



May 15, 2020

Ms. Carol Eady
Senior Director of Benefits & Compensation
Milwaukee Public Schools
Administration Building
5225 West Vliet Street
Milwaukee, Wisconsin 53208

**Subject: Milwaukee Public Schools – Retiree Healthcare and Life Insurance Benefits
Closed Group – Cost Impact of Alternative Retirement Eligibility**

Dear Carol:

With respect to the retiree healthcare benefits (“OPEB”) program sponsored by Milwaukee Public Schools (“MPS”), we have estimated the cost impact of the following proposed changes in retirement eligibility:

	Baseline	Alternative C
Eligible for OPEB if hired before	July 1, 2013	July 1, 2013
Minimum age at retirement	60	55
Minimum service at retirement	20	20
Percentage of maximum sick leave accrued at retirement	90%	70%

This communication is intended to accompany the letter dated March 13, 2020, which shows the impact of changing OPEB eligibility to age 57 with 20 years of service (Alternative A), and age 55 with 15 years of service (Alternative B). Both Alternative A and Alternative B have a requirement of 70% of maximum sick leave accrued at retirement.

Our cost estimates are based on the following:

- Census data as of January 1, 2020, which reflects
 - 159 normal retirements
 - 278 retirements due to the Early Retirement Window (ERW) program
 - 85 active members who have elected to retire under the ERW (out of 342 eligible)
- Pension-related assumptions used for:
 - Actuarial valuations as of June 30, 2018, of the MPS Supplemental Pension Plans
 - Actuarial valuations as of January 1, 2019, of the City of Milwaukee Employees Retirement System

- OPEB-related assumptions used for the July 1, 2017, GASB 75 actuarial valuation adjusted for
 - Premium changes during fiscal years 2019 and 2020
 - Trend rate updates for fiscal years 2019 and 2020 based on actual premium increases
 - Decrease in long-term rate of return on assets from 7.25% to 7.00%
 - Decrease in the short-term rate of return on assets from 3.00% to 2.75%
- Accelerated retirement rates for members who are eligible for the ERW
- Increased retirement rates under Alternative C since members are able to retire earlier and receive healthcare benefits
- Increased likelihood that members are expected to accrue the minimum number of sick leave hours needed for a Board paid subsidy. Since the percentage of maximum accumulated sick leave at retirement was reduced from 90% to 70% under Alternative C, the likelihood was increased from 60% to 76%.
- Market value of assets as of January 31, 2020

The following table shows a (gain)/loss of the actuarial liabilities at December 31, 2019, by source before considering the impact of Alternative C:

(\$ in Millions)	
Projected Actuarial Liability as of December 31, 2019 @ 4.89%	\$880.6
Increase/(Decrease) Due To:	
Demographic Experience	\$17.5
Changes in Healthcare-Related Assumption	(\$48.4)
Changes in Pension-Related Assumptions	\$55.9
Changes in Plan Provisions	<u>\$0.0</u>
Total	\$25.0
Actuarial Liability as of January 1, 2020 @ 4.89%	\$905.6

The demographic experience components include: normal retirement, retirement under the ERW and termination. The healthcare related gains were primarily due to favorable claims experience and premium rate increases. The pension-related losses were primarily due to changes in the assumed mortality table.

Exhibit A breaks out the results of the actuarial valuation at January 1, 2020, by employee group.



Cost Impact of Alternative Benefit Designs

Under the current plan provisions and funding policy, if MPS pre-funds five percent of expected claim costs and invests these contributions in a long-term account which earns 7.00 percent per year, then the program is projected to be fully funded by 2037.

The following tables shows key actuarial valuation results under the baseline and alternative scenarios including additional contribution needed to reach full funding by 2037:

(\$ in Millions)	Baseline (60/20/90%)	Alternative C (55/20/70%)
Actuarial Liability at 1/1/2020	\$ 905.62	\$ 993.67
Increase in Actuarial Liability		\$ 88.05
Market Value of Assets at 1/1/2020	160.57	160.57
Funded Ratio at 1/1/2020	17.7%	16.2%
FY 2025 Expected PAYGO Contributions	57.24	63.08
FY 2025 Pre-Fund Contributions	2.86	3.43
Pre-fund Contributions as a Percent of PAYGO Contributions	5.0%	5.4%
Year Program is Fully Funded	2037	2037

Exhibits B, C and D provide more details on the projections.

Key observations include:

Alternative C reduces the retirement eligibility age from 60 to 55 and reduces the eligibility requirement relating to the percentage of maximum sick leave hours accrued at retirement from 90% to 70% and is expected to: (i) cause members to retire earlier and (ii) expand the group of members who are eligible to receive Board Paid subsidies at retirement. For members hired before July 1, 2013, this change is expected to increase the actuarial liability as of January 1, 2020, by approximately \$88.05 million.

Exhibit D shows a projection of the expected increase in sponsor contributions. Calendar 2020 PAYGO contributions and pre-fund contributions are relatively close under the Baseline case and Alternative C. This is partially due to the ERW. That is, a significant number of members meeting the 55/20/90% ERW eligibility requirements have already retired or elected to retire under the ERW. However, in future years, Alternative C contributions are expected to increase significantly since the ERW eligibility period ends on June 30, 2020. For example, in calendar year 2025, sponsor contributions are expected to increase by \$6.41 million under Alternative C.



Under the current funding policy, PAYGO plus five percent of PAYGO, the program is projected to be fully funded by 2037 under the Baseline case. Under Alternative C, if pre-funding contributions are increased to 5.4% of PAYGO contributions, the program is projected to be fully funded by 2037. Even though benefits are more expensive under Alternative C, the significant increase in contributions caused the program to be fully funded by 2037 under both scenarios.

Caveats

This report is intended for use by MPS and those designated or approved by MPS. This report may be provided to parties other than MPS only in its entirety with supporting documents and only with the permission of MPS. This report should not be relied on for any purpose other than estimating the financial impact of providing the alternative scenarios as described in this report. GRS is not responsible for unauthorized use of this report.

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.

The actuaries submitting this statement are independent of the plan sponsor, are Members of the American Academy of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

To the best of our knowledge, the information contained in this report is accurate and fairly presents the financial impact of the changes described on the OPEB actuarial valuation results. All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board.

If you have any questions or comments, please call us at 312.368.6613.

Sincerely,

Alex Rivera, F.S.A., E.A., M.A.A.A., F.C.A.
Senior Consultant

Lance J. Weiss, E.A., M.A.A.A., F.C.A.
Senior Consultant

cc. Mr. Matthew J. Chason, Milwaukee Public Schools



Exhibit A

**Milwaukee Public Schools
Retiree Healthcare and Life Insurance Programs
Actuarial Valuation as of 12/31/2019
Entry Age Normal Cost Method**

Discount Rate 4.89%
Salary Scale ¹ 3.00%
Ultimate Trend ² 4.50%
Wage Inflation 3.00%

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	\$ 21,038,074	\$ 3,001,713	\$ 5,674,867	\$ 5,497,114	\$ 14,500,023	\$ 1,591,201	\$ 4,690,024	\$ 24,736,321	\$ -	\$ 114,394,473	\$ 2,785,408	\$ 273,610	\$ 198,182,828
ii) Retired and Disabled Participants	\$ 82,263,046	\$ 16,304,728	\$ 28,126,781	\$ 6,493,506	\$ 24,234,006	\$ 8,163,282	\$ 20,237,900	\$ 34,544,889	\$ 9,441,984	\$ 402,997,561	\$ 6,620,043	\$ 1,772,995	\$ 641,200,721
iii) Total	\$ 103,301,120	\$ 19,306,441	\$ 33,801,648	\$ 11,990,620	\$ 38,734,029	\$ 9,754,483	\$ 24,927,924	\$ 59,281,210	\$ 9,441,984	\$ 517,392,034	\$ 9,405,451	\$ 2,046,605	\$ 839,383,549
B) Life Insurance													
i) Active Employees	\$ 1,379,402	\$ 226,310	\$ 276,406	\$ 13,091	\$ 6,324	\$ 73,189	\$ 278,517	\$ 871,452	\$ -	\$ 7,398,352	\$ 267,947	\$ 13,850	\$ 10,804,840
ii) Retired and Disabled Participants	\$ 9,555,850	\$ 1,145,192	\$ 1,850,846	\$ 288,911	\$ 683,303	\$ 535,631	\$ 1,121,467	\$ 1,459,509	\$ 483,751	\$ 36,683,731	\$ 517,212	\$ 1,105,703	\$ 55,431,105
iii) Total	\$ 10,935,252	\$ 1,371,502	\$ 2,127,252	\$ 302,002	\$ 689,627	\$ 608,820	\$ 1,399,984	\$ 2,330,961	\$ 483,751	\$ 44,082,083	\$ 785,159	\$ 1,119,553	\$ 66,235,945
B) Total Liabilities	\$ 114,236,372	\$ 20,677,943	\$ 35,928,900	\$ 12,292,622	\$ 39,423,656	\$ 10,363,303	\$ 26,327,908	\$ 61,612,171	\$ 9,925,735	\$ 561,474,117	\$ 10,190,610	\$ 3,166,158	\$ 905,619,495
II) Assets													
	20,255,041	3,666,368	6,370,487	2,179,582	6,990,136	1,837,498	4,668,153	10,924,341	1,759,914	99,553,942	1,806,878	561,386	160,573,726
III) Unfunded Actuarial Liability (UAL)													
	93,981,331	17,011,575	29,558,413	10,113,040	32,433,520	8,525,805	21,659,755	50,687,830	8,165,821	461,920,175	8,383,732	2,604,772	745,045,769
IV) Normal Cost													
A) Health Insurance	\$ 195,835	\$ 64,032	\$ 77,681	\$ 86,797	\$ 247,697	\$ 28,891	\$ 70,562	\$ 391,067	\$ -	\$ 1,366,239	\$ 28,918	\$ 5,355	\$ 2,563,074
B) Life Insurance	\$ 22,909	\$ 4,109	\$ 2,965	\$ 11	\$ 18	\$ 1,218	\$ 3,455	\$ 13,652	\$ -	\$ 92,570	\$ 2,718	\$ 285	\$ 143,910
C) Total	\$ 218,744	\$ 68,141	\$ 80,646	\$ 86,808	\$ 247,715	\$ 30,109	\$ 74,017	\$ 404,719	\$ -	\$ 1,458,809	\$ 31,636	\$ 5,640	\$ 2,706,984
D) Percentage of Payroll	0.50%	1.37%	1.30%	1.72%	2.79%	1.97%	1.14%	2.17%	N/A	0.73%	0.45%	1.57%	0.90%
V) Actuarially Determined Contribution (ADC)													
A) Normal Cost	\$ 218,744	\$ 68,141	\$ 80,646	\$ 86,808	\$ 247,715	\$ 30,109	\$ 74,017	\$ 404,719	\$ -	\$ 1,458,809	\$ 31,636	\$ 5,640	\$ 2,706,984
B) Amortization of UAL	\$ 12,427,202	\$ 2,098,001	\$ 4,109,775	\$ 1,020,990	\$ 3,734,504	\$ 1,208,462	\$ 2,544,902	\$ 5,213,402	\$ 1,242,178	\$ 59,451,061	\$ 911,874	\$ 451,609	\$ 94,413,961
C) Total	\$ 12,645,946	\$ 2,166,142	\$ 4,190,421	\$ 1,107,798	\$ 3,982,219	\$ 1,238,571	\$ 2,618,919	\$ 5,618,121	\$ 1,242,178	\$ 60,909,870	\$ 943,510	\$ 457,249	\$ 97,120,944
VI) Expected Employer Contributions													
A) Expected Healthcare Benefit Payments	\$ 6,387,985	\$ 1,459,473	\$ 2,337,151	\$ 548,121	\$ 1,963,685	\$ 672,613	\$ 1,757,982	\$ 2,813,743	\$ 537,599	\$ 30,790,996	\$ 529,953	\$ 119,743	\$ 49,919,044
B) Expected Life Insurance Benefit Payments	\$ 489,030	\$ 67,325	\$ 104,643	\$ 19,307	\$ 50,089	\$ 36,530	\$ 61,538	\$ 85,941	\$ 27,208	\$ 1,951,982	\$ 26,713	\$ 132,195	\$ 3,052,501
C) Additional Contributions	\$ 343,851	\$ 76,340	\$ 122,090	\$ 28,371	\$ 100,689	\$ 35,457	\$ 90,976	\$ 144,984	\$ 28,240	\$ 1,637,149	\$ 27,833	\$ 12,597	\$ 2,648,577
D) Total	\$ 7,220,866	\$ 1,603,138	\$ 2,563,884	\$ 595,799	\$ 2,114,463	\$ 744,600	\$ 1,910,496	\$ 3,044,668	\$ 593,047	\$ 34,380,127	\$ 584,499	\$ 264,535	\$ 55,620,122
E) Percentage of Payroll	16.5%	32.2%	41.4%	11.8%	23.8%	48.7%	29.3%	16.3%	N/A	17.3%	8.3%	73.8%	18.4%
VII) Expected Retiree Contributions													
	\$ (577,928)	\$ (33,257)	\$ (287,295)	\$ (43,254)	\$ (277,142)	\$ (25,190)	\$ (53,075)	\$ (305,086)	\$ (114,915)	\$ (3,158,921)	\$ (57,959)	\$ (14,078)	\$ (4,948,103)
VIII) Expected Actuarial Liability at Plan Year End													
	\$ 113,003,408	\$ 20,195,199	\$ 35,267,634	\$ 12,401,500	\$ 39,542,749	\$ 10,174,630	\$ 25,827,672	\$ 62,069,767	\$ 9,832,652	\$ 556,890,263	\$ 10,151,217	\$ 3,068,735	\$ 898,425,426
IX) Payroll													
	\$ 43,721,342	\$ 4,985,971	\$ 6,194,667	\$ 5,060,827	\$ 8,891,683	\$ 1,529,847	\$ 6,514,920	\$ 18,675,893	\$ -	\$ 198,761,616	\$ 7,050,378	\$ 358,567	\$ 301,745,711
X) Covered Member Counts													
A) Active Employees	457	68	157	156	399	39	114	690	-	2,722	79	8	4,889
B) Retired and Disabled Participants	838	170	317	74	290	93	174	386	93	4,171	64	19	6,689
C) Total	1,295	238	474	230	689	132	288	1,076	93	6,893	143	27	11,578



Exhibit B

Long-term asset return	7.000%
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	4.890%

Baseline - 60/20/90%

CYE	Assets (boy)	Benefits	Operating Expense	PAYGO Contributions	Pre-Fund Contribution	Income Short-term Cash Flow	Income Long-term Account	Total Income	Assets (eoy)	Accrued Liability (eoy)	Funded Ratio	Normal Cost
2019									\$ 160,573,726	\$ 905,619,495	17.7%	
2020	\$ 160,573,726	\$ 52,971,545	\$ 264,858	\$ 52,971,545	\$ 2,648,577	\$ 364,179	\$ 10,313,159	\$ 10,677,338	173,634,784	898,425,426	19.3%	2,706,984
2021	173,634,784	52,833,057	264,165	52,833,057	2,641,653	363,227	11,229,856	11,593,084	187,605,355	890,793,136	21.1%	2,484,106
2022	187,605,355	54,611,541	273,058	54,611,541	2,730,577	375,454	12,176,673	12,552,127	202,615,002	880,820,980	23.0%	2,342,330
2023	202,615,002	55,569,938	277,850	55,569,938	2,778,497	382,043	13,210,576	13,592,620	218,708,269	869,252,636	25.2%	2,218,327
2024	218,708,269	56,400,967	282,005	56,400,967	2,820,048	387,757	14,322,562	14,710,319	235,956,631	856,143,690	27.6%	2,097,442
2025	235,956,631	57,244,833	286,224	57,244,833	2,862,242	393,558	15,515,180	15,908,738	254,441,386	841,405,362	30.2%	1,976,267
2026	254,441,386	58,234,071	291,170	58,234,071	2,911,704	400,359	16,791,801	17,192,160	274,254,079	824,786,796	33.3%	1,833,323
2027	274,254,079	59,209,856	296,049	59,209,856	2,960,493	407,068	18,161,613	18,568,681	295,487,204	806,206,579	36.7%	1,687,208
2028	295,487,204	60,052,981	300,265	60,052,981	3,002,649	412,864	19,633,177	20,046,041	318,235,629	785,705,903	40.5%	1,542,315
2029	318,235,629	60,378,858	301,894	60,378,858	3,018,943	415,105	21,219,864	21,634,969	342,587,646	763,733,106	44.9%	1,409,632
2030	342,587,646	60,484,861	302,424	60,484,861	3,024,243	415,833	22,922,650	23,338,484	368,647,949	740,432,156	49.8%	1,267,936
2031	368,647,949	60,496,772	302,484	60,496,772	3,024,839	415,915	24,746,663	25,162,578	396,532,882	715,850,684	55.4%	1,142,069
2032	396,532,882	60,881,427	304,407	60,881,427	3,044,071	418,560	26,691,877	27,110,437	426,382,983	689,523,107	61.8%	995,488
2033	426,382,983	60,543,553	302,718	60,543,553	3,027,178	416,237	28,787,297	29,203,534	458,310,976	662,136,048	69.2%	880,173
2034	458,310,976	60,167,969	300,840	60,167,969	3,008,398	413,655	31,028,829	31,442,484	492,461,018	633,685,529	77.7%	773,852
2035	492,461,018	59,521,020	297,605	59,521,020	2,976,051	409,207	33,430,653	33,839,860	528,979,325	604,396,593	87.5%	666,676
2036	528,979,325	58,482,323	292,412	58,482,323	2,924,116	402,066	36,005,112	36,407,178	568,018,207	574,639,715	98.8%	569,520
2037	568,018,207	57,172,618	285,863	57,172,618	2,858,631	393,062	38,760,754	39,153,815	609,744,790	544,673,953	111.9%	476,646



Exhibit C

Long-term asset return	7.000%
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	5.440%
Operating expense rate, percentage of expected benefits	0.500%
Discount rate	4.890%

Alternative C - 55/20/70%

CYE	Assets (bo)	Benefits	Operating Expense	PAYGO Contributions	Pre-Fund Contribution	Income Short-term Cash Flow	Income Long-term Account	Total Income	Assets (eoy)	Accrued Liability (eoy)	Funded Ratio	Normal Cost
2019									\$ 160,573,726	\$ 993,672,470	16.2%	
2020	\$ 160,573,726	\$ 53,129,235	\$ 265,646	\$ 53,129,235	\$ 2,890,230	\$ 365,263	\$ 10,310,399	\$ 10,675,663	173,873,973	994,600,485	17.5%	\$ 6,590,946
2021	173,873,973	53,424,040	267,120	53,424,040	2,906,268	367,290	11,236,257	11,603,548	188,116,669	994,737,124	18.9%	6,068,734
2022	188,116,669	55,799,611	278,998	55,799,611	3,035,499	383,622	12,191,674	12,575,296	203,448,465	992,086,958	20.5%	5,716,711
2023	203,448,465	58,296,940	291,485	58,296,940	3,171,354	400,791	13,221,196	13,621,988	219,950,322	986,390,184	22.3%	5,365,834
2024	219,950,322	60,655,683	303,278	60,655,683	3,299,669	417,008	14,335,048	14,752,056	237,698,768	977,653,240	24.3%	5,028,120
2025	237,698,768	63,081,267	315,406	63,081,267	3,431,621	433,684	15,534,992	15,968,675	256,783,658	965,660,695	26.6%	4,692,056
2026	256,783,658	65,500,159	327,501	65,500,159	3,563,209	450,314	16,828,603	17,278,917	277,298,283	950,241,676	29.2%	4,337,901
2027	277,298,283	67,798,766	338,994	67,798,766	3,688,253	466,117	18,224,401	18,690,518	299,338,060	931,347,462	32.1%	3,979,492
2028	299,338,060	69,579,868	347,899	69,579,868	3,785,145	478,362	19,736,017	20,214,378	322,989,684	909,353,743	35.5%	3,636,334
2029	322,989,684	70,742,990	353,715	70,742,990	3,848,419	486,358	21,371,276	21,857,634	348,342,021	884,763,232	39.4%	3,314,043
2030	348,342,021	71,483,894	357,419	71,483,894	3,888,724	491,452	23,132,973	23,624,425	375,497,750	857,868,123	43.8%	2,978,822
2031	375,497,750	71,808,473	359,042	71,808,473	3,906,381	493,683	25,028,194	25,521,877	404,566,966	829,004,939	48.8%	2,665,898
2032	404,566,966	72,251,977	361,260	72,251,977	3,930,508	496,732	27,055,278	27,552,010	435,688,225	797,937,708	54.6%	2,335,461
2033	435,688,225	71,848,919	359,245	71,848,919	3,908,581	493,961	29,240,820	29,734,781	468,972,342	765,482,092	61.3%	2,060,120
2034	468,972,342	71,314,022	356,570	71,314,022	3,879,483	490,284	31,580,069	32,070,352	504,565,607	731,729,353	69.0%	1,808,340
2035	504,565,607	70,343,652	351,718	70,343,652	3,826,695	483,613	34,088,579	34,572,191	542,612,775	697,062,965	77.8%	1,557,449
2036	542,612,775	68,975,092	344,875	68,975,092	3,752,245	474,204	36,775,830	37,250,034	583,270,178	661,865,561	88.1%	1,325,599
2037	583,270,178	67,265,309	336,327	67,265,309	3,659,233	462,449	39,651,770	40,114,219	626,707,303	626,465,874	100.0%	1,098,857



Exhibit D

	Baseline		Alternative C (55/20/70%) Increase in Contributions	
CYE	PAYGO Contributions	Pre-Fund Contributions	PAYGO Contributions	Pre-Fund Contributions
2020	52,971,545	2,648,577	157,690	241,653
2021	52,833,057	2,641,653	590,983	264,615
2022	54,611,541	2,730,577	1,188,070	304,922
2023	55,569,938	2,778,497	2,727,002	392,857
2024	56,400,967	2,820,048	4,254,716	479,621
2025	57,244,833	2,862,242	5,836,434	569,379
2026	58,234,071	2,911,704	7,266,088	651,505
2027	59,209,856	2,960,493	8,588,910	727,760
2028	60,052,981	3,002,649	9,526,887	782,496
2029	60,378,858	3,018,943	10,364,132	829,476
2030	60,484,861	3,024,243	10,999,033	864,481
2031	60,496,772	3,024,839	11,311,701	881,542
2032	60,881,427	3,044,071	11,370,550	886,436
2033	60,543,553	3,027,178	11,305,366	881,404
2034	60,167,969	3,008,398	11,146,053	871,084
2035	59,521,020	2,976,051	10,822,632	850,644
2036	58,482,323	2,924,116	10,492,769	828,129
2037	57,172,618	2,858,631	10,092,691	800,602

