associated with term bonds.</p>
<p><b>Review of Existing Debt:</b></p>	<p>We have reviewed all outstanding indebtedness for the City and find that there are no refunding opportunities at this time that would be cost effective.</p> <p>We will continue to monitor the market and the call dates for the City’s outstanding debt and will alert you to any future refunding opportunities.</p>
<p><b>Continuing Disclosure:</b></p>	<p>Because the City has more than \$10,000,000 in outstanding debt (including this issue) and this issue is over \$1,000,000, the City will be agreeing to provide certain updated Annual Financial Information and its Audited Financial Statement annually, as well as providing notices of the occurrence of certain reportable events to the Municipal Securities Rulemaking Board (the “MSRB”), as required by rules of the Securities and Exchange Commission (SEC). The City is already obligated to provide such reports for its existing bonds and has contracted with Ehlers to prepare and file the reports.</p>
<p><b>Arbitrage Monitoring:</b></p>	<p>Because the Bonds are tax-exempt obligations, the City must ensure compliance with certain Internal Revenue Service (IRS) rules throughout the life of the issue. These rules apply to all gross proceeds of the issue, including initial bond proceeds and investment earnings in construction, escrow, debt service, and any reserve funds. How issuers spend bond proceeds and how they track interest earnings on funds (arbitrage/yield restriction compliance) are common subjects of IRS inquiries. Your specific responsibilities will be detailed in the Tax Exemption Certificate prepared by your Bond Attorney and provided at closing. We recommend that you regularly monitor compliance with these rules and/or retain the services of a qualified firm to assist you.</p>
<p><b>Investment of and Accounting for Proceeds:</b></p>	<p>In order to more efficiently segregate funds for this project and maximize interest earnings, we recommend using an investment advisor, to assist with the investment of bond proceeds until they are needed to pay project costs. Ehlers Investment Partners, a subsidiary of Ehlers and registered investment advisor, will discuss an appropriate investment strategy with the City.</p>



<p>Risk Factors:</p>	<p><b>GO with Planned Abatement:</b> The City expects to abate a portion of the City debt service with water utility revenues and sewer utility revenues. In the event this/these revenue(s) is/are not available, the City is obligated to levy property taxes in an amount sufficient to make all debt payments.</p>
<p>Other Service Providers:</p>	<p>This debt issuance will require the engagement of other public finance service providers. This section identifies those other service providers, so Ehlers can coordinate their engagement on your behalf. Where you have previously used a particular firm to provide a service, we have assumed that you will continue that relationship. For services you have not previously required, we have identified a service provider. Fees charged by these service providers will be paid from proceeds of the obligation, unless you notify us that you wish to pay them from other sources. Our pre-sale bond sizing includes a good faith estimate of these fees, but the final fees may vary. If you have any questions pertaining to the identified service providers or their role, or if you would like to use a different service provider for any of the listed services please contact us.</p> <p><b>Bond Counsel:</b> Quarles &amp; Brady LLP</p> <p><b>Paying Agent:</b> Bond Trust Services Corp.</p> <p><b>Rating Agency:</b> Moody's Investors Service</p>



## Proposed Debt Issuance Schedule

Pre-Sale Review by City Council:	October 16, 2018
Conference with Rating Agency:	To be Scheduled November 5 - 12, 2018
Distribute Official Statement:	November 5, 2018
City Council Meeting to Award Sale of the Bonds:	November 20, 2018
Estimated Closing Date:	December 13, 2018

### Attachments

- Estimated Sources and Uses of Funds
- Estimated Proposed Debt Service Schedule
- Bond Buyer Index

### Ehlers Contacts

Municipal Advisors:	Michael Harrigan	(262) 796-6165
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Disclosure Coordinator:	Sue Porter	(262) 796-6167
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The Preliminary Official Statement for this financing will be sent to the City Council at their home or email address for review prior to the sale date.





## Equalized Value Growth Projections - TID Out

Valuation Year	Percentage Method		Straight Line Method		Projected Method	
	Equalized Value	Percent Change	Equalized Value	Dollar Value Change	Equalized Value	Percent Change
<b>Historical</b>	<b>5 year trend</b>			<b>21,754,740</b>		
		0.60%				
2012	3,638,962,200		3,638,962,200		3,638,962,200	
2013	3,611,817,200	-0.75%	3,611,817,200	-27,145,000	3,611,817,200	-0.75%
2014	3,625,496,100	0.38%	3,625,496,100	13,678,900	3,625,496,100	0.38%
2015	3,660,116,000	0.95%	3,660,116,000	34,619,900	3,660,116,000	0.95%
2016	3,639,905,800	-0.55%	3,639,905,800	-20,210,200	3,639,905,800	-0.55%
2017	3,630,895,400	-0.25%	3,630,895,400	-9,010,400	3,630,895,400	-0.25%
2018	3,720,590,900	2.47%	3,720,590,900	89,695,500	3,720,590,900	2.47%
<b>Projected</b>						
2019	3,742,946,068	0.60%	3,742,345,640	0.58%	3,757,796,809	1.00%
2020	3,765,435,558	0.60%	3,764,100,380	0.58%	3,795,374,777	1.00%
2021	3,788,060,175	0.60%	3,785,855,120	0.58%	3,833,328,525	1.00%
2022	3,810,820,733	0.60%	3,807,609,860	0.57%	3,871,661,810	1.00%
2023	3,833,718,047	0.60%	3,829,364,600	0.57%	3,910,378,428	1.00%
2024	3,856,752,940	0.60%	3,851,119,340	0.57%	3,949,482,212	1.00%
2025	3,879,926,238	0.60%	3,872,874,080	0.56%	3,988,977,035	1.00%
2026	3,903,238,773	0.60%	3,894,628,820	0.56%	4,028,866,805	1.00%
2027	3,926,691,381	0.60%	3,916,383,560	0.56%	4,069,155,473	1.00%
2028	3,950,284,904	0.60%	3,938,138,300	0.56%	4,109,847,028	1.00%
2029	3,974,020,189	0.60%	3,959,893,040	0.55%	4,150,945,498	1.00%
2030	3,997,898,087	0.60%	3,981,647,780	0.55%	4,192,454,953	1.00%
2031	4,021,919,456	0.60%	4,003,402,520	0.55%	4,234,379,503	1.00%
2032	4,046,085,156	0.60%	4,025,157,260	0.54%	4,276,723,298	1.00%
2033	4,070,396,057	0.60%	4,046,912,000	0.54%	4,319,490,531	1.00%
2034	4,094,853,029	0.60%	4,068,666,740	0.54%	4,362,685,436	1.00%
2035	4,119,456,952	0.60%	4,090,421,480	0.53%	4,406,312,290	1.00%
2036	4,144,208,707	0.60%	4,112,176,220	0.53%	4,450,375,413	1.00%
2037	4,169,109,182	0.60%	4,133,930,960	0.53%	4,494,879,167	1.00%
2038	4,194,159,273	0.60%	4,155,685,700	0.53%	4,539,827,959	1.00%
2039	4,219,359,877	0.60%	4,177,440,440	0.52%	4,585,226,238	1.00%
2040	4,244,711,898	0.60%	4,199,195,180	0.52%	4,631,078,501	1.00%
2041	4,270,216,247	0.60%	4,220,949,920	0.52%	4,677,389,286	1.00%
2042	4,295,873,839	0.60%	4,242,704,660	0.52%	4,724,163,179	1.00%
2043	4,321,685,595	0.60%	4,264,459,400	0.51%	4,771,404,811	1.00%



### Existing Debt Service Sources of Repayment and Levy Impact Analysis- Base Case

#### Debt Service

#### Abatement Sources

#### Projected Rate Impact

YEAR	General Obligation Debt	Total of All Obligations	Bid Premium Deposit to General Fund	TID 5	TID 6	TID 7	TID 9	TID 10	TID 11	Water	Sewer	Storm	Total of All Sources	Tax Levy for Debt	Projected Equalized Value	% Change	Net Rate	YEAR
2018	11,591,794	11,591,794	(2,032,098)	(139,785)	(595,235)	(254,999)	(116,880)	(87,061)	(1,471,994)	(2,259,278)	(1,09,683)	(7,281,815)	4,309,978	3,630,895,400	2.47%	1.19	2018	
2019	10,393,190	10,393,190	(2,031,014)	(137,456)	(278,866)	(69,893)	(114,980)	(254,045)	(1,430,116)	(2,160,672)	(113,133)	(6,676,530)	3,716,660	3,720,590,900	2.47%	1.00	2019	
2020	9,676,244	9,676,244	(1,993,603)	(151,043)	(179,153)	(68,449)	(117,811)	(286,758)	(1,398,763)	(2,093,403)	(111,533)	(6,340,514)	3,335,730	3,757,796,809	1.00%	0.89	2020	
2021	9,172,937	9,172,937	(1,930,745)	(154,201)	(179,920)	(71,853)	(115,453)	(496,738)	(1,272,748)	(1,795,964)	(114,458)	(6,132,078)	3,040,879	3,795,374,777	1.00%	0.80	2021	
2022	8,595,561	8,595,561	(1,974,781)	(161,989)	(180,270)	(70,083)	(117,868)	(496,273)	(1,158,667)	(1,567,612)	(112,168)	(5,839,723)	2,755,638	3,833,328,525	1.00%	0.72	2022	
2023	8,126,768	8,126,768	(1,970,074)	(159,458)	(180,068)	(68,163)	(114,988)	(495,233)	(1,076,273)	(1,482,602)	(114,905)	(5,661,761)	2,465,006	3,871,661,810	1.00%	0.64	2023	
2024	6,749,406	6,749,406	(2,015,760)	(156,656)	(179,413)	(71,051)	(116,864)	(499,059)	(946,121)	(1,320,290)	(112,318)	(5,417,531)	1,331,875	3,910,378,428	1.00%	0.34	2024	
2025	4,838,762	4,838,762	(688,096)	(148,710)	(183,240)	(68,760)	(113,515)	(496,340)	(868,889)	(1,177,683)	(114,543)	(3,859,775)	978,988	3,949,482,212	1.00%	0.25	2025	
2026	4,335,890	4,335,890	(664,356)	(165,378)	(181,330)	(71,295)	(114,955)	(504,815)	(737,281)	(948,570)	(116,518)	(3,640,465)	695,425	3,988,977,035	1.00%	0.17	2026	
2027	2,788,239	2,788,239	(516,975)	(171,810)	(182,330)	(181,330)	(116,110)	(422,562)	(511,606)	(795,031)	(118,211)	(3,167,165)	409,388	4,028,866,805	1.00%	0.10	2027	
2028	2,022,123	2,022,123		(152,250)				(425,600)	(400,397)	(679,694)	(119,690)	(1,891,248)	130,675	4,109,847,028	1.00%	0.03	2028	
2029	1,502,300	1,502,300						(438,400)	(296,656)	(532,381)	(115,950)	(1,374,350)	127,950	4,150,945,498	1.00%	0.03	2029	
2030	1,032,756	1,032,756						(430,600)	(190,547)	(286,734)	(117,013)	(907,881)	124,875	4,192,454,953	1.00%	0.03	2030	
2031	792,238	792,238						(437,425)	(116,581)			(670,588)	121,650	4,234,379,503	1.00%	0.03	2031	
2032	438,000	438,000						(438,000)				(438,000)	4,276,723,298	1.00%	0.00	2032		
2033	443,200	443,200						(443,200)				(443,200)	4,319,490,531	1.00%	0.00	2033		
2034	447,600	447,600						(447,600)				(447,600)	4,362,685,436	1.00%	0.00	2034		
2035	451,258	451,258						(451,258)				(451,258)	4,406,312,290	1.00%	0.00	2035		
2036	104,000	104,000						(104,000)				(104,000)	4,450,375,413	1.00%	0.00	2036		
2037													4,494,879,167	1.00%	0.00	2037		
2038													4,539,827,959	1.00%	0.00	2038		
2039													23,676,565			0.00	2039	
<b>TOTALS</b>	<b>87,078,637</b>	<b>87,078,637</b>	<b>(291,159)</b>	<b>(1,631,835)</b>	<b>(1,880,065)</b>	<b>(1,956,163)</b>	<b>(824,544)</b>	<b>(1,393,695)</b>	<b>(8,148,477)</b>	<b>(12,724,180)</b>	<b>(18,373,326)</b>	<b>(1,490,110)</b>	<b>(63,400,072)</b>					

NOTES:





## Capital Financing Plan Sizing

	Proposed <u>2018A Bonds</u>
<b>Projects</b>	
Streets	2,730,000
Sanitary Sewer	3,200,000
Water (Infrastructure)	2,217,000
Water (Hydrants, Meters, Software, Equipment)	500,000
<b>Project Needs</b>	8,647,000
<b>Issuance Expenses to be Paid by City excluding discount (New Money)</b>	(55,150)
<b>Issuance Expenses</b>	
Municipal Advisor	18,500
Bond Counsel	13,000
Disclosure Counsel	7,800
Paying Agent If terms	850
Rating	15,000
Reoffering Premium (built into rates)	
Underwriter Discount est @\$10/\$1,000 Notes, 12.50/\$1,000 Bonds	108,938
<b>Total Funds Needed</b>	8,755,938
Less Interest 2.0% for 3 months	(43,235)
Rounding	2,298
<b>Size of Issue</b>	<b>8,715,000</b>

### Resolution Breakdowns

Streets	2,750,000
Sanitary Sewer	3,225,000
Water	2,740,000
Total	8,715,000



### Allocation Breakdown for General Obligation Bonds, Series 2018A

Year	Streets			Sanitary Sewer			Water (Infrastructure)				Water (Hydrants, Meters, Software, Equipment)			TOTAL		
	Prin (4/1)	Interest	Total	Prin (4/1)	Interest	Total	Prin (4/1)	Rate	Interest	Total	Prin (4/1)	Interest	Total	Principal	Interest	Total
2019	255,000	56,511	311,511	195,000	73,341	268,341	135,000	2.25%	50,827	185,827	\$50,000	10,328	60,328	635,000	191,006	826,006
2020	250,000	65,550	315,550	180,000	87,916	267,916	125,000	2.35%	60,926	185,926	\$45,000	11,959	56,959	600,000	226,350	826,350
2021	255,000	59,501	314,501	185,000	83,544	268,544	130,000	2.44%	57,871	187,871	\$45,000	10,881	55,881	615,000	211,797	826,797
2022	260,000	53,101	313,101	190,000	78,884	268,884	130,000	2.53%	54,641	184,641	\$50,000	9,700	59,700	630,000	196,325	826,325
2023	270,000	46,262	316,262	195,000	73,916	268,916	135,000	2.63%	51,221	186,221	\$50,000	8,410	58,410	650,000	179,808	829,808
2024	275,000	38,957	313,957	200,000	68,622	268,622	140,000	2.73%	47,535	187,535	\$50,000	7,070	57,070	665,000	162,183	827,183
2025	285,000	31,171	316,171	205,000	62,991	267,991	140,000	2.83%	43,643	183,643	\$50,000	5,680	55,680	680,000	143,484	823,484
2026	290,000	22,904	312,904	210,000	57,024	267,024	145,000	2.92%	39,545	184,545	\$55,000	4,169	59,169	700,000	123,642	823,642
2027	300,000	14,140	314,140	215,000	50,712	265,712	150,000	3.02%	35,163	185,163	\$55,000	2,536	57,536	720,000	102,550	822,550
2028	310,000	4,805	314,805	225,000	43,978	268,978	155,000	3.10%	30,495	185,495	\$55,000	853	55,853	745,000	80,130	825,130
2029				230,000	36,822	266,822	160,000	3.19%	25,541	185,541				390,000	62,362	452,362
2030				235,000	29,323	264,323	165,000	3.26%	20,299	185,299				400,000	49,622	449,622
2031				245,000	21,437	266,437	170,000	3.31%	14,796	184,796				415,000	36,233	451,233
2032				255,000	13,111	268,111	175,000	3.35%	9,051	184,051				430,000	22,163	452,163
2033				260,000	4,420	264,420	180,000	3.40%	3,060	183,060				440,000	7,480	447,480
	\$2,750,000	\$ 392,901	\$ 3,142,901	\$3,225,000	\$ 786,038	\$ 4,011,038	\$ 2,235,000		\$ 544,611	\$ 2,779,611	\$ 505,000	\$ 71,582	\$ 576,582	\$ 8,715,000	\$ 1,795,132	\$ 10,510,132

Rates based on AA scale .10/01/18 + .35



## Projected Impact of Proposed Projects



Existing General Obligation Debt Only						
YEAR	Equalized Value Projection	Change in EV/TID OUT	Total Payment (P&I)	Total Less Non Levy Revenues	Net Debt Service Levy	Debt Service Tax Rate
2018	3,630,895,400	-0.25%	11,591,794	(7,281,815)	4,309,978	1.19
2019	3,720,590,900	2.47%	10,393,190	(6,676,530)	3,716,660	1.00
2020	3,757,796,809	1.00%	9,676,244	(6,340,514)	3,335,730	0.89
2021	3,795,374,777	1.00%	9,172,957	(6,132,078)	3,040,879	0.80
2022	3,833,328,525	1.00%	8,595,361	(5,839,723)	2,755,638	0.72
2023	3,871,661,810	1.00%	8,126,768	(5,661,761)	2,465,006	0.64
2024	3,910,378,428	1.00%	6,749,406	(5,417,531)	1,331,875	0.34
2025	3,949,482,212	1.00%	4,838,762	(3,859,775)	978,988	0.25
2026	3,988,977,035	1.00%	4,335,890	(3,640,465)	695,425	0.17
2027	4,028,866,805	1.00%	3,576,553	(3,167,165)	409,388	0.10
2028	4,069,155,473	1.00%	2,788,239	(2,654,589)	133,650	0.03
2029	4,109,847,028	1.00%	2,022,123	(1,891,248)	130,875	0.03
2030	4,150,945,498	1.00%	1,502,300	(1,374,350)	127,950	0.03
2031	4,192,454,953	1.00%	1,032,756	(907,881)	124,875	0.03
2032	4,234,379,503	1.00%	792,238	(670,588)	121,650	0.03
2033	4,276,723,298	1.00%	438,000	(438,000)	0	0.00
2034	4,319,490,531	1.00%	443,200	(443,200)	0	0.00
2035	4,362,685,436	1.00%	447,600	(447,600)	0	0.00
2036	4,406,312,290	1.00%	451,258	(451,258)	0	0.00
2037	4,450,375,413	1.00%	104,000	(104,000)	0	0.00
2038	4,494,879,167	1.00%			0	0.00
2039	4,539,827,959	1.00%			0	0.00
2040	4,585,226,238	1.00%			0	0.00
<b>TOTALS</b>			<b>87,078,637</b>	<b>(63,400,072)</b>	<b>23,678,565</b>	

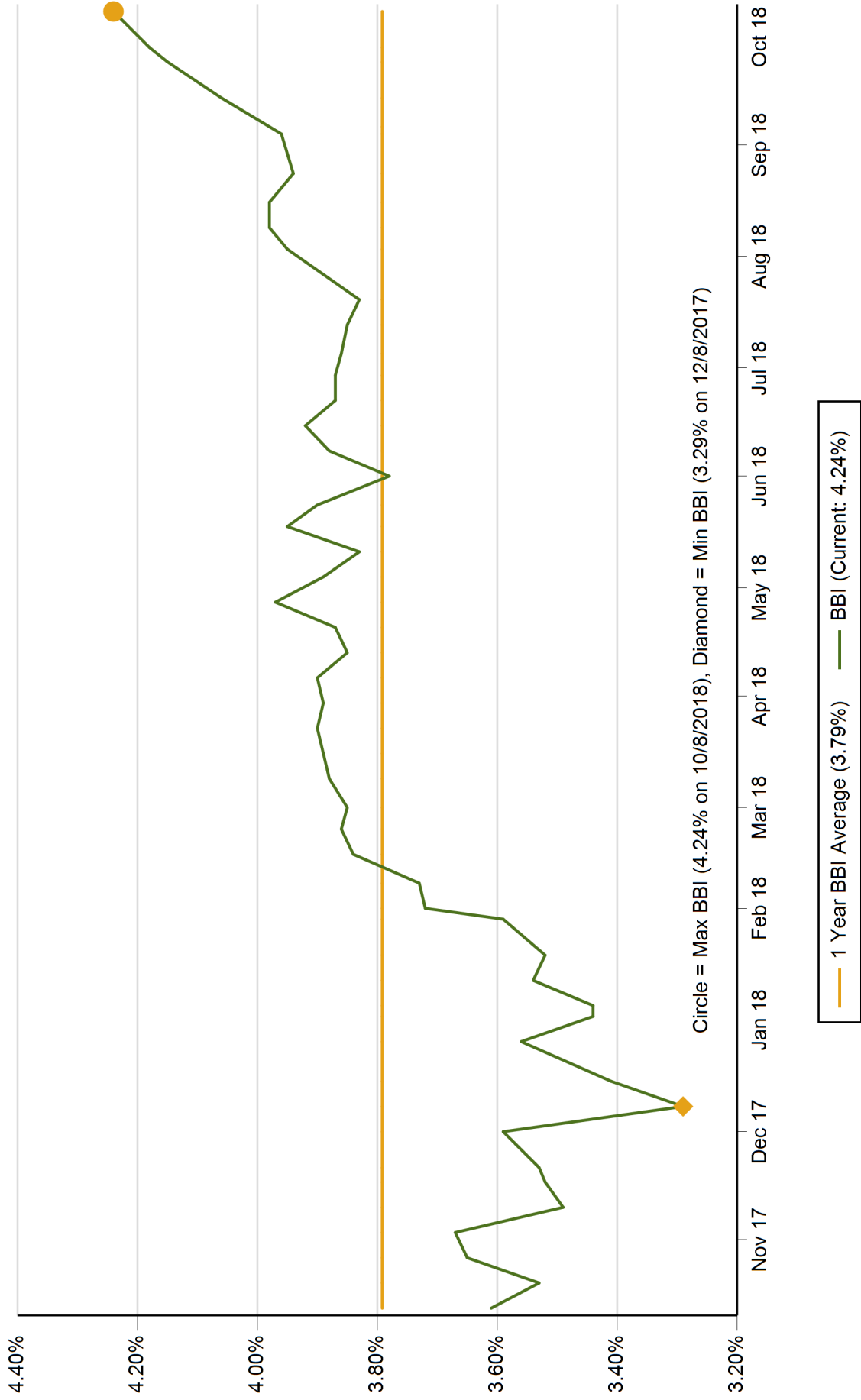
Projected Debt Service										
YEAR	General Obligation Bonds, 2018A Bonds \$8,715,000 Dated 12-13-18				Sewer Revenues 2018	Water Revenues 2018	Total Projected Debt Service less abatements	Net Debt Service Levy	Debt Service Tax Rate @ 1.00% Growth	YEAR
	Prin (4/1)	Rate	Interest	Total						
2018	635,000	2.250%	191,006	826,006	(268,341)	(246,154)	311,511	4,309,978	1.19	2018
2019	600,000	2.350%	226,350	826,350	(267,916)	(242,885)	315,550	4,028,170	1.08	2019
2020	615,000	2.440%	211,797	826,797	(268,544)	(243,752)	314,501	3,355,380	0.88	2020
2021	630,000	2.530%	196,325	826,325	(268,884)	(244,340)	313,101	3,068,739	0.80	2021
2022	650,000	2.630%	179,808	829,808	(268,916)	(244,630)	316,262	2,781,268	0.72	2022
2023	665,000	2.730%	162,183	827,183	(268,622)	(244,604)	313,957	1,645,832	0.42	2023
2024	680,000	2.830%	143,484	823,484	(267,991)	(243,714)	316,171	1,295,158	0.33	2024
2025	700,000	2.920%	123,642	823,642	(267,024)	(243,714)	312,904	1,008,329	0.25	2025
2026	720,000	3.020%	102,550	822,550	(265,712)	(242,698)	314,140	723,528	0.18	2026
2027	745,000	3.100%	80,130	825,130	(268,978)	(241,348)	314,805	448,455	0.11	2027
2028	390,000	3.190%	62,362	452,362	(266,822)	(185,541)		130,875	0.03	2028
2029	400,000	3.260%	49,622	449,622	(264,323)	(185,299)		127,950	0.03	2029
2030	415,000	3.310%	36,233	451,233	(266,437)	(184,796)		124,875	0.03	2030
2031	430,000	3.350%	22,163	452,163	(268,111)	(184,051)		121,650	0.03	2031
2032	440,000	3.400%	7,480	447,480	(264,420)	(183,060)		0	0.00	2032
2033										2033
2034										2034
2035										2035
2036										2036
2037										2037
2038										2038
2039										2039
2040										2040
<b>TOTALS</b>	<b>8,715,000</b>		<b>1,795,132</b>	<b>10,510,132</b>	<b>(4,011,038)</b>	<b>(3,356,193)</b>	<b>3,142,901</b>	<b>26,821,466</b>		<b>TOTALS</b>

Rates based on AA scale 10/01/18 + .35

NOTES

# 1 YEAR TREND IN MUNICIPAL BOND INDICES

## Weekly Rates October, 2017 - October, 2018



The Bond Buyer "20 Bond Index" (BBI) shows average yields on a group of municipal bonds that mature in 20 years and have an average rating equivalent to Moody's Aa2 and S&P's AA.

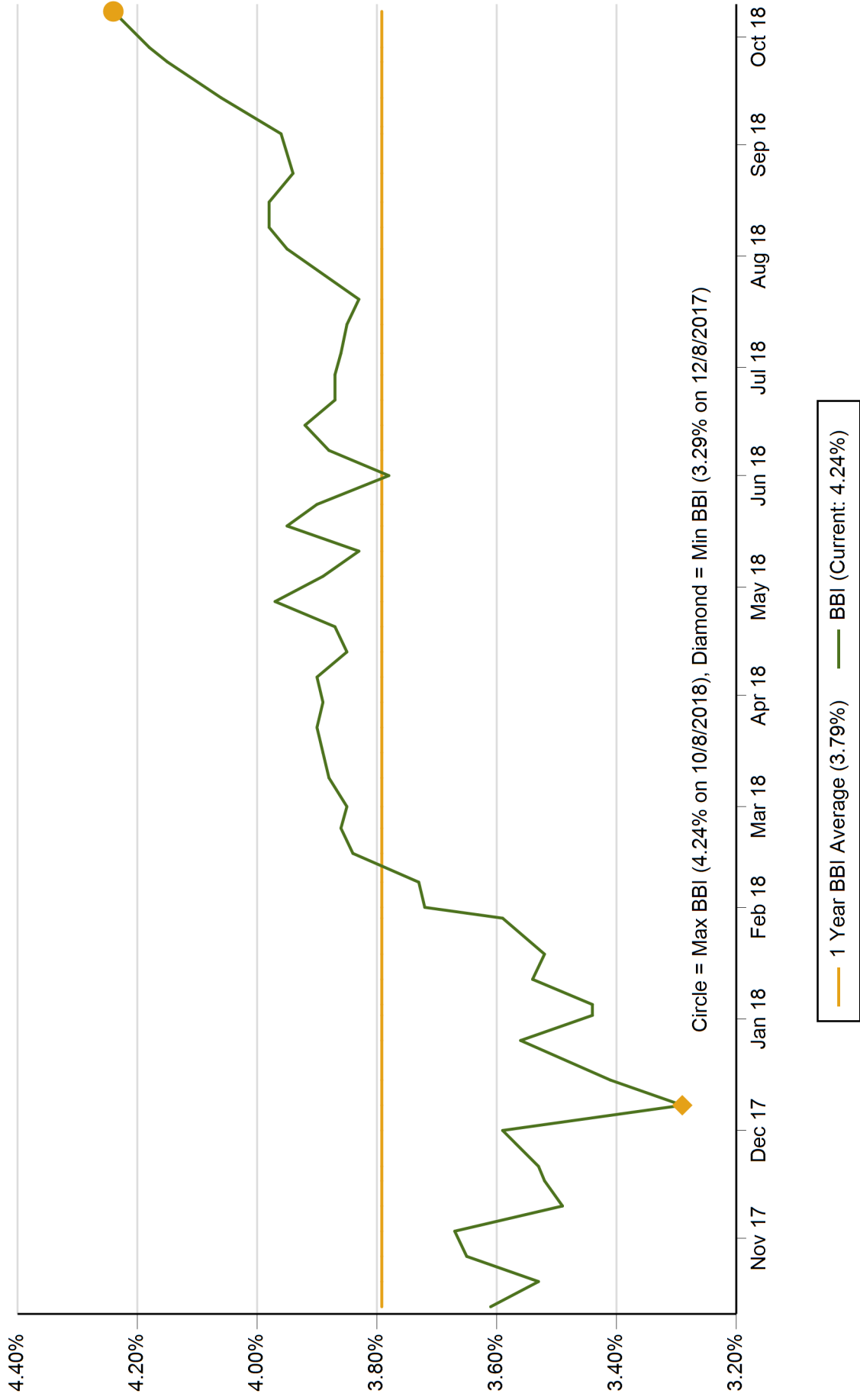
Source: The Bond Buyer



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# 1 YEAR TREND IN MUNICIPAL BOND INDICES

## Weekly Rates October, 2017 - October, 2018



The Bond Buyer "20 Bond Index" (BBI) shows average yields on a group of municipal bonds that mature in 20 years and have an average rating equivalent to Moody's Aa2 and S&P's AA.

Source: The Bond Buyer



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