

August 20, 2019

Pre-Sale Report for

City of Northfield, Minnesota

\$6,900,000 General Obligation Bonds, Series 2019A



### Prepared by:

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And

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# **Executive Summary of Proposed Debt**

Proposed Issue:	\$6,900,000 General Obligation Bonds, Series 2019A (the "Bonds")				
Purposes:	The proposed issue includes fixed-rate, tax-exempt financing for the City's 2019 Street Reclamation, Spring Creek Road Improvement, and Public Facility Roof Replacement projects. Inclusive of estimated financing costs, the Bonds will be sized for the following purposes:				
	• \$1,990,000 Improvement Bonds portion for the Street Reclamation Project. Debt service will be paid by special assessments and a tax levy over a 10-year period starting with collections in 2020, and				
	• \$735,000 Public Infrastructure portion for the Spring Creek Road Improvement and Public Facility Roof projects. Debt service will be paid by a tax abatement levy over the same ten-year term.				
	• \$4,175,000 Refunding portion includes proceeds, together with existing debt service funds, to execute a refunding of the remaining maturities of the City's Certificates of Participation, Series 2012B (the "2012B Certificates") originally issued to finance the construction of the Northfield Police Facility. Debt Service on the 2012B Certificates is paid from a property tax levy 2013 to 2033 and will continue as such.				
	Interest rates on the 2012B Certificates average 3.05%. The expected refinanced interest cost is below 2.25%. Including issuance costs, the refunding is expected to reduce debt service expenses by approximately \$275,000 over the remaining term. The Net Present Value Benefit of the refunding is estimated to be \$210,100, or 4.2%.				
Authority:	The Bonds are being issued pursuant to Minnesota Statutes, Chapters 429, 469 and 475. The Bonds will be general obligations of the City for which its full faith, credit and taxing powers are pledged.				
	Under Chapter 429, because the City is assessing at least 20% of the financed project costs, the Improvement Bonds portion can be a general obligation without a referendum and will not count against the City's debt limit.				
	Under the Tax Abatement statute, the city can pledge its general obligation to finance public improvements and also will not count against the City's debt limit. The amount of property taxes abated in any year for the Bonds, together with any outstanding annual abatements, may not exceed 10% of the City's net tax capacity or \$200,000, whichever is greater. The Abatement portion of the Bonds, together with the existing abatements pledged toward the 2014A and 2018B Bonds, are anticipated to carry a maximum annual abatement of approximately \$332,000. The City's Pay 2019 Abatement Limit is \$1,610,000, leaving over \$1.2 million in unused annual abatement capacity. The City Council will consider establishing the new abatement after a public hearing August 20, 2019.				
	Under Chapter 475.521, the City Council held a public hearing in 2018 and adopted a five-year Capital Improvement Plan authorizing the issuance of Capital Improvement				

	Plan Bonds to acquire the Northfield Police Facility to reduce debt service expense by effecting a refunding of it Certificates of Participation, Series 2012B. The Refunding portion of the Bonds will continue to count against the City's debt limit of 3% of market value. The City's unused debt limit capacity is estimated at \$34 million.
Term/Call Feature:	The Bonds are being issued for a term of 13 years, 4 months in total. Principal on the Bonds will be due on February 1 in the years 2021 through 2033. Interest is payable every six months beginning August 1, 2020. The Bonds will be subject to prepayment at the discretion of the City on February 1, 2028 or any date thereafter at a price of pay plus any accrued interest.
Bank Qualification:	Because the City is expecting to issue no more than \$10,000,000 in new 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.
Rating:	The City's most recent bond issues were rated by Standard & Poor's. The current ratings on those bonds are "AA." The City will request a new rating for the Bonds.
	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.
Method of Sale/Placement:	We will solicit competitive bids for the purchase of the Bonds from underwriters and banks. 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. If the Bonds are purchased at a price greater than the minimum bid amount (maximum discount), the unused allowance will be used to reduce the final borrowing amount.
Premium Pricing:	Under current market conditions, most 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 as proceeds. Any net premium received may be retained for additional project funding or used to reduce the principal amount of the Bonds.
	The amount of the premium varies, but it is not uncommon to see premiums for new issues in the range of 2.0% to 10.0% of the face amount of the issue. This means that an issuer with a \$7,000,000 offering may receive bids that result in proceeds of \$7,140,000 to \$7,700,000.
	The amount of premium can be restricted in the bid specifications. Be advised that restrictions on premium may result in fewer bids, but may also eliminate large adjustments on the day of sale and unintended impacts with respect to debt service payments. Ehlers will identify appropriate premium restrictions for the Bonds

	intended to achieve the City's objectives for this financing. For this issue of Bonds, we have been directed to use any net premium to reduce the size of the issue to target only the appropriate level of proceeds necessary for the projects and execute the refunding. The resulting adjustment will not change the pricing, but may slightly change the true interest cost calculation of the issue.
Review of Existing Debt:	We have reviewed all outstanding indebtedness for the City and find that there are no other viable refunding opportunities at this time. 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 as they arise.
Continuing Disclosure:	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.
Arbitrage Monitoring:	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 Certificate prepared by your Bond Attorney and provided at closing. You have retained Ehlers to assist you with compliance with these rules.
Investment of and Accounting for Proceeds:	In order to adhere to IRS compliance and maximize interest earnings, we recommend devising a specific strategy which efficiently segregates the investment of all bond proceeds until they are needed to pay project costs, and/or utilize an investment advisor to assist with the investment.
Risk Factors:	<b>Special Assessments:</b> We have sized the Improvement Bonds portion of the Bonds assuming \$241,846 (30%) in pre-paid special assessments and we have assumed that remaining assessments will be levied as projected. If the City receives a significant amount of additional pre-paid assessments or does not levy the assessments as scheduled, it may need to increase future levy collections to make up for lower interest earnings than the expected assessment interest rate.
	Current Refunding: The Bonds are being issued to finance a current refunding of prior City debt obligations. Those prior debt obligations are "callable" on or after April 1, 2018. The new Bonds will not be pre-payable until February 1, 2028. This refunding is being undertaken based in part on an assumption that the City does not expect to pre-pay off this debt prior to the new call date and that market conditions warrant the refunding at this time.

Other Service Providers:	This debt issuance will require the engagement of other public finance service providers. This section identifies those other service providers, so Ehlers calcoordinate their engagement on your behalf. Where you have previously used particular firm to provide a service, we have assumed that you will continue the relationship. 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. On 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 the role, or if you would like to use a different service provider for any of the lister services please contact us.		
	Bond Counsel: Kennedy & Graven, Chartered Paying Agent: Bond Trust Services Corporation Rating Agency: Standard & Poor's Global Ratings		
Basis for Recommendation:	Based on the City's objectives, project funding requirements, our advisory relationship, the City's desire to reduce future interest costs, and characteristics of various municipal financing options, we are recommending the issuance of General Obligation Bonds as a suitable option to finance the planned projects and refunding based on:		
	<ul> <li>The issuance is consistent with the City's practices for financing these types of projects and is structured to fit within its Capital Improvement Plan.</li> <li>General Obligation pledge will result in lower interest rates than other financing options available.</li> <li>The expectation this form of financing will also meet the City's objectives for term, structure and optional redemption.</li> <li>The method of sale process identified herein complies with City policy as well as best practices endorsed by the Government Finance Officers Association (GFOA)</li> </ul>		
Summary:	The decisions to be made by the City related to this Presale Report are as follows:  • Accept or modify the finance assumptions described in this report  • Adopt the resolution provided to set a bond sale date September 17, 2019.		

This presale report summarizes our understanding of the City's objectives for the structure and terms of this financing as of this date. As additional facts become known or capital markets conditions change, we may need to modify the structure and/or terms of this financing to achieve results consistent with the City's objectives.

### Proposed Debt Issuance Schedule

Pre-Sale Review by Staff and City Council:	August 20, 2019
Due Diligence Call to review Official Statement:	Complete by August 30, 2019
Distribute Official Statement:	Week of September 3 <sup>rd</sup>
Conference with Rating Agency:	Week of September 3 <sup>rd</sup>
City Council Meeting to Award Sale of the Bonds:	September 17, 2019
Estimated Closing Date:	October 10, 2019
Redemption Date for 2012B Certificates:	October 21, 2019

### **Attachments**

Estimated Sources and Uses of Funds

Estimated Proposed Debt Service Schedule

Resolution Authorizing Ehlers to Proceed With Bond Sale

#### **Ehlers Contacts**

Municipal Advisors:	Nick Anhut	(651) 697-8507
	Rebecca Kurtz	(651) 697-8516
Disclosure Coordinator:	Emily Wilkie	(651) 697-8588
Financial Analyst:	Alicia Gage	(651) 697-8551

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.

\$6,900,000 General Obligation Bonds, Series 2019A Issue Summary - With Cur Ref 2012B COPS - 10 Years Assuming Current GO BQ "AA" Market Rates plus 25bps

#### **Total Issue Sources And Uses**

Dated 10/10/2019   Delivered 10/10/2019	)			
	Improvement Bonds	Public Infrastructure Bonds	Proposed Cur Ref 2012B COPs	Issue Summary
Sources Of Funds				·
Par Amount of Bonds	\$1,990,000.00	\$735,000.00	\$4,175,000.00	\$6,900,000.00
Other contributions	-	-	670,000.00	670,000.00
Prepaid Assessments	241,845.60	-	-	241,845.60
Total Sources	\$2,231,845.60	\$735,000.00	\$4,845,000.00	\$7,811,845.60
Uses Of Funds				
Total Underwriter's Discount (1.200%)	23,880.00	8,820.00	50,100.00	82,800.00
Costs of Issuance	23,360.87	8,628.26	49,010.87	81,000.00
Deposit to Project Construction Fund	2,179,890.00	720,100.00	-	2,899,990.00
Deposit to Current Refunding Fund	-	-	4,747,508.89	4,747,508.89
Rounding Amount	4,714.73	(2,548.26)	(1,619.76)	546.71
Total Uses	\$2,231,845.60	\$735,000.00	\$4,845,000.00	\$7,811,845.60

\$6,900,000 General Obligation Bonds, Series 2019A Issue Summary - With Cur Ref 2012B COPS - 10 Years Assuming Current GO BQ "AA" Market Rates plus 25bps

10/10/2019 08/01/2020	-	_			
09/01/2020			-	-	-
06/01/2020	-	-	103,994.10	103,994.10	-
02/01/2021	310,000.00	1.450%	64,326.25	374,326.25	478,320.35
08/01/2021	-	-	62,078.75	62,078.75	-
02/01/2022	520,000.00	1.450%	62,078.75	582,078.75	644,157.50
08/01/2022	-	-	58,308.75	58,308.75	-
02/01/2023	585,000.00	1.550%	58,308.75	643,308.75	701,617.50
08/01/2023	-	-	53,775.00	53,775.00	-
02/01/2024	595,000.00	1.600%	53,775.00	648,775.00	702,550.00
08/01/2024	-	-	49,015.00	49,015.00	-
02/01/2025	605,000.00	1.650%	49,015.00	654,015.00	703,030.00
08/01/2025	-	-	44,023.75	44,023.75	-
02/01/2026	610,000.00	1.750%	44,023.75	654,023.75	698,047.50
08/01/2026	-	-	38,686.25	38,686.25	-
02/01/2027	615,000.00	1.850%	38,686.25	653,686.25	692,372.50
08/01/2027	-	-	32,997.50	32,997.50	-
02/01/2028	630,000.00	1.950%	32,997.50	662,997.50	695,995.00
08/01/2028	-	-	26,855.00	26,855.00	-
02/01/2029	640,000.00	2.050%	26,855.00	666,855.00	693,710.00
08/01/2029	· -	-	20,295.00	20,295.00	· -
02/01/2030	650,000.00	2.150%	20,295.00	670,295.00	690,590.00
08/01/2030	-	-	13,307.50	13,307.50	-
02/01/2031	370,000.00	2.250%	13,307.50	383,307.50	396,615.00
08/01/2031	· -	-	9,145.00	9,145.00	-
02/01/2032	380,000.00	2.350%	9,145.00	389,145.00	398,290.00
08/01/2032	-	-	4,680.00	4,680.00	-
02/01/2033	390,000.00	2.400%	4,680.00	394,680.00	399,360.00
Total	\$6,900,000.00	_	\$994,655.35	\$7,894,655.35	
Yield Statistics	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	. , ,	
Bond Year Dollars					\$49,602.50
Average Life					7.189 Years
Average Coupon					2.0052525%
Net Interest Cost (NIC	<i>-</i> 2)				2.1721795%
True Interest Cost (TI	<u>′</u>				2.1797398%
Bond Yield for Arbitr					1.9963042%
All Inclusive Cost (Al	· ·				2.3621096%
IRS Form 8038					
Net Interest Cost					2.0052525%
Weighted Average Ma	aturity				7.189 Years



\$1,990,000 General Obligation Bonds, Series 2019A Improvement Bonds
Assuming Current GO BQ "AA" Market Rates plus 25bps

Date	Principal	Coupon	Interest	Total P+I	105% of Total	Assessments	Levy/(Surplus)
02/01/2020	-	-	-	-	-	-	-
02/01/2021	185,000.00	1.450%	45,582.33	230,582.33	242,111.45	79,567.20	162,544.25
02/01/2022	195,000.00	1.450%	32,157.50	227,157.50	238,515.38	77,253.54	161,261.84
02/01/2023	195,000.00	1.550%	29,330.00	224,330.00	235,546.50	74,939.88	160,606.62
02/01/2024	200,000.00	1.600%	26,307.50	226,307.50	237,622.88	72,626.24	164,996.64
02/01/2025	200,000.00	1.650%	23,107.50	223,107.50	234,262.88	70,312.58	163,950.30
02/01/2026	200,000.00	1.750%	19,807.50	219,807.50	230,797.88	67,998.92	162,798.96
02/01/2027	200,000.00	1.850%	16,307.50	216,307.50	227,122.88	65,685.26	161,437.62
02/01/2028	205,000.00	1.950%	12,607.50	217,607.50	228,487.88	63,371.60	165,116.28
02/01/2029	205,000.00	2.050%	8,610.00	213,610.00	224,290.50	61,057.96	163,232.54
02/01/2030	205,000.00	2.150%	4,407.50	209,407.50	219,877.88	58,744.30	161,133.58
Total	\$1,990,000.00		\$218,224.83	\$2,208,224.83	\$2,318,636.07	\$691,557.48	\$1,627,078.59

Dated	10/10/2019
First Coupon Date	8/01/2020
Yield Statistics	
Bond Year Dollars	\$11,708.58
Average Life	5.884 Years
Average Coupon	1.8638022%
Net Interest Cost (NIC)	2.0677551%
True Interest Cost (TIC)	2.0782445%
Bond Yield for Arbitrage Purposes	1.9963042%
All Inclusive Cost (AIC)	2.2970732%



\$564,306 General Obligation Bonds, Series 2019A Assessments - 10 Years 2.00% over TIC - Equal Principal

#### **Assessments**

Date	Principal	Coupon	Interest	Total P+I
12/31/2020	56,430.64	4.100%	23,136.56	79,567.20
12/31/2021	56,430.64	4.100%	20,822.90	77,253.54
12/31/2022	56,430.64	4.100%	18,509.24	74,939.88
12/31/2023	56,430.64	4.100%	16,195.60	72,626.24
12/31/2024	56,430.64	4.100%	13,881.94	70,312.58
12/31/2025	56,430.64	4.100%	11,568.28	67,998.92
12/31/2026	56,430.64	4.100%	9,254.62	65,685.26
12/31/2027	56,430.64	4.100%	6,940.96	63,371.60
12/31/2028	56,430.64	4.100%	4,627.32	61,057.96
12/31/2029	56,430.64	4.100%	2,313.66	58,744.30
Total	\$564,306.40	-	\$127,251.08	\$691,557.48

#### **Significant Dates**

Filing Date	1/01/2020
First Payment Date	12/31/2020

\$735,000 General Obligation Bonds, Series 2019A Public Infrastructure Bonds Assuming Current GO BQ "AA" Market Rates plus 25bps

					105%
Date	Principal	Coupon	Interest	Total P+I	Overlev
02/01/2020	-	-	-	-	
02/01/2021	65,000.00	1.450%	16,906.94	81,906.94	86,002.29
02/01/2022	70,000.00	1.450%	11,980.00	81,980.00	86,079.00
02/01/2023	70,000.00	1.550%	10,965.00	80,965.00	85,013.25
02/01/2024	70,000.00	1.600%	9,880.00	79,880.00	83,874.00
02/01/2025	75,000.00	1.650%	8,760.00	83,760.00	87,948.00
02/01/2026	75,000.00	1.750%	7,522.50	82,522.50	86,648.63
02/01/2027	75,000.00	1.850%	6,210.00	81,210.00	85,270.50
02/01/2028	75,000.00	1.950%	4,822.50	79,822.50	83,813.63
02/01/2029	80,000.00	2.050%	3,360.00	83,360.00	87,528.00
02/01/2030	80,000.00	2.150%	1,720.00	81,720.00	85,806.00
Total	\$735,000.00		\$82,126.94	\$817,126.94	\$857,983.29
Significant Date	es				10/10/2019
	9 <b>S</b>				
Dated First Coupon Date  Yield Statistics	98				8/01/2020
Dated First Coupon Date  Yield Statistics  Bond Year Dollars	9S				\$4,391.63
Dated First Coupon Date  Yield Statistics  Bond Year Dollars  Average Life	98				\$4,391.63 5.975 Years
Dated First Coupon Date  Yield Statistics  Bond Year Dollars	98				\$4,391.63 5.975 Years
Dated First Coupon Date  Yield Statistics  Bond Year Dollars  Average Life					\$4,391.62 \$4,391.62 5.975 Years 1.8700809%
Dated First Coupon Date  Yield Statistics  Bond Year Dollars  Average Life  Average Coupon	IC)				\$4,391.62 \$4,391.62 5.975 Years 1.8700809% 2.0709177%
Dated First Coupon Date  Yield Statistics  Bond Year Dollars  Average Life  Average Coupon  Net Interest Cost (NI	IC)				\$4,391.62 \$4,391.62 5.975 Years 1.8700809% 2.0709177% 2.0813878%
Dated First Coupon Date  Yield Statistics  Bond Year Dollars  Average Life  Average Coupon  Net Interest Cost (NI Frue Interest Cost (T	IC) IC) IC) trage Purposes				\$4,391.6 5.975 Year 1.8700809% 2.0709177% 2.0813878% 1.9963042%
Dated First Coupon Date  Yield Statistics  Bond Year Dollars  Average Life  Average Coupon  Net Interest Cost (NI Frue Interest Cost (T  Bond Yield for Arbit	IC) IC) IC) trage Purposes				\$4,391.63 \$4,391.63 5.975 Years 1.8700809% 2.0709177% 2.0813878% 1.9963042% 2.2970429%
Dated First Coupon Date  Yield Statistics  Bond Year Dollars  Average Life  Average Coupon  Net Interest Cost (NI  Frue Interest Cost (T  Bond Yield for Arbit  All Inclusive Cost (A	IC) IC) IC) trage Purposes				\$4,391.62 \$4,391.62 5.975 Years 1.8700809% 2.0709177% 2.0813878% 1.9963042%



\$4,175,000 General Obligation Bonds, Series 2019A Proposed Cur Ref 2012B COPs Assuming Current GO BQ "AA" Market Rates plus 25bps

Date	Principal	Coupon	Interest	Total P+I	Fiscal Total
10/10/2019	-	-	-	-	-
08/01/2020	-	-	65,386.08	65,386.08	-
02/01/2021	60,000.00	1.450%	40,445.00	100,445.00	165,831.08
08/01/2021	-	-	40,010.00	40,010.00	-
02/01/2022	255,000.00	1.450%	40,010.00	295,010.00	335,020.00
08/01/2022	-	-	38,161.25	38,161.25	-
02/01/2023	320,000.00	1.550%	38,161.25	358,161.25	396,322.50
08/01/2023	-	-	35,681.25	35,681.25	-
02/01/2024	325,000.00	1.600%	35,681.25	360,681.25	396,362.50
08/01/2024	-	-	33,081.25	33,081.25	-
02/01/2025	330,000.00	1.650%	33,081.25	363,081.25	396,162.50
08/01/2025	-	-	30,358.75	30,358.75	-
02/01/2026	335,000.00	1.750%	30,358.75	365,358.75	395,717.50
08/01/2026	-	-	27,427.50	27,427.50	-
02/01/2027	340,000.00	1.850%	27,427.50	367,427.50	394,855.00
08/01/2027	-	-	24,282.50	24,282.50	-
02/01/2028	350,000.00	1.950%	24,282.50	374,282.50	398,565.00
08/01/2028	-	-	20,870.00	20,870.00	-
02/01/2029	355,000.00	2.050%	20,870.00	375,870.00	396,740.00
08/01/2029	-	-	17,231.25	17,231.25	-
02/01/2030	365,000.00	2.150%	17,231.25	382,231.25	399,462.50
08/01/2030	-	-	13,307.50	13,307.50	-
02/01/2031	370,000.00	2.250%	13,307.50	383,307.50	396,615.00
08/01/2031	-	-	9,145.00	9,145.00	-
02/01/2032	380,000.00	2.350%	9,145.00	389,145.00	398,290.00
08/01/2032	-	-	4,680.00	4,680.00	-
02/01/2033	390,000.00	2.400%	4,680.00	394,680.00	399,360.00
Total	\$4,175,000.00	-	\$694,303.58	\$4,869,303.58	-
Yield Statistics			. ,	. , ,	
Bond Year Dollars					\$33,502.29
Average Life					8.025 Years
Average Coupon					2.0724062%
Net Interest Cost (N	IIC)				2.2219482%
True Interest Cost (					2.2291597%
Bond Yield for Arbi	· · · · · · · · · · · · · · · · · · ·				1.9963042%
All Inclusive Cost (					2.3941000%
	·				2.37+1000/0
IRS Form 8038 Net Interest Cost					2.0724062%
Weighted Average I	Maturity				8.025 Years
5 1 1 7 CIUSC 1					5.025 I Cui



\$6,280,000 Certificates of Participation, Series 2012B

### **Debt Service To Maturity And To Call**

	Refunded	Refunded					Refunded
Date	Bonds	Interest	D/S To Call	Principal	Coupon	Interest	D/S
10/10/2019	-	-	-	-	-	-	-
10/21/2019	4,740,000.00	7,508.89	4,747,508.89	-	-	-	-
04/01/2020	-	-	-	285,000.00	2.100%	67,580.00	352,580.00
10/01/2020	-	-	-	-	-	64,587.50	64,587.50
04/01/2021	-	-	=	290,000.00	2.300%	64,587.50	354,587.50
10/01/2021	-	-	-	-	-	61,252.50	61,252.50
04/01/2022	-	-	-	300,000.00	2.400%	61,252.50	361,252.50
10/01/2022	-	-	-	-	-	57,652.50	57,652.50
04/01/2023	-	-	-	305,000.00	2.500%	57,652.50	362,652.50
10/01/2023	-	-	-	-	-	53,840.00	53,840.00
04/01/2024	-	-	-	310,000.00	2.600%	53,840.00	363,840.00
10/01/2024	-	-	-	-	-	49,810.00	49,810.00
04/01/2025	-	-	-	320,000.00	2.650%	49,810.00	369,810.00
10/01/2025	-	-	-	-	-	45,570.00	45,570.00
04/01/2026	-	-	-	330,000.00	2.750%	45,570.00	375,570.00
10/01/2026	-	-	-	-	-	41,032.50	41,032.50
04/01/2027	-	-	-	340,000.00	2.850%	41,032.50	381,032.50
10/01/2027	-	-	-	-	-	36,187.50	36,187.50
04/01/2028	-	-	-	350,000.00	2.950%	36,187.50	386,187.50
10/01/2028	-	-	-	-	-	31,025.00	31,025.00
04/01/2029	-	-	-	360,000.00	3.000%	31,025.00	391,025.00
10/01/2029	-	-	-	-	-	25,625.00	25,625.00
04/01/2030	-	-	-	370,000.00	3.500%	25,625.00	395,625.00
10/01/2030	-	-	-	-	-	19,150.00	19,150.00
04/01/2031	-	-	-	380,000.00	3.500%	19,150.00	399,150.00
10/01/2031	-	-	-	-	-	12,500.00	12,500.00
04/01/2032	-	-	-	395,000.00	3.125%	12,500.00	407,500.00
10/01/2032	-	-	-	-	-	6,328.13	6,328.13
04/01/2033	-	-	-	405,000.00	3.125%	6,328.13	411,328.13
Total	\$4,740,000.00	\$7,508.89	\$4,747,508.89	\$4,740,000.00	-	\$1,076,701.26	\$5,816,701.26
Yield Statist	tics						
Base date for A	vg. Life & Avg. Co	oupon Calculation	n				10/10/2019
Average Life	5 8						7.422 Years
Average Coupo	n						3.0508144%
	age Maturity (Par E	Basis)					7.422 Years
	age Maturity (Origi						7.422 Years
Kerunaing E	Bond Informati	on					
Refunding Date	d Date						10/10/2019

10/10/2019

Refunding Delivery Date

\$4,175,000 General Obligation Bonds, Series 2019A Proposed Cur Ref 2012B COPs Assuming Current GO BQ "AA" Market Rates plus 25bps

### **Debt Service Comparison**

Date	Total P+I	Net New D/S	Old Net D/S	Saving
04/01/2020	-	671,619.76	352,580.00	(319,039.76
04/01/2021	165,831.08	165,831.08	419,175.00	253,343.9
04/01/2022	335,020.00	335,020.00	422,505.00	87,485.0
04/01/2023	396,322.50	396,322.50	420,305.00	23,982.5
04/01/2024	396,362.50	396,362.50	417,680.00	21,317.5
04/01/2025	396,162.50	396,162.50	419,620.00	23,457.5
04/01/2026	395,717.50	395,717.50	421,140.00	25,422.5
04/01/2027	394,855.00	394,855.00	422,065.00	27,210.00
04/01/2028	398,565.00	398,565.00	422,375.00	23,810.00
04/01/2029	396,740.00	396,740.00	422,050.00	25,310.00
04/01/2030	399,462.50	399,462.50	421,250.00	21,787.50
04/01/2031	396,615.00	396,615.00	418,300.00	21,685.00
04/01/2032	398,290.00	398,290.00	420,000.00	21,710.00
04/01/2033	399,360.00	399,360.00	417,656.26	18,296.20
Total PV Analysis Sum	\$4,869,303.58 nmary (Net to Net)	\$5,540,923.34	\$5,816,701.26	\$275,777.92
PV Analysis Sum	. , ,	\$5,540,923.34	\$5,816,701.26	\$275,777.92 881,728.18
PV Analysis Sum Gross PV Debt Service	nmary (Net to Net)		\$5,816,701.26	
PV Analysis Sum Gross PV Debt Service Net PV Cashflow Savi	nmary (Net to Net) e Savings ings @ 1.996%(Bond Yield)		\$5,816,701.26	881,728.18 881,728.18
PV Analysis Sum  Gross PV Debt Service  Net PV Cashflow Savi  Total Cash contribution	nmary (Net to Net) e Savings ings @ 1.996%(Bond Yield)		\$5,816,701.26	881,728.18
PV Analysis Sum Gross PV Debt Service Net PV Cashflow Savi Total Cash contribution Contingency or Round	e Savings ings @ 1.996%(Bond Yield) ings Amount		\$5,816,701.26	881,728.11 881,728.11 (670,000.00 (1,619.76
PV Analysis Sum Gross PV Debt Service Net PV Cashflow Savi Cotal Cash contribution Contingency or Round Net Present Value Ben	e Savings ings @ 1.996%(Bond Yield) ings Amount		\$5,816,701.26	881,728.13 881,728.13 (670,000.00 (1,619.76 \$210,108.43
PV Analysis Sum Gross PV Debt Service Net PV Cashflow Savi Cotal Cash contribution Contingency or Round Net Present Value Ben Net PV Benefit / \$5,07	e Savings ings @ 1.996%(Bond Yield) ings @ amount		\$5,816,701.26	881,728.13 881,728.13 (670,000.00 (1,619.76 \$210,108.43 4.138%
PV Analysis Sum Gross PV Debt Service Net PV Cashflow Savi Cotal Cash contribution Contingency or Round Net Present Value Ben Net PV Benefit / \$5,07 Net PV Benefit / \$4,7	e Savings ings @ 1.996%(Bond Yield) ings @ and the same of the same o		\$5,816,701.26	881,728.13 881,728.13 (670,000.00 (1,619.76 \$210,108.43 4.1389 4.4339
PV Analysis Sum Gross PV Debt Service Net PV Cashflow Savi Cotal Cash contribution Contingency or Round Net Present Value Ben Net PV Benefit / \$5,07 Net PV Benefit / \$4,7	e Savings		\$5,816,701.26	881,728.1 881,728.1 (670,000.00 (1,619.76 \$210,108.4 4.1389 4.4339
PV Analysis Sum Gross PV Debt Service Net PV Cashflow Savi Cotal Cash contributio Contingency or Round Net Present Value Ben Net PV Benefit / \$5,07 Net PV Benefit / \$4,7 Net PV Benefit / \$4,1	e Savings		\$5,816,701.26	881,728.18 881,728.18 (670,000.00