COUNTY OF MILWAUKEE
INTEROFFICE COMMUNICATION

DATE : July 9, 2020

TO : Supervisor Marcelia Nicholson, Chairwoman, County Board of Supervisors

FROM : Scott B. Manske, Comptroller

SUBJECT : 2020 Budget Amendment 1A021 – Pension Obligation Bond Issuance Report

REQUEST

The 2020 Adopted Budget included a request for the Office of the Comptroller to outline potential scenarios where issuing Pension Obligation Bonds ("POBs") may be advantageous to Milwaukee County finances. The purpose of this request was to, "prepare the County to act if market conditions are favorable to borrow and invest funds to help lower the cost of financing long-term pension obligations and/or improve the funded ratio of the Employees' Retirement System ("ERS").

BACKGROUND

The County contributes to the ERS annually. This contribution covers the normal cost and a payment toward the unfunded liability. The normal cost is the value of benefits earned by employees during the current year. The net pension liability is the difference between a pension fund's total liability and a pension fund's fiduciary net position[1]. As of December 31, 2018, ERS's net pension liability was $674,843,894.[2] The plan fiduciary net position as a percentage of the total pension liability was 70.6% as of December 31, 2018. The assumed interest rate on the total pension liability is 7.5%.

POBs are similar to other County bond issues. The major differences are that POB proceeds are invested by the Pension Board and income on POBs are not exempt from Federal income tax. POBs may be fixed rate bonds, variable rate bonds or other products. The POBs are used fund the unfunded portion (net pension liability) of pension liabilities by creating debt.

Milwaukee County Previous POB Issuances

In April 2009, the County issued $265,000,000 Taxable General Obligation Pension Promissory Notes, Series 2009A (the "Series 2009A Notes") and $135,000,000 Taxable Pension Notes, Series 2009B (the "Series 2009B Notes"). The plan of finance for the $400 million in pension notes was for an overall level debt service structure. In conjunction with the pension financing the County also created a pension-related Stabilization Fund.

The proceeds of the 2009A and 2009B Notes were used to fund a portion of the County's unfunded prior service liability for its Employees' Retirement System and were intended to stabilize the County's annual contribution levels to the ERS, achieve budgetary savings and provide a greater funding ratio for the ERS. The net proceeds of the notes were transferred to, and invested at the direction of, the County's Pension Board, which oversees and manages the ERS.[3]

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[1] Fiduciary net position, which equals assets, plus deferred outflows of resources, minus liabilities, minus deferred inflows of resources. Governmental Accounting Standards Board (GASB) Statement 67 Pension Reporting - Fact Sheet.
[2] ERS 2018 Annual Report of the Pension Board
[3] Milwaukee County 2009AB Final Official Statement

The plan of finance for the 2009 issuances intended to provide level debt service payments over a 25-year period and involved the issuance of two series of notes. Approximately two-thirds of the principal amount was issued as the Series 2009A Notes that would mature in the years 2010 through 2028 (consistent with the maximum maturity of 20 years allowed by state statutes). The balance of the principal amount was issued as the Series 2009B Notes. The Series 2009B Notes were anticipated to be funded in 2013 with general obligation promissory notes that would be amortized in the years 2029 through 2033.

In February 2013, the County issued $138,730,000 of Taxable General Obligation Pension Promissory Notes, Series 2013 ("2013 Notes") in order to provide for the timely payment of the Series 2009B Notes. The 2013 Notes included Serial Bonds that maturate in 2014-2028 and a Term Bond due in 2030 that has mandatory prepayments in 2029 and 2030. The favorable interest rates on the 2013 Notes allowed the County to maintain a level debt schedule which allowed the debt to be repaid three years earlier than projected.

After the February 2013 POB issuance, the Office of the Comptroller was contacted by JP Morgan to inquire if the County would be interested in purchasing the outstanding 2024 Term Bond within the 2009A Notes. The Office of the Comptroller subsequently received initial authorization from the County Board and County Executive to issue new pension obligation notes to refund any of the 2009 pension obligation notes that the County was able to achieve an appropriate level of savings. In June 2013, the County closed on the issuance of $99,300,000 of 2013B Taxable General Obligation Pension Refunding Bonds ("2013B Bonds"). These proceeds were used in order to purchase some of the outstanding 2024 Term Bonds of the 2009A Notes and the County achieved $1,571,900 of net present value savings.

Request for Information

In the first quarter of 2020, the Office of the Comptroller begin to draft questions and background information for a Request for Information ("RFI") that was to be provided to underwriters. During the development of the RFI, the demand for municipal bonds was severely decreased due to market impacts from the COVID-19 pandemic. As a result, the Office of the Comptroller delayed issuing the RFI till May.

The Office of the Comptroller worked with the County's municipal advisor (PFM Financial Advisors LLC or "PFM") to solicit information from five municipal bond underwriters. The information solicited by the County sought to gain information about the current market conditions for a POB issuance, the risks and potential benefits, and ideas for what the structure of a POB issuance would look like. The potential structures provided by the underwriters were to be compared to the County's existing UAAL.[4]

Market Conditions

A successful POB issuance depends on the difference between borrowing rate and expected rate of return on pension assets at which the net pension liability accrues. Accordingly, it is important to evaluate the economic drivers of POBs before deciding to pursue a transaction and reevaluate market conditions leading up to an issuance to ensure conditions still allow the desired financial objectives to be achieved. **The most important drivers of a successful POB issuance are achieving low taxable borrowing rates and the ability to meet investment return thresholds.**

[4] The Unfunded Actuarial Accrued Liability ("UAAL") amortization schedule was provided by the County's pension actuary (Segal). The projections are based on a January 1, 2019 actuarial valuation except a preliminary figure of $1.73 billion was used for the 2019 market value of assets and was based on the preliminary 15.2% 2019 rate of return. No gains or losses are assumed for future years.

POB debt service costs are a critical component in determining the economics and ultimate success of a POB offering. Despite recent COVID-19 related volatility, the current market (as of June 2020) is advantageous for issuers looking to issue long-term fixed rate taxable bonds. The 10-year and 30-year treasuries[5] are near historic lows at 0.65% and 1.38% respectively. The Graph 1 shows the average Treasury rates for the past 20-years (blue line) along with the current treasury rates for June 2020 (orange line).

Graph 1: Historical vs. Current Treasury Rates

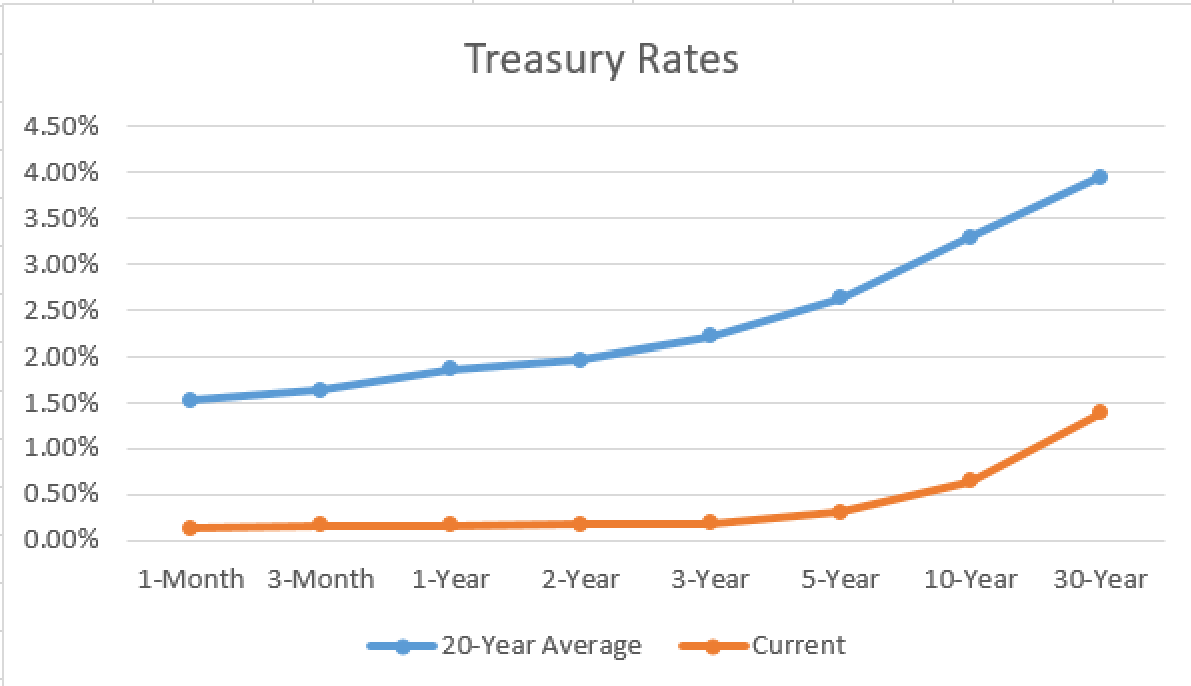


Table 1 indicates the current Treasury rates compared to the 20-year average Treasury rates along with a percentile column that shows how often treasury rates are lower than they are today.

Table 1: 20-Year Average vs. Current Treasury Rates (Include Percentile Rank)

	20-Year Average	Current	Percentile Rank	
3-Month	1.53%	0.14%	1-Month	29.88%
6-Month	1.64%	0.17%	3-Month	25.37%
1-Year	1.87%	0.16%	1-Year	14.61%
2-Year	1.96%	0.17%	2-Year	0.35%
3-Year	2.22%	0.19%	3-Year	0.02%
5-Year	2.63%	0.30%	5-Year	0.00%
10-Year	3.29%	0.65%	10-Year	0.38%
30-Year	3.95%	1.38%	30-Year	0.73%

Taxable municipal bonds are priced (spread) off of treasury rates. Current taxable municipal bond spreads are elevated when compared to spreads prior to the market dislocation earlier this year, but as previously mentioned treasuries are near historic lows.

[5] U.S. Treasury marketable securities are debt instruments issued to raise money needed to operate the federal government and pay off maturing obligations. These liquid securities can be sold for cash in the secondary market

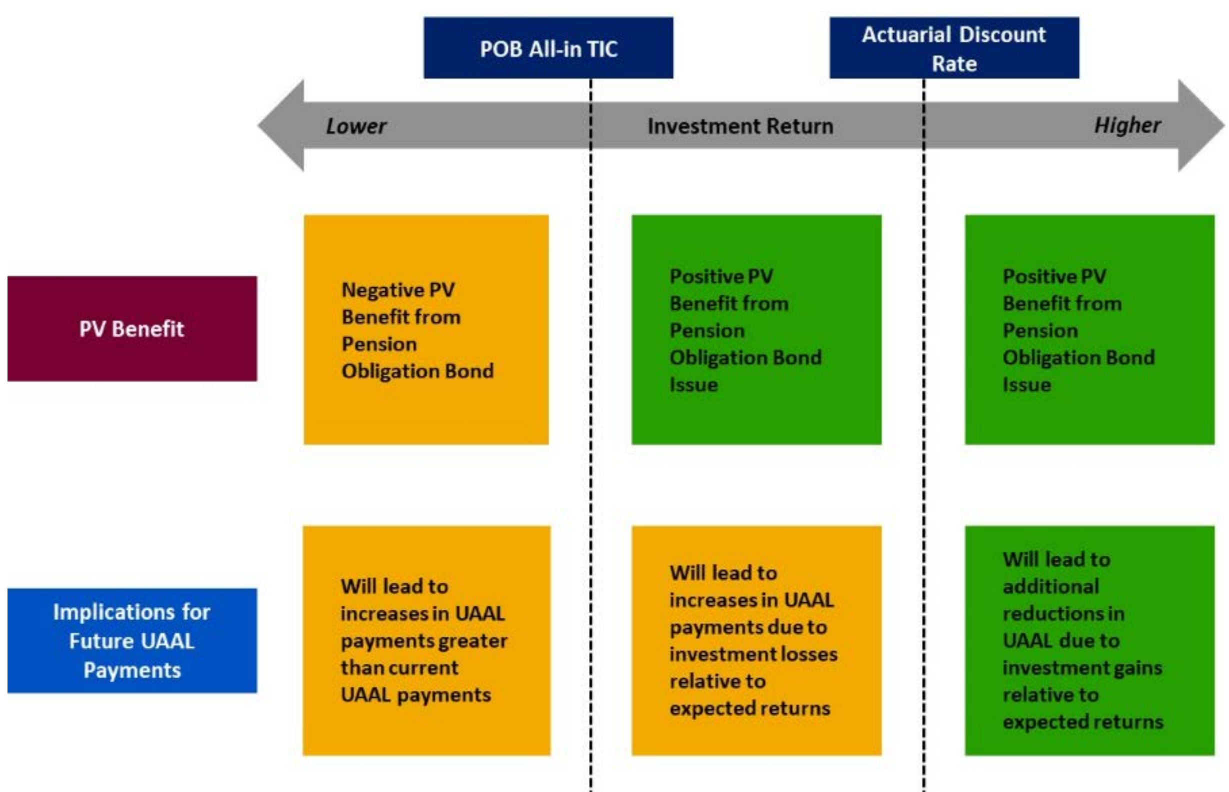
Risks of POB Issuance

The Government Finance Officers Association ("GFOA") recommends that state and local governments do not issue POBs. The GFOA advises against issuing POB for various reasons[6]. These reasons include:

1. The issuance of POBs carries with it a risk that the POB proceeds may fail to earn more than the interest rate owed over the term of the bond, leading to increased overall liabilities for the issuer.
2. POBs are complex instruments that carry considerable risk. POB structures may incorporate the use of guaranteed investment contracts, swaps, or derivatives, which must be intensively scrutinized as these embedded products can introduce counterparty risk, credit risk, and interest rate risk.
3. Issuing taxable debt to fund the pension liability increases the jurisdiction's bonded debt burden and potentially uses up debt capacity that could be used for other purposes.
4. POBs are frequently structured in a manner that defers the principal payments or extends repayment over a period longer than the actuarial amortization period, thereby increasing the sponsor's overall costs.
5. Rating agencies may not view the proposed POB issuance as credit positive, particularly if the issuance is not part of a more comprehensive plan to address pension funding shortfalls.

As noted by GFOA in Item 1 above, the risk from a POB issuance is that the County experiences an investment rate that does not meet or exceed the interest rates on the bonds (POB All-In Total Interest Cost). The graph below[7] illustrates that the County would receive a negative present value ("PV") benefit and higher UAAL payments if the investment earnings rate is below the POB All-In Total Interest Cost ("TIC")[8]. In addition, if the County achieves and investment rate higher than the interest rate on the bonds, but lower than the 7.5% actuarial discount rate then the UAAL will grow in the future.

Graph 2: Potential Present Value Impact and Impacts to UAAL from a POB Transaction



[6] GFOA https://www.gfoa.org/materials/pension-obligation-bonds
[7] BOA Securities, Inc. RFI Response June 17, 2020
[8] The All In TIC includes the cost of issuance associated with the transaction. These costs would include rating agency fees, bond counsel fees, and municipal advisor fees

It is unknown what the investment earnings rate would be subsequent to a POB issuance. Over the last six years, the rate of return has ranged from -2.4% to +16.0%. Table 2 shown below is from the 2019 Annual Report of the Pension Board.

Table 2: ERS Schedule of Investment Returns 2014-2019

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF INVESTMENT RETURNS
Last 6 Fiscal Years

Fiscal Year	Total Investment Plan Assets	Annual Money-Weighted Rate of Return, Net of Investment Expense
2019	$1,695,060,315	16.0% *
2018	$1,572,748,783	(2.4%)*
2017	$1,722,450,819	15.8% *
2016	$1,610,341,450	6.9% *
2015	$1,634,904,202	2.2% *
2014	$1,715,303,583	5.3% *

* Calculated by Marquette Associates, Inc.

The plan implemented GASB Statement No. 67 in the fiscal year 2014. Information calculated utilizing GASB 67 prior to fiscal year 2014 is not available.

Table 3 shows long-term expected real rate of return on pension plan investments. Real rates of return were determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of position plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.[9]

Table 3: Long Term Expected Real Rate of Return

	2020		2019	
Asset Class	Policy	Long-term Expected Real Rate of Return *	Policy	Long-term Expected Real Rate of Return *
Fixed income	23.00%	0.30%	18.00%	1.90%
Domestic common and preferred stocks	23.00%	5.30%	25.00%	5.60%
International common and preferred stocks ...	15.50%	5.50%	20.00%	5.80%
Long/Short hedge funds	8.50%	3.50%	8.50%	4.30%
Infrastructure	10.00%	5.30%	8.50%	5.50%
Real estate and REIT's	10.00%	4.00%	10.00%	5.20%
Private equity	10.00%	8.80%	10.00%	8.80%
Cash & cash equivalents	0.00%	1.30%	0.00%	0.00%
	100.00%		100.00%	

* Provided by Marquette Associates

[9] ERS 2019 Annual Report of the Pension Board

Benefits of POB Issuance

The primary benefit of a POB issuance is that the County may realize cost savings if the bond proceeds are invested, through the pension fund, in assets that realize a return higher than the cost of the POBs. In order to capture these savings, a plan would need to be developed to implement asset strategies to absorb the additional proceeds without impacting near and long term asset allocations. Depending on the structure of the POB issuance, the County could realize near term budgetary savings, long term reductions of overall liability or a combination of the two.

Another benefit of a POB issuance is that the cost associated with the County's unfunded liability would be changed to a debt service cost. Changing the cost to debt service would be advantageous since the County's levy to pay debt service on general obligation debt not limited by the State's Local Levy Limits.[10] The operating levy that is currently being used to finance the County's unfunded liability could be reallocated to other operating purposes to the extent that the overall tax levy was increased by policymakers. In 2020, the County budgeted $58.4 million for the ERS Unfunded Actuarial Liability.[11]

The Existing UAAL Payment Schedule[12] and a Potential POB Structure

The existing UAAL payment schedule is being included to compare the structure, rates and payment amounts to a potential POB structure. The Table 4 below is the amortization schedule of UAAL payments **without** a POB issuance. The amortization schedule of UAAL payments was provided by the County's pension actuary (Segal). The principal and interest amounts were derived by the Office of the Comptroller.

Table 4: Amortization Schedule of UAAL Payments

Amortization Schedule of UAAL Payments

Year	Principal	Interest Rate	Interest	UAAL Payment
2021	14,092,250	7.500%	44,307,750	58,400,000.00
2022	15,670,750	7.500%	43,229,250	58,900,000.00
2023	18,378,500	7.500%	42,031,500	60,410,000.00
2024	22,121,500	7.500%	41,518,500	63,640,000.00
2025	24,996,000	7.500%	40,344,000	65,340,000.00
2026	27,975,750	7.500%	38,174,250	66,150,000.00
2027	31,153,750	7.500%	35,606,250	66,760,000.00
2028	34,729,000	7.500%	33,711,000	68,440,000.00
2029	38,405,250	7.500%	30,264,750	68,670,000.00
2030	42,485,250	7.500%	27,384,750	69,870,000.00
2031	46,892,000	7.500%	24,198,000	71,090,000.00
2032	51,658,750	7.500%	20,681,250	72,340,000.00
2033	56,793,250	7.500%	16,806,750	73,600,000.00
2034	62,343,250	7.500%	12,546,750	74,890,000.00
2035	68,328,750	7.500%	7,871,250	76,200,000.00
2036	14,083,500	7.500%	2,746,500	16,830,000.00
2037	12,590,250	7.500%	1,689,750	14,280,000.00
2038	6,374,500	7.500%	745,500	7,120,000.00
2039	6,172,250	7.500%	267,750	6,440,000.00
Total	**595,244,500**		**464,125,500**	**1,059,370,000**

[10] Wisconsin Statutes 66.0602 (3)(d)2.
[11] Milwaukee County 2020 Adopted Budget https://county.milwaukee.gov/files/county/administrative-services/PSB/BudgetsCopy-1/2020-Budget/2020-Adopted-Budget/2020-2020_1950-FRINGE.pdf
[12] The projections are based on a January 1, 2019 actuarial valuation except a preliminary figure of $1.73 billion was used for the 2019 market value of assets and was based on the preliminary 15.2% 2019 rate of return. No gains or losses are assumed for future years.

The Office of the Comptroller requested underwriters develop POB structures based on current market conditions. Based on the structures and spreads received from underwriters and input from the PFM pricing desk, a sample schedule was developed by PFM in order to illustrate what a potential POB issuance could look like. The structure assumes that the County would get to 100% funding for the ERS in 2021. Rates are based on June treasury rates.

Table 4: Sample POB Structure (Level Debt Service, 100% ERS Funding)

	Level Debt Service			
Year	**Principal**	**Interest Rate**	**Interest**	**Debt Service**
2021	26,870,000	1.070%	12,311,204	39,181,204
2022	27,160,000	1.170%	12,023,695	39,183,695
2023	27,480,000	1.270%	11,705,923	39,185,923
2024	27,825,000	1.280%	11,356,927	39,181,927
2025	28,185,000	1.550%	11,000,767	39,185,767
2026	28,620,000	1.550%	10,563,899	39,183,899
2027	29,065,000	1.840%	10,120,289	39,185,289
2028	29,600,000	1.840%	9,585,493	39,185,493
2029	30,145,000	2.090%	9,040,853	39,185,853
2030	30,770,000	2.140%	8,410,823	39,180,823
2031	31,430,000	2.190%	7,752,345	39,182,345
2032	32,120,000	2.290%	7,064,028	39,184,028
2033	32,855,000	2.340%	6,328,480	39,183,480
2034	33,625,000	2.390%	5,559,673	39,184,673
2035	34,425,000	2.440%	4,756,035	39,181,035
2036	35,265,000	2.490%	3,916,065	39,181,065
2037	36,145,000	2.540%	3,037,967	39,182,967
2038	37,065,000	2.770%	2,119,884	39,184,884
2039	38,090,000	2.870%	1,093,183	39,183,183
Total	**596,740,000**		**147,747,527**	**744,487,527**

COMMITTEE ACTION

This an informational report only.

Scott B. Manske
Comptroller

pc: David Crowley, County Executive
Supervisor Jason Haas, Chair, Committee on Finance
Mary Jo Meyers, Chief of Staff, County Executive's Office
Kelly Bablitch, Chief of Staff, County Board
Stephen Cady, Office of the Comptroller
Pamela Bryant, Office of the Comptroller
Justin Rodriguez, Office of the Comptroller
CJ Pahl, Office of the Comptroller
Joe Lamers, Department of Administrative Services- PSB
Vince Masterson, Department of Administrative Services- PSB