

Milwaukee Public Schools

Retiree Healthcare and Life Insurance Programs

Actuarial Valuation as of July 1, 2019





October 27, 2020

Ms. Carol Eady
Sr. Director, Benefits, Pension & Compensation
Milwaukee Public Schools
Administration Building
5225 West Vliet Street, Room 124
Milwaukee, Wisconsin 53208-2181

Dear Ms. Eady:

We have performed an actuarial valuation as of July 1, 2019, of the Retiree Healthcare and Life Insurance Programs sponsored by the Milwaukee Public Schools (MPS). The actuarial valuation was performed in order to:

- Measure the actuarial liability as of July 1, 2019;
- Develop retiree healthcare accounting expense and disclosure information for fiscal year end 2020, as defined under the GASB Statement Nos. 74 and 75; and
- Develop pre-funding contributions for plan year end June 30, 2021, based on the plan provisions in effect as of June 30, 2020, including the provisions of Alternative C (55/20/70%).

The actuarial valuation was based on the following:

- Census data as of July 1, 2019, as provided by MPS staff;
- Premium information for calendar years 2019 and 2020 as provided by MPS staff;
- Claims, expenses and enrollment data for the period from July 1, 2017, to June 30, 2019, as disclosed in the plan's most recent premium rating reports prepared by the healthcare actuary and provided by MPS staff;
- IRC Section 115 assets as provided by MPS staff;
- Actual employer contributions for fiscal year 2020 as provided by MPS staff;
- Plan provisions and funding policy in effect as of July 1, 2019, and June 30, 2020, as provided by MPS staff and summarized in Section G;
- Our understanding of the substantive plan in effect as currently being administered;
- OPEB and healthcare-related actuarial assumptions and methods as recommended by GRS and approved by MPS as shown in Section H; and
- Pension-related actuarial assumptions as shown in Section H used for the actuarial valuations of the Milwaukee Public Schools Supplemental Pension Plans for Teachers and Administrators, and the City of Milwaukee Employees' Retirement System (ERS) for other labor units.

On March 30, 2017, the Milwaukee Board of School Directors approved an Early Retirement Window (ERW) program. Under the ERW, certain employees under age 60 may retire with health and life insurance benefits. Eligible ERW members: (i) have attained at least age 55 between July 1, 2017, and June 30, 2020, (ii) have earned at least 20 years of MPS service, and (iii) have accrued at least 90% of the maximum sick leave balance. The ERW ends on June 30, 2020; however, members may elect to retire after June 30, 2020, and receive ERW benefits. The actuarial valuation as of July 1, 2019, reflects emerging ERW experience through December 31, 2019.

On May 28, 2020, the Milwaukee Board of School Directors approved Alternative C (55/20/70%) changes to the retiree healthcare and life insurance program. Alternative C permanently changes the eligibility requirements for all eligible members upon retirement to: (i) have attained at least age 55, (ii) have earned at least 20 years of MPS service, and (iii) have accrued at least 70% of the maximum sick leave balance. Alternative C also provides actuarially based level dollar pre-funding of additional benefits due to Alternative C so that the program is projected to be fully funded by 2037.

The actuarial valuation was based upon information furnished by Milwaukee Public Schools concerning benefits provided by the Retiree Healthcare and Life Insurance Programs, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by Milwaukee Public Schools.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation. We performed tests to ensure that the model reasonably represents that which is intended to be modeled. We are relying on the GRS actuaries and Internal Software, Training, and Processes Team who developed and maintain the model.

To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the Retiree Healthcare and Life Insurance Programs sponsored by the Milwaukee Public Schools as of the actuarial valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board, and with our understanding of GASB Statements Nos. 74 (*Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*) and 75 (*Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pension*).



This report should not be relied on for any purpose other than the purpose stated.

Alex Rivera and Abra D. Hill are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

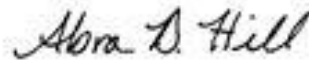
The signing actuaries are independent of the plan sponsor.

We will be pleased to review this report with you at your convenience.

Respectfully submitted,



Alex Rivera, FSA, EA, MAAA, FCA
Senior Consultant



Abra D. Hill, ASA, MAAA, FCA
Consultant

AR: rmn
Enclosures

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SECTION A

EXECUTIVE SUMMARY

Executive Summary

This report presents the results of our actuarial valuation as of July 1, 2019, for the Retiree Healthcare and Life Insurance Programs sponsored by the Milwaukee Public Schools. The actuarial valuation was performed for purposes of (i) satisfying the reporting requirements of GASB Statement Nos. 74 and 75 for fiscal year end June 30, 2020, and (ii) developing recommended pre-funding contributions for plan year end June 30, 2021.

The actuarial valuation as of July 1, 2019, was based on a discount rate assumption of 4.93 percent and an ultimate healthcare trend assumption of 4.25 percent, as approved by Milwaukee Public Schools. The discount rate of 4.93 percent reflects the plan sponsor's prefunding policy. The report also includes a projection of actuarial liabilities as of June 30, 2020, using a discount rate of 5.33 percent and Alternative C (55/20/70%) plan provisions.

Milwaukee Public Schools has established an IRC Section 115 trust to prefund retiree healthcare benefits. Ongoing costs for the fiscal year are paid from the Section 115 trust. The current funding policy is to make pay-as-you-go contributions and prefund 5 percent in addition to gross (retiree and employer) pay-as-you-go costs. Effective as of July 1, 2020, the sponsor will make additional annual pre-funding contributions, on a level dollar basis, which are projected to finance the additional costs of Alternative C (55/20/70%) benefits by plan year end 2037.

The key actuarial valuation results as of July 1, 2019, before Alternative C benefits, are summarized below:

Retiree Healthcare and Life Insurance Programs 4.93% Discount Rate and 4.25% Ultimate Trend \$ in Thousands							
	Board/ Cabinet/ ASC	Building Trades	1053 Clerical/ Technical	150 Building Service	150 Food Service	1616 Education Employees	420 Engineers
Actuarial Liability as of July 1, 2019	\$113,096.6	\$19,873.0	\$36,290.5	\$11,595.5	\$38,485.6	\$10,310.5	\$26,953.3
Normal Cost for FY 2020	\$603.3	\$100.3	\$132.7	\$129.8	\$365.1	\$38.2	\$136.5
FY 2020 Employer Pay-go Contribution (% of Payroll)	\$9,917.7 19.7%	\$2,274.2 45.2%	\$3,668.3 58.9%	\$822.7 17.9%	\$2,944.6 34.8%	\$1,113.9 85.7%	\$2,791.0 43.0%
Payroll	\$50,363.7	\$5,027.9	\$6,226.8	\$4,591.3	\$8,453.3	\$1,299.6	\$6,488.0
Number of Actives Members	543	69	164	147	406	35	131
Number of Retirees and Surviving Spouses	847	170	319	78	298	97	175

	Educational Assistants	Sub Teachers	Teachers	PAMPS	Others	Total
Actuarial Liability as of July 1, 2019	\$58,913.5	\$9,716.6	\$550,426.8	\$9,976.6	\$2,369.7	\$888,008.1
Normal Cost for FY 2020	\$584.6	\$0.0	\$3,183.1	\$54.2	\$9.8	\$5,337.5
FY 2020 Employer Pay-go Contribution (% of Payroll)	\$4,219.6 27.7%	\$888.8 N/A	\$47,475.4 25.0%	\$854.9 13.4%	\$219.6 52.0%	\$77,190.6 26.2%
Payroll	\$15,213.8	\$0.0	\$189,931.7	\$6,361.3	\$422.3	\$294,379.9
Number of Active Members	661	0	2,765	77	10	5,008
Number of Retirees and Surviving Spouses	393	93	4,215	65	18	6,768

The details of the preceding actuarial valuation results by labor unit are included in Section B of the report.



Executive Summary

Plan Experience and Updates in Assumptions

The actuarial liabilities used for GASB No. 74 financial reporting at June 30, 2019, were based on an actuarial projection of actuarial liabilities from July 1, 2017, to June 30, 2019, using a discount rate of 4.93 percent.

An updated actuarial valuation as of June 30, 2019, was performed using census, healthcare-related assumptions, pension-related assumptions and plan provisions as of June 30, 2019.

The following table shows a reconciliation of the change in actuarial liabilities as of June 30, 2019, and a projection of actuarial liabilities from July 1, 2019, to June 30, 2020. The projected actuarial liabilities as of June 30, 2020, reflect Alternative C (55/20/70%) plan benefits, which became effective on June 30, 2020, and a change in the discount rate from 4.93 percent to 5.33 percent.

Projected Actuarial Liability as of June 30, 2019 @ 4.93%	\$	881,431,123
Increase/(Decrease) at July 1, 2019, Due To:		
Demographic Experience	\$	24,081,398
Changes in Pension-Related Assumptions and Methods		12,530,256
Changes in Healthcare-Related Assumption		<u>(30,034,718)</u>
Total	\$	6,576,936
Actuarial Liability as of July 1, 2019 @ 4.93%	\$	888,008,059
Increase/(Decrease) for Plan Year End June 30, 2020, Due To:		
Normal Costs	\$	5,337,504
Expected Benefits		(49,887,152)
Interest Costs		42,693,859
Plan Provisions - Alternative C (55/20/70%)		101,807,196
Change in Discount Rate from 4.93% to 5.33%		<u>(42,216,517)</u>
Total	\$	57,734,891
Actuarial Liability as of June 30, 2020 @ 5.33%	\$	945,742,950

Executive Summary

Actuarial Projections and Support of 5.33 Percent Discount Rate

The following tables show a projection of actuarial liabilities based on the provisions of Alternative C and the development of a blended discount rate of 5.33 percent as of June 30, 2020. Key observations include:

- During plan year end June 30, 2020, MPS made additional pre-funding contributions of \$24,049,000. The additional contributions partially offset the additional actuarial liability as of June 30, 2020, of \$100,807,000, attributable to Alternative C benefits.
- If MPS makes additional annual Alternative C contributions of \$6,740,000 from plan year 2021 to plan year 2037, then the plan is projected to be fully funded by plan year end 2037.
- Phased-in investment returns which grade from 3.75 percent for plan year end 2021 to 7.00 percent after 2037 produces a present value of expected benefits of \$990,201,000.
- Assuming a level return of 5.33 percent on and after 2021 also produces a present value of \$990,201,000.
- Consequently, we recommend using a discount rate of 5.33 to develop: (i) the actuarial accrued liability as of June 30, 2020, used for Alternative C funding, and (ii) the Total OPEB Liability as of June 30, 2020, used for GASB 74/75 accounting.

Executive Summary

Long-term asset return	7.000%	Alternative C - 55/20/70% Level-Dollar Funding
Short-term asset return	2.750%	
Average number of monthly benefits in short-term reserve account	3	
Pre funding contribution rate, percentage of expected benefits	5.000%	
Operating expense rate, percentage of expected benefits	0.500%	
Discount rate	5.330%	

PYE 6/30	Assets (bo)	Expected Benefits Alternative C	Additional Expected Benefits due to Alternative C	Total Expected Benefits	Operating Expense	PAYGO Contributions Before Alternative C	Pre-Fund Contributions Before Alternative C	Level Dollar Contribution due to Alternative C	Income Short-term Cash Flow	Income Long-term Account	Total Income	Assets (eoy)	Accrued Liability (eoy)	Funded Ratio	Normal Cost
2020	\$ 145,534,188	\$ 47,099,851	\$ -	\$ 47,099,851	\$ -	\$ 53,141,445	\$ 24,049,171	\$ -	\$ -	\$ -	\$ 7,840,887	\$ 183,465,840	\$ 945,742,950	19.4%	\$ 6,464,767
2021	183,465,840	50,205,506	569,440	50,774,946	253,875	50,205,506	2,510,275	6,739,602	349,078	11,954,047	12,303,125	204,195,528	950,679,304	21.5%	5,907,736
2022	204,195,528	51,442,153	2,272,564	53,714,717	268,574	51,442,153	2,572,108	6,739,602	369,289	13,117,793	13,487,082	224,453,182	952,288,080	23.6%	5,604,421
2023	224,453,182	52,447,865	3,381,708	55,829,573	279,148	52,447,865	2,622,393	6,739,602	383,828	14,498,819	14,882,647	245,036,969	951,500,599	25.8%	5,298,819
2024	245,036,969	53,504,600	4,550,671	58,055,271	290,276	53,504,600	2,675,230	6,739,602	399,130	15,900,735	16,299,865	265,910,719	948,072,265	28.0%	4,989,625
2025	265,910,719	54,745,271	5,567,227	60,312,499	301,562	54,745,271	2,737,264	6,739,602	414,648	17,322,396	17,737,044	287,255,839	941,825,995	30.5%	4,672,893
2026	287,255,839	56,450,032	6,508,913	62,958,946	314,795	56,450,032	2,822,502	6,739,602	432,843	18,770,241	19,203,084	309,197,318	932,204,200	33.2%	4,348,104
2027	309,197,318	57,893,931	7,340,042	65,233,973	326,170	57,893,931	2,894,697	6,739,602	448,484	20,266,332	20,714,815	331,880,220	919,400,517	36.1%	4,018,127
2028	331,880,220	59,663,429	7,883,607	67,547,036	337,735	59,663,429	2,983,171	6,739,602	464,386	21,813,656	22,278,042	355,659,694	903,200,846	39.4%	3,690,953
2029	355,659,694	60,701,064	8,716,828	69,417,892	347,089	60,701,064	3,035,053	6,739,602	477,248	23,445,479	23,922,727	380,293,159	883,880,896	43.0%	3,368,366
2030	380,293,159	61,744,528	9,370,314	71,114,842	355,574	61,744,528	3,087,226	6,739,602	488,915	25,140,125	25,629,040	406,023,139	861,457,783	47.1%	3,050,974
2031	406,023,139	62,916,757	9,649,987	72,566,744	362,834	62,916,757	3,145,838	6,739,602	498,896	26,915,816	27,414,712	433,310,470	836,022,353	51.8%	2,737,873
2032	433,310,470	64,089,360	9,511,196	73,600,556	368,003	64,089,360	3,204,468	6,739,602	506,004	28,807,837	29,313,841	462,689,183	807,848,165	57.3%	2,431,914
2033	462,689,183	64,445,549	9,531,733	73,977,282	369,886	64,445,549	3,222,277	6,739,602	508,594	30,857,754	31,366,348	494,115,791	777,470,343	63.6%	2,150,384
2034	494,115,791	64,217,361	9,899,104	74,116,465	370,582	64,217,361	3,210,868	6,739,602	509,551	33,055,181	33,564,732	527,361,307	745,041,285	70.8%	1,890,601
2035	527,361,307	63,772,722	9,851,534	73,624,256	368,121	63,772,722	3,188,636	6,739,602	506,167	35,390,981	35,897,148	562,967,037	711,121,999	79.2%	1,636,259
2036	562,967,037	62,572,102	9,819,904	72,392,006	361,960	62,572,102	3,128,605	6,739,602	497,695	37,904,946	38,402,641	601,056,022	676,398,258	88.9%	1,391,785
2037	601,056,022	60,462,666	9,711,672	70,174,338	350,872	60,462,666	3,023,133	6,739,602	482,449	40,609,985	41,092,433	641,848,647	641,848,647	100.0%	1,163,558



Executive Summary

FYE	Total Benefit Payments	Phased-in Investment Return	Discounted Benefit Payments	Single Equivalent Return	Discounted Benefit Payments
2021	\$ 50,774,946	3.75%	\$ 49,848,881	5.33%	\$ 49,472,489
2022	53,714,717	3.94%	50,735,461	5.33%	49,686,243
2023	55,829,573	4.13%	50,640,379	5.33%	49,027,050
2024	58,055,271	4.32%	50,476,824	5.33%	48,399,591
2025	60,312,499	4.51%	50,174,180	5.33%	47,734,891
2026	62,958,946	4.71%	50,021,801	5.33%	47,305,827
2027	65,233,973	4.90%	49,409,721	5.33%	46,532,845
2028	67,547,036	5.09%	48,684,506	5.33%	45,742,580
2029	69,417,892	5.28%	47,523,940	5.33%	44,628,713
2030	71,114,842	5.47%	46,160,436	5.33%	43,404,202
2031	72,566,744	5.66%	44,578,909	5.33%	42,047,264
2032	73,600,556	5.85%	42,713,972	5.33%	40,486,458
2033	73,977,282	6.04%	40,485,607	5.33%	38,632,751
2034	74,116,465	6.24%	38,181,075	5.33%	36,745,194
2035	73,624,256	6.43%	35,637,293	5.33%	34,652,562
2036	72,392,006	6.62%	32,865,884	5.33%	32,346,971
2037	70,174,338	6.81%	29,828,121	5.33%	29,768,018
2038	68,407,636	7.00%	27,174,927	5.33%	27,548,931
2039	66,541,278	7.00%	24,704,220	5.33%	25,440,163
2040	63,811,177	7.00%	22,140,784	5.33%	23,160,828
2041	61,244,109	7.00%	19,859,887	5.33%	21,103,293
2042	58,620,923	7.00%	17,765,660	5.33%	19,176,403
2043	55,315,650	7.00%	15,667,255	5.33%	17,178,732
2044	52,301,409	7.00%	13,844,412	5.33%	15,420,024
2045	49,393,267	7.00%	12,219,266	5.33%	13,825,091
2046	45,999,537	7.00%	10,635,234	5.33%	12,223,126
2047	42,824,590	7.00%	9,253,436	5.33%	10,803,155
2048	39,733,267	7.00%	8,023,804	5.33%	9,515,689
2049	36,914,957	7.00%	6,966,981	5.33%	8,392,995
2050	32,270,497	7.00%	5,691,990	5.33%	6,965,444
2060	16,835,679	7.00%	1,509,563	5.33%	2,161,024
2070	8,053,624	7.00%	367,091	5.33%	614,761
2080	2,115,086	7.00%	49,009	5.33%	96,013
2090	205,373	7.00%	2,419	5.33%	5,544
2100	3,986	7.00%	24	5.33%	64
2110	2	7.00%	0	5.33%	0
Total Present Value			\$ 990,201,340		\$ 990,201,340



SECTION B

**ACTUARIAL VALUATION RESULTS AS OF JULY 1, 2019
AT 4.93 PERCENT DISCOUNT RATE AND 4.25 PERCENT
TREND RATE**

Valuation Results at 4.93 Percent Discount Rate and 4.25 Percent Trend Rate

The following tables show the results of our actuarial valuation at July 1, 2019, assuming:

- A discount rate of 4.93 percent;
- Salary increases comprised of a wage inflation component of 2.50 percent plus a seniority and merit component; and
- An ultimate healthcare trend rate of 4.25 percent.

We believe these assumptions are consistent with the requirements of GASB Statement Nos. 74 and 75. The discount rate of 4.93 percent as of June 30, 2019, was based on an actuarial projection of assets and liabilities that reflects the following:

- MPS contributes pay-as-you-go contributions, plus an additional pre-funding contribution of 5.0 percent of expected employer paid claims.
- Contributions are made to an IRC Section 115 trust that MPS established for the exclusive purpose of pre-funding retiree healthcare benefits.
- Assets and pre-funding contributions, in excess of three months of expected costs, remain in a long-term account which is assumed to earn 7.00 percent per year. Three months of expected costs are held in a short-term account which is assumed to earn 2.75 percent per year.
- Operating expenses are assumed to equal 0.5 percent of expected employer paid claims.
- Assets in the long-term account are not expected to be used to pay benefits until the closed plan is fully funded. However, MPS may use assets in the long-term account if there is a non-appropriation in a budget year to fully pay all current year pay-as-you-go contributions.

The preceding projection methodology produced a projected funded ratio of 100 percent by 2037 and an effective discount rate of 4.93 percent as of June 30, 2019.

Please note that the preceding methodology assumes MPS will make pre-funding contributions of at least 5.0 percent of expected claims cost in all future years until the year that the program is fully funded. If MPS deviates significantly from the pre-funding objective, the full funding target year may be extended or never be reached, which would decrease the effective discount rate and increase the Total OPEB Liability.

The following table shows the actuarial accrued liability at July 1, 2019, and other actuarial costs for plan year June 30, 2020, using a discount rate of 4.93 percent. Actuarial costs are shown separately for each Labor Unit. The actuarial costs shown below exclude Alternative C benefits which became effective as of June 30, 2020.

**Milwaukee Public Schools
Retiree Healthcare and Life Insurance Programs
Actuarial Valuation as of July 1, 2019
Entry Age Normal Cost Method**

Discount Rate 4.93%
Salary Scale ¹ 2.50%
Ultimate Trend ² 4.25%
Wage Inflation 2.50%

Amortization: 15-year closed, level dollar for unfunded retiree liabilities as of July 1, 2011, 25-year open, level percentage of payroll for remaining liabilities.

	Board/ Cabinet/ ASC	Building Trades	1053 Clerical/ Technical	150 Building Service	150 Food Service	1616 Education Employees	420 Engineers	Educational Assistants	Sub Teachers	Teachers	PAMPS	Others ³	Total
Retiree Healthcare Program													
I) Actuarial Liability													
A) Health Insurance													
i) Active Employees ⁴	\$ 21,788,494	\$ 2,872,641	\$ 6,207,960	\$ 5,235,964	\$ 15,430,715	\$ 1,512,599	\$ 5,295,038	\$ 23,805,608	\$ -	\$ 107,745,986	\$ 2,785,031	\$ 390,917	\$ 193,070,953
ii) Retired and Disabled Participants ⁵	\$ 82,885,745	\$ 15,862,817	\$ 28,398,743	\$ 6,131,378	\$ 22,475,235	\$ 8,249,855	\$ 20,535,999	\$ 33,165,004	\$ 9,295,044	\$ 407,179,343	\$ 6,517,588	\$ 1,870,305	\$ 642,567,056
iii) Total	\$ 104,674,239	\$ 18,735,458	\$ 34,606,703	\$ 11,367,342	\$ 37,905,950	\$ 9,762,454	\$ 25,831,037	\$ 56,970,612	\$ 9,295,044	\$ 514,925,329	\$ 9,302,619	\$ 2,261,222	\$ 835,638,009
B) Life Insurance													
i) Active Employees	\$ 1,378,694	\$ 228,058	\$ 289,697	\$ 12,902	\$ 6,496	\$ 61,211	\$ 272,149	\$ 730,137	\$ -	\$ 7,015,812	\$ 239,944	\$ 22,029	\$ 10,257,129
ii) Retired and Disabled Participants	\$ 7,043,643	\$ 909,438	\$ 1,394,136	\$ 215,272	\$ 573,132	\$ 486,830	\$ 850,068	\$ 1,212,720	\$ 421,553	\$ 28,485,617	\$ 434,070	\$ 86,440	\$ 42,112,921
iii) Total	\$ 8,422,337	\$ 1,137,496	\$ 1,683,833	\$ 228,174	\$ 579,628	\$ 548,041	\$ 1,122,217	\$ 1,942,857	\$ 421,553	\$ 35,501,429	\$ 674,014	\$ 108,469	\$ 52,370,050
C) Total Liabilities	\$ 113,096,576	\$ 19,872,954	\$ 36,290,536	\$ 11,595,516	\$ 38,485,578	\$ 10,310,495	\$ 26,953,254	\$ 58,913,469	\$ 9,716,597	\$ 550,426,758	\$ 9,976,633	\$ 2,369,691	\$ 888,008,057
II) Assets ⁶	18,535,213	3,256,946	5,947,597	1,900,370	6,307,338	1,689,770	4,417,325	9,655,232	1,592,437	90,208,540	1,635,054	388,365	145,534,188
III) Unfunded Actuarial Liability (UAL)	94,561,363	16,616,008	30,342,939	9,695,146	32,178,240	8,620,725	22,535,929	49,258,237	8,124,160	460,218,218	8,341,579	1,981,326	742,473,870
IV) Normal Cost													
A) Health Insurance	\$ 573,190	\$ 94,788	\$ 128,695	\$ 129,765	\$ 365,033	\$ 36,973	\$ 131,573	\$ 571,085	\$ -	\$ 3,028,363	\$ 50,904	\$ 9,465	\$ 5,119,834
B) Life Insurance	\$ 30,106	\$ 5,550	\$ 3,969	\$ 32	\$ 21	\$ 1,195	\$ 4,961	\$ 13,473	\$ -	\$ 154,735	\$ 3,252	\$ 376	\$ 217,670
C) Total	\$ 603,296	\$ 100,338	\$ 132,664	\$ 129,797	\$ 365,054	\$ 38,168	\$ 136,534	\$ 584,558	\$ -	\$ 3,183,098	\$ 54,156	\$ 9,841	\$ 5,337,504
D) Percentage of Payroll	1.20%	2.00%	2.13%	2.83%	4.32%	2.94%	2.10%	3.84%	N/A	1.68%	0.85%	2.33%	1.81%
V) Actuarially Determined Contribution (ADC)													
A) Normal Cost	\$ 603,296	\$ 100,338	\$ 132,664	\$ 129,797	\$ 365,054	\$ 38,168	\$ 136,534	\$ 584,558	\$ -	\$ 3,183,098	\$ 54,156	\$ 9,841	\$ 5,337,504
B) Amortization of UAL	\$ 11,737,189	\$ 1,966,271	\$ 3,898,539	\$ 961,989	\$ 3,543,274	\$ 1,137,732	\$ 2,465,375	\$ 4,940,166	\$ 1,156,700	\$ 56,029,570	\$ 870,506	\$ 385,406	\$ 89,092,718
C) Total	\$ 12,340,485	\$ 2,066,609	\$ 4,031,203	\$ 1,091,786	\$ 3,908,328	\$ 1,175,900	\$ 2,601,909	\$ 5,524,724	\$ 1,156,700	\$ 59,212,668	\$ 924,662	\$ 395,247	\$ 94,430,221
VI) Expected Employer Contributions ⁷													
A) Expected Healthcare Benefit Payments	\$ 6,044,961	\$ 1,412,597	\$ 2,285,067	\$ 516,218	\$ 1,857,260	\$ 686,020	\$ 1,752,726	\$ 2,650,071	\$ 548,007	\$ 29,102,510	\$ 530,709	\$ 138,324	\$ 47,524,470
B) Expected Life Insurance Benefit Payments	\$ 364,692	\$ 57,156	\$ 85,680	\$ 15,467	\$ 45,823	\$ 33,871	\$ 51,024	\$ 76,988	\$ 26,440	\$ 1,580,127	\$ 21,819	\$ 3,595	\$ 2,362,682
C) Additional Contributions	\$ 3,089,911	\$ 708,526	\$ 1,142,869	\$ 256,310	\$ 917,422	\$ 347,039	\$ 869,536	\$ 1,314,637	\$ 276,924	\$ 14,791,223	\$ 266,358	\$ 68,415	\$ 24,049,171
D) Total	\$ 9,499,564	\$ 2,178,279	\$ 3,513,616	\$ 787,995	\$ 2,820,505	\$ 1,066,930	\$ 2,673,286	\$ 4,041,696	\$ 851,371	\$ 45,473,860	\$ 818,886	\$ 210,334	\$ 73,936,323
E) Percentage of Payroll	18.9%	43.3%	56.4%	17.2%	33.4%	82.1%	41.2%	26.6%	N/A	23.9%	12.9%	49.8%	25.1%
VII) Actual Employer Contributions ⁴	\$ 9,917,685	\$ 2,274,156	\$ 3,668,267	\$ 822,678	\$ 2,944,649	\$ 1,113,891	\$ 2,790,950	\$ 4,219,590	\$ 888,844	\$ 47,475,383	\$ 854,929	\$ 219,592	\$ 77,190,616
VIII) Actual Retiree Contributions ⁹	\$ (402,243)	\$ (92,236)	\$ (148,778)	\$ (33,366)	\$ (119,430)	\$ (45,177)	\$ (113,196)	\$ (171,139)	\$ (36,050)	\$ (1,925,515)	\$ (34,674)	\$ (8,906)	\$ (3,130,711)
IX) Expected Actuarial Liability at Plan Year End	\$ 112,724,475	\$ 19,449,926	\$ 35,787,071	\$ 11,755,500	\$ 38,807,432	\$ 10,120,477	\$ 26,574,231	\$ 59,623,225	\$ 9,607,188	\$ 549,393,549	\$ 9,957,972	\$ 2,351,222	\$ 886,152,268
X) Payroll	\$ 50,363,705	\$ 5,027,948	\$ 6,226,836	\$ 4,591,309	\$ 8,453,342	\$ 1,299,589	\$ 6,488,028	\$ 15,213,829	\$ -	\$ 189,931,748	\$ 6,361,267	\$ 422,347	\$ 294,379,947
XI) Covered Member Counts													
A) Active Employees	543	69	164	147	406	35	131	661	-	2,765	77	10	5,008
B) Retired and Disabled Participants ⁵	847	170	319	78	298	97	175	393	93	4,215	65	18	6,768
C) Total	1,390	239	483	225	704	132	306	1,054	93	6,980	142	28	11,776



¹ Plus an additional age or service-based component.

² From 2020 to 2035, 1.98% is added to the base healthcare trend rate to approximate the assumed wear-away of MAPD plan design savings.

³ Includes participants who have life insurance only.

⁴ Active employees eligible for future retiree healthcare.

⁵ Includes Surviving Spouses.

⁶ Assets allocated to employee group based on total liabilities.

⁷ Expected employer contributions to finance current retiree healthcare and life insurance claims assuming pay-as-you-go funding.

⁸ Actual employer contributions allocated to employee group based on total expected employer contributions.

⁹ Expected retiree contributions are offset by projected Part B premium reimbursements.

SECTION C

ASSET RECONCILIATION

Asset Reconciliation

**Milwaukee Public Schools
Retiree Healthcare and Life Insurance Programs
Actuarial Valuation Results as of July 1, 2019**

Assets Available for Benefits	For Year Ending June 30, 2018	For Year Ending June 30, 2019	For Year Ending June 30, 2020
Net Assets Held in Trust for Post-Employment Benefits, Beginning of Year	\$ 108,867,958	\$ 123,078,430	\$ 145,534,188
Revenues			
Employer Contributions			
- Pay-as-you-go Contributions	\$ 53,027,180	\$ 48,651,394	\$ 53,141,445
- ERRP Funds			
- Medicare Part D Funds	-	-	-
- EWGP Revenue	-	-	-
- Medicare Part D Receivables			
- Pre-funding Contributions	215,458	9,584,425	24,049,171
Total	\$ 53,242,638	\$ 58,235,819	\$ 77,190,616
Employee Contributions			
- Health Care	\$ 2,076,615	\$ 2,134,839	\$ 2,658,534
- Life Insurance	173,821	172,393	174,754
- Pre-funding Contributions/Accruals	194,049	202,675	297,423
Total	\$ 2,444,485	\$ 2,509,907	\$ 3,130,711
Net Investment Income	\$ 8,512,126	\$ 8,355,586	\$ 7,840,886
Total Contributions	\$ 64,199,249	\$ 69,101,312	\$ 88,162,213
Deductions			
Claims and Expenses			
- Health Care	\$ 44,973,891	\$ 42,940,659	\$ 45,897,976
- Life Insurance	1,296,274	1,496,165	1,327,332
- Pre-funding Contributions/Accruals	3,718,612	2,208,730	3,005,254
Total	\$ 49,988,777	\$ 46,645,554	\$ 50,230,562
Total Deductions	\$ 49,988,777	\$ 46,645,554	\$ 50,230,562
Net Change	\$ 14,210,472	\$ 22,455,758	\$ 37,931,651
Net Assets Held in Trust for Post-Employment Benefits, End of Year	\$ 123,078,430	\$ 145,534,188	\$ 183,465,839



SECTION D

GASB STATEMENT NOS. 74 AND 75 OPEB DISCLOSURE INFORMATION

Schedule of Changes in Net OPEB Liability Multiyear

Fiscal year ending June 30	2020	2019	2018	2017
Total OPEB Liability				
Service Cost	\$ 5,337,504	\$ 3,214,967	\$ 3,415,121	\$ 4,101,247
Interest on the Total OPEB Liability	42,693,859	42,385,766	42,630,800	45,599,496
Changes of Benefit Terms	101,807,196	-	-	-
Difference between Expected and Actual Experience	21,294,097	(8,091,913)	30,739,181	2,563,048
Changes in Healthcare Assumptions	(30,034,718)	-	(92,738,729)	-
Change in Other Assumptions	(29,686,261)	-	(4,040,417)	-
Benefit Payments	(47,099,851)	(44,135,647)	(47,544,292)	(52,906,009)
Net Change in Total OPEB Liability	64,311,827	(6,626,827)	(67,538,337)	(642,218)
Total OPEB Liability - Beginning	881,431,123	888,057,950	955,596,287	956,238,505
Total OPEB Liability - Ending (a)	\$ 945,742,950	\$ 881,431,123	\$ 888,057,950	\$ 955,596,287
Plan Fiduciary Net Position				
Employer Contributions	\$ 77,190,616	\$ 58,235,819	\$ 53,242,638	\$ 33,755,421
Member Contributions	-	-	-	-
Net Investment Income	7,840,886	8,355,586	8,512,126	3,910,328
Benefit Payments	(47,099,851)	(44,135,647)	(47,544,292)	(52,906,009)
Operating Expenses	-	-	-	-
Other	-	-	-	-
Net Change in Plan Fiduciary Net Position	37,931,650	22,455,758	14,210,472	(15,240,260)
Plan Fiduciary Net Position - Beginning	145,534,188	123,078,430	108,867,958	124,108,219
Plan Fiduciary Net Position - Ending (b)	\$ 183,465,838	\$ 145,534,188	\$ 123,078,430	\$ 108,867,959
Net OPEB Liability - Ending (a) - (b)	762,277,112	735,896,935	764,979,520	846,728,328
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability	19.40 %	16.51 %	13.86 %	11.39 %
Covered Employee Payroll	\$ 301,739,000	\$ 323,210,100	\$ 355,843,000	\$ 387,681,000
Net OPEB Liability as a Percentage of Covered Employee Payroll	252.63 %	227.68 %	214.98 %	218.41 %
Single Discount Rate - Ending	5.33 %	4.93 %	4.93 %	4.89 %
Short Term Expected Rate of Return	2.75 %	3.00 %	3.00 %	3.00 %
Long Term Expected Rate of Return	7.00 %	7.25 %	7.25 %	7.25 %
Inactive plan members or beneficiaries currently receiving benefit payments	6,768	6,718	6,718	6,978
Inactive plan members entitled to but not yet receiving benefit payments	-	-	-	-
Active plan members	5,008	6,193	6,193	7,184
Total plan members	11,776	12,911	12,911	14,162



Schedule of Net OPEB Liability Multiyear

FY Ending June 30,	Total OPEB Liability	Fiduciary Net Position	Net OPEB Liability	Fiduciary Net Position as a % of Total OPEB Liability	Covered Payroll ¹	Net OPEB Liability as a % of Covered Payroll
2016	\$ 956,238,505	\$ 124,108,219	\$ 832,130,286	12.98%	\$ 376,390,000	221.08%
2017	955,596,287	108,867,959	846,728,328	11.39%	387,681,000	218.41%
2018	888,057,950	123,078,430	764,979,520	13.86%	355,843,000	214.98%
2019	881,431,123	145,534,188	735,896,935	16.51%	323,210,100	227.68%
2020	945,742,950	183,465,838	762,277,112	19.40%	301,739,000	252.63%

¹ Estimated payroll for fiscal year end 2020, based on prior fiscal year end payroll adjusted by wage inflation assumption of 2.50 percent.

Schedule of Employer Contributions

FY Ending June 30,	Actuarially Determined Contribution	Actual Employer Contribution	Contribution Deficiency (Excess)	Covered Payroll ¹	Actual Contribution as a % of Covered Payroll
2016	\$ 87,848,228	\$ 53,072,438	\$ 34,775,790	\$ 376,390,000	14.10%
2017	89,979,057	33,755,421	56,223,636	387,681,000	8.71%
2018	88,022,745	53,242,638	34,780,107	355,843,000	14.96%
2019	90,020,711	58,235,819	31,784,892	323,210,100	18.02%
2020	94,430,221	77,190,616	17,239,605	301,739,000	25.58%

¹ Estimated payroll for fiscal year end 2020, based on prior fiscal year end payroll adjusted by wage inflation assumption of 2.50 percent.

Sensitivity of Net OPEB Liability

Sensitivity of Net OPEB Liability to the Discount Rate Assumption

1% Decrease	Current Discount Rate Assumption	1% Increase
4.33%	5.33%	6.33%
\$ 873,693,067	\$ 762,277,112	\$ 668,558,704

Sensitivity of Net OPEB Liability to the Healthcare Cost Trend Rate Assumption

1% Decrease	Current Healthcare Cost Trend Rate Assumption	1% Increase
\$ 685,747,803	\$ 762,277,112	\$ 845,364,471

Notes to Schedule of Contributions

Valuation Date	July 1, 2019
Measurement Date	June 30, 2020
Plan Fiscal Year End	June 30, 2020

Methods and Assumptions Used to Determine Actuarial Liability and Contributions:

Actuarial Cost Method	Entry Age Normal, used to measure the Actuarial Liability and Total OPEB Liability
Contribution Policy	Sponsor contributes pay-as-you-go costs plus a pre-funding contribution equal to 5% of expected employer costs. After June 30, 2020, sponsor also makes level dollar annual contribution to pre-fund Alternative C benefits by plan year end 2037. Pre-funding contributions are held in a long-term account. Principal, pre-funding contributions and investment income are expected to be used to pay benefits when the plan is fully funded. Three months of expected benefits are held in reserve in a short-term account.
Actuarially Determined Contribution (ADC)	The ADC equals the normal cost plus the amortization of the unfunded actuarial liability. The amortization components include: <ul style="list-style-type: none"> • 15-year closed period amortization of unfunded retiree liabilities as of July 1, 2011. As of June 30, 2019, the remaining period is 7 years, the remaining balance is \$448,993,849, and the annual amortization payment is \$73,761,848 for plan year end June 30, 2020. The amortization factor is based on a discount rate of 4.93%. • 25-year amortization, on a level percentage of payroll basis, for the remaining unfunded actuarial liabilities of \$293,480,021 as of June 30, 2019. The annual amortization payment is \$15,330,870 for plan year end June 30, 2020. The amortization factor is based on a discount rate of 4.93% and a wage inflation assumption of 2.50%.
Asset Valuation Method	Market value
Investment Rate of Return	Short-term account earns 2.75% per year. Long-term account earn 7.00% per year.
Wage Inflation	2.50%
Salary Increases	Depends on age, service and employer group. Rate ranges from 6.70% at less than 1 year of service to 2.50% at 30 or more years of service. Salary increase includes wage inflation assumption of 2.50%.
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition.
Mortality Teachers and ASC	For retirees and survivor: Based on RP-2014 White Collar Annuitant Mortality Table with scaling factors of: 98% for males and 96% for females in Teachers group, and 99% for males and 96% for females in ASC group. For active members: Based on RP-2014 White Collar Employee Mortality Table with scaling factors of 97% for males and 99% for females in Teachers group. All tables reflect future mortality improvements using MP-2018 2-dimensional mortality improvement scales.
Mortality General Employees	For retirees and survivor: Based on RP-2014 Healthy Annuitant Mortality Table with scaling factors of 111% for males and 110% for females. For active members: Based on RP-2014 non-Annuitant Mortality Table. All tables reflect future mortality improvements using MP-2016 mortality improvement scales.
Healthcare Cost Trend Rates	Actual trend used for fiscal year 2018. For fiscal years on and after 2020, trend starts at 8.00% and gradually decreases to an ultimate trend of 4.25%. Additional trend of 1.98% is added to Medicare trend from 2021 to 2035 to approximate the assumed wear-away of MAPD plan design savings.
Aging Factors	Based on the 2013 SOA Study "Health Care Costs - From Birth to Death".
Expenses	Health administrative expenses are included in the development of the per capita claims costs. Operating expenses are reflected separately.



SECTION E

GASB STATEMENT No. 75 OPEB EXPENSE

Net OPEB Liability for Fiscal Year Ending June 30, 2020

Fiscal Year Ending June 30,	<u>2020</u>
Total OPEB Liability	
Service Cost	\$ 5,337,504
Interest on the Total OPEB Liability	42,693,859
Changes of Benefit Terms	101,807,196
Difference between Expected and Actual Experience	21,294,097
Changes in Healthcare Assumptions	(30,034,718)
Change in Other Assumptions	(29,686,261)
Benefit Payments	(47,099,851)
Net Change in Total OPEB Liability	<u>64,311,827</u>
Total OPEB Liability - Beginning	881,431,123
Total OPEB Liability - Ending (a)	<u>\$ 945,742,950</u>
Plan Fiduciary Net Position	
Employer Contributions	\$ 77,190,616
Member Contributions	-
Net Investment Income	7,840,886
Benefit Payments	(47,099,851)
Operating Expenses	-
Other	-
Net Change in Plan Fiduciary Net Position	<u>37,931,650</u>
Plan Fiduciary Net Position - Beginning	145,534,188
Plan Fiduciary Net Position - Ending (b)	<u>183,465,838</u>
Net OPEB Liability - Ending (a) - (b)	<u>\$ 762,277,112</u>
Plan Fiduciary Net Position as a Percentage Total OPEB Liability	19.40%
Covered-Employee Payroll¹	\$301,739,000
Net OPEB Liability as a Percentage of Covered Payroll	252.63%
Inactive plan members or beneficiaries currently receiving benefit payments	6,768
Inactive plan members entitled to but not yet receiving benefit payments	-
Active plan members	<u>5,008</u>
Total plan members	<u>11,776</u>

¹ Estimated payroll for fiscal year end 2020, based on prior fiscal year end payroll adjusted by wage inflation assumption of 2.50 percent.



OPEB Expense for Fiscal Year Ending June 30, 2020

Fiscal Year Ending June 30,	2020
A. Expense	
1. Service Cost	\$ 5,337,504
2. Interest on the Total Pension Liability	42,693,859
3. Current-Period Benefit Changes	101,807,196
4. Employee Contributions	-
5. Projected Earnings on Plan Investments	(10,746,492)
6. Administrative Expense	-
7. Other Changes in Plan Fiduciary Net Position	-
8. Recognition of Outflow/(Inflow) due to Non-investment Experience	10,020,719
9. Recognition of Outflow/(Inflow) due to Assumption Changes	(35,456,316)
10. Recognition of Outflow/(Inflow) due to Investment Experience	528,625
11. Total OPEB Expense	\$ 114,185,096
B. Reconciliation of Net OPEB Liability	
1. Net OPEB Liability beginning of year	\$ 735,896,935
2. OPEB Expense	114,185,096
3. Employer Contributions	(77,190,616)
4. Change in Outflow/(Inflow) due to Non-investment Experience	11,273,378
5. Change in Outflow/(Inflow) due to Assumption Changes	(24,264,663)
6. Change in Outflow/(Inflow) due to Investment Experience	2,376,982
7. Net OPEB Liability End of year	\$ 762,277,112



Schedule of Outflows and Inflows of Resources

	Non-Investment Experience			Assumption Changes			Investment Experience		
	<u>7/1/2017</u>	<u>7/1/2018</u>	<u>7/1/2019</u>	<u>7/1/2017</u>	<u>7/1/2018</u>	<u>7/1/2019</u>	<u>7/1/2017</u>	<u>7/1/2018</u>	<u>7/1/2019</u>
Plan Year Beginning									
(Gain)/Loss	\$ 30,739,181	\$ (8,091,913)	\$ 21,294,097	\$ (96,779,146)	\$ -	\$ (59,720,979)	\$ (890,641)	\$ 628,158	\$ 2,905,607
Amortization Factor	4.738362	4.430801	3.972998	4.738362	4.430801	3.972998	5.000000	5.000000	5.000000
Amortization Amount	\$ 6,487,301	\$ (1,826,287)	\$ 5,359,705	\$ (20,424,599)	\$ -	\$ (15,031,716)	\$ (178,128)	\$ 125,632	\$ 581,121
Amortization for Plan Year End									
6/30/2018	\$ 6,487,301			\$ (20,424,599)			\$ (178,128)		
6/30/2019	6,487,301	\$ (1,826,287)		(20,424,599)	\$ -		(178,128)	\$ 125,632	
6/30/2020	6,487,301	(1,826,287)	\$ 5,359,705	(20,424,599)	-	\$ (15,031,716)	(178,128)	125,632	\$ 581,121
6/30/2021	6,487,301	(1,826,287)	5,359,705	(20,424,599)	-	(15,031,716)	(178,128)	125,632	581,121
6/30/2022	4,789,977	(1,826,287)	5,359,705	(15,080,748)	-	(15,031,716)	(178,128)	125,632	581,121
6/30/2023	-	(786,766)	5,214,982	-	-	(14,625,830)	-	125,632	581,121
6/30/2024	-	-	-	-	-	-	-	-	581,121
6/30/2025	-	-	-	-	-	-	-	-	-
Total	\$ 30,739,181	\$ (8,091,913)	\$ 21,294,097	\$ (96,779,146)	\$ -	\$ (59,720,979)	\$ (890,641)	\$ 628,158	\$ 2,905,607
Deferred Outflows/(Inflows) Recognized in OPEB Expense for Current Plan Year End									
	Outflows	(Inflows)	Net	Outflows	(Inflows)	Net	Outflows	(Inflows)	Net
6/30/2020	\$ 11,847,006	\$ (1,826,287)	\$ 10,020,719	\$ -	\$ (35,456,316)	\$ (35,456,316)	\$ 706,753	\$ (178,128)	\$ 528,625
Deferred Outflows/(Inflows) Recognized in OPEB Expense for Future Plan Years Ending									
6/30/2021	\$ 11,847,006	\$ (1,826,287)	\$ 10,020,719	\$ -	\$ (35,456,316)	\$ (35,456,316)	\$ 706,753	\$ (178,128)	\$ 528,625
6/30/2022	10,149,682	(1,826,287)	8,323,395	-	(30,112,465)	(30,112,465)	706,753	(178,128)	528,625
6/30/2023	5,214,982	(786,766)	4,428,216	-	(14,625,830)	(14,625,830)	706,753	-	706,753
6/30/2024	-	-	-	-	-	-	581,121	-	581,121
6/30/2025	-	-	-	-	-	-	-	-	-
Total	\$ 27,211,670	\$ (4,439,340)	\$ 22,772,330	\$ -	\$ (80,194,610)	\$ (80,194,610)	\$ 2,701,380	\$ (356,256)	\$ 2,345,123
Change In Deferred Outflows/(Inflows) Recognized in Liability and Assets for Current Plan Year End									
6/30/2020			\$ 11,273,378			\$ (24,264,663)			\$ 2,376,982



SECTION F

SUPPORT OF GASB Nos. 74 AND 75 DISCOUNT RATE

Projections and Development of Discount Rate

The methodology used to develop the GASB Statement Nos. 74 and 75 discount rate as of June 30, 2020, is based on an actuarial projection of assets and liabilities which fully funds the actuarial liability. The general approach is as follows:

- MPS contributes pay-as-you-go contributions, plus an additional pre-funding contribution of 5.0 percent of expected employer paid claims.
- MPS also makes level dollar contributions from 2021 to 2037 that are projected to fully finance Alternative C liabilities by 2037.
- Contributions are made to an IRC Section 115 trust that MPS established for the exclusive purpose of pre-funding retiree healthcare benefits.
- Assets and pre-funding contributions, in excess of three months of expected costs, remain in a long-term account which is assumed to earn 7.00 percent per year. Three months of expected costs are held in a short-term account which is assumed to earn 2.75 per year.
- Operating expenses are assumed to equal 0.5 percent of expected net employer costs.
- Assets in the long-term account are not expected to be used to pay benefits until the closed plan is fully funded. However, MPS may use assets in the long-term account if there is a non-appropriation in a budget year to fully pay all current year pay-as-you-go contributions.
- The GASB Nos. 74 and 75 discount rate used to develop the projected Total OPEB Liability at June 30, 2020, phases in the short-term assumed rate of 2.75 percent and the long-term rate of 7.00 percent over the period that the closed plan is projected to be fully funded.

The projection methodology produced a full funding period of 17 years and an effective discount rate of 5.33 percent. The details of the projections were presented on pages A-4 and A-5.

Please note that the preceding methodology assumes MPS will make pre-funding annual contributions through 2037 of: (i) at least 5.0 percent of expected claims, plus (ii) annual level dollar contributions for Alternative C benefits, which are projected to fully fund projected actuarial liabilities at plan year end 2037. If MPS deviates significantly from the pre-funding objective, the full funding target year may be extended or never be reached, which would decrease the effective discount rate and increase the Total OPEB Liability.

Paragraph 50 of GASB Statement No. 74 provides guidance for cases in which the sponsor has deviated from the funding policy. A review of at least a five-year history of the contributions and “other known events and conditions” should be considered when evaluating the funding progress of the plan.

Projections and Development of Discount Rate

The following table provides a five-year history of expected versus actual contributions. For fiscal years ending 2020, 2019, and 2018, MPS made contributions that exceeded pay-as-you-go cost by a significant margin. However, for fiscal years ending 2017 and 2016, MPS contributions were significantly lower than pay-as-you-go costs. If MPS makes pre-funding contributions that are less than the funding policy target, we may no longer be able to use the preceding methodology to develop the discount rate for GASB Statement Nos. 74 and 75 reporting.

Fiscal Year End June 30,	2020	2019	2018	2017	2016
(A) Employer Contributions	\$ 77,190,616	\$ 58,235,819	\$ 53,242,638	\$ 33,755,421	\$ 53,072,438
(B) Net Employer PAYGO Costs	47,099,851	44,135,647	47,544,292	52,906,009	55,926,607
(C) Excess Contributions [(B) - (A)]	30,090,765	14,100,172	5,698,347	(19,150,588)	(2,854,169)
(D) % of Net Employer PAYGO Costs	63.9%	31.9%	12.0%	-36.2%	-5.1%

Schedule of Investment Returns

<u>FY Ending June 30</u>	<u>Annual Money-Weighted Rate of Return, Net of Investment Expenses</u>
2017	3.30%
2018	7.55%
2019	6.46%
2020	5.23%

Target Asset Allocation

Based on Current Investment Policy

Growth Assets

Domestic Equity	19% - 59%
International Equity	1% - 41%
Other	0% - 20%

Income Assets

Fixed Income	20% - 60%
Other	0% - 20%

Real Return Assets 0% - 20%

Cash Equivalents 0% - 20%

SECTION G

PLAN PROVISIONS

Plan Provisions

Plan Members

Milwaukee Public School (hereinafter referred to as MPS or the Board) employees can qualify to continue healthcare benefits as a retiree for themselves and their eligible dependents if they satisfy the eligibility requirements and were enrolled in an MPS health plan as an active subscriber at the time of retirement. **Members hired or rehired on or after July 1, 2013, are not eligible to continue healthcare benefits as a retiree.**

Board members can qualify to continue healthcare benefits for themselves and their eligible dependents upon leaving the Board provided they are at least age 55 years of age and have served a minimum of eight full years on the Board. This provision terminated for all Board members on and after the 2001 Board organizational meeting except for previous Board members who already qualified for this benefit and Board members who were in office as of January 25, 2000, who met the eligibility requirements as of September 1, 1999.

Access to the MPS PPO/Indemnity Health Plan was eliminated as a plan option for active employees in the following units:

- Building Trades Effective September 1, 2010
- ASC Unit Effective November 1, 2011
- MTEA-Substitute Teacher Unit Effective September 1, 2011

Access to the MPS PPO/Indemnity Health Plan was eliminated as an option for retiree health insurance effective with dates of retirement on or after the dates indicated below for the following units:

- Building Trades Retirement dates on/after September 1, 2010
- ASC Unit Retirement dates on/after November 1, 2011
- MTEA-Substitute Teacher Unit Retirement dates on/after August 1, 2011

Active health benefits were eliminated for employees in the following units including the eligibility to retire with retiree health benefits on/after the following effective dates:

- Local 150-FS Unit – 775 hourly Effective September 1, 2011
- MTEA-Substitute Teachers Unit Effective September 1, 2012
- Local 1053 – Part-time clericals Effective February 1, 2013
- Part-time employees* Effective July 1, 2012*
- Seasonal Laborers (rehire or layoff) Effective July 1, 2012

(*Note: The eligibility provisions for active health benefits for part-time classified employees was changed to positions regularly scheduled for 30 or more hours per week or positions that are scheduled at 75 percent or more of a full-time position effective July 1, 2012, in the following units: Local 150 Building Service Unit, Local 150 Food Service Unit, MTEA-Educational Assistant Unit, Local 1053 Unit, MTEA-School Bookkeeper Unit, Local 950 Unit, Local 1616 Unit and Building Trades. A group of active classified employees currently working in positions regularly scheduled for 20 hours but less than 30 hours were grandfathered through August 31, 2013.



Plan Provisions (Continued)

The eligibility provisions for active health benefits for part-time classified and certificated employees was changed to positions regularly scheduled for 30 hours or more hours per week or positions that are scheduled at 75 percent or more of a full-time position effective July 1, 2013, in the following units: ASC Unit, MTEA-Teachers Unit, PAMPS Unit, Local 1053 exempts, ASC exempts, Office of Board Governance, Office of Accountability and Efficiency and Cabinet-Level Employees.)

Eligible Service

Eligible Service includes service with Milwaukee Public Schools as an active employee and service accrued while on leave, paid or unpaid, for represented employees in accordance with applicable collective bargaining agreement and plan provisions, or, when such bargaining agreement provisions expire, in accordance with Board policy and plan provisions; for non-represented employees in accordance with Board policy and plan provisions. With regard to Local 1053, only regular full-time service with Milwaukee Public Schools is included for Eligible Service. In addition, service while covered under the City of Milwaukee Employees' Retirement System (ERS) counts as Eligible Service for the following groups, for represented employees in accordance with applicable collective bargaining agreement and plan provisions, or, when such bargaining agreement provisions expire, in accordance with Board policy and plan provisions; for non-represented employees in accordance with Board policy and plan provisions:

- ASC Unit including exempts;
- Building Trades;
- Cabinet-Level employees;
- Local 950 Unit;
- Local 1053 Unit including exempts;
- Local 1616 Unit;
- Office of Board Governance;
- Office of Accountability and Efficiency; and
- Superintendent.

Normal Retirement

Eligibility conditions:

Age 55 and 15 years of Eligible Service for dates of retirement before July 1, 2013.

Effective with dates of retirement on/after July 1 2013, whichever of the following occurs earlier:

- Age 60 and 20 years of Eligible Service; **OR**
- Age 55 or older with 30 or more years of Eligible Service until sunset on July 1, 2015.

Benefit: On a self-paid basis, continuation in an MPS retiree health plan in single or family coverage status that the employee was enrolled in at time of retirement. Represented employees who satisfy the eligibility requirements at the time of retirement may receive a Board-paid subsidy in accordance with applicable collective bargaining agreement and plan provisions, or, when such bargaining agreement provisions expire, in accordance with Board policy and plan provisions; non-represented employees who



Plan Provisions (Continued)

satisfy the eligibility requirements at the time of retirement may receive a Board-paid subsidy in accordance with Board policy and plan provisions.

An Early Retirement Window was passed whereby effective with dates of retirement on July 1, 2017 through June 30, 2020, employees who are age 55 or older, with 20 or more years of eligible service may qualify for retiree health and life insurance. The 90 percent sick leave accumulation is still required for a Board subsidy toward the cost of retiree health insurance coverage.

On May 28, 2020 the Board approved that the requirements to receive retiree health and life benefits for employees hired prior to July 1, 2013 will change as of July 1, 2020

Duty Disability Retirement

Eligibility Conditions: An MPS employee, who retires on duty-incurred disability pension due to a compensable workers compensation injury or illness, may continue in an MPS health plan. No age or service requirements apply.

Benefit: Coverage is Board-paid for five years after the workers compensation settlement; five years after date of duty incurred disability retirement for Local 150 Building Service Helpers; and five years after the date of the workers compensation incident for Local 950, Local 1616 and Building Trades. After the five-year period, the retiree may continue on a self-paid basis. This benefit does not apply to Local 150 Food Service, MTEA Substitute Teachers and Board Members.

NOTE: Eligibility for this duty disability retirement provision ended June 30, 2013.

Disability Retirement (Non-Duty)

Eligibility Conditions: The following groups are eligible for continuation in an MPS health plan on a self-paid basis as a retiree if they apply and qualify for a disability pension under the Wisconsin Retirement System (WRS) or ERS and have 15 years of Eligible Service (20 years of Eligible Service effective July 1, 2013):

- ASC Unit including exempts;
- Cabinet-Level employees;
- Superintendent;
- Office of Board of Governance;
- Office of Accountability and Efficiency; and
- MTEA-Teachers Unit.

Medicare

Retirees and eligible spouses are required to enroll in Medicare Part B upon attainment of age 65 or when first eligible due to a disability. Plan Members who participated in Social Security while working are also required to enroll in Medicare Part A. The Board provides retiree healthcare benefits that are secondary to Medicare for Medicare eligible retirees and dependents. MPS has applied for and is receiving the Medicare Part D subsidy as available under the Medicare Modernization Act. Effective



Plan Provisions (Continued)

January 1, 2014, MPS has implemented a self-funded Employer Group Waiver Plan with a Commercial Wrap.

Effective January 1, 2015, all Medicare eligible retirees and their Medicare eligible spouses have been enrolled in the MPS Group Medicare Advantage Plan that includes a group Medicare Part D pharmacy benefit.

For non-Medicare retirees and active employees, effective January 1, 2015, the District added a High Deductible Health Plan (HDHP) with a health savings account (HSA). The HSA is available only to active employees with an employer contribution of \$400 for a single HDHP and \$800 for a family HDHP annually. The HDHP was offered to all active employees with a lower premium share ranging from 2 percent to 9 percent based on their annual salary.

Effective January 1, 2017, non-Medicare retirees and active employees in the ASC employee unit will have the PPO plan as a health plan option in addition to the EPO and HDHP plans.

Employer Funding Policy

MPS finances net retiree claims in excess of retiree contributions directly from its general fund. MPS has also established an IRC Section 115 trust to prefund retiree healthcare and life insurance benefits and contributes 105 percent of actual retiree healthcare claims and retiree life insurance premiums beginning in fiscal year 2011.

The Retiree Plan's policy in regard to the allocation of invested assets is established and may be amended by Board policy of the District's Governing Body. It is the policy of the District's Governing Body to pursue an investment strategy that reduces risk through the prudent diversification of the portfolio across a broad selection of distinct asset classes. The Retiree Plan's investment policy discourages the use of cash equivalents, except for liquidity purposes, and aims to refrain from dramatically shifting asset class allocations over short time spans. The following table shows the program's range and targeted asset allocation.

<u>Asset Class</u>	<u>Asset Allocation</u>	
	<u>Range</u>	<u>Target</u>
<u>Growth Assets</u>		
Domestic Equity	19% - 59%	39%
International Equity	1% - 41%	21%
Other	0% - 20%	0%
<u>Income Assets</u>		
Fixed Income	20% - 60%	40%
Other	0% - 20%	0%
<u>Real Return Assets</u>		
	0% - 20%	0%
<u>Cash Equivalents</u>		
	<u>0% - 20%</u>	<u>0%</u>
Total	<u>100%</u>	<u>100%</u>



Plan Provisions (Continued)

On August 25, 2016, the Governing Body approved a policy change in the OPEB investment policy from a 100 percent short and intermediate fixed income portfolio asset allocation target to the allocation targets as reflected above. This change was made to diversify the portfolio asset allocation with a long-term investment perspective invested in a similar time horizon as the liabilities.

Rate of return. For the year ended June 30, 2020, the annual money-weighted rate of return on investments, net of investment expense, was 5.23 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Premium Cost Sharing

Retirees with Dates of Retirement before July 1, 2013

An eligible employee who meets the age and service requirements with 70 percent or more of the maximum accumulated sick leave at the time of retirement will receive a monthly Board subsidy at the Board's share of the PPO/Indemnity Health Plan active single plan or family plan premium rate in effect as of the employee's date of retirement in accordance with applicable collective bargaining agreement and plan provisions for represented employees, or, when such bargaining agreement provisions expire, in accordance with Board policy and plan provisions; for non-represented employees in accordance with Board policy and plan provisions. (Note: The Board's share of the applicable active plan premium rate is net of the employee required premium contribution in effect as of the employee's retirement date for all groups except MTEA-Teachers and PAMPS.)

For dates of retirement on or after July 1, 2013, an eligible employee who meets the age and service requirements with 90 percent or more of the maximum accumulated sick leave at the time of retirement will receive a monthly Board subsidy at the Board's share of the average of the PPO/Indemnity Health Plan and EPO Health Plan active single plan or family plan premium rate in effect as of the employee's date of retirement in accordance with applicable collective bargaining agreement and plan provisions for represented employees, or, when such bargaining agreement provisions expire, in accordance with Board policy and plan provisions; for non-represented employees in accordance with Board policy and plan provisions. (Note: The Board's share of the applicable active plan premium rate is net of the employee required premium contribution in effect as of the employee's retirement date.)

The Board's share of the EPO Health Plan is used for the monthly Board subsidy for Building Trades employees who retire on or after September 1, 2010, and for MTEA Substitute Teachers who retire during the period of August 1, 2011, through June 30, 2012. (Note: For the MTEA-Substitute Teachers Unit, active health insurance ended August 31, 2012, and eligibility for retiree health insurance ended with dates of retirement on or after July 1, 2012.)

Ten-month employees in the MTEA-Teachers, Educational Assistants, Accountants/Bookkeepers Units, ASC Unit (represented and exempt), PAMPS Unit, Local 1053 Unit including exempts and Cabinet Level employees who submit a retirement notice by March 1 and Substitute Teachers who submit a retirement notice by April 1 will receive the greater of the June 30 or July 1 premium rate as their monthly Board subsidy in accordance with applicable collective bargaining agreement and plan provisions for represented employees, or, when such bargaining agreement provisions expire, in accordance with



Plan Provisions (Continued)

Board policy and plan provisions; non-represented employees who satisfy the eligibility requirements at the time of retirement may receive a Board-paid subsidy in accordance with Board policy and plan provisions. This provision was expanded to all 10-month benefit eligible employees effective with submission of a retirement notice by March 1, 2013, and each year forward by March 1st.

Generally, the Board subsidy remains fixed for the lifetime of the retiree while the retiree continues enrollment in an MPS health plan for retirees with dates of retirement before July 1, 2013. MPS will reimburse the retiree for the amount of the retiree's Medicare Part B premium, including the Income Related Monthly Adjustment, in an amount not to exceed the Board subsidy. Employees who meet all other eligibility requirements, but do not meet the 70 percent or, as applicable, the 90 percent maximum accumulated eligibility requirement for the Board subsidy, may continue coverage in an MPS health plan as a retiree on a self-paid basis.

When husband and wife both retire from the Board and meet eligibility requirements for retiree health coverage as of his/her date of retirement effective as indicated in the chart below, the Board will pay only its portion of one family or two single plans:

Units	Retirement Date
Administrators and Supervisors	1/01/07 and after
Exempt Administrators and Supervisors	1/01/07 and after
Bookkeeper/Accountants	7/01/12 and after
Building Engineers	2/28/08 and after
Building Service Helpers	4/24/08 and after
Building Trades	2/28/08 and after
Cabinet Level	1/01/07 and after
Clerical-Technical	6/30/09 and after
Exempt from Clerical-Technical	6/30/09 and after
Educational Assistants/Safety Assistants	7/01/12 and after
Food Service, CHA, SNA	2/28/08 and after
Office of Accountability and Efficiency	1/01/07 and after
Office of Board Governance	1/01/07 and after
Psychologists	4/01/11 and after
Substitute Teachers	7/01/12 and after
Superintendent	1/01/07 and after
Teachers	7/01/13 and after
Warehouse, Distribution, Buyers, etc.	3/30/08 and after

A special one-time provision providing the higher PPO/Indemnity Health Plan rate of March 31, 2011, or July 1, 2011, was extended to the following groups for eligible employees who gave their retirement notice by April 1, 2011, and retired by the end of their regular work year in June, 2011, or where applicable for 12-month employees who retired June 30, 2011:

- ASC Unit including exempts;
- Cabinet-Level employees;
- Local 1053 Unit including exempts;
- MTEA-Bookkeepers Unit;
- MTEA-Educational Assistants Unit;
- MTEA-Teachers Unit; and
- PAMPS Unit.

Plan Provisions (Continued)

Effective on the date of the 2001 Board Organizational meeting, Board members are not eligible to continue in the District's retiree group health plans upon leaving the Board.

Retirees with Dates of Retirement on/after July 1, 2013

Effective with dates of retirement on/after July 1, 2013, the Board's share of the average of the active PPO/Indemnity Health Plan and the active EPO Health Plan, (single or family plan premium rate) in effect at date of retirement will be the Board subsidy and is reduced by the employee premium contribution for the annual base salary band in effect as of the employee's retirement date. Upon the retiree reaching Medicare eligibility (currently age 65), the Board subsidy will be adjusted (reduced) to the Board's share of the average of the Medicare rates in effect as of the date of retirement, for the plan the retiree is in upon reaching Medicare eligibility, to reflect coordination with Medicare.

Effective with dates of retirement on/after July 1, 2013, the methodology to determine premium rates will be changed to establish a pre-Medicare retiree premium rate for self-paid coverage (e.g., for those retirees who are not eligible for the Board-paid subsidy).

On March 30, 2017, the Milwaukee Board of School Directors approved an Early Retirement Window (ERW) program. Under the ERW, certain employees under age 60 may retire with health and life insurance benefits. Eligible ERW members: (i) have attained at least age 55 between July 1, 2017, and June 30, 2020, (ii) have earned at least 20 years of MPS service, and (iii) have accrued at least 90 percent of the maximum sick leave balance. The ERW ends on June 30, 2020; however, members may elect to retire after June 30, 2020, and receive ERW benefits. The actuarial valuation as of July 1, 2019, reflects emerging ERW experience through December 31, 2019.

On May 28, 2020, the Milwaukee Board of School Directors approved Alternative C (55/20/70%) changes to the retiree healthcare and life insurance program. Alternative C permanently changes the eligibility requirements for all eligible members upon retirement to: (i) have attained at least age 55, (ii) have earned at least 20 years of MPS service, and (iii) have accrued at least 70 percent of the maximum sick leave balance. Alternative C also provides actuarially based level dollar pre-funding of additional benefits due to Alternative C so that the program is projected to be fully funded by 2037.

Surviving Spouse Coverage

Death of Employee in Active Service ¹

If an MPS employee dies while in active service and has met the eligibility requirements of 15 or more years of Eligible Service (or effective July 1, 2013, the eligibility requirements of 20 or more years of Eligible Service):

1. The surviving spouse and eligible dependents can continue health coverage with the Board paying its share of the premium until the surviving spouse remarries or is covered by another group insurance plan.



Plan Provisions (Continued)

2. When the surviving spouse turns age 60, he/she (but not any dependents) will be eligible to continue coverage in a single plan and will be covered as a surviving spouse of an employee who retired that month.
 - The Board subsidy will be the Board's share of the single premium for the PPO/Indemnity Health Plan, or the EPO Health Plan as applicable in effect as of the date of the surviving spouse's turning age 60 if the employee had the required 70 percent of maximum sick leave balance as of the employee's date of death. Thereafter, the surviving spouse is required to pay all future premium increases.
 - Effective July 1, 2013, the Board subsidy will be the Board's share of the single premium for the average of the PPO/Indemnity Health Plan and EPO Health Plan, or the EPO Health Plan as applicable in effect as of the date of the surviving spouse's turning age 60 if the employee had the required 90 percent of maximum sick leave balance as of the employee's date of death. Upon reaching Medicare eligibility, the Board subsidy will be adjusted (reduced) to the Board's share of the Medicare rate in effect as of the surviving spouse's turning age 60 to reflect coordination with Medicare. Thereafter, the surviving spouse is required to pay all future premium increases.
 - If the employee did not have the required 70 percent (or 90 percent effective July 1, 2013) of maximum sick leave as of the employee's date of death, continuation in health coverage will be self-paid. Effective July 1, 2013, the pre-Medicare retiree premium rates shall be used for such self-paid pre-Medicare coverage.

¹ Does not apply to Local 150 Food Service, MTEA-Substitute Teachers and Board Members.

Death of Employee after Retirement ¹

If the employee dies after retirement:

- The surviving spouse (but not any dependents) can continue coverage under the MPS retiree health insurance in a single plan until the spouse remarries or is otherwise covered by another group health insurance plan.
- The Board subsidy will be adjusted to the Board's share of the premium rate of a single active PPO/Indemnity Health Plan, or EPO Health Plan, or the average of the PPO/Indemnity Health Plan and the EPO Health Plan for dates of retirement on or after July 1, 2013, as applicable, which was in effect as of the deceased employee's date of retirement. For dates of retirement on or after July 1, 2013, upon reaching Medicare eligibility the Board subsidy will be adjusted (reduced) to the Board's share of the Medicare rate in effect as of the date of retirement.

¹ Does not apply to MTEA-Substitute Teachers and Board Members who have not met the eligibility requirements as of September 1, 1999.

Plan Provisions (Continued)

Premium Rates as of January 1, 2019

PPO Plan ¹					
	Single + Spouse/Dependent		Single + Spouse/Dependent		
	Single	1 with Medicare	Both with Medicare	Family w/o Medicare	
Active	\$ 737.65			\$ 1,733.48	
Retiree (Non-Medicare)	737.65	\$ 932.65		1,733.48	\$ 1,190.83 (1 w/Med.)
Retiree (Medicare)	195.00*	932.65	\$ 390.00*		648.18 (2 w/Med.)

EPO Plan ¹					
	Single + Spouse/Dependent		Single + Spouse/Dependent		
	Single	1 with Medicare	Both with Medicare	Family w/o Medicare	
Active	\$ 763.47			\$ 1,794.15	
Retiree (Non-Medicare)	763.47	\$ 958.47		1,794.15	\$ 1,225.68 (1 w/Med.)
Retiree (Medicare)	195.00*	958.47	\$ 390.00*		657.21 (2 w/Med.)

HDHP ¹					
	Single + Spouse/Dependent		Single + Spouse/Dependent		
	Single	1 with Medicare	Both with Medicare	Family w/o Medicare	
Active	\$ 710.69			\$ 1,650.22	
Retiree (Non-Medicare)	710.69	\$ 905.69		1,650.22	\$ 1,134.54 (1 w/Med.)
Retiree (Medicare)	195.00*	905.69	\$ 390.00*		618.85 (2 w/Med.)

Self-Pay Retiree Rates					
PPO Plan					
	Single + Spouse/Dependent		Single + Spouse/Dependent		
	Single	1 with Medicare	Both with Medicare	Family w/o Medicare	
Retiree (Non-Medicare)	\$ 1,106.17	\$ 1,301.17		\$ 2,212.34	\$ 1,301.17 (1 w/Med.)
Retiree (Medicare)	195.00*	1,301.17	\$ 390.00*		702.14 (2 w/Med.)

EPO Plan					
	Single + Spouse/Dependent		Single + Spouse/Dependent		
	Single	1 with Medicare	Both with Medicare	Family w/o Medicare	
Retiree (Non-Medicare)	\$ 1,139.35	\$ 1,334.35		\$ 2,278.71	\$ 1,334.35 (1 w/Med.)
Retiree (Medicare)	195.00*	1,334.35	\$ 390.00*		713.06 (2 w/Med.)

HDHP					
	Single + Spouse/Dependent		Single + Spouse/Dependent		
	Single	1 with Medicare	Both with Medicare	Family w/o Medicare	
Retiree (Non-Medicare)	\$ 1,084.19	\$ 1,279.19		\$ 2,168.39	\$ 1,279.19 (1 w/Med.)
Retiree (Medicare)	195.00*	1,279.19	\$ 390.00*		674.05 (2 w/Med.)

¹ Premium for active members in the PPO, EPO and HDHP plans includes vision coverage.

* MPS Group Medicare Advantage Plan.



Plan Provisions (Continued)

Premium Rates as of January 1, 2020 (Rates effective through December 31, 2020)

	PPO Plan ¹				
	Single + Spouse/Dependent		Single + Spouse/Dependent		
	Single	1 with Medicare	Both with Medicare	Family w/o Medicare	
Active	\$ 800.15			\$ 1,880.35	
Retiree (Non-Medicare)	800.15	\$ 1,032.20		1,880.35	\$ 1,312.25 (1 w/Med.)
Retiree (Medicare)	232.05*	1,032.20	\$ 464.10*		744.15 (2 w/Med.)
	EPO Plan ¹				
	Single + Spouse/Dependent		Single + Spouse/Dependent		
	Single	1 with Medicare	Both with Medicare	Family w/o Medicare	
Active	\$ 828.15			\$ 1,946.16	
Retiree (Non-Medicare)	828.15	\$ 1,060.20		1,946.16	\$ 1,350.06 (1 w/Med.)
Retiree (Medicare)	232.05*	1,060.20	\$ 464.10*		753.95 (2 w/Med.)
	HDHP Plan ¹				
	Single + Spouse/Dependent		Single + Spouse/Dependent		
	Single	1 with Medicare	Both with Medicare	Family w/o Medicare	
Active	\$ 768.08			\$ 1,784.39	
Retiree (Non-Medicare)	768.08	\$ 1,000.13		1,784.39	\$ 1,248.37 (1 w/Med.)
Retiree (Medicare)	232.05*	1,000.13	\$ 464.10*		712.34 (2 w/Med.)

Self-Pay Retiree Rates					
	PPO Plan				
	Single + Spouse/Dependent		Single + Spouse/Dependent		
	Single	1 with Medicare	Both with Medicare	Family w/o Medicare	
Retiree (Non-Medicare)	\$ 1,092.38	\$ 1,324.43		\$ 2,184.77	\$ 1,324.43 (1 w/Med.)
Retiree (Medicare)	232.05*	1,324.43	\$ 464.10*		806.06 (2 w/Med.)
	EPO Plan				
	Single + Spouse/Dependent		Single + Spouse/Dependent		
	Single	1 with Medicare	Both with Medicare	Family w/o Medicare	
Retiree (Non-Medicare)	\$ 1,125.16	\$ 1,357.21		\$ 2,250.31	\$ 1,357.21 (1 w/Med.)
Retiree (Medicare)	232.05*	1,357.21	\$ 464.10*		818.03 (2 w/Med.)
	HDHP Plan				
	Single + Spouse/Dependent		Single + Spouse/Dependent		
	Single	1 with Medicare	Both with Medicare	Family w/o Medicare	
Retiree (Non-Medicare)	\$ 1,071.10	\$ 1,303.15		\$ 2,142.20	\$ 1,303.15 (1 w/Med.)
Retiree (Medicare)	232.05*	1,303.15	\$ 464.10*		775.28 (2 w/Med.)

¹ Premium for active members in the PPO, EPO and HDHP plans includes vision coverage.

* MPS Group Medicare Advantage Plan.

Members that retired on or after July 1, 2013, and do not receive a Board-paid subsidy pay the Self-Pay retiree rates.



Plan Provisions (Continued)

Active Employee Premium Share for Health Insurance

Effective August 1, 2011, all active employees pay premium contributions for health insurance based on either a percentage of the active premium rate or a percentage of salary (for the MTEA-Teacher Unit) in accordance with applicable collective bargaining agreement and plan provisions for represented employees, or, when such bargaining agreement provisions expire, in accordance with Board policy and plan provisions; for non-represented employees in accordance with Board policy and plan provisions.

Prior to August 1, 2011, there was no cost to most active employees; Cabinet members pay 5 percent of the premium and Board members pay any difference between the plan they have selected and the lowest cost plan. Effective with the union contract settlements (2005-2006), there is a conditional employee premium contribution of 2.5 percent for those enrolled in the PPO/Indemnity Plan if the premium for this plan increases greater than 17 percent. If the conditional premium share is triggered, future retired members that receive a Board-paid subsidy would receive a subsidy amount equal to the PPO/Indemnity Plan premium rate at the time of retirement less the 2.5 percent conditional premium amount. This conditional premium share was never triggered and has been replaced by the aforementioned required employee premium contributions effective with the 2010/2011 contract settlements and Board policy.

Effective July 1, 2012, or July 1, 2013, as described below, all active employees will pay a percentage of premium for health insurance based on their annual base salary as follows:

Annual Base Salary	Plan	PPO % of Premium	EPO % of Premium	HDHP Effective 1/1/2015 % of Premium
\$25,000 or Under	Single or Family	11%	5%	2%
\$25,001 - \$50,000	Single or Family	12%	8%	5%
\$50,001 - \$75,000	Single or Family	13%	10%	7%
\$75,000 and above	Single or Family	14%	12%	9%

Effective July 1, 2012, new contributions and new plan design for the following employee units:

Local 150 Building Service Helpers Unit	Building Trades
Local 150 Food Service Unit	MTEA-Bookkeepers/Accountants Unit
Local 950 Building Engineers Unit	MTEA-Educational Assistants Unit
Local 1053 Clerical – Technical Unit	MTEA-Substitute Teachers Unit
Local 1616 Unit	

Effective July 1, 2013, new contributions and new plan design for the following employee units:

ASC Unit including exempts	Board Members
Cabinet Level employees	Local 1053 Exempts
MTEA-Teachers Unit	PAMPS Unit
Office of Chief Accountability & Efficiency	Office of Board Governance

Effective July 1, 2015, a new High Deductible Health Plan (HDHP) with a Health Savings Account (HSA) was made available to all active employees.



Plan Provisions (Continued)

Life Insurance Benefit

The Board provides group life insurance coverage to eligible retirees equal to the annual earnings at retirement to the next even thousand dollars. Coverage is equal to the previous year's annual earnings for hourly employees included in 150 Food Services Unit, Local 150 Building Service Helpers Unit, MTEA-Substitute Teachers Unit, and part-time (20 hours per week; 30 hours per week effective July 1, 2012) 1616 Social Work Aides, Local 950 Unit, 1616 Seasonal Laborers and Building Trades. The life insurance face amount is reduced by 25 percent of the original amount each March 1 following the attainment of age 65, 66 and 67. A life insurance amount of 25 percent of the original life insurance benefit is payable if death occurs after March 1 following the retiree's 67th birthday. At the 25 percent reduction the Board will pay a maximum coverage of \$15,000 for 950 and Building Trades, \$20,000 for 1053 and 1616 and \$25,000 for PAMPS. The Board will pay for a maximum of \$10,000 of coverage for Local 150 Food Services and BSH in retirement. Effective with dates of retirement on/after July 1, 2013, the maximum benefit payable at the 25 percent reduction at age 67 is \$25,000. Active Substitute Teachers effective September 1, 2012, and active Seasonal Laborers effective with hire or layoff July 1, 2012, or after are no longer eligible for group life insurance coverage.

Sunset Provision: Employees who are age 55 or older with 30 or more years of MPS service can retire before age 60 (prior to July 1, 2015) and qualify for retiree life insurance benefits.

For all employee units retiring effective July 1, 2016, and after life insurance coverage at age 67 and over is Board-paid.

Vision Benefit

Retirees and dependents enrolled in the EPO plan receive vision coverage. Effective April 1, 2011, vision benefits for current and future retirees were discontinued.

Dental Benefit

Retirees and dependents are not eligible for dental coverage; however, retirees are eligible for self-pay COBRA coverage for up to 18 months.



Plan Provisions (Continued)
Effective January 1, 2020
United Healthcare MPS PPO Choice Plus Plan
Actives and Non-Medicare Eligible Retirees

Plan Feature	In Network			Out of Network	
Annual Deductible	\$ 750 per person \$ 2,250 per family			\$ 1,500 per person \$ 4,500 per family	
Annual Coinsurance Limit (Includes Annual Deductible)	\$ 3,250 per person \$ 9,750 per family			\$ 4,500 per person \$ 13,500 per family	
<u>Covered Services</u> -Physicians Visits -Specialist Visits -Emergency Room • Emergency Care • Non-Emergency Care -Inpatient Services -Outpatient Services	<u>Coinsurance</u> 100% after \$20 Co-pay 100% after \$35 Co-pay 100% after \$150 Co-pay 50% after deductible 80% after deductible* 80% after deductible*			<u>Coinsurance</u> 50% after deductible* 100% after \$150 Co-pay 50% after deductible 50% after deductible* 50% after deductible*	
Prescription Drug Co-pays (Three-Tier Formulary)	<u>Tier 1</u> Generic	<u>Retail</u> Up to 30- day Supply \$8	<u>Mail Order</u> 90-day Supply \$16	<u>Retail</u> Up to 30-day Supply No benefit	<u>Mail Order</u> 90-day Supply No benefit
	<u>Tier 2</u> Preferred Brand	10% with \$25 min.	\$50		
	<u>Tier 3</u> Non- Preferred Brand	20% with \$50 min.	\$100		
Prescription Drug Out-of- Pocket Annual Limit	\$ 4,100 per person \$ 4,950 per family			No Benefit	
Maximum Lifetime Benefit	None			None	

*Until coinsurance limit is met; 100% thereafter.



Plan Provisions (Continued)
Effective January 1, 2020
United Healthcare MPS EPO Choice
Actives and Non-Medicare Eligible Retirees

Plan Feature	In Network Only		
Annual Deductible	\$ 350 per person \$ 1,050 per family		
Annual Coinsurance Limit (Excludes Annual Deductible)	\$ 1,350 per person \$ 4,050 per family		
<u>Covered Services</u> -Physicians Visits -Specialist Visits -Emergency Room <ul style="list-style-type: none"> • Emergency Care • Non-Emergency Care -Inpatient Services -Outpatient Services	<u>Coinsurance</u> 100% after \$20 Co-pay 100% after \$35 Co-pay 100% after \$125 Co-pay 50% after deductible 80% after deductible* 80% after deductible*		
Prescription Drug Co-pays (Three-Tier Formulary)	<u>Tier 1</u> Generic	<u>Retail</u> Up to 30-day Supply \$8	<u>Mail Order</u> 90-day Supply \$16
	<u>Tier 2</u> Preferred Brand	10% with \$25 min.	\$50
	<u>Tier 3</u> Non- Preferred Brand	20% with \$50 min.	\$100
Prescription Drug Out-of- Pocket Annual Limit	\$6,000 per person \$10,650 per family		
Maximum Lifetime Benefit	None		

**Until coinsurance limit is met; 100% thereafter.*

Plan Provisions (Continued)
Effective January 1, 2020
United Healthcare MPS HDHP Plan
Actives and Non-Medicare Eligible Retirees

Plan Feature	In Network			Out of Network	
Annual Deductible	\$ 1,600 per person \$ 3,200 per family			\$ 3,200 per person \$ 6,400 per family	
Annual Coinsurance Limit (Includes Annual Deductible and Pharmacy Costs)	\$ 3,200 per person \$ 6,400 per family			\$ 6,400 per person \$ 12,800 per family	
<u>Covered Services</u> -Physicians Visits -Specialist Visits -Emergency Room • Emergency Care • Non-Emergency Care -Inpatient Services -Outpatient Services	<u>Coinsurance</u> 80% after deductible* 80% after deductible* 80% after deductible* Not Covered 80% after deductible* 80% after deductible*			<u>Coinsurance</u> 50% after deductible* 50% after deductible* 80% after deductible* Not Covered 50% after deductible* 50% after deductible*	
Prescription Drug Co-pays (Three-Tier Formulary) Preventive Only	<u>Tier 1</u> Generic	<u>Retail</u> Up to 30- day Supply \$8	<u>Mail Order</u> 90-day Supply \$16	<u>Retail</u> Up to 30-day Supply No benefit	<u>Mail Order</u> 90-day Supply No benefit
	<u>Tier 2</u> Preferred Brand	10% with \$25 min.	\$50		
	<u>Tier 3</u> Non- Preferred Brand	20% with \$50 min.	\$100		
Retail & Mail Order Pharmacy	80% after deductible*			None	
Maximum Lifetime Benefit	None			None	

*Until coinsurance limit is met; 100% thereafter.



Plan Provisions (Continued)
Effective January 1, 2020
United Healthcare MPS Group Medicare Advantage Plan
Medicare-Eligible Retirees

Plan Feature	In Network/Out of Network		
Annual Deductible	None		
Annual Coinsurance Limit (Excludes Annual Deductible)	\$ 1,350 per person		
<u>Covered Services</u>	<u>Coinsurance</u>		
-Physicians Visits	\$20 Co-pay		
-Specialists Visits	\$35 Co-pay		
-Emergency Room	\$65 Co-pay		
• Emergency Care	\$35 Co-pay		
• Urgently Needed Care	\$35 Co-pay		
-Inpatient Hospital Stay	\$0 Per Admit		
-Outpatient Hospital Services	\$100 Co-pay		
Prescription Drug Co-pays (Three-Tier Formulary) No out of network benefit	<u>Tier 1</u> Generic	<u>Retail</u> Up to 30-day Supply \$8	<u>Mail Order</u> 90-day Supply \$16
	<u>Tier 2</u> Preferred Brand	\$25	\$50
	<u>Tier 3</u> Non- Preferred Brand	\$50	\$100
	<u>Tier 4</u> Specialty Tier	\$50	\$100
Maximum Lifetime Benefit	None		

Life Insurance

Eligible Groups	Eligibility for Board-Paid Benefit	Eligibility for Self-Paid Benefit
ASC-represented Employees ASC-exempt Employees Cabinet Members Office of Board Governance Office of Chief Accountability and Efficiency	30 years & age 55, fully Board-paid with dates of retirement before 7/1/13	15 years & age 55, self-paid to age 65. Fully Board-paid after 65. Self-paid until 65 at age 50 for Administrators on disability pension. Effective with dates of retirement on or after 7/1/13, 20 years & age 60, self-paid to age 65. Maximum benefit coverage amount of \$25,000 at 25% reduction.
Building Trades Local 950 – Building Engineers	N/A	15 years & age 55, self-paid to age 65 & Board-paid after 65 if hired prior to 1/1/87. Maximum of \$15,000 Board-paid at 25% reduction. If hired after 1/1/87, self-paid until death; if eligible, at age 67 or over, Board-paid for retirements on 7/1/16 or later. Effective with dates of retirement on or after 7/1/13, 20 years & age 60 self-paid to 65 & Board paid after 65. Maximum of \$15,000 Board-paid at 25% reduction; retiree self pays for coverage above \$15,000 to the \$25,000 maximum coverage amount.
Local 1053 – Clerical including exempts	30 years & age 55, fully Board-paid with dates of retirement before 7/1/13 Maximum Board-paid \$20,000 at 25% reduction	15 years & age 55, self-paid to age 65 & Board-paid after 65 if hired prior to 1/1/87. Maximum of \$20,000 Board-paid at 25% reduction. If hired after 1/1/87, self-paid until death; if eligible, at age 67 or over, Board-paid for retirements on 7/1/16 or later. Effective with dates of retirement on or after 7/1/13, 20 years & age 60, self-paid to age 65 & Board-paid after 65. Maximum of \$20,000 Board-paid at 25% reduction; retiree self pays for coverage above \$20,000 to the \$25,000 maximum coverage amount.
Local 150 – Building Service Helpers Local 150 – Food Service Workers	N/A	15 years & age 55, self-paid to age 65; after age 65 Board-paid life insurance up to a maximum of \$10,000 if hired prior to 7/1/86. If hired after 7/1/86, not eligible for group coverage. Effective with dates of retirement on or after 7/1/13, 20 years & age 60, self-paid to age 65; after age 65 Board-paid life insurance up to a maximum of \$10,000 if hired prior to 7/1/86; retiree self pays for coverage above \$10,000 to the \$25,000 maximum coverage amount. If hired after 7/1/86, not eligible for group coverage.

Life Insurance (Continued)

Eligible Groups	Eligibility for Board-Paid Benefit	Eligibility for Self-Paid Benefit
Local 1616 Employees	<p>30 years & age 55, fully Board-paid with dates of retirement before 7/1/13</p> <p>Maximum Board-paid \$20,000 at 25% reduction</p>	<p>15 years & age 55, self-paid to age 65 & Board-paid after 65 if hired prior to 1/1/87. Maximum of \$20,000 Board-paid at 25% reduction. If hired after 1/1/87, self-paid until death; if eligible, at age 67 or over, Board-paid for retirements on 7/1/16 or later.</p> <p>Effective with dates of retirement on or after 7/1/13, 20 years & age 60, self-paid to age 65 & Board-paid after 65. Maximum of \$20,000 Board-paid at 25% reduction; retiree self pays for coverage above \$20,000 to the \$25,000 maximum coverage amount.</p>
<p>MTEA – Teachers</p> <p>MTEA – Substitute Teachers</p>	<p>30 years & age 55, Board-paid to \$50,000 for dates of retirement before 7/1/13. Must self-pay any amount over \$50,000. Fully Board-paid after 65.</p> <p>(Substitute Teachers: Benefit eliminated effective with dates of retirement on/ after 7/1/12.)</p>	<p>15 years & age 55, self-paid to age 65. Fully Board-paid after 65.</p> <p>Effective with dates of retirement on or after 7/1/13, 20 years & age 60, self-paid to age 65. Fully Board-paid after 65. Maximum benefit coverage amount of \$25,000 at final 25% reduction.</p> <p>(Substitute Teachers: Benefit eliminated effective with dates of retirement on or after 7/1/12.)</p>
MTEA – Accountants and Bookkeepers	<p>30 years & age 55, Board-paid to \$50,000 for dates of retirement before 7/1/13. Must self-pay any amount over \$50,000. Fully Board-paid after 65.</p>	<p>15 years & age 60, self-paid to age 65. Fully Board-paid after 65.</p> <p>Effective with dates of retirement on or after 7/1/13, 20 years & age 60, self-paid to age 65. Fully Board-paid after 65. Maximum benefit coverage amount of \$25,000 at final 25% reduction.</p>
MTEA – Educational Assistants	<p>30 years & age 55, Board-paid to \$19,000 for dates of retirement before 7/1/13. Must self-pay any amount over \$19,000. Fully Board-paid after 65.</p>	<p>15 years & age 55, self-paid to age 65. Fully Board-paid after 65.</p> <p>Effective with dates of retirement on or after 7/1/13, 20 years & age 60, self-paid to age 65. Fully Board-paid after 65. Maximum benefit coverage amount of \$25,000 at final 25% reduction.</p>
PAMPS – School Psychologists	<p>30 years & age 55, fully Board-paid with dates of retirement before 7/1/13.</p> <p>Maximum Board-paid \$25,000 at 25% reduction</p>	<p>15 years & age 55, self-paid to age 65. Fully Board-paid after 65. Maximum of \$25,000 Board-paid at 25% reduction.</p> <p>Effective with dates of retirement on or after 7/1/13, 20 years & age 60, self-paid to age 65. Fully Board-paid after 65. Maximum of \$25,000 Board-paid at 25% reduction.</p>

Years of service in accordance with applicable collective bargaining agreement and plan provisions for represented employees, or, when such bargaining agreement provisions expire, in accordance with Board policy and plan provisions; for non-represented employees in accordance with Board policy and plan provisions.



SECTION H

ACTUARIAL METHODS AND ASSUMPTIONS

Actuarial Methods and Assumptions

Development of Per Capita Claim Costs

The development of per capita claim costs is based on paid claims, expenses and enrollment experience for the period from July 1, 2017, to June 30, 2019, adjusted for claims in excess of the stop loss limits. Costs were trended to the mid-point of the first valuation year. Average costs for the pre-Medicare United Healthcare EPO/PPO plans were based on claims and enrollment experience for active and retired members. Average costs for the United Healthcare MPS Group Medicare Advantage Plan were based on premium rates. Standard morbidity tables were used to develop expected claims costs at each respective postretirement age. We relied on claims, expenses, enrollment data and rating methodology disclosed in the plan's most recent rating reports prepared by MPS' healthcare actuary.

Cost Method and Expense Calculations for Retiree Healthcare Benefits

The retiree healthcare actuarial valuation was based on the entry age normal cost method. Under this method, each participant's projected benefits are assumed to be funded by annual installments, equal to a level percentage of compensation, payable from date of participation to assumed date of retirement. The total normal cost is the sum of the current year's annual installment determined for all active participants. The actuarial accrued liability is the excess value of the present value of future benefits for all participants (both active and retired) over the present value of future normal costs.

Actuarial Assumptions

The actuarial assumptions used in our actuarial valuation are outlined on the following pages.

Actuarial Methods and Assumptions (Continued)

Actuarial Valuation Date	July 1, 2019
Discount Rate as of June 30, 2019	4.93%
Discount Rate as of June 30, 2020	5.33%
Inflation ¹	2.50%
Wage Inflation ²	2.50%
OPEB Assumptions	

<u>Fiscal Year</u>	<u>Healthcare Trend ^{3,4}</u>	<u>Medicare Part B Trend⁵</u>
2020	3.923%	6.716%
2021	8.000%	4.250%
2022	7.750%	4.250%
2023	7.500%	4.250%
2024	7.250%	4.250%
2025	7.000%	4.250%
2026	6.750%	4.250%
2027	6.500%	4.250%
2028	6.250%	4.250%
2029	6.000%	4.250%
2030	5.750%	4.250%
2031	5.500%	4.250%
2032	5.250%	4.250%
2033	5.000%	4.250%
2034	4.750%	4.250%
2035	4.500%	4.250%
2036 +	4.250%	4.250%

**Composite Annual Per Capita
Claim Costs for Calendar Year 2020**

<u>Age</u>	<u>Male</u>	<u>Female</u>
55	\$11,100	\$12,119
60	14,336	14,116
64	17,433	16,452
65	2,454	2,315
70	2,674	2,587
75	2,872	2,802
80	3,015	2,962
85	3,036	3,072

¹ Inflation assumption was used as a building block to estimate healthcare trend, investment returns, and wage inflation

² Wage inflation was used to project payroll.

³ Medicare trend rates were adjusted to assume initial MAPD plan design savings rate would gradually be reduced by 15% to 20% after 2035. From 2021 to 2035, base Medicare trend rates were increased by approximately 1.98% per year.

⁴ First year base trend rates apply to the 6-month period ending June 30, 2020, and equal 3.923% for non-Medicare costs and 0.0% for Medicare costs.

⁵ Reflects actual Medicare Part B monthly premium rates of \$135.50 for 2019 and \$144.60 for 2020.



Actuarial Methods and Assumptions (Continued)

The premiums used in the actuarial valuation of future retirees are blended based on approximately 30% of the PPO costs and 70% of the EPO costs. Current retirees are assumed to remain in their current plan (PPO or EPO). Relative value factors were applied to the composite per capita claim costs.

A 10% load is applied to the pre-Medicare dependent per capita claim cost to account for covered children who are not directly valued. For retirees who cover only dependent children and not a spouse, a 10% load is applied to the pre-Medicare retiree per capita claim cost.

Eligibility for Board-paid subsidy

The table below shows the percentage of retirees assumed to retire with the required percentage of the maximum sick leave allowance and therefore are eligible to receive a Board-paid subsidy.

<u>Retirement Date</u>	<u>% Eligible</u>	<u>% of Maximum Sick Leave Allowance</u>
After June 30, 2013, and before July 1, 2020	60%	90%
On and after June 30, 2020	76%	70%

Participation

Future retirees who meet eligibility conditions for retiree healthcare benefits

Eligible for Board-paid subsidy	85%
Eligible for self-paid benefits only	30%

30% of future retirees are expected to elect PPO coverage. 0% of future Building Trades and ASC retirees are assumed to elect PPO coverage. This retiree health option was eliminated for these groups.

Spouse Coverage

Future retirees that elect coverage at retirement are assumed to enroll as follows:

	<u>Single</u>	<u>Family</u>
Election	40%	60%

40% of spouses are expected to continue coverage after the death of the retiree.

Females are assumed to be three years younger than their spouses.



Actuarial Methods and Assumptions (Continued)

Pension-related Assumptions

Pension-related assumptions for participants covered under the Milwaukee Board of School Directors Supplemental Early Retirement Plan for Teachers (“Teachers Plan”) as stated in the actuarial valuation report as of July 1, 2019, are assumed for the GASB Statement Nos. 74 and 75 actuarial valuation.

Pension-related assumptions for participants covered under the Milwaukee Board of School Directors Early Retirement Supplement and Benefit Improvement Plan (“Administrators Plan”) and participants in covered positions who became members on or after July 1, 2003, who would otherwise have been participants in the plan, as stated in the actuarial valuation report as of July 1, 2019, are assumed for the GASB Statement Nos. 74 and 75 actuarial valuation.

Other participants are covered under the City of Milwaukee Employees’ Retirement System (“ERS”) and those assumptions, as stated in the actuarial valuation report as of January 1, 2019, and provided by the actuary with certain adjustments are assumed.

Rates are applied consistently with the pension actuarial valuations (with modifications as described), using the census data, as provided by MPS. Retirement rates are applied at first eligibility for pension benefits, although retiree healthcare benefits may not be payable.

Actuarial Methods and Assumptions (Continued)

Salary Increase¹

<u>Years of Service</u>	<u>Teachers</u>	<u>Administrators</u>	<u>Age</u>	<u>General Employees</u>
1	6.70%	4.80%	20	5.50%
5	6.70%	4.80%	25	4.93%
10	4.70%	4.80%	30	3.79%
15	4.20%	4.30%	35	3.78%
20	2.50%	3.30%	40	2.89%
25	2.50%	2.70%	45	2.50%
29	2.50%	2.50%	50	2.50%
			55	2.50%
			60 +	2.50%

Demographic Assumptions Mortality¹

Teachers

Retired Member Mortality: Scaling factors of 98% for males, and 96% for females of the RP-2014 White Collar Healthy Annuitant mortality table, sex distinct, with generational mortality improvement using MP-2018 2-dimensional mortality improvement scales recently released by the SOA. This assumption provides a margin for mortality improvements.

Active Member Mortality: Scaling factors of 97% for males, and 99% for females of the RP-2014 White Collar Employee mortality table, sex distinct, with generational mortality improvement using MP-2018 2-dimensional mortality improvement scales recently released by the SOA. This assumption provides a margin for mortality improvements.

Future mortality improvements in pre- and post-retirement mortality are reflected by projecting the base mortality tables back from the year 2014 to the year 2006 using the MP-2014 projection scale and projecting from 2006 using the MP-2018 projection scale.

Administrators

Retired Member Mortality: Scaling factors of 99% for males, and 96% for females of the RP-2014 White Collar Healthy Annuitant mortality table, sex distinct, with generational mortality improvement using MP-2018 2-dimensional mortality improvement scales recently released by the SOA. This assumption provides a margin for mortality improvements.

Active Member Mortality: No scaling of the RP-2014 White Collar Employee mortality table, sex distinct, with generational mortality improvement using MP-2018 2-dimensional mortality improvement scales recently released by the SOA. This assumption provides a margin for mortality improvements.



Actuarial Methods and Assumptions (Continued)

Future mortality improvements in pre- and post-retirement mortality are reflected by projecting the base mortality tables back from the year 2014 to the year 2006 using the MP-2014 projection scale and projecting from 2006 using the MP-2018 projection scale.

General Employees

For regular retirees and for survivors, the RP-2014 Healthy Annuitant Mortality Table (using 111% of rates for males and 110% of rates for females) (base year 2006) projected generationally with Scale MP-2016. For duty and ordinary disability retirees, the RP-2014 Disability Mortality Table (using 102% of rates for males and 98% of rates for females) (base year 2006) projected generationally with Scale MP-2016 was used. For death in active service, the RP-2014 Non-annuitant Mortality Table (base year 2006) projected generationally with Scale MP-2016.

This assumption is used to measure the probabilities of members dying before retirement and the probabilities of each benefit payment being made after retirement. Based on the most recent experience study, these tables provide a margin for near-term mortality improvements.

¹ Pension valuation assumptions effective in the July 1, 2019, actuarial valuations for Teachers and Administrators and as stated in the January 1, 2019, ERS actuarial valuation and provided by the actuary (with certain adjustments) for general employees.

Sample Disability Rates ¹		
% Separating Within Next Year		
Age	Teachers and Administrators	General Employees
20	0.010%	0.050%
25	0.010%	0.050%
30	0.010%	0.060%
35	0.010%	0.077%
40	0.020%	0.131%
45	0.070%	0.162%
50	0.130%	0.256%
55	0.210%	0.527%
60	0.320%	0.077%
65	0.370%	0.200%

20% of disabilities are considered to be duty-related for General Employees.

¹ Pension valuation assumptions effective in the July 1, 2019, actuarial valuations for Teachers and Administrators and as stated in the January 1, 2019, ERS actuarial valuation and provided by the actuary (with certain adjustments) for general employees.



Actuarial Methods and Assumptions (Continued)

Sample Turnover Rates ¹						
% Separating Within Next Year						
Age	Teachers	Administrators	General Employees			
			Less Than 5 Years of Service		At Least 5 Years of Service	
			Male	Female	Male	Female
20	18.000%	9.200%	17.620%	24.050%	13.000%	14.300%
25	17.000%	9.200%	15.930%	24.120%	12.680%	14.300%
30	12.100%	9.200%	11.310%	16.770%	6.920%	8.450%
35	9.000%	7.200%	10.660%	15.600%	7.190%	7.270%
40	4.600%	5.700%	8.780%	10.400%	4.510%	8.450%
45	2.800%	4.200%	9.100%	9.230%	2.990%	4.670%
50	2.200%	2.700%	8.320%	8.580%	2.380%	3.380%
55	2.000%	1.200%	6.830%	7.800%	1.990%	3.640%

¹ Pension valuation assumptions effective in the July 1, 2019, actuarial valuations for Teachers and Administrators and as stated in the January 1, 2019, ERS actuarial valuation and provided by the actuary (with certain adjustments) for general employees.

Actuarial Methods and Assumptions (Continued)

Sample Normal Retirement Rates^{1,2,3}

Vesting Service	Teachers															
	% Separating Within Next Year (Age and Service-Based)															
	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70+
0 - 9	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
10	2.0	3.0	2.0	1.0	1.0	3.0	5.0	7.0	7.0	10.0	20.0	25.0	35.0	40.0	50.0	60.0
11	2.9	4.0	2.9	1.6	1.6	3.9	6.1	8.6	8.4	11.6	22.1	27.0	37.0	42.0	52.0	62.0
12	3.7	4.9	3.7	2.2	2.2	4.7	7.2	10.2	9.7	13.2	24.2	29.0	39.0	44.0	54.0	64.0
13	4.6	5.9	4.6	2.8	2.8	5.6	8.3	11.8	11.1	14.8	26.3	31.0	41.0	46.0	56.0	66.0
14	5.4	6.8	5.4	3.4	3.4	6.4	9.4	13.4	12.4	16.4	28.4	33.0	43.0	48.0	58.0	68.0
15	9.8	11.3	10.3	9.0	6.0	7.3	10.5	15.0	13.8	18.0	30.5	35.0	45.0	50.0	60.0	70.0
16	10.6	12.2	11.1	9.6	6.6	8.1	11.6	16.6	15.1	19.6	32.6	37.0	47.0	52.0	62.0	72.0
17	11.5	13.2	12.0	10.2	7.2	9.0	12.7	18.2	16.5	21.2	34.7	39.0	49.0	54.0	64.0	74.0
18	12.3	14.1	12.8	10.8	7.8	9.8	13.8	19.8	17.8	22.8	36.8	41.0	51.0	56.0	66.0	76.0
19	13.2	15.1	13.7	11.4	8.4	10.7	14.9	21.4	19.2	24.4	38.9	43.0	53.0	58.0	68.0	78.0
20	14.0	16.0	14.5	12.0	9.0	11.5	16.0	23.0	20.5	26.0	41.0	45.0	55.0	60.0	70.0	80.0
21	14.9	17.0	15.4	12.6	9.6	12.4	17.1	24.6	21.9	27.6	43.1	47.0	57.0	62.0	72.0	82.0
22	15.7	17.9	16.2	13.2	10.2	13.2	18.2	26.2	23.2	29.2	45.2	49.0	59.0	64.0	74.0	84.0
23	16.6	18.9	17.1	13.8	10.8	14.1	19.3	27.8	24.6	30.8	47.3	51.0	61.0	66.0	76.0	86.0
24	17.4	19.8	17.9	14.4	11.4	14.9	20.4	29.4	25.9	32.4	49.4	53.0	63.0	68.0	78.0	88.0
25	18.3	20.8	18.8	15.0	12.0	15.8	21.5	31.0	27.3	34.0	51.5	55.0	65.0	70.0	80.0	90.0
26	19.1	21.7	19.6	15.6	12.6	16.6	22.6	32.6	28.6	35.6	53.6	57.0	67.0	72.0	82.0	92.0
27	20.0	22.7	20.5	16.2	13.2	17.5	23.7	34.2	30.0	37.2	55.7	59.0	69.0	74.0	84.0	94.0
28	20.8	23.6	21.3	16.8	13.8	18.3	24.8	35.8	31.3	38.8	57.8	61.0	71.0	76.0	86.0	96.0
29	21.7	24.6	22.2	17.4	14.4	19.2	25.9	37.4	32.7	40.4	59.9	63.0	73.0	78.0	88.0	98.0
30	21.7	24.6	22.2	17.4	14.4	19.2	25.9	37.4	32.7	40.4	59.9	65.0	75.0	80.0	90.0	100.0
31	21.7	24.6	22.2	17.4	14.4	19.2	25.9	37.4	32.7	40.4	59.9	67.0	77.0	82.0	92.0	100.0
32	18.2	21.1	18.3	12.8	12.8	19.2	25.9	37.4	32.7	40.4	59.9	69.0	79.0	84.0	94.0	100.0
33	18.2	21.1	18.3	12.8	12.8	19.2	25.9	37.4	32.7	40.4	59.9	71.0	81.0	86.0	96.0	100.0
34	18.2	21.1	18.3	12.8	12.8	19.2	25.9	37.4	32.7	40.4	59.9	73.0	83.0	88.0	98.0	100.0
35	18.2	21.1	18.3	12.8	12.8	19.2	25.9	37.4	32.7	40.4	59.9	75.0	85.0	90.0	100.0	100.0
36	18.2	21.1	18.3	12.8	12.8	19.2	25.9	37.4	32.7	40.4	59.9	77.0	87.0	92.0	100.0	100.0
37	18.2	21.1	18.3	12.8	12.8	19.2	25.9	37.4	32.7	40.4	59.9	79.0	89.0	94.0	100.0	100.0
38	18.2	21.1	18.3	12.8	12.8	19.2	25.9	37.4	32.7	40.4	59.9	81.0	91.0	96.0	100.0	100.0
39	18.2	21.1	18.3	12.8	12.8	19.2	25.9	37.4	32.7	40.4	59.9	83.0	93.0	98.0	100.0	100.0
40	18.2	21.1	18.3	12.8	12.8	19.2	25.9	37.4	32.7	40.4	59.9	85.0	95.0	100.0	100.0	100.0
41	18.2	21.1	18.3	12.8	12.8	19.2	25.9	37.4	32.7	40.4	59.9	87.0	97.0	100.0	100.0	100.0
42	18.2	21.1	18.3	12.8	12.8	19.2	25.9	37.4	32.7	40.4	59.9	89.0	99.0	100.0	100.0	100.0
43	18.2	21.1	18.3	12.8	12.8	19.2	25.9	37.4	32.7	40.4	59.9	91.0	100.0	100.0	100.0	100.0
44	18.2	21.1	18.3	12.8	12.8	19.2	25.9	37.4	32.7	40.4	59.9	93.0	100.0	100.0	100.0	100.0
45+	18.2	21.1	18.3	12.8	12.8	19.2	25.9	37.4	32.7	40.4	59.9	95.0	100.0	100.0	100.0	100.0

¹ Pension valuation assumptions effective in the July 1, 2019, actuarial valuations for Teachers and Administrators and as stated in the January 1, 2019, ERS actuarial valuation and provided by the actuary (with certain adjustments) for general employees.

² Normal retirement eligibility for general employees is satisfied upon attainment of age 55 with 30 years of service or age 60 with four years of service. Early retirement eligibility for general employees is satisfied upon attainment of age 55 with 15 years of service.



Actuarial Methods and Assumptions (Continued)

Sample Normal Retirement Rates					
Administrators					
% Separating Within Next Year (Age-Based)					
Rate of Retirement before June 30, 2020			Rate of Retirement after June 30, 2020		
Age	Certificated	Classified	Age	Certificated	Classified
55	20.0%	15.0%	55	12.0%	10.0%
56	20.0%	15.0%	56	12.0%	10.0%
57	20.0%	25.0%	57	12.0%	20.0%
58	20.0%	17.0%	58	12.0%	12.0%
59	20.0%	17.0%	59	12.0%	12.0%
60	25.0%	25.0%	60	25.0%	25.0%
61	20.0%	20.0%	61	20.0%	20.0%
62	20.0%	20.0%	62	20.0%	20.0%
63	20.0%	20.0%	63	20.0%	20.0%
64	20.0%	20.0%	64	20.0%	20.0%
65	50.0%	50.0%	65	50.0%	50.0%
66	50.0%	50.0%	66	50.0%	50.0%
67	50.0%	50.0%	67	50.0%	50.0%
68	50.0%	50.0%	68	50.0%	50.0%
69	50.0%	50.0%	69	50.0%	50.0%
70 +	100.0%	100.0%	70 +	100.0%	100.0%

Retirement rates for members between the ages 55 and 60 with 20 or more years of service were increased by 4 percentage points for Certificated members and 2.5 percentage points for Classified members to account for updated eligibility conditions for OPEB benefits.

Actuarial Methods and Assumptions (Continued)

Sample Normal Retirement Rates ^{1,2,3,4}		Early Retirement Rates ^{1,2}	
% Separating Within Next Year (Age-Based)			
Age	General Employees		General Employees
	Male	Female	Male/Female
54	35.000%	26.000%	
55	45.000%	26.000%	4.000%
56	30.000%	17.000%	4.000%
57	27.000%	15.000%	4.000%
58	27.000%	20.000%	4.000%
59	22.000%	20.000%	4.000%
60	19.000%	19.000%	4.000%
61	19.000%	20.000%	4.000%
62	28.000%	25.000%	4.000%
63	20.000%	18.000%	4.000%
64	20.000%	18.000%	4.000%
65	30.000%	25.000%	
66	30.000%	30.000%	
67	18.000%	20.000%	
68	18.000%	20.000%	
69	18.000%	20.000%	
70	100.000%	100.000%	

¹ Pension valuation assumptions effective in the July 1, 2019, actuarial valuations for Teachers and Administrators and as stated in the January 1, 2019, ERS actuarial valuation and provided by the actuary (with certain adjustments) for general employees.

² Normal retirement eligibility for general employees is satisfied upon attainment of age 55 with 30 years of service or age 60 with four years of service. Early retirement eligibility for general employees is satisfied upon attainment of age 55 with 15 years of service.

³ 50% of certificated members and 100% of classified members are assumed to retire once a participant completes 35 years of service.

⁴ Retirement rates for members between the ages 55 and 60 with 20 or more years of service were increased by 1 percentage point to account for updated eligibility conditions for OPEB benefits.

SECTION I

PARTICIPANT DATA

Participant Data

Counts by Labor Unit

	Retirees and Surviving		Total
	Actives	Spouses	
Board/Cabinet/ASC	543	847	1,390
Building Trades	69	170	239
1053 Clerical/Technical	164	319	483
150 Building Service	147	78	225
150 Food Service	406	298	704
1616 Education Employees	35	97	132
420 Engineers	131	175	306
Educational Assistants	661	393	1,054
Sub Teachers	0	93	93
Teachers	2,765	4,215	6,980
PAMPS	77	65	142
Accountants	<u>10</u>	<u>18</u>	<u>28</u>
	5,008	6,768	11,776

Participant Data (Continued)

Retiree and Surviving Spouse Healthcare Coverage Type by Labor Unit

	1 Person	2 Person	Total
Board/Cabinet/ASC	507	340	847
Building Trades	86	84	170
1053 Clerical/Technical	210	109	319
150 Building Service	62	16	78
150 Food Service	199	99	298
1616 Education Employees	59	38	97
420 Engineers	94	81	175
Educational Assistants	242	151	393
Sub Teachers	47	46	93
Teachers	2,475	1,740	4,215
PAMPS	39	26	65
Accountants	<u>9</u>	<u>9</u>	<u>18</u>
	4,029	2,739	6,768

Participant Data (Continued)

**Milwaukee Public Schools
 Retiree Healthcare and Life Insurance Programs
 Actuarial Valuation as of July 1, 2019
 Age Service Distribution for Total Active Population**

Attained Age	Years of Service at Valuation Date									Total
	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 35	
Under 20										0
20-24										-
25-29			3							3
30-34		1	111	32						144
35-39		2	94	287	57	9				449
40-44		1	61	186	306	104	6			664
45-49			53	138	219	416	113	3	1	943
50-54		1	62	108	183	313	391	96	4	1,158
55-59			43	88	122	225	242	187	19	926
60-64			33	52	84	146	114	70	30	529
65-69			12	24	36	33	21	16	10	152
Over 70			1	5	7	11	7	3	6	40
Total	-	5	473	920	1,014	1,257	894	375	70	5,008

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age:	49.9 years
Service:	20.1 years
Total Pay:	\$294,379,947
Average Pay:	\$58,782