

**MILWAUKEE BOARD OF SCHOOL DIRECTORS
SUPPLEMENTAL EARLY RETIREMENT PLAN
FOR TEACHERS**

(A Pension Trust Fund of Milwaukee Public Schools)

FINANCIAL STATEMENTS AND
REQUIRED SUPPLEMENTARY INFORMATION

Including Independent Auditors' Report

As of and for the Years Ended June 30, 2019 and 2018

**MILWAUKEE BOARD OF SCHOOL DIRECTORS SUPPLEMENTAL
EARLY RETIREMENT PLAN FOR TEACHERS**

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INDEPENDENT AUDITORS' REPORT

To the Milwaukee Board of School Directors
Supplemental Early Retirement Plan for Teachers:

Report on the Financial Statements

We have audited the accompanying statements of fiduciary net position of the Milwaukee Board of School Directors Supplemental Early Retirement Plan for Teachers (the Plan), as of June 30, 2019 and 2018, the statements of changes in fiduciary net position for the years then ended, and the related notes to the financial statements, which collectively comprise the Plan's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control over financial reporting relevant to the Plan's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to previously present fairly, in all material respects, the fiduciary net position of the Plan as of June 30, 2019 and 2018 and the changes in fiduciary net position of the Plan for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Other Matters - Required Supplementary Information

Accounting principles generally accepted in the United States of America require that Management's Discussion and Analysis, the Schedules of Changes in Net Pension Liability and Related Ratios, Contributions, and Investment Returns, and the notes to required supplementary information as listed in the table of contents be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in appropriate operational, economical, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Baker Tilly Veitchau Krause, LLP

Milwaukee, Wisconsin
December 12, 2019

MILWAUKEE BOARD OF SCHOOL DIRECTORS SUPPLEMENTAL EARLY RETIREMENT PLAN FOR TEACHERS

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) As of and for the Years Ended June 30, 2019 and 2018

Milwaukee Public Schools' (the District) Management's review of the changes in the pension plan fiduciary net position and actuarial liabilities for the Milwaukee Board of School Directors Supplemental Early Retirement Plan for Teachers (the Plan) for the fiscal years ended on June 30, 2019 and 2018 is presented below. This information supplements the financial statements in this report.

Overview of the Financial Statements of the Plan

The two basic financial statements of the Plan are the *Statements of Fiduciary Net Position* and the *Statements of Changes in Fiduciary Net Position*. Statements are shown for the most recent and previous fiscal years for comparison and analysis of changes in individual line items. The statements are prepared in conformity with accounting principles generally accepted in the United States of America.

The *Statements of Fiduciary Net Position* is a measure of the plan assets and liabilities at the close of the fiscal year. Total assets less liabilities equal net position restricted for pensions.

The *Statements of Changes in Fiduciary Net Position* shows additions (investment income and employer contributions) and deductions (benefits and expenses) for the fiscal year. The net increase (or decrease) is the change in fiduciary net position since the end of the previous fiscal year.

The *Notes to Financial Statements* are a fundamental part of the financial statements and provide important information to augment the figures in the financial statements. The notes provide information pertaining to the plan provisions, a summary of significant accounting policies, contributions, investments, and tax status of the Plan. Supplementary disclosures of selected financial data are included in the notes.

In addition to the basic financial statements and notes, a *Schedule of Changes in Net Pension Liability and Related Ratios*, a *Schedule of Contributions* and a *Schedule of Investment Returns* are included as required supplementary information. These schedules emphasize the long-term nature of the Plan and show progress of the Plan in accumulating sufficient assets to pay benefits when due.

The *Schedule of Changes in Net Pension Liability and Related Ratios* shows actuarial trend information. It includes the ratio of the Plan Fiduciary Net Position to Total Pension Liability (funded ratio) as a percentage. The funded ratio increases or decreases over time depending upon the relationships between contributions, investment performance, benefit changes, and actuarial assumption changes based upon participant information and characteristics.

The *Schedule of Contributions* shows the amount of actuarially determined contributions and the actual contributions as a percentage of the covered payroll.

The *Schedule of Investment Returns* shows the percentage of annual money-weighted rate of return (net of investment expenses) by plan year on investments.

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**MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)
As of and for the Years Ended June 30, 2019 and 2018**

Analysis of Plan Fiduciary Net Position and Actuarial Liabilities

The Plan's assets are reported at fair market value. A summary of the Plan's net position as of June 30, 2019, 2018, and 2017 is as follows:

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Assets:			
Investments including investments receivable	\$ 162,985,624	\$ 158,207,997	\$ 153,119,177
Accrued interest receivable	14,445	15,365	6,224
	<u>163,000,069</u>	<u>158,223,362</u>	<u>153,125,401</u>
Liabilities (benefits, transfers, expenses payable)	<u>1,430,924</u>	<u>2,715,968</u>	<u>2,387,758</u>
Plan Fiduciary Net Position	<u>\$ 161,569,145</u>	<u>\$ 155,507,394</u>	<u>\$ 150,737,643</u>

The Plan's Fiduciary Net Position increased by approximately \$6.0 million during the fiscal year ending on June 30, 2019. The increase is due to a net investment gain of approximately \$10.7 million and contributions of approximately \$11.9 million that were above benefit payments and expenses of approximately \$16.6 million. The Plan's Fiduciary Net Position increased by approximately \$4.8 million during the fiscal year ending on June 30, 2018. The increase was due to a net investment gain of approximately \$12.0 million and contributions of approximately \$8.9 million that were more than benefit payments and expenses of approximately \$16.1 million.

It is also helpful to analyze the Plan's Fiduciary Net Position in relation to the Total Pension Liability for plan benefits to evaluate the fiduciary net position of the Plan. An actuarial valuation is performed as of the beginning (July 1) of each year with the results projected to the end of the fiscal year (June 30) using various assumptions including a 7.0% future return on investments. This liability is then rolled forward to June 30, 2019. Additionally, for this purpose, investments are valued at fair market value. The fiduciary net positions as a percentage of total liability as of June 30, 2019, and 2018, and 2017 are as follows:

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Plan Fiduciary Net Position	\$ 161,569,145	\$ 155,507,394	\$ 150,737,643
Total Pension Liability	<u>238,982,475</u>	<u>227,576,941</u>	<u>230,314,394</u>
Net Pension Liability	<u>\$ 77,413,330</u>	<u>\$ 72,069,547</u>	<u>\$ 79,576,751</u>
Fiduciary Net Position as a percentage of Total Pension Liability	<u>67.6%</u>	<u>68.3%</u>	<u>65.4%</u>

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**MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)
As of and for the Years Ended June 30, 2019 and 2018**

Analysis of Changes in Fiduciary Net Position

A summary of the changes in fiduciary net position for the years ended June 30, 2019, 2018, and 2017 is as follows:

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Additions:			
Net investment income	\$ 10,779,925	\$ 12,028,603	\$ 16,153,487
Employer contributions	<u>11,911,441</u>	<u>8,906,670</u>	<u>9,456,955</u>
Total additions	<u>22,691,366</u>	<u>20,935,273</u>	<u>25,610,442</u>
Deductions:			
Benefit and refund payments	16,477,649	16,017,694	16,244,782
Administrative expenses	<u>151,966</u>	<u>147,828</u>	<u>156,826</u>
Total deductions	<u>16,629,615</u>	<u>16,165,522</u>	<u>16,401,608</u>
Net increase in net position	<u>\$ 6,061,751</u>	<u>\$ 4,769,751</u>	<u>\$ 9,208,834</u>

The net investment gains for the years ended June 30, 2019 and June 30, 2018 are the result of money weighted returns on investments of 7.2% and 8.3% for the years ended June 30, 2019 and 2018, respectively.

It is the District's practice to fund the Plan based on the actuarially determined contributions which were approximately \$10.4 million, \$9.4 million, and \$9.8 million for the years ended June 30, 2019, 2018, and 2017, respectively. However, the District made prepayments during the years ended June 30, 2019, 2018 and 2017 toward the past service liability portion of the subsequent years' recommended contribution which resulted in a difference in the actual amounts contributed during the respective years. As of June 30, 2019, 2018, and 2017, the District had cumulative credits (prepayments) of \$10.7 million, \$9.1 million, and \$9.6 million, respectively, for the subsequent years' contribution.

Observations

- For the year ended June 30, 2019, the Plan's time-weighted investment return of 7.5% was 4% above its benchmark index return of 7.1% and 5.9% above inflation. Over the five years ending on June 30, 2019, the Plan's annualized investment return of 6.2% was in line with its benchmark index return of 6.2% and 4.8% above inflation. For the year ended June 30, 2018, the Plan's time-weighted investment return of 8.1% was .6% above its benchmark index return of 7.5% and 5.3% above inflation. Over the five years ending on June 30, 2018, the Plan's annualized investment return of 8.0% was equal to its benchmark index return of 7.9% and 6.5% above inflation.
- For the ten fiscal years through June 30, 2019, the Plan's money-weighted investment returns were as follows: 2019 – 7.2%; 2018 – 8.3%; 2017 – 12.8%; 2016 – 0.6%; 2015 – 1.8%; 2014 – 16.5%; 2013 – 12.0%; 2012 – 1.0%; 2011 – 27.6%; 2010 – 14.8%.
- The Plan's assets were invested approximately 86% in the SWIB Core Fund, 9% in the SWIB Variable Fund and 5% in various bond funds and money market funds on June 30, 2019. The Plan's assets were invested approximately 48% in Public Equities, 39% in Fixed Income, 6% in Real Estate, and 7% in Alternative Investments on June 30, 2018. Relative to the allocation on June 30, 2018, this represents a 2% increase in the allocation to Public Equities, and a 2% reduction in the allocation to Fixed Income.

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**MANAGEMENT’S DISCUSSION AND ANALYSIS (UNAUDITED)
As of and for the Years Ended June 30, 2019 and 2018**

- SWIB’s Core and Variable Funds included derivative investments in futures contracts, foreign exchange forward and spot contracts, and options in 2019, 2018 and in 2017.
- Based on the funding assumptions, actuarial liabilities for retired participants, terminated vested participants and active participants represented 68%, 14% and 18%, respectively, of total accrued liabilities on July 1, 2018, and 63%, 14% and 23%, respectively, of total accrued liabilities on July 1, 2017.
- The fiduciary net position as a percent of the total pension liability decreased by .7% from 68.3% on June 30, 2018 to 67.6% on June 30, 2019.
- The Plan’s actuarially determined contribution increased by approximately \$1,000,000 for the fiscal year ended June 30, 2019. The Plan’s actuary comments that the increase in the contribution is primarily due to change in expected rate of return on investments from 7.5% to 7% and changes in actual claims experience. The Plan’s actuarially determined contribution decreased by approximately \$400,000 for the fiscal year ended June 30, 2018. The Plan’s actuary comments that the reduction in the contribution was due to favorable demographic experience.

Investment Performance

The returns versus benchmarks were as follows for the one and five-year periods through June 30, 2019:

	<u>1 Year</u>	<u>5 Years</u>
SWIB Core Fund <i>Benchmark Index Return</i>	8.3% 7.9%	6.4% 6.7%
SWIB Variable Fund <i>Benchmark Index Return</i>	6.7% 7.6%	8.0% 8.7%
Employer Benefit Payment Fund <i>Benchmark Index Return</i>	6.3% 6.9%	2.9% 2.4%
Total Portfolio <i>Benchmark Index</i>	7.5% 7.1%	6.2% 6.2%

The benchmark indices for each fund were as follows:

<u>Funds</u>	<u>Index Benchmarks</u>
SWIB Core Fund	39% Russell 3000 18% Morgan Stanley All World ex U.S. 34% Barclays Aggregate Bond Index 4% NCREIF 5% “15%” Rate of Return
SWIB Variable Fund	80% Russell 3000 20% Morgan Stanley All World ex U.S.
Employer Benefit Payment Fund	100% Barclays Intermediate Government/Credit Bond Index
Total Portfolio	35% S&P 500 10% Russell 2000 15% EAFE 40% Barclays Aggregate Bond Index

See accompanying independent auditors’ report

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**MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)
As of and for the Years Ended June 30, 2019 and 2018**

Asset Allocation by Fund and by Asset Class

The asset allocations by fund on June 30, 2019, 2018, and 2017 were as follows:

	June 30		
	2019	2018	2017
SWIB Core Fund	86%	87%	85%
SWIB Variable Fund	9%	6%	10%
Employer Benefit Payment Fund at BMO	5%	7%	5%

On June 30, 2019, the SWIB Core Fund was broadly diversified into U.S. stocks, fixed income, international stocks, real estate, and alternative investments; the SWIB Variable Fund was invested in U.S. stocks and international stocks; and the other portfolio investments were in fixed income. The Total Portfolio allocation by asset class was approximately as follows:

<u>Asset Class</u>	<u>Percentage Allocation on June 30:</u>		
	<u>2019</u>	<u>2018</u>	<u>2017</u>
Global Stocks	48%	46%	53%
Fixed Income	39%	41%	33%
Real Estate	6%	6%	6%
Alternative Investments	7%	7%	8%

Requests for Information

This report is designed to provide a financial overview of the Plan. Questions or requests for additional information regarding the financial information presented in this report may be addressed in writing to Pension Office, Department of Pensions and Data Systems, Milwaukee Public Schools, 5225 W Vliet Street, Room 124, Milwaukee, WI 53208.

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**STATEMENTS OF FIDUCIARY NET POSITION
AS OF JUNE 30, 2019 AND 2018**

	2019	2018
ASSETS		
Investments, at fair value		
Money market accounts	\$ 4,164,892	\$ 3,058,442
Nongovernmental obligations	3,883,842	7,615,567
Investment in the state of Wisconsin:		
Core retirement investment trust fund	139,066,484	137,824,453
Variable retirement investment trust fund	<u>14,552,753</u>	<u>9,709,535</u>
Total investments	<u>161,667,971</u>	<u>158,207,997</u>
Receivables		
Accrued interest receivable	14,445	15,365
Due from sale of investments	<u>1,317,653</u>	<u>-</u>
Total assets	<u>163,000,069</u>	<u>158,223,362</u>
LIABILITIES		
Benefits payable	1,375,879	1,343,727
Administrative expenses payable	55,045	57,795
Payable for investments purchased	<u>-</u>	<u>1,314,446</u>
Total liabilities	<u>1,430,924</u>	<u>2,715,968</u>
NET POSITION RESTRICTED FOR PENSIONS	<u>\$161,569,145</u>	<u>\$155,507,394</u>
Net position restricted for pensions attributable to:		
Nondedicated fund	<u>\$161,569,145</u>	<u>\$155,507,394</u>

The accompanying notes are an integral part of the basic financial statements.

**MILWAUKEE BOARD OF SCHOOL DIRECTORS SUPPLEMENTAL
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**STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEARS ENDED JUNE 30, 2019 AND 2018**

	<u>2019</u>	<u>2018</u>
ADDITIONS		
Investment income:		
Net investment income from the state of Wisconsin:		
Core retirement trust fund income	\$ 9,242,031	\$ 10,186,812
Variable retirement trust fund income	1,193,219	1,811,426
Investment income from other investments	<u>359,852</u>	<u>44,615</u>
Total investment income	10,795,102	12,042,853
Less: investment expenses	<u>(15,177)</u>	<u>(14,250)</u>
Net investment income	10,779,925	12,028,603
Employer contributions	<u>11,911,441</u>	<u>8,906,670</u>
Total additions	<u>22,691,366</u>	<u>20,935,273</u>
DEDUCTIONS		
Benefits paid to participants	16,477,649	16,017,694
Administrative expenses	<u>151,966</u>	<u>147,828</u>
Total deductions	<u>16,629,615</u>	<u>16,165,522</u>
Net increase in net position	6,061,751	4,769,751
NET POSITION RESTRICTED FOR PENSIONS-		
Beginning of year	<u>155,507,394</u>	<u>150,737,643</u>
End of year	<u>\$161,569,145</u>	<u>\$155,507,394</u>

The accompanying notes are an integral part of the basic financial statements.

MILWAUKEE BOARD OF SCHOOL DIRECTORS SUPPLEMENTAL EARLY RETIREMENT PLAN FOR TEACHERS

NOTES TO FINANCIAL STATEMENTS As of and for the Years Ended June 30, 2019 and 2018

1. DESCRIPTION OF THE PLAN

The Milwaukee Board of School Directors Supplemental Early Retirement Plan for Teachers (the Plan) is a single-employer defined benefit pension plan for certain employees of the Milwaukee Board of School Directors (MBSD). The Plan is administered by the MBSD. The following brief description is provided for general information purposes only. Participants should refer to the plan document for more complete information.

- a. *General* - The Plan is a defined benefit pension plan established to provide benefits after early retirement, which will supplement the pension benefits provided by the Wisconsin Retirement System (WRS). To be eligible for participation, an employee must be a teacher of the Milwaukee Public Schools (the District or MPS) who is in the collective bargaining unit represented by the Milwaukee Teachers' Education Association (MTEA) and who is participating as an active employee in the WRS. Such employees shall become participants in the Plan on the later of the effective date of the Plan or the date they become a participant in the WRS. Employees who first became participants before July 1, 1998, are vested upon participation. Employees who first became participants on or after July 1, 1998, are vested after being employed by the District for at least 15 years after July 1, 1998, in a position that is covered under the MBSD/MTEA teacher contract and that counts as creditable service under the WRS (but excluding periods of military service) and terminates employment with the District on or after the employee's 55th birthday.

Effective July 1, 2013, the Plan was amended as follows:

- Enrollment in the Plan was closed to any employees hired or rehired or transferred or demoted to the teacher unit until covered under the Plan on or after July 1, 2013; and
- Average monthly compensation was frozen as of July 1, 2013; and
- Creditable service was frozen for all Plan participants as of July 1, 2013; and
- Vesting service was frozen for employees hired or rehired or transferred or demoted to the teacher unit on or after July 1, 2013; and
- Participants in the Plan as of July 1, 2013 and who do not subsequently separate from service prior to eligibility for retirement shall continue to accrue vesting services under the Plan.

The Plan is classified as a "governmental plan" and is, therefore, exempt from the provisions of the Employee Retirement Income Security Act of 1974 (ERISA).

- b. *Retirement Benefits*- The Plan provides for early reduced retirement benefits to participants who are eligible and commence their WRS benefit after age 55 and prior to age 62 and provides early retirement benefits if they commence WRS benefits after age 62 but prior to age 65. Benefits are paid in the form of monthly payments based on compensation, years of service, and a defined maximum of average monthly compensation for the three fiscal years of highest earnings preceding the date of retirement. The Plan does not provide for any postretirement increases.
- c. *Reduction in Accrued Plan Liabilities* - Accrued plan liabilities are reduced by the amount attributed to employer contributions for employees who are not vested for benefits and who terminate participation under the Plan for reasons that include termination of employment. These employer contributions are applied to reduce the cost of the Plan and not to increase benefits otherwise payable to eligible participants.

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**NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended June 30, 2019 and 2018**

1. DESCRIPTION OF THE PLAN (cont.)

d. *Plan Membership* – Plan membership consisted of the following:

	July 1	
	2018	2017
Inactive plan members or beneficiaries currently receiving benefits	4,746	4,677
Inactive members entitled to but not yet receiving benefits	3,258	3,334
Active plan members	2,934	3,309
	10,938	11,320

Plan membership as of July 1, 2018 and 2017 is a close approximation of Plan membership as of June 30, 2019 and 2018. As the Plan was frozen as of July 1, 2013, the Plan membership as of July 1, 2018 was used as of June 30, 2019 (Measurement Date and Reporting Date for Net Pension Liability).

e. *Plan Administration* – Management of the Plan is vested in the Milwaukee Board of School Directors (Board), which consists of nine elected officials. The Board has authority to establish and amend benefit terms, actuary assumptions and funding of the actuarially determined contributions. The Board grants the plan administration authority and responsibilities to the District’s administration.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The financial statements of the Plan have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP), as prescribed by the Governmental Accounting Standards Board (GASB). To facilitate the understanding of data included in the financial statements, summarized below are the more significant accounting policies.

- a. *Reporting Entity* – As defined by GAAP, the financial reporting entity consists of a primary government, as well as its component units, which are legally separate organizations for which the elected officials of the primary government are financially accountable. Based upon required criteria, the Plan has no component units. However, the Plan is included in the financial statements of the Milwaukee Public Schools as a pension trust fund.
- b. *Measurement Focus and Basis of Accounting* - The Plan’s financial statements are prepared using the accrual basis of accounting. Plan member contributions are recognized in the period in which the contributions are due. Employer contributions to the Plan are recognized when due. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan. The Plan is accounted for on a flow of economic resources measurement focus. With this measurement focus, all assets and all liabilities associated with the operation of these funds are included on the Statements of Fiduciary Net Position.

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**NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended June 30, 2019 and 2018**

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

- c. *Investment Valuation and Income Recognition* - Investments are recorded at fair value. Short-term investments include money market accounts and are reported at cost, which approximates fair value. The specific identification basis is used in the determination of realized gains and losses on sales of securities, excluding the investments in the State of Wisconsin Core Retirement Investment Trust Fund and the State of Wisconsin Variable Retirement Investment Trust Fund (collectively, the "Trusts"). Purchases and sales of securities are recorded on a trade-date basis.

The Plan's investments in the Trusts are stated at fair value. Quoted market prices are used to value investments in the Trusts. Net investment income (loss) in the Trusts consists of realized and unrealized gains and losses and investment income (net of fund investment fees).

Dividends and interest are recorded as earned. All dividend and interest income, and all realized investment gains and losses, are allocated to the individual funds based on fund balances at the beginning of the year.

Investment securities, in general, are exposed to various risks, such as interest rate, credit, and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonable possible that changes in the values of the investment securities will occur in the near terms and that such changes could materially affect the amounts reported in the Statements of Fiduciary Net Position.

- d. *Use of Estimates* – The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of additions and deductions of the Plan's net position during the reporting period. Actual results could differ from those estimates.
- e. *Contingencies* - Claims and judgments are recorded as liabilities if all the conditions of GASB pronouncements are met. Claims and judgments are recorded as expenses when the related liabilities are incurred.
- f. *Benefits Payable* – Plan benefits are paid on the first day of the month for the prior month. Hence, Plan benefits paid on July 1 for the month of June are accrued at Plan year-end on June 30.

3. PLAN TERMINATION

Although the District has expressed no intent to terminate the plan agreement, it may do so at any time. In the event the Plan terminates, the net position of the Plan will be allocated, as prescribed by the plan provisions, generally to provide the following benefits in the order indicated:

1. To provide pensions for those persons who are receiving benefits under the Plan on the date of termination;

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**NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended June 30, 2019 and 2018**

3. PLAN TERMINATION (cont.)

2. To provide pensions for participants who have attained age 62 prior to the date of termination;
3. To provide pensions for participants who have attained age 55 prior to the date of termination;
4. To provide benefits for all other participants according to the respective actuarial values of their accrued pension benefits as of the date of termination.

4. CONTRIBUTIONS DETERMINED AND CONTRIBUTIONS MADE

The Plan's funding policy provides for periodic employer contributions at actuarially determined rates that, expressed as percentages of annual covered payroll, are sufficient to accumulate assets to pay benefits when due. Level percentages of payroll employer contribution rates are determined using the entry age normal actuarial funding method.

The recommended contribution for the year ended June 30, 2019 of \$10,390,406 to the Plan is an actuarially determined contribution amount determined through an actuarial valuation performed at July 1, 2018. All recommended contributions for the year ended June 30, 2019 consisted of \$10,242,578 amortization of the unfunded actuarial accrued liability and administrative expenses of \$147,828 assuming a funding date of July 1, 2018.

The recommended contribution for the year ended June 30, 2018 of \$9,385,932 to the Plan is an actuarially determined contribution amount determined through an actuarial valuation performed at July 1, 2017. All recommended contributions for the year ended June 30, 2018 consisted of \$9,228,566 amortization of the unfunded actuarial accrued liability and administrative expenses of \$156,826, assuming a funding date of July 1, 2017.

The District actually contributed \$11,911,441 in the year ended June 30, 2019. As of June 30, 2019, the District has a cumulative credit (prepayment) of \$10,561,293 (including net interest owed of \$69,734) to be used for the subsequent year's recommended contributions, which are based on estimates provided by the Plan's actuary.

The District actually contributed \$8,906,670 in the year ended June 30, 2018. As of June 30, 2018, the District has a cumulative credit (prepayment) of \$9,150,377 (including net interest of \$33,400) to be used for the subsequent year's recommended contributions, which are based on estimates provided by the Plan's actuary.

Based on the funding assumptions, the unfunded actuarial liability, for the year ended June 30, 2019 and June 30, 2018 is being amortized over 25 years, except for the Additional Deferred Vested Liability, which is amortized over 15 years. The annual amortization is included in the recommended contributions.

The Schedule of Changes in Net Pension Liability and Related Ratios and Schedule of Contributions are presented as required supplementary information following the notes to the financial statements.

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4. CONTRIBUTIONS DETERMINED AND CONTRIBUTIONS MADE (cont.)

These schedules present information about the Plan fiduciary net position relative to the total pension liability for fiscal year ending June 30, 2019 and contributions made in the past ten years.

5. NET PENSION LIABILITY

The components of the net pension liability for the year ending June 30, 2019 and 2018, were as follows:

	2019	2018
Total pension liability	\$238,982,475	\$ 227,576,941
Plan fiduciary net position	<u>(161,569,145)</u>	<u>(155,507,394)</u>
Net pension liability	<u>\$ 77,413,330</u>	<u>\$ 72,069,547</u>
Plan fiduciary net position as a percentage of total pension liability	67.6%	68.3%
Net pension liability as a percentage of covered payroll	38.7%	32.6%

Changes in the net pension liability for the years ending June 30, 2019 and 2018, were as follows:

	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
Balances as of 6/30/2018	<u>\$ 227,576,941</u>	<u>\$ 155,507,394</u>	<u>\$ 72,069,547</u>
Changes for the year:			
Service cost	-	-	-
Interest	16,182,472	-	16,182,472
Differences between expected and actual expense	(695,436)	-	(695,436)
Assumption Changes	12,396,147	-	12,396,147
Contributions - employer	-	11,911,441	(11,911,441)
Contributions - employee	-	-	-
Net investment income	-	10,779,925	(10,779,925)
Benefit payments	(16,477,649)	(16,477,649)	-
Administrative expense	-	(151,966)	151,966
Net changes	<u>11,405,534</u>	<u>6,061,751</u>	<u>5,343,783</u>
Balances as of 6/30/2019	<u>\$ 238,982,475</u>	<u>\$ 161,569,145</u>	<u>\$ 77,413,330</u>

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5. NET PENSION LIABILITY (cont.)

	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	<u>\$ 230,314,394</u>	<u>\$ 150,737,643</u>	<u>\$ 79,576,751</u>
Balances as of 6/30/2017			
Changes for the year:			
Service cost	-	-	-
Interest	16,436,072	-	16,436,072
Differences between expected and actual expense	(3,160,017)	-	(3,160,017)
Contributions - employer	-	8,906,670	(8,906,670)
Contributions - employee	-	-	-
Net investment income	-	12,028,603	(12,028,603)
Benefit payments	(16,013,508)	(16,013,508)	-
Administrative expense	-	(147,828)	147,828
Other	-	(4,186)	4,186
	<u>(2,737,453)</u>	<u>4,769,751</u>	<u>(7,507,204)</u>
Net changes			
Balances as of 6/30/2018	<u>\$ 227,576,941</u>	<u>\$ 155,507,394</u>	<u>\$ 72,069,547</u>

Actuarial Assumptions: In March 2019, the Plan actuary performed an experience study based on actuarial valuations for the period July 1, 2012 to July 1, 2017. Based on this study the following assumptions were implemented effective for the July 1, 2018 actuarial valuation. The total pension liability was determined by an actuarial valuation as of July 1, 2018 and data rolled forward to June 30, 2019, above using the following actuarial methods and assumptions:

Actuarial cost method	Entry Age Normal
Actuarial Value of Assets	5-year smoothed market
Inflation	Price Inflation 0.0%
Salary increases	No longer required as Plan was frozen effective July 1, 2013. Therefore salary increases after this date will not be considered pensionable under the Plan.
Investment rate of return	7.0% net of investment expenses
Mortality rate	Based on RP-2014 White Collar Healthy Annuitant Mortality Table the scaling factors are 98% for men and 96% for women with generational mortality improvement using MP-2018.

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5. NET PENSION LIABILITY (cont.)

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return 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. Best estimates of geometric real rates of return for each major asset class as of December 31, 2018 and 2017 are as follows:

<u>Asset Class</u>	<u>2018</u>		<u>2017</u>	
	<u>Actual Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>	<u>Actual Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>
<i><u>SWIB Core Fund</u></i>				
Global Equities	49.0%	5.5%	50.0%	5.3%
Fixed Income	24.5%	1.5%	24.5%	1.4%
Inflation Sensitive Assets	15.5%	1.3%	15.5%	1.0%
Real Estate	9.0%	3.9%	8.0%	3.6%
Private Equity/Debt	8.0%	6.7%	8.0%	6.5%
Multi-Asset	4.0%	4.1%	4.0%	3.6%
Cash	(10.0)%	0%	(10.0)%	0%
Portfolio Target Allocation	86.0%		85.0%	
<i><u>SWIB Variable Fund</u></i>				
Domestic Equity	70.0%	5.0%	70.0%	4.6%
International Equity	30.0%	5.9%	30.0%	4.9%
Portfolio Target Allocation	9.0%		10.0%	
<i><u>BMO Fund</u></i>				
Intermediate Fixed Income	100.0%	1.35%	100.0%	1.45%
Portfolio Target Allocation	5.0%		5.0%	
Long-Term Inflation Assumption	2.50%		2.75%	

Single Discount Rate: The Plan is closed to future members, and the funding policy is projected to fully finance plan liabilities in the future. Actuarially determined contributions will be adjusted in the future, as experience emerges, to ensure that retiree benefits are paid.

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5. NET PENSION LIABILITY (cont.)

A single discount rate of 7.0% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 7.0%. The projection of cash flows used to determine this single discount rate assumed that the plan sponsor would make the actuarially determined contribution as defined by the funding policy. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of Net Pension Liability to the Single Discount Rate Assumption: Regarding the sensitivity of the net pension liability to changes in the single discount rate, the following presents the Plan's net pension liability, calculated using a single discount rate of 7.0%, as well as what the Plan's net pension liability would be if it were calculated using a single discount rate that is 1-percentage-point lower (6.0%) or 1-percentage-point higher (8.0%) for the year ending June 30, 2019 and 7.5%, as well as what the Plan's net pension liability would be if it were calculated using a single discount rate that is 1-percentage-point lower (6.5%) or 1-percentage-point higher (8.5%) for the year ending June 30, 2018:

	1% Decrease 6.0%	Current Single Discount Rate Assumption 7.0%	1% Increase 8.0%
2019 Net Pension Liability	\$100,727,528	\$77,413,330	\$57,630,689
	1% Decrease 6.5%	Current Single Discount Rate Assumption 7.5%	1% Increase 8.5%
2018 Net Pension Liability	\$93,228,765	\$72,069,547	\$53,953,873

6. INVESTMENTS

The following table presents a summarization of the fair values of the Plan's investments at June 30, 2019 and 2018. All categorized investments unregistered are held by the counterparty or by its trust department or agent but not in the Plan's name for the facilitation of trading by the Plan's investment managers. Money market accounts and investments in State of Wisconsin Core Retirement Investment Trust Fund (the "Core Trust") and Variable Retirement Investment Trust Fund (the "Variable Trust") are not categorized because the relationship between the fund and the investment agent is a direct contractual relationship and a transferable instrument that evidences ownership or creditorship does not support the investments.

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6. INVESTMENTS (cont.)

	June 30	
	2019	2018
Categorized:		
Nongovernmental obligations	\$3,883,842	\$7,615,567
Non-categorized:		
Money market accounts	4,164,892	3,058,442
Investment in the State of Wisconsin		
Core retirement investment trust fund	139,066,484	137,824,453
Variable retirement investment trust fund	14,552,753	9,709,535
Total Investments	\$161,667,971	\$158,207,997

The Plan's investments in the Core Trust and the Variable Trust were established for the investment of assets of the Plan and several other governmental-sponsored retirement plans. Each participating retirement plan has an undivided interest in the Trusts. The assets of the Trusts are held by the State of Wisconsin and BMO Global Asset Management ("BMO" or the "Trustee") and each exceeds 5% of the net position restricted for pensions. At June 30, 2019 and 2018, the Plan's interest in the plan net position of the Core Trust was approximately 0.149% and 0.124% respectively, and the Plan's interest in the plan net position of the Variable Trust was approximately 0.2% and 0.118%, respectively. Investment income and administrative expenses relating to the Trusts are allocated to the individual plans based upon average monthly balances invested by each plan. The Core Trust invests primarily in equity and fixed income securities, while the Variable Trust invests primarily in equity securities.

The Plan invests in accordance with the Plan's investment policy. The Plan did not have any investments in mortgage backed securities as of June 30, 2019 and June 30, 2018.

Also in accordance with the Plan's investment policy, the Plan invests in nongovernmental obligations (2.40% and 4.81% of plan assets in 2019 and 2018, respectively). These securities are reported at fair value in the statements of fiduciary net position.

For the years ended June 30, 2019 and 2018, the annual money-weighted rate of return on Plan investments, net of pension plan investment expense, was 7.2% and 8.3%, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

7. DEPOSIT AND INVESTMENT RISK

The Trustees of the Plan have adopted a Statement of Investment Policy (the "Policy"). It articulates asset allocation targets; guidelines for interest rate risk, credit risk, and concentration of credit risk for separately managed portfolios; and performance benchmarks. Under Wisconsin statutes, equities, other than investments in the State of Wisconsin Employee Trust Funds ("SWIB funds"), are subject to the statutory limitation that they may not exceed 50% of the market value of the plan assets. The Plan has no equity investments other than those in the SWIB funds. The Policy targets equities in the SWIB Variable Fund to equal 150% of the amount in Fixed Income securities at BMO, with the remainder of the portfolio allocated to the SWIB Core Fund. The Policy target for Fixed Income is the

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7. DEPOSIT AND INVESTMENT RISK (cont.)

sum of six months benefit payments plus six months administrative expense. The portfolio is rebalanced toward the Policy targets quarterly. On June 30, 2019, the SWIB Core Fund strategic targets were 50.1% to Global Stocks, 41.1% to Fixed Income, 7.2% to Real Estate, and 11.6% to Alternative Investments. On June 30, 2018, the SWIB Core Fund strategic targets were 50.6% to Global Stocks, 41.3% to Fixed Income, 6.8% to Real Estate, and 11.3% to Alternative Investments. The strategic target allocations total 110% and 110% on June 30, 2019 and 2018, respectively, reflecting the possibility of introducing leverage into the portfolio. On June 30, 2019, the SWIB Variable Fund strategic targets were 70% to U.S. Stocks, 30% to International Stocks, and 0% to Alternative Investments. On June 30, 2018, the SWIB Variable Fund asset-mix targets also were 70% to U.S. Stocks, 30% to International Stocks, and 0% to Alternative Investments.

Under the SWIB Investment Policy, the Core and Variable Fund asset allocations will be reviewed monthly for potential rebalancing. For the SWIB funds, when a major liquid asset class (i.e., Total Public Equities, Total Public Fixed Income) exceeds its target allocation by plus or minus 4%, a rebalancing exercise will be initiated. The Plan's investment portfolio (the Fund) has two investment managers: the State of Wisconsin Investment Board (SWIB) and BMO. Each investment manager is responsible for managing the portion of the Fund assets under its control in accordance with its policy and guidelines. BMO is also responsible for managing its Plan portfolios in accordance with the guidelines adopted by the Trustees. Milwaukee Public Schools completes a comprehensive review of the Fund relative to the Policy on an annual basis.

A. Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Milwaukee Public Schools uses both duration and weighted average maturity as methods of monitoring interest rate risk. SWIB data is expressed in terms of modified duration and option adjusted duration. Modified duration, which is stated in years, is the measure of price sensitivity of a fixed income security to an interest rate change of 100 basis points. The calculation is based on the weighted average of the present value of all cash flows. Some pooled investments are analyzed using an option adjusted duration calculation which is similar to the modified duration method. Option adjusted duration incorporates the duration shortening effect of any embedded call provisions in securities.

The following schedule summarizes the duration and fair value of the investments at BMO as of June 30, 2019 and the fair value at SWIB as of June 30, 2019.

<u>Investments</u>	<u>Duration (Years)</u>	<u>Fair Value</u>
SWIB Core and Variable Funds	Details on the SWIB fixed income investments as of 12/31/18 are included below.	\$153,619,237
Money market accounts (at BMO) And Cash Equivalents	0.08	\$4,164,892
Mutual Funds (at BMO)	3.97	\$3,883,842

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7. DEPOSIT AND INVESTMENT RISK (cont.)

SWIB information is provided within the accompanying financial statement as of December 31, 2018. There has been no significant changes in SWIB's investment strategies, asset allocations and investment pricing methods from December 31, 2018 to June 30, 2019. Based on SWIB information, the District feels the information presented for SWIB Investments as of December 31, 2018 is a fair representation for June 30, 2019.

The following schedule displays the duration or weighted average maturity of the investments by type of investment at SWIB as of December 31, 2018.

<u>SWIB Investments</u>	<u>Duration (Years)</u>	<u>Fair Value</u>
Asset Backed Securities	2.5	\$ 211 Million
Commercial Paper	27 days	\$ 159 Million
Corporate Bonds and Private Placements	5.4	\$ 5,476 Million
Foreign Gov./Agency Bonds.	6.1	\$ 3,081 Million
Municipal Bonds	10.2	\$ 105 Million
Repurchase Agreements	1 day	\$ 367 Million
U.S Government Agencies	3.9	\$ 209 Million
U.S. TIPS	7.2	\$ 14,565 Million
U.S Treasury Securities	5.5	\$ 3,353 Million
Commingled Funds	19 days to 7.6	\$ 8,177 Million

Note: On June 30, 2019, SWIB's Core Fund and Variable Fund had \$93.5 billion and \$7.1 billion in assets, respectively. As of June 30, 2019, the Plan's assets were invested 86% in the SWIB Core Fund, 9% in the SWIB Variable Fund, and 5% in portfolios managed by BMO. For SWIB, the duration of each U.S. Fixed Income portfolio shall remain within 15% of the assigned benchmark's duration. For the bond portfolio for the payment of benefits and expenses, the duration will be within a range of 50% to 150% of the duration of the benchmark index.

The following schedule summarizes the duration and fair value of the investments at BMO as of June 30, 2018 and the fair value at SWIB as of June 30, 2018.

<u>Investments</u>	<u>Duration (Years)</u>	<u>Fair Value</u>
SWIB Core and Variable Funds	Details on the SWIB fixed income investments as of 12/31/17 are included below.	\$147,533,988
Money market accounts (at BMO) And Cash Equivalents	0.08	\$3,058,442
Mutual Funds (at BMO)	4.06	\$7,615,567

SWIB information provided within the accompanying financial statement is as of December 31, 2017. There has been no significant change in SWIB's investment strategies, asset allocations and investment pricing methods from December 31, 2017 to June 30, 2018. Based on SWIB information, the District feels the information presented for SWIB Investments as of December 31, 2017 is a fair representation for June 30, 2018.

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7. DEPOSIT AND INVESTMENT RISK (cont.)

The following schedule displays the duration or weighted average maturity of the investments by type of investment at SWIB as of December 31, 2017.

<u>SWIB Investments</u>	<u>Duration (Years)</u>	<u>Fair Value</u>
Asset Backed Securities	4.1	\$ 72 Million
Commercial Paper	15 days	\$ 398 Million
Corporate Bonds and Private Placements	6.3	\$ 4,985 Million
Foreign Gov./Agency Bonds.	8.0	\$ 2,511 Million
Municipal Bonds	10.3	\$ 122 Million
Repurchase Agreements	2 days	\$ 14 Million
U.S Government Agencies	4.2	\$ 216 Million
U.S. TIPS	7.6	\$ 12,781 Million
U.S Treasury Securities	5.0	\$ 3,701 Million
Commingled Funds	45 days to 7.9	\$ 9,093 Million

Note: On June 30, 2018, SWIB's Core Fund and Variable Fund had \$100.2 billion and \$8.1 billion in assets, respectively. As of June 30, 2018, the Plan's assets were invested 87% in the SWIB Core Fund, 6% in the SWIB Variable Fund, and 7% in portfolios managed by BMO. For SWIB, the duration of each U.S. Fixed Income portfolio shall remain within 15% of the assigned benchmark's duration. For the bond portfolio for the payment of benefits and expenses, the duration will be within a range of 50% to 150% of the duration of the benchmark index.

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7. DEPOSIT AND INVESTMENT RISK (cont.)

B. Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The following schedule displays the credit quality percentage distributions of the fixed income investments in the SWIB Core and Variable Funds as of December 31, 2018 and December 31, 2017 and in the separate accounts managed by BMO on June 30, 2019 and June 30, 2018. For SWIB, the schedule displays the lowest credit rating assigned by several nationally recognized statistical rating organizations.

Rating*	SWIB		BMO	
	12/31/2018	12/31/2017	6/30/2019	6/30/2018
P-1 or A-1	2%	0%	N/A	N/A
P-2 or A-2	0%	1%	N/A	N/A
UST and AGY	N/A**	N/A**	N/A	N/A
AAA/Aaa	1%	1%	48%	71%
AA/Aa	53%	51%	N/A	N/A
A	5%	6%	N/A	N/A
BBB/ Baa	7%	6%	N/A	N/A
BB/Ba	2%	3%	N/A	N/A
B	3%	2%	N/A	N/A
CCC/Caa or below	0%	1%	N/A	N/A
CC/Ca	N/A	N/A	N/A	N/A
C	N/A	N/A	N/A	N/A
D	N/A	N/A	N/A	N/A
Commingled Funds & Mutual Funds***	23%	27%	52%	29%
Not-Rated	4%	2%	0%	0%

*As defined by Moody's Bond Ratings or Standard and Poor's

**As of 12/31/13 SWIB's holdings of UST and AGY are included in the "AA" category.

***Additional information on the Fixed Income Fund Commingled Funds in the SWIB portfolio is in the table labeled "Investments Measured at Net Asset Value." The weighted average quality of the mutual funds in the BMO Portfolio was A (excluding BMO's money market fund and cash equivalents which were rated AAA).

SWIB's Core Fund's Government/Credit Portfolio shall maintain an average quality rating of A or better. Non-Investment Grade securities shall not exceed 15% of the portfolio's market value. For SWIB's Global Bond Portfolio, overall portfolio quality must be maintained at an average rating of A or better. Corporate securities may not exceed 20% of the portfolio's market value and must be rated at least "B-" and above. Corporate securities rated "BB+" or lower but no lower than "B-" may not exceed 5% of the portfolio's market value. Emerging market sovereign debt is limited to (a) securities that are rated "B-" or above and (b) debt of countries in the J.P. Morgan Emerging Market Bond Index Global Diversified; Emerging market corporate debt is limited to (a) securities that are rated "B-" or above and (b) issuers in the Bloomberg Barclays US Credit Index. Relative emerging market debt shall not exceed 10% of the portfolio's market value.

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7. DEPOSIT AND INVESTMENT RISK (cont.)

C. Custodial Credit Risk

The Plan does not have a deposit or investment policy specifically related to custodial credit risk. The Plan's assets are restricted to investments in the SWIB Core and Variable Funds and in portfolios at BMO.

Deposits - Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, the fund will not be able to recover deposits that are in the possession of an outside party. SWIB had uninsured and uncollateralized deposits totaling \$390.2 million and \$363.1 million on December 31, 2018 and December 31, 2017, respectively. In addition, SWIB held certificates of deposit which were covered by depository insurance with a fair value of \$2 million and \$24.9 million on December 31, 2018 and 2017, respectively. In total, these deposits represented 0.39% and 0.33% of the combined assets of the SWIB Core and Variable Funds, on December 31, 2018 and on December 31, 2017, respectively.

Investments - Custodial credit risk for investments is the risk that, in the event of the failure of a counterparty to a transaction, SWIB will not be able to recover the value of investments that are in the possession of an outside party. The repurchase agreements held by the fund were 7 agreements totaling \$367 million as of December 31, 2018 and 2 agreements totaling \$14.2 million as of December 31, 2017. All of these repurchase agreements were tri-party agreements held in short-term cash management portfolios managed by SWIB's custodian. The underlying securities for these repurchase agreements were held by the tri-party's agent, not in SWIB's name. These agreements represented 0.36% and 0.01% of the combined assets of the SWIB Core and Variable Funds on December 31, 2018 and December 31, 2017, respectively.

D. Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of a fund's investment in a single issuer. SWIB limits concentrations of credit risk by establishing investment guidelines for individual portfolios or groups of portfolios (excluding U.S. Government and Agency Securities) that generally restrict issuer concentrations in any one company or Rule 144A securities to less than 5% of the portfolio's market value. For the other separately managed portfolios, the policy guidelines specify that individual securities (excluding U.S. Government and Agency securities) in a separate portfolio should not exceed 7% of the value of that portfolio. None of the securities in these portfolios represented more than 5% of the market value of the Fund.

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7. DEPOSIT AND INVESTMENT RISK (cont.)

E. Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or deposit. As of December 31, 2018, \$20.2 billion of the SWIB Core and Variable Funds' currency exposure was denominated in foreign currency. As of December 31, 2017, \$22.8 billion of the SWIB Core and Variable Funds' currency exposure was denominated in foreign currency. For the BMO managed portfolios, there was no foreign currency exposure.

The risk definitions noted above are from the GASB. The data, risk descriptions, and guidelines for the SWIB Funds were provided by SWIB and the data for the other investment types were provided by BMO.

8. DERIVATIVE INVESTMENTS

The Plan holds investments in SWIB Funds, which may enter into a variety of financial contracts, including futures and options, primarily to enhance performance, reduce volatility of the portfolio, and aid in cash flow management. SWIB also enters into foreign exchange positions, such as forward and spot contracts, to obtain or hedge foreign currency exposure. The financial contracts are included in SWIB Variable and Core Investments on the Statement of Fiduciary Net Position. At June 30, 2019 and 2018, the Plan's interest in the SWIB Core Trust was approximately 0.149% and 0.124%, respectively, and the Plan's interest in the plan net position of the Variable Trust was approximately 0.2% and 0.118%, respectively. The SWIB Funds are exposed to credit risk in the event of non-performance by counterparties to financial instruments. Exposure to market risk, the risk that future changes in market conditions may make an instrument less valuable, is managed in accordance with risk limits through buying or selling instruments or entering into offsetting positions.

A financial futures contract is an exchange traded agreement to buy or sell a financial instrument at an agreed upon price and time in the future. Futures contracts are marked to market daily, based upon the closing market price of the contract at the board of trade or exchange on which they are traded. The resulting gain or loss is typically received or paid the following day until the contract expires. Futures contracts involve, to varying degrees, risk of loss in excess of the variation margin. Losses may arise from future changes in the value of the underlying instrument. Substantially all future contracts have a maturity date of less than one year.

Option contracts give the purchaser of the contract the right to buy (call) or sell (put) the security or index underlying the contract at an agreed upon price on or before the expiration of the option contract. The fair value of option contracts is based upon the closing market price of the contract. The seller of the contract is subject to market risk, while the purchaser is subject to credit risk and market risk to the extent of the premium paid to enter into the contract.

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8. DERIVATIVE INVESTMENTS (cont.)

Foreign exchange contracts involve an agreement to exchange the currency of one country for the currency of another country at an agreed-upon price and settlement date. Spot and forward contracts entered into by SWIB are over-the-counter contracts, entered into with various counterparties. These contracts are valued daily, and guidelines have been established which provide minimum credit ratings for counterparties. Losses may arise from future changes in value of the underlying currency, or if the counterparties do not perform under the terms of the contract.

The following table summarizes the aggregate notional or fair value amounts for SWIB's derivative financial instruments at December 31, 2018 and December 31, 2017 (in thousands):

	<u>12/31/2018</u>	<u>12/31/2017</u>
Future contracts (Notional)	\$ 10,086,518	\$11,954,025
Foreign currency spot and forward contracts -- Receivable (Fair Value)	\$ 3,863,442	\$ 2,482,831
Foreign currency spot and forward contracts -- Payable (Fair Value)	\$ (3,884,736)	\$ (2,483,962)
OTC Derivative Investments subject to Counterparty Credit Risk – Receivable (Fair Value)	\$ 4,754,460	\$ 2,486,927
OTC Derivative Investments subject to Counterparty Credit Risk – Payable (Fair Value)	\$ (4,743,202)	\$ (2,482,758)
Options – puts (Notional)	\$ (923,933)	\$ (137,003)
Options – calls (Notional)	\$ (178,116)	\$ (73,263)

9. FAIR VALUE MEASUREMENTS

The framework for measuring fair value provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1) and the lowest priority to unobservable inputs (level 3). The three levels of the fair value hierarchy under authoritative guidance are described as follows:

- Level 1 - Inputs to the valuation methodology are unadjusted quoted market prices for identical assets in active markets that the plan has the ability to access.
- Level 2 - Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly, such as:
 - quoted prices for similar assets or liabilities in active markets;
 - quoted prices for identical or similar assets or liabilities in inactive markets;
 - inputs other than quoted prices that are observable for the asset or liability;
 - inputs that are derived principally from or corroborated by observable market data by correlation or other means

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9. FAIR VALUE MEASUREMENTS (cont.)

If the asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability

Level 3 - Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset's or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques maximize the use of relevant observable inputs and minimize the use of unobservable inputs.

The following is a description of the valuation methodologies used for BMO assets measured at fair value. There were no changes to the methodologies during the years ended June 30, 2019 and 2018.

Money market accounts: Valued at the quoted net asset value (NAV) of shares held by the Plan at year end.

Mutual funds: Mutual funds are valued at the daily closing price as reported by the fund. Mutual funds held by the Plan are open-end mutual funds that are registered with the U.S. Securities and Exchange Commission. These funds are required to publish their daily NAV and to transact at that price. The mutual funds held by the Plan are deemed to be actively traded.

The plan sponsor is responsible for the determination of fair value. The plan sponsor has not historically adjusted the prices obtained from pricing services. The preceding methods described may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, although the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

The following tables set forth by level, within the fair value hierarchy, the Plan's investments held at BMO at fair value as of June 30, 2019 and 2018.

	June 30, 2019			Total
	Level 1	Level 2	Level 3	
Money market accounts	\$ -	\$ 4,164,892	\$ -	\$ 4,164,892
Mutual funds:				
Short-Term Investment Grade Bond Funds	1,839,161	-	-	1,839,161
Intermediate-Term Investment Grade Bond Funds	2,044,681	-	-	2,044,681
Investments at fair value	<u>\$ 3,883,842</u>	<u>\$ 4,164,891</u>	<u>\$ -</u>	<u>\$ 8,048,734</u>

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9. FAIR VALUE MEASUREMENTS (cont.)

	June 30, 2018			
	Level 1	Level 2	Level 3	Total
Money market accounts	\$ -	\$ 3,058,442	\$ -	\$ 3,058,442
Mutual funds:				
Short-Term Investment Grade Bond Funds	3,206,554	-	-	3,206,554
Intermediate-Term Investment Grade Bond Funds	4,409,013	-	-	4,409,013
Investments at fair value	<u>\$ 7,615,567</u>	<u>\$ 3,058,442</u>	<u>\$ -</u>	<u>\$ 10,674,009</u>

Short-Term Investment Grade Bond Funds include funds with a duration of less than three years and Intermediate-Term Investment Grade Bond Funds include funds with a duration greater than three years.

The following is a description of the valuation methodologies used for SWIB assets measured at fair value. There are no changes to the methodologies during the years ended December 31, 2018 and December 31, 2017.

Level 1 investments are generally valued at the official closing price (usually the last trade price) or the last bid price on the security's primary exchange. Such investments generally include exchange-traded securities such as equities, preferred stock, certain derivatives, and exchange-traded funds. U.S. Treasury Bills and only the most recently-issued US Treasury Notes and Bonds are classified as level 1 because available pricing for these securities is similarly reliable to exchange-traded securities.

Level 2 investments are valued using observable inputs by third-party pricing services using either a bid evaluation or a matrix-pricing technique. Bid evaluations may include market quotations that are based on yields, maturities, call features, and ratings. Matrix-pricing is used to value securities based on their relationship to benchmark market prices for securities with similar interest rates, maturities, and credit ratings. Pricing in this level may also include market approaches that incorporate benchmark interest rates. Debt securities comprise the majority of the level 2 investments because they are generally traded using a dealer market, with lower trading volumes than level 1 securities. Over-the-counter derivatives, such as swaps, TBAs, and foreign exchange contracts, are also included in level 2 because they are priced using a market approach that considers benchmark interest rates and foreign exchange rates.

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9. FAIR VALUE MEASUREMENTS (cont.)

Level 3 investments are generally valued using significant inputs that are unobservable to the marketplace. This may occur if an investment is illiquid or its value is based on estimates. For the WRS, such investments primarily include directly-held real estate, valued using appraisals and, as such, rely on unobservable inputs. Foreign Government/Agency securities in level 3 are valued using proprietary valuation models. Asset Backed Securities included in level 3 represent private placements that are valued at purchase price because third-party valuations are unavailable. Equities, convertibles, and preferred securities included in the level 3 hierarchy are generally privately-held securities valued using valuation models such as price multiples incorporating public company comparables, discounted cash flows and milestone valuation models. In some instances of privately-held preferred securities, valuation is determined based on recent financing rounds. Bank loans, which represent the majority of corporate bonds and private placements in the level 3 category, are priced by vendors using proprietary models which may incorporate unobservable inputs. Cash and Cash Equivalents included in level 3 represent securities priced at cost. Typically, due to their short-term nature, cost approximates fair value for these investments. Other factors such as infrequent trading, inactive market, or adjusted quoted prices may also result in level 3 measurements.

SWIB Investments by Fair Value Level as of December 31, 2018 and 2017 (in thousands) are noted in the following tables.

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**NOTES TO FINANCIAL STATEMENTS
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9. FAIR VALUE MEASUREMENTS (cont.)

Investments by Fair Value Level as of December 31, 2018 (in thousands)

Asset Type	Level 1	Level 2	Level 3	TOTAL
Cash Equivalents				
Corporates & Private Placements	\$ -	\$ 41,709	\$ 27,296	\$ 69,005
Foreign Government/Agency Securities	-	-	159,044	159,044
U.S. Treasury Securities	-	-	711,367	711,367
Total Cash Equivalents	-	41,709	897,707	939,416
Stocks				
Domestic	30,805,076	-	78,165	30,883,241
International	17,660,734	-	3,928	17,664,662
Total Stocks	48,465,810	-	82,093	48,547,903
Fixed Income				
Asset Backed Securities	-	207,145	4,000	211,145
Corporate & Private Placements	-	4,907,712	137,918	5,045,630
Foreign Government/Agency Bonds	-	2,369,745	-	2,369,745
Municipal Bonds	-	105,001	-	105,001
U.S. Government Agencies	-	209,439	-	209,439
U.S. Treasury Inflation Protected Securities	-	14,565,286	-	14,565,286
U.S. Treasury Securities	12,184	3,340,316	-	3,352,500
Total Fixed Income	12,184	25,704,644	141,918	25,858,746
Real Estate	-	-	1,372,027	1,372,027
Preferred Securities				
Domestic	-	44,529	41,822	86,351
International	123,476	-	219	123,695
Total Preferred Securities	123,476	44,529	42,041	210,046
Convertibles	-	-	326	326
Derivatives				
Foreign Exchange Contracts	-	(21,294)	-	(21,294)
Futures	156,899	-	-	156,899
Options	(8,095)	(53)	-	(8,148)
Swaps	-	(21,790)	-	(21,790)
To Be Announces Securities	-	686,251	-	686,251
Total Derivatives	148,804	643,114	-	791,918
Equity Short Sales	(3,002,001)	-	-	(3,002,001)
Total	\$ 45,748,273	\$ 26,433,996	\$ 2,536,112	\$ 74,718,381

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9. FAIR VALUE MEASUREMENTS (cont.)

Investments by Fair Value Level as of December 31, 2017 (in thousands)

Asset Type	Level 1	Level 2	Level 3	TOTAL
Cash Equivalents				
Corporates & Private Placements	\$ -	\$ 4,373	\$ 36,987	\$ 41,360
Foreign Government/Agency Securities	-	-	397,860	397,860
U.S. Treasury Securities	104,900	-	-	104,900
Total Cash Equivalents	104,900	4,373	434,847	544,120
Stocks				
Domestic	36,000,791	-	136,296	36,137,087
International	20,262,996	-	1,304	20,264,300
Total Stocks	56,263,787	-	137,600	56,401,387
Fixed Income				
Asset Backed Securities	-	54,543	17,250	71,793
Corporate & Private Placements	-	4,621,721	104,772	4,726,493
Foreign Government/Agency Bonds	-	2,506,420	5,037	2,511,457
Municipal Bonds	-	122,400	-	122,400
U.S. Government Agencies	-	215,869	-	215,869
U.S. Treasury Inflation Protected Securities	-	12,780,811	-	12,780,811
U.S. Treasury Securities	115,658	3,480,078	-	3,595,736
Total Fixed Income	115,658	23,781,842	127,059	24,024,559
Real Estate	-	-	1,368,583	1,368,583
Preferred Securities				
Domestic	-	43,760	53,934	97,694
International	131,089	12,890	-	143,979
Total Preferred Securities	131,089	56,650	53,934	241,673
Convertibles	-	-	196	196
Derivatives				
Foreign Exchange Contracts	-	(1,131)	-	(1,131)
Futures	47,079	-	-	47,079
Options	(3,830)	-	-	(3,830)
Swaps	-	4,171	-	4,171
To Be Announced Securities	-	95,489	-	95,489
Total Derivatives	43,249	98,529	-	141,778
Equity Short Sales	(2,662,107)	(60,087)	-	(2,722,194)
Total	\$ 53,996,576	\$ 23,881,307	\$ 2,122,219	\$ 80,000,102

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**NOTES TO FINANCIAL STATEMENTS
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9. FAIR VALUE MEASUREMENTS (cont.)

SWIB notes that the fair value of investments in certain fixed income funds, private equity limited partnerships, stock funds, real estate limited partnerships, and hedge funds are based on the investments' net asset value (NAV) per share (or its equivalent) provided by the investee. The December 31, 2018 and 2017 investments valued using NAV are shown in the tables below and include commingled/pooled funds, private equity and real estate limited partnerships.

Investments Measured at NAV as of December 31, 2018 (in thousands)

Investments Measured at NAV	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period (8)
Cash and Cash Equivalents (1)	\$ 2,343,290	\$ -	Daily	Same day
Fixed Income (2)	6,219,438	261,883	Daily, Monthly, Quarterly N/A (1)	2-90 days, N/A (2)
Private Equity Limited Partnerships (3)	8,168,019	5,721,846	N/A	N/A
Equities (4)	6,301,746	-	Daily, Monthly	2-30 days
Real Estate Limited Partnerships (5)	5,422,487	1,601,867	Quarterly, Annually, N/A	30-90 days, Other, N/A
Hedge Funds (6)	5,759,422	68,139	Various	Various
Total (7)	<u>\$ 34,214,402</u>	<u>\$ 7,653,735</u>		

- (1) This category consists of short-term cash funds with the investment objective of safety of principal and liquidity while earning a competitive money market rate of return. The short-term cash funds have daily liquidity with same day notice.
- (2) Corporate and government bond index funds make up a significant portion of this category (76%) and have the investment objective of approximating as closely as practicable the return of a given segment of the markets for publicly-traded investments. The corporate and government index funds have daily liquidity with 2 days' notice. An additional 18% of this category represents long-only fixed income managers, which can invest across the credit quality spectrum, in varying geographies, and can include derivatives, high yield and structured securities. These long-only managers require a redemption notice period between one and two weeks and have daily or monthly liquidity. The remaining 6% of this category includes LLCs which invest in private real estate debt. The majority of these LLC investments distribute earnings over the life of the investment and have an average remaining life of less than 5 years. One LLC investment has an estimated remaining life of greater than 10 years. The private real estate debt LLC's that do not distribute earnings over the life of the fund permit quarterly redemptions with 90 days' notice.
- (3) Private Equity Limited Partnerships include direct, co-investments with existing SWIB general partners, direct secondary investments and fund of funds. These investments are illiquid and are generally not resold or redeemed. Distributions from each fund will be received as the underlying investments are liquidated.
- (4) This category includes long-only equity managers (70%) with various fundamental, quantitative and other approaches spanning various styles, geographies and market cap weights. The majority of these long-only manager investments can be redeemed monthly with between 10 and 30 days' notice. One long-only manager investment can be redeemed daily with 30 days' notice. An additional 30% of this category represents emerging markets equity index funds with an investment strategy designed to track the return of the given segment of the emerging equity markets. These investments can be redeemed daily with 2 days' notice. This category includes investments that are in the process of being fully redeemed, with final distribution expected in 2019.

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9. FAIR VALUE MEASUREMENTS (cont.)

- (5) This category includes funds that invest directly in real estate and real estate related assets. Approximately 70% of these investments are generally not resold or redeemed. Distributions from each fund will be received as the underlying investments are liquidated. The remaining 30% of this category consists of open-ended funds that invest directly in real estate and real estate related assets. The majority of these investments can be redeemed quarterly with between 30 and 90 days' notice. One fund can be redeemed annually with notice provided in the first quarter of the calendar year.
- (6) Hedge Fund investments are private investment funds that seek to produce absolute returns using a broad range of strategies. In certain instances, Hedge Fund investments are structured as limited partnerships, whereby participants receive distributions over the life of the fund. Estimated remaining life of funds structured as limited partnerships is estimated to be between 5-10 years. One fund has an estimated remaining life of greater than 10 years.
- (7) SWIB had additional unfunded commitments of approximately \$15.8 million, relating to assets not valued using NAV.
- (8) Redemption terms described for NAV investments reflect contractual agreements and assume withdrawals are made without adverse market impact and under normal market conditions.

Investments Measured at NAV as of December 31, 2017 (in thousands)

Investments Measured at NAV	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period (8)
Cash and Cash Equivalents (1)	\$ 2,335,166	\$ -	Daily	Same day
Fixed Income (2)	6,960,023	228,636	Daily, Monthly, N/A (1)	2-90 days, N/A (2)
Private Equity Limited Partnerships (3)	7,407,515	5,300,600	N/A	N/A
Equities (4)	6,839,675	-	Daily, Monthly, Quarterly	2-30 days
Real Estate Limited Partnerships (5)	4,804,895	1,287,600	N/A, Quarterly	N/A, 30-90 days
Hedge Funds (6)	4,701,121	91,144	Weekly, Monthly, Quarterly	7-90 days
Total (7)	<u>\$ 33,048,395</u>	<u>\$ 6,907,980</u>		

- (1) This category consists of short-term cash funds with the investment objective of safety of principal and liquidity while earning a competitive money market rate of return. The short-term cash funds have daily liquidity with same day notice.
- (2) Corporate and government bond index funds make up a significant portion of this category (82%) and have the investment objective of approximating as closely as practicable the return of a given segment of the markets for publicly-traded investments. The corporate and government index funds have daily liquidity with 2 days' notice. An additional 15% of this category represents long-only fixed income managers, which can invest across the credit quality spectrum, in varying geographies, and can include derivatives, high yield and structured securities. These long-only managers require a redemption notice period between one and two weeks and have daily or monthly liquidity.

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9. FAIR VALUE MEASUREMENTS (cont.)

One of these funds also has an investor level gate, limiting daily withdrawals to \$2 million per day or 5% of the portfolio's net asset value. The remaining 3% of this category includes LLCs which invest in private real estate debt. The majority of these LLC investments distribute earnings over the life of the investment and have an average remaining life of less than 5 years. The private real estate debt LLC's that do not distribute earnings over the life of the fund permit quarterly redemptions with 90 days' notice.

- (3) Private Equity Limited Partnerships include direct, co-investments with existing SWIB general partners, direct secondary investments and fund of funds. These investments are illiquid and are generally not resold or redeemed. Distributions from each fund will be received as the underlying investments are liquidated.
- (4) This category includes emerging markets equity index funds (54%) with an investment strategy designed to track the return of the given segment of the emerging equity markets. These investments can be redeemed daily with 2 days' notice. An additional 46% of this category represents long-only equity managers with various fundamental, quantitative and other approaches spanning various styles, geographies and market cap weights. These long-only manager investments can be redeemed monthly, with between 10 and 30 days' notice.
- (5) This category includes funds that invest directly in real estate and real estate related assets. Approximately 68% of these investments are generally not resold or redeemed. Distributions from each fund will be received as the underlying investments are liquidated. The remaining 32% of this category consists of open-ended funds that invest directly in real estate and real estate related assets. Such investments can be redeemed quarterly with between 30 and 90 days' notice.
- (6) Hedge Fund investments are private investment funds that seek to produce absolute returns using a broad range of strategies. In certain instances, Hedge Fund investments are structured as limited partnerships, whereby participants receive distributions over the life of the fund. Estimated remaining life of funds structured as limited partnerships is estimated to be between 5-10 years.
- (7) SWIB had additional unfunded commitments of approximately \$10.2 million, relating to assets not valued using NAV.
- (8) Redemption terms described for NAV investments reflect contractual agreements and assume withdrawals are made without adverse market impact and under normal market conditions.

10. RISKS AND UNCERTAINTIES

The total pension liability is reported based on certain assumptions pertaining to interest rates, inflation rates, and employee demographics, all of which are subject to change. Due to uncertainties inherent in the estimations and assumptions process, it is at least reasonably possible that changes in these estimates and assumptions in the near term would be material to the financial statements.

11. TAX STATUS

The District has received a favorable tax determination letter dated January 9, 2017 from the Internal Revenue Service, which indicates that the Plan qualifies under Internal Revenue Code Section 401(a) and the related trust is exempt from Federal income taxes under Section 501(a) as amended by the Economic Growth and Tax Relief Reconciliation Act of 2001. This favorable determination is contingent upon the adoption of the proposed First Amendment for the Plan which amends Section 6.4(a). On October 16, 2014, the District received a favorable tax determination letter from the Internal Revenue Service, which indicates that it considered the 2007 Cumulative List of Changes in Plan Qualification Requirements and is entitled to be treated as Governmental plan under the section 414(d) of the Internal Revenue Code.

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**NOTES TO FINANCIAL STATEMENTS
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12. SUBSEQUENT EVENTS

Management has evaluated subsequent events occurring through December 12, 2019, the date the financial statements were available to be issued for events requiring recording or disclosure in the financial statements. Management feels no material event occurred that would require disclosure.

REQUIRED SUPPLEMENTARY INFORMATION

(See Independent Auditors' Report on Page 1)

**MILWAUKEE BOARD OF SCHOOL DIRECTORS
SUPPLEMENTAL EARLY RETIREMENT PLAN FOR TEACHERS
Required Supplementary Information
Schedule of Changes in Net Pension Liability and Related Ratios
Last 6 Fiscal Years**

Fiscal year ending June 30	2019	2018	2017	2016	2015	2014
Total Pension Liability						
Service cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest on the total pension Liability	16,182,472	16,436,072	16,635,125	16,846,685	17,001,811	17,203,578
Benefit changes	-	-	-	-	-	-
Difference between expected and actual expense	(695,436)	(3,160,017)	(3,241,431)	(2,247,617)	(2,929,293)	-
Assumption changes	12,396,147	-	-	-	-	-
Benefit payments	(16,477,649)	(16,013,508)	(16,244,782)	(16,607,340)	(17,037,741)	(16,891,272)
Refunds	-	-	-	-	-	-
Net Change in Total Pension Liability	<u>11,405,534</u>	<u>(2,737,453)</u>	<u>(2,851,088)</u>	<u>(2,008,272)</u>	<u>(2,965,223)</u>	<u>312,306</u>
Total Pension Liability - Beginning	<u>227,576,941</u>	<u>230,314,394</u>	<u>233,165,482</u>	<u>235,173,754</u>	<u>238,138,977</u>	<u>237,826,671</u>
Total Pension Liability - Ending (a)	<u><u>238,982,475</u></u>	<u><u>227,576,941</u></u>	<u><u>230,314,394</u></u>	<u><u>\$ 233,165,482</u></u>	<u><u>\$ 235,173,754</u></u>	<u><u>\$ 238,138,977</u></u>
Plan Fiduciary Net Position						
Employer contributions	\$ 11,911,441	\$ 8,906,670	\$ 9,456,955	\$ 9,888,196	\$ 9,540,139	\$ 10,954,526
Employee contributions	-	-	-	-	-	-
Net investment income	10,779,925	12,028,603	16,153,487	964,012	2,410,365	21,504,411
Benefit payments	(16,477,649)	(16,013,508)	(16,244,782)	(16,607,340)	(17,037,741)	(16,891,272)
Refunds	-	-	-	-	-	-
Administrative expense	(151,966)	(147,828)	(156,826)	(174,658)	(145,726)	(176,226)
Other *	-	(4,186)	-	-	-	-
Net Change in Plan Fiduciary Net Position	<u>6,061,751</u>	<u>4,769,751</u>	<u>9,208,834</u>	<u>(5,929,790)</u>	<u>(5,232,963)</u>	<u>15,391,439</u>
Plan Fiduciary Net Position - Beginning	<u>155,507,394</u>	<u>150,737,643</u>	<u>141,528,809</u>	<u>147,458,599</u>	<u>152,691,562</u>	<u>137,300,123</u>
Plan Fiduciary Net Position - Ending (b)	<u><u>\$ 161,569,145</u></u>	<u><u>\$ 155,507,394</u></u>	<u><u>\$ 150,737,643</u></u>	<u><u>\$ 141,528,809</u></u>	<u><u>\$ 147,458,599</u></u>	<u><u>\$ 152,691,562</u></u>
Net Pension Liability - Ending (a) - (b)	<u><u>\$ 77,413,330</u></u>	<u><u>\$ 72,069,547</u></u>	<u><u>\$ 79,576,751</u></u>	<u><u>\$ 91,636,673</u></u>	<u><u>\$ 87,715,155</u></u>	<u><u>\$ 85,447,415</u></u>
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	67.61%	68.33%	65.45%	60.70%	62.70%	64.12%
Covered Employee Payroll	\$ 199,988,240	\$ 221,227,773	\$ 236,655,777	\$ 250,768,000	\$ 262,424,327	\$ 288,512,864
Net Pension Liability as a Percentage of Covered Employee Payroll	38.71%	32.58%	33.62%	36.54%	33.42%	29.62%

Notes to Schedule:

* Transfer from Teacher's Plan to Director's Plan year end June 30, 2018.

The Plan implemented GASB Statement No. 67 in fiscal year 2014. Information that complies with GASB 67 prior to fiscal year 2014 is not available.

See accompanying independent auditors' report and notes to required supplementary information.

**MILWAUKEE BOARD OF SCHOOL DIRECTORS
SUPPLEMENTAL EARLY RETIREMENT PLAN FOR TEACHERS
Required Supplementary Information
Schedule of Contributions
Last 10 Fiscal years**

Fiscal year ending June 30	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>
Actuarially determined contribution	\$10,390,406	\$9,385,392	\$9,791,544	\$9,897,438	\$10,329,340	\$11,168,472	\$14,365,412	\$15,797,043	\$15,645,398	\$15,641,408
Contributions in relation to the actuarially determined contribution	\$11,911,441	\$8,906,670	\$9,456,055	\$9,888,196	\$9,540,139	\$10,954,526	\$13,998,622	\$15,126,448	\$27,419,691	\$4,381,384
Contribution deficiency (excess)	<u>(\$1,521,035)</u>	<u>\$478,722</u>	<u>\$335,489</u>	<u>\$9,242</u>	<u>\$789,201</u>	<u>\$213,946</u>	<u>\$366,790</u>	<u>\$670,595</u>	<u>(\$11,774,293)</u>	<u>\$11,260,024</u>
Covered-employee payroll	\$199,988,240	\$221,227,773	\$236,665,777	\$250,768,000	\$262,424,327	\$288,512,864	\$323,922,137	\$333,480,915	\$342,784,884	\$353,723,230
Contributions as a percentage of covered-employee payroll	5.2%	4.2%	4.1%	3.9%	3.9%	3.9%	4.4%	4.7%	4.6%	4.4%

See accompanying independent auditors' report and notes to required supplementary information.

**MILWAUKEE BOARD OF SCHOOL DIRECTORS
 SUPPLEMENTAL EARLY RETIREMENT PLAN FOR TEACHERS
 Required Supplementary Information
 Schedule of Investment Returns
 Last 7 Fiscal Years**

Fiscal year ending, June 30	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
Annual money-weighted rate of return, net of investment expense	7.2%	8.3%	12.8%	0.6%	1.8%	16.5%	12.0%

<p>The Plan implemented GASB Statement No. 67 in fiscal year 2014. Information that complies with GASB 67 prior to fiscal year 2013 is not available.</p>
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See accompanying independent auditors' report and notes to required supplementary information.

**MILWAUKEE BOARD OF SCHOOL DIRECTORS
 SUPPLEMENTAL EARLY RETIREMENT PLAN FOR TEACHERS
 Notes to Required Supplementary Information
 As of and for the Years Ended June 30, 2019 and 2018**

1. SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

The total pension liability contained in this schedule was provided by the Plan's actuary, Gabriel, Roeder, Smith & Company. The net pension liability is measured as the total pension liability less the amount of the fiduciary net position of the Plan.

2. SCHEDULE OF CONTRIBUTIONS

The determined employer contributions and the amounts of the contributions actually made are presented in the schedule.

3. ACTUARIAL INFORMATION

The information presented in the required supplementary schedules was used in the actuarial valuations for purposes of determining the actuarially determined contribution rate. The assumptions and methods used for this actuarial valuation were recommended by the actuary and adopted by the District. Additional information as of the latest actuarial valuation follows:

Valuation date	July 1, 2018
Actuarial cost method	Entry age normal
Asset valuation method	5-year smoothed market
Amortization method	The loss at July 1, 2006, due to the valuation of deferred vested temporary benefits is amortized over a 15-year closed period commencing July 1, 2006, on a level dollar basis. Unfunded liabilities not attributable to the loss due to valuation of deferred vested temporary benefits are amortized using a 25-year closed period, level-dollar amortization commencing July 1, 2007. The resulting amortization period is 15.1 and is in accordance with GASB 25 and 27 requirements.
Investment rate of return	7.00%
Projected salary increases	The Plan is frozen at July 1, 2013. Pay increases received after that date are not pensionable under the Plan
Cost of living increases	0.0% per year
Mortality table	Based on RP-2014 White Collar Healthy Annuitant and Mortality Table the scaling factors are 98% for men and 96% for women with generational mortality improvement using MP-2018.

See accompanying independent auditors' report and notes to required supplementary information.