Montgomery County Public Schools Post-Employment Benefits Other Than Pensions (OPEB) Plan Actuarial Valuation as of July 1, 2022



Table of Contents

Section	Page	_
		Introduction
А		Actuarial Valuation Results
	1-5	Comments on the Actuarial Valuation
	6-8	Risk Measures
	9	Summary of Actuarial Valuation Results
	10	Gain/Loss Analysis
	11	Funded Ratio History
	12	Historical Trends of Funded Ratio and Employer Contributions
	13	Statement of Fiduciary Net Position
	14	Statement of Changes in Fiduciary Net Position
	15	Historical Investment Returns
В		Actuarial Valuation Data
	1-2	Age/Service by Group
	3	Schedule of Retirees
С	1-2	Retiree Per Capita Claims Costs
D		Actuarial Valuation Methods and Assumptions
	1	Actuarial Cost Method
	2	Actuarial Assumptions in the Valuation Process
	3-10	Actuarial Valuation Assumptions
E		Brief Summary of Benefit Provisions
	1-11	Brief Summary of Plan Provisions
F	1	Glossary of Terms





November 10, 2022

Mr. Robert Reilly Associate Superintendent of Finance Office of Finance 45 West Gude Drive Rockville, Maryland 20850

Dear Mr. Reilly:

We are pleased to provide our formal annual Actuarial Valuation Report as of July 1, 2022, for the Montgomery County Public Schools OPEB Plan ("Plan"). The actuarial valuation was performed at the request of Montgomery County Public Schools ("MCPS") and is intended for use by MCPS and the Plan and those designated by MCPS and the Plan. This report may be provided to parties other than MCPS and the Plan only in its entirety and only with the permission of MCPS and the Plan. GRS is not responsible for unauthorized use of this report.

The purposes of the July 1, 2022 actuarial valuation are to measure the funding progress of the Plan and to determine the recommended annual contribution to the Plan for the Plan Year commencing July 1, 2023, and ending on June 30, 2024. Information required by GASB Statement Nos. 74 and 75 is provided in a separate report. This report should not be relied on for any purpose other than the purposes described herein. Determinations of financial results, associated with the benefits described in this report, for purposes other than those identified above may be significantly different.

The annual contribution requirement in this report is determined using the actuarial assumptions and methods disclosed in Section D of this report. This report includes risk metrics beginning on page A-6 but does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment.

This actuarial valuation assumed the continuing ability of the plan sponsor to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our scope of expertise and was not performed.

The actuarial valuation was based upon information furnished by the MCPS staff, concerning benefits provided by the Montgomery County Public Schools OPEB Plan, financial transactions, plan provisions and census data for active members, retirees and beneficiaries as of July 1, 2022. 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 the MCPS staff.

Mr. Robert Reilly Montgomery County Public Schools November 10, 2022 Page 2

This report was prepared using actuarial assumptions adopted by the MCPS Staff. All actuarial assumptions used in this report are reasonable for the purposes of this actuarial valuation. Additional information about the actuarial assumptions is included in Section D of this report. Most of the actuarial assumptions used in this actuarial valuation are based on an experience review covering the period July 1, 2014 to July 1, 2018 and input from MCPS staff and were first adopted for use beginning with the actuarial valuation as of July 1, 2019. The pension-related assumptions are the same as those used by the Retirement and Pension System. The following OPEB-specific assumptions have changed since the last actuarial valuation, performed as of July 1, 2021:

- Medical trend rates have been refreshed to assume trend in 2023 is 4.00 percent and trend in 2024 is 8.00 percent, with rates grading down each year by 0.25 percent to an ultimate trend rate of 4.25 percent.
- Pre-Medicare Prescription Drug (Rx) trend rates have been refreshed to assume trend in 2023 is 6.00 percent and trend in 2024 is 8.50 percent, with rates grading down each year by 0.25 percent to an ultimate trend rate of 4.25 percent.
- Post-Medicare Prescription Drug (Rx) trend rates have been refreshed to assume trend in 2023 is 7.00 percent and trend in 2024 is 9.00 percent, with rates grading down each year by 0.25 percent to an ultimate trend rate of 4.25 percent.
- Age-adjusted claims costs have been updated based on claims and enrollment through June 2022 and are net of Part D subsidies and prescription benefit rebates.

All other actuarial assumptions are the same as those used in the last actuarial valuation, performed as of July 1, 2021. The assets of the OPEB Plan are invested in the Montgomery County Consolidated Retiree Health Benefits Trust (CRHBT). Therefore, to maintain consistency in the assumptions used across the entities participating in the CRHBT, we are using an investment return assumption of 7.50 percent, a payroll growth assumption of 3.00 percent to amortize the unfunded actuarial accrued liability and the Projected Unit Credit actuarial cost method. We do, however, recommend that the actuarial cost method be changed to the Entry Age Normal actuarial cost method for funding purposes. This is the cost method required for accounting purposes and used in the GASB Statement Nos. 74 and 75 actuarial valuation. In addition, we recommend that the amortization period be changed from a 30-year open period to a 30-year closed period and the current investment return assumption of 7.50 percent.

MCPS and Montgomery County have contributed a combined amount during each fiscal year 2017 through 2022 that was less than the Actuarially Determined Contribution calculated in the applicable actuarial valuation report.

All plan provisions have remained unchanged since the last actuarial valuation, performed as of July 1, 2021.

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, and has no material limitations or known weaknesses. We performed tests to ensure that the



Mr. Robert Reilly Montgomery County Public Schools November 10, 2022 Page 3

model reasonably represents that which is intended to be modeled. We are relying on the GRS actuaries and Internal Software, Training and Processes Teams who developed and maintain the model.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge, the information contained in this report is accurate and fairly presents the actuarial position of the Montgomery County Public Schools OPEB Plan as of the actuarial valuation date. 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.

This report reflects the impact of COVID-19 through June 30, 2022. However, this report does not reflect the longer term and still developing future impact of COVID-19, which is likely to further influence demographic experience and economic expectations. We will continue to monitor these developments and their impact on the Plan and the actuarial assumptions. Actual experience will be reflected in each subsequent annual valuation, as experience emerges.

Amy Williams, Lance J. Weiss, and Cassie Rapoport are Members of the American Academy of Actuaries (MAAA) 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.

Gabriel, Roeder, Smith & Company will be pleased to review this actuarial valuation and Report with the MCPS staff and to answer any questions pertaining to the actuarial valuation.

Respectfully submitted,

Gabriel, Roeder, Smith & Company

my Williams

Amy Williams, ASA, MAAA, FCA Senior Consultant

Cassie Rapoport, ASA, MAAA Senior Analyst

Lanerg. when

Lance J. Weiss, EA, MAAA, FCA Senior Consultant and Team Leader



SECTION A

ACTUARIAL VALUATION RESULTS

At your request, we have performed an actuarial valuation of the Montgomery County Public Schools OPEB Plan as of July 1, 2022.

The purposes of this actuarial valuation are as follows:

- To determine the funding status of the Plan as of the actuarial valuation date;
- To determine the recommended contribution for the fiscal year beginning July 1, 2023; and
- To provide other data required by the Plan.

Accounting information required under Governmental Accounting Standards Board ("GASB") Statement Nos. 74 and 75 is presented in a separate report.

We received the data from the Montgomery County Public Schools Staff. We performed certain checks for reasonableness and found the data to be complete and reliable for actuarial valuation purposes. However, we did not audit the data.

A total of 24,317 active members were included in the actuarial valuation as of July 1, 2022. These are active members in the Employees' Retirement and Pension Systems who are eligible for future retiree healthcare benefits. The number of retirees and surviving spouses with medical coverage increased from 10,503 to 10,630, or 1.2 percent, since the last actuarial valuation. There are 13,294 retirees who have medical, prescription, dental, vision or life insurance coverage. Section B summarizes the membership data.

Section C summarizes the age-adjusted claims costs and Section D outlines the actuarial assumptions and methods used in the actuarial valuation.

The actuarial assumptions used in this actuarial valuation are based on an experience review covering the period July 1, 2014 to July 1, 2018 and were first adopted for use beginning with the actuarial valuation as of July 1, 2019.

The following OPEB-specific assumptions have changed since the last actuarial valuation, performed as of July 1, 2021, as approved by MCPS staff:

- Medical trend rates have been refreshed to assume trend in 2023 is 4.00 percent and trend in 2024 is 8.00 percent, with rates grading down each year by 0.25 percent to an ultimate trend rate of 4.25 percent.
- Pre-Medicare Prescription Drug (Rx) trend rates have been refreshed to assume trend in 2023 is 6.00 percent and trend in 2024 is 8.50 percent, with rates grading down each year by 0.25 percent to an ultimate trend rate of 4.25 percent.
- Post-Medicare Prescription Drug (Rx) trend rates have been refreshed to assume trend in 2023 is 7.00 percent and trend in 2024 is 9.00 percent, with rates grading down each year by 0.25 percent to an ultimate trend rate of 4.25 percent.
- Age-adjusted claims costs have been updated based on claims and enrollment through June 2022 and are net of Part D subsidies and prescription benefit rebates.



Comments on the Actuarial Valuation

All other actuarial assumptions are the same as those used in the last actuarial valuation, performed as of July 1, 2021. The assets of the OPEB Plan are invested in the Montgomery County Consolidated Retiree Health Benefits Trust (CRHBT). Therefore, to maintain consistency in the assumptions used across the entities participating in the CRHBT, we are using including an investment return assumption of 7.50 percent, a payroll growth assumption of 3.00 percent to amortize the unfunded actuarial accrued liability and the Projected Unit Credit actuarial cost method. We do, however, recommend that the actuarial cost method be changed to the Entry Age Normal actuarial cost method for funding purposes. This is the cost method required for accounting purposes and used in the GASB Statement Nos. 74 and 75 actuarial valuation. In addition, we recommend that the amortization period be changed from a 30-year open period to a 30-year closed period and the current investment return assumption of 7.50 percent be reduced.

The assumption for administrative expenses is equal to 105 percent of the average of the prior three years' administrative expenses. This amount is \$265,300, which is an increase from the prior year assumption.

Section E outlines the principal benefit provisions of the Plan. The plan provisions have remained unchanged since the last actuarial valuation, performed as of July 1, 2021.

During the plan year ending June 30, 2022, the unfunded actuarial accrued liability ("UAAL") increased from \$1,041,299,634 as of July 1, 2021, to \$1,114,981,981 as of July 1, 2022, which is an increase of \$73,682,347. The key factors contributing to the increase in the UAAL were 1) contributions that were lower than the increase in the actuarial accrued liability (normal cost plus interest on the unfunded liability), and 2) asset losses based on an investment return on the market value of assets of approximately -9.28 percent (net of investment expenses, as estimated by GRS) compared to the assumption of 7.50 percent. There was approximately a \$46.5 million shortfall in contributions during fiscal year 2022 (based on an actual additional contributions in excess of benefit payments of \$73.0 million to be contributed to the Trust under the normal cost plus 30-year open period amortization funding policy (as calculated in the July 1, 2020 actuarial valuation).

The funded ratio (ratio of assets to liabilities) decreased from 42.5 percent to 39.3 percent between the 2021 and 2022 actuarial valuations.

The funded ratio and unfunded actuarial accrued liability are appropriate for assessing the need for and the amount of future unfunded liability contributions (excludes normal cost contributions). They are not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the Plan's benefit obligations.



Historical and Projected Benefits

	Total Benefits Net of Part D Subsidies, Retiree Caremark					
	Rebates and	Retiree	Davit D	Total Benefits	Dating a Daid	
	Retiree Paid	Caremark	Part D	Net of Retiree	Retiree Paid	Total Danafita
Fiscal Year	Premiums \$ 46,566,511	Rebates	Subsidies	Paid Premiums		Total Benefits
2017	. , ,	. , ,	. , ,	. , ,	\$ 37,315,988	\$ 107,748,325
2018	44,789,327	6,776,487	21,197,806	72,763,620	39,875,875	112,639,495
2019	53,987,678	7,328,608	22,561,041	83,877,327	38,743,969	122,621,296
2020	52,086,550	7,523,100	26,546,554	86,156,204	42,290,716	128,446,920
2021	50,511,254	5,355,347	31,293,901	87,160,502	41,581,285	128,741,787
2022	53,413,665	14,349,599	34,112,264	101,875,528	40,761,969	142,637,497
2023	72,953,610				40,217,685	
2024	80,415,128				44,579,945	
2025	89,545,917				49,887,727	
2026	99,314,434				55,514,500	
2027	109,334,833				61,518,689	

Following are the historical and projected benefits payable from the Plan.

Note: Actual amounts are shown for fiscal years 2017 through 2022 and projected amounts are shown in italics for fiscal years 2023 through 2027. Projected amounts for fiscal years 2023 through 2027 are based on the actuarial valuation as of July 1, 2022. Retiree Caremark rebates are included in the employer contribution amounts on page A-14. Projected retiree Caremark rebates and Part D subsidies are not shown as these are not figures that GRS explicitly projects.

Recommended Contributions

The recommended contribution is equal to the normal cost plus amortization of the unfunded liability as a level percentage of payroll. The unfunded actuarial accrued liability is amortized using level-percentage of pay amortization based on a 30-year open amortization period, an investment return assumption of 7.50 percent and a payroll growth assumption of 3.00 percent. Based on a 30-year open amortization period, the unfunded liability is not expected to be fully paid off even if all assumptions are realized.

We recommend that the amortization period be changed from a 30-year open period to a 30-year closed period.

Following is a history of the additional contributions that have been made to the Trust (contributions that have been made in excess of current year retiree benefit payments and expenses).

Year Ending June 30	2017	2018	2019	2020	2021	2022		
Total Contributions	\$152,375,250	\$151,653,985	\$123,972,054	\$184,039,019	\$179,469,583	\$169,530,203		
Total Deductions ¹	108,041,057	112,846,703	122,815,998	128,634,824	128,940,035	143,009,442		
Additional Contribution	44,334,193	38,807,282	1,156,056	55,404,195	50,529,548	26,520,761		
(in Excess of Current Year Benefit Payments) ¹ Includes Benefit Payments and Premiums to Insurance Companies, and OPEB Plan Administrative Expenses.								



Following is a comparison of the actual and the expected additional contributions (in excess of current year retiree benefit payments and expenses). MCPS and Montgomery County have contributed a combined amount during each fiscal year 2017 through 2022 that was less than the Actuarially Determined Contribution calculated in the applicable actuarial valuation report.

					Actual							
			_						_	ontribution		
	Actuarially		C	ontribution					le	ss Benefits &		Expected
	Determined	Actual	I	Deficiency	Ν	let Benefits	Ad	dministrative	Ac	dministrative		Additional
Fiscal Year	Contribution	Contribution		(Excess)		Paid		Expenses		Expenses	С	ontribution
2017	\$ 136,339,000	\$ 115,059,262	\$	21,279,738	\$	70,432,337	\$	292,732	\$	44,334,193	\$	65,040,000
2018	168,287,000	111,778,110		56,508,890		72,763,620		207,208		38,807,282		100,547,000
2019	159,436,890	85,228,085		74,208,805		83,877,327		194,702		1,156,056		91,357,594
2020	154,363,013	141,748,303		12,614,710		86,156,204		187,904		55,404,195		79,182,859
2021	142,970,371	137,888,298		5,082,073		87,160,502		198,248		50,529,548		69,115,779
2022	149,523,526	128,768,234		20,755,292		101,875,528		371,945		26,520,761		73,048,269

Note: Actuarially determined contribution was calculated and provided in the actuarial valuation report from the prior actuary for fiscal year 2017 and from GRS beginning in fiscal year 2018 and is equal to normal cost plus 30-year open levelpercentage-of-payroll amortization of the unfunded liability. Actual contribution equals the sum of the employer contribution and the Medicare Part D subsidy from the federal government. Net benefits paid equals benefit payments and payments to insurance companies minus member (retiree) paid premiums. Net benefits do not exclude retiree Caremark rebates. Expected additional contribution equals the actuarially determined contribution minus the expected benefit payments and expenses as determined in the applicable actuarial valuation.

The calculated ADC for fiscal years 2023 and 2024 and projected benefits and expenses are shown below. In order to satisfy the Actuarially Determined Contribution calculated under the funding policy, the combined employer contribution between MCPS and Montgomery County in excess of the current year retiree benefit payments would need to be at least \$57.4 million for fiscal year 2023 (as shown on page A-9) and \$62.3 million for fiscal year 2024. (\$64.0 million is the revised additional contribution for fiscal year 2023 based on experience through fiscal year 2022.)

	Net of Part D Subsidies, Retiree Caremark Rebates and Retiree Paid Premiums							
Fiscal Year	Actuarially Determined Contribution a	Total Benefits b	Administrative Expenses c	Additional Contribution in Excess of Pay-go d=a-b-c				
2023 2024	\$137,217,743 142,931,900	\$72,953,610 80,415,128	. ,	\$64,060,833 62,251,472				

Note: Expected benefit payment amounts shown for fiscal year 2023 are based on the actuarial valuation as of July 1, 2022, and differ from the amount shown on page A-9 (which is based on the actuarial valuation as of July 1, 2021).



General Implications of Contribution Allocation Procedure or Funding Policy on Future Expected Plan Contributions and Funded Status

Given the Plan's contribution allocation procedure, if all actuarial assumptions are met (including the assumption of the Plan earning 7.50 percent), it is expected that:

- The normal cost as a percentage of pay will decrease to the level of the normal cost for members hired on or after July 1, 2011 (Reformed plan members) as time passes and the majority of the active population is comprised of these members. The unfunded liability contribution will decrease as a level percentage of pay as the funded status improves and the unfunded liability is re-amortized over a 30-year period;
- 2) The unfunded liability will never be fully amortized; and
- 3) The funded status of the plan will increase gradually towards a 100 percent funded ratio (but will not reach 100 percent using an open-amortization period).

Limitations of Funded Status Measurements

Unless otherwise indicated, a funded status measurement presented in this report is based upon the actuarial accrued liability and the market value of assets. Unless otherwise indicated, with regard to any funded status measurements presented in this report:

- The funded ratio and unfunded actuarial accrued liability are useful for assessing the need for and the amount of future unfunded liability contributions (excludes normal cost contributions). They are not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the Plan's benefit obligations, for example: transferring the liability to an unrelated third party in a free market type transaction.
- 2) The measurement is dependent upon the actuarial cost method which, in combination with the Plan's amortization policy, affects the timing and amounts of future contributions. The amounts of future contributions will most certainly differ from those assumed in this report due to future actual experience differing from assumed experience based upon the actuarial assumptions. A funded status measurement in this report of 100 percent is not synonymous with no required future contributions. If the funded status were 100 percent, the Plan would still require future normal cost contributions (i.e., contributions to cover the cost of the active membership accruing an additional year of service credit).



Risks Associated with the Measuring the Accrued Liability and Recommended Annual Contribution

The determination of the accrued liability and the actuarially determined contribution requires the use of assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the actuarial assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that result from the differences between actual experience and the actuarial assumptions.

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 due to changing conditions; 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 scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

- 1. Investment Risk actual investment returns may differ from the expected returns;
- 2. Asset/Liability Mismatch changes in asset values may not match changes in liabilities, thereby altering the gap between the accrued liability and assets and consequently altering the funded status and contribution requirements;
- Contribution Risk actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll or other relevant contribution base;
- 4. Salary and Payroll Risk actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
- 5. **Longevity Risk** members may live longer or shorter than expected and receive pensions for a period of time other than assumed;
- 6. **Healthcare Risk** actual medical trend differing from expected, changes in the healthcare plan designs offered to active and retired members; and participant behavior differing from expected (e.g., elections at retirement, one-person versus two-person coverage elections, etc.); and
- 7. **Other Demographic Risks** members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

The effects of certain trends in experience can generally be anticipated. For example, if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the cost of the plan can be expected to increase (or decrease). Likewise, if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.



The Board contribution rate shown on page A-9 may be considered as a minimum contribution rate that complies with the Board's funding policy. The timely receipt of the actuarially determined contributions is critical to support the financial health of the plan. Users of this report should be aware that contributions made at the actuarially determined rate do not necessarily guarantee benefit security.

PLAN MATURITY MEASURES

Risks facing a pension plan evolve over time. A young plan with virtually no investments and paying few benefits may experience little investment risk. An older plan with a large number of members in pay status and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures include the following:

	2018	2019	2020	2021	2022
Ratio of the market value of assets to total payroll	0.29	0.31	0.34	0.45	0.41
Ratio of actuarial accrued liability to payroll	1.14	1.06	1.08	1.06	1.05
Ratio of actives to retirees and beneficiaries	2.39	2.34	2.36	2.31	2.29
Ratio of net cash flow to market value of assets	8.52%	0.24%	9.74%	6.57%	3.67%

RATIO OF MARKET VALUE OF ASSETS TO PAYROLL

The relationship between assets and payroll is a useful indicator of the potential volatility of contributions. For example, if the market value of assets is 1.0 times the payroll, a return on assets 5% different than assumed would equal 5% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in plan sponsor contributions as a percentage of payroll.

RATIO OF ACTUARIAL ACCRUED LIABILITY TO PAYROLL

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of contributions for a fully funded plan. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time.

The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 1.5 times the payroll, a change in liability 2% other than assumed would equal 3% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also plan sponsor contributions) as a percentage of payroll.

RATIO OF ACTIVES TO RETIREES AND BENEFICIARIES

A young plan with many active members and few retirees will have a high ratio of actives to retirees. A mature open plan may have close to the same number of actives to retirees resulting in a ratio near 1.0. A super-mature or closed plan may have significantly more retirees than actives resulting in a ratio below 1.0.

RATIO OF NET CASH FLOW TO MARKET VALUE OF ASSETS

A positive net cash flow means contributions exceed benefits and expenses. A negative cash flow means existing funds are being used to make payments. A certain amount of negative net cash flow is generally expected to occur when benefits are prefunded through a qualified trust. Large negative net cash flows as a percent of assets may indicate a super-mature plan or a need for additional contributions.



ADDITIONAL RISK ASSESSMENT

Additional risk assessment is outside the scope of the annual actuarial valuation. Additional assessment may include scenario tests, sensitivity tests, stochastic modeling, stress tests, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability.



Summary of Actuarial Valuation Results

	July 1, 2021 Results	July 1, 2022 Results
Membership Data		
Active Members	24,223	24,317
Retirees and Beneficiaries	 10,503	 10,630
TOTAL	34,726	34,947
Plan Liabilities		
Actuarial Accrued Liability:		
Active Members	\$ 914,089,006	\$ 927,206,441
Retirees and Beneficiaries	 896,170,564	 910,656,549
TOTAL	\$ 1,810,259,570	\$ 1,837,862,990
Market Value of Assets at Valuation Date	\$ 768,959,936	\$ 722,881,009
Unfunded (Overfunded) Actuarial		
Accrued Liability	\$ 1,041,299,634	\$ 1,114,981,981
Funded Position of Plan's Actuarial Accrued Liability ¹	42.5 %	39.3 %
Recommended		
Annual Contribution	Fiscal Year	Fiscal Year
Requirements	2023	2024
Annual Normal Cost	\$ 69,610,652	\$ 70,635,210
Normal Cost Expense Load	203,300	265,300
Amortization Payment	60,309,858	64,577,383

Normal Cost Expense Load	203,300	265,300	
Amortization Payment	60,309,858	64,577,383	
Interest to Beginning of Fiscal Year	 7,093,933	 7,454,007	
Total Annual Required Contribution	137,217,743	142,931,900	
Expected Benefit Payments (Pay-go) Plus Expenses	 79,793,066	 80,680,428	
Additional Contribution	\$ 57,424,677	\$ 62,251,472	
Contribution Basis Payroll:			
For Normal Cost	\$ 1,791,066,271	\$ 1,828,506,771	
For Amortization of Unfunded Liability	\$ 1,712,963,560	\$ 1,748,733,399	
Contribution % of Payroll			
Employer Normal Cost	3.90%	3.88%	
Amortization of Unfunded Liability	 3.52%	 3.69%	
Total	 7.42%	 7.57%	

¹ Equals the ratio of the market value of assets to the total actuarial accrued liability.

Expected benefit payment amounts shown for fiscal year 2023 are based on the actuarial valuation as of July 1, 2021, and differ from the amounts shown on pages A-3 and A-4 (which are based on the actuarial valuation as of July 1, 2022). Actuarial liabilities, normal cost and expected benefits are net of Part D subsidies, prescription benefit rebates and the share of the premiums paid by the retirees.



Actuarial Valuation Results Gain/Loss Analysis

Unfunded liability at previous valuation date of July 1, 2021	\$1,041,299,634
Expected unfunded liability at current valuation	
Normal cost for plan year	69,813,952
Interest on unfunded liability and normal cost	80,668,167
Employer contributions net of Rx rebates with interest to current valuation date	(83,263,418)
Total expected change in unfunded liability at current valuation	67,218,701
Total expected unfunded liability at current valuation	\$1,108,518,335
Change due to:	
Difference between expected and actual benefit payments (net of subsidies and	
retiree paid premiums)	0
Recognition of asset (gains)/losses	131,248,232
Healthcare related experience ¹	(105,941,427)
Changes in assumptions ²	28,205,727
Demographic experience ³	(47,048,886)
Total change	6,463,646
Unfunded liability at current valuation date of July 1, 2022	\$1,114,981,981

	County	
	Contribution	Funded Status
FY 2023 County Contribution/July 1, 2021 Funded Ratio	7.42%	42.5%
Expected FY 2024 County Contribution/July 1, 2022 Funded Ratio	7.54%	44.0%
Change due to: Difference between expected and actual benefit payments (net of subsidies and	0.00%	0.5%
retiree paid premiums)	0.00%	-0.5%
Recognition of asset (gains)/losses	0.43%	-7.2%
Healthcare related experience	-0.54%	2.6%
Changes in assumptions ¹	0.21%	-0.7%
Demographic experience ²	-0.07%	1.1%
Total change	0.03%	-4.7%
FY 2024 County Contribution/July 1, 2022 Funded Ratio	7.57%	39.3%

¹*Healthcare related experience included:*

• Changes in per capita costs and retiree premium shares.

²Changes in assumptions included:

• Medical and Prescription Drug (Rx) trend rates were reset

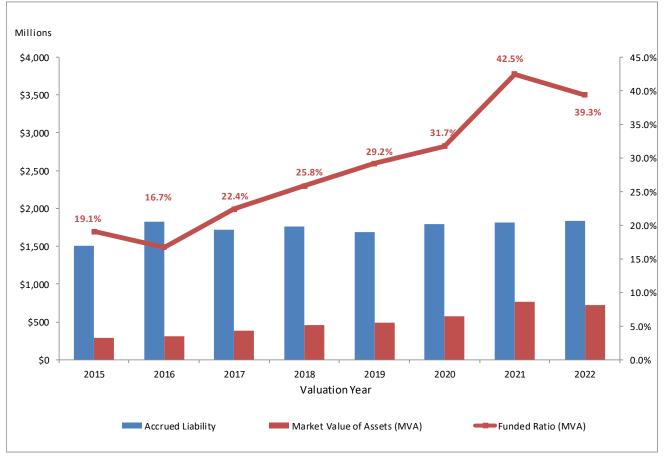
³Demographic experience includes deviations in actual experience compared to the actuarial assumptions including:

- Mortality
- Retirement
- Termination
- Disability
- Healthcare plan election assumptions
- For fiscal year 2022:
 - 80% of eligible retirees are assumed to elect healthcare coverage at retirement
 - 70% of pre-65 and post-65 males electing two-person coverage at retirement
 - 60% of pre-65 females and 50% of post-65 females electing two-person coverage at retirement



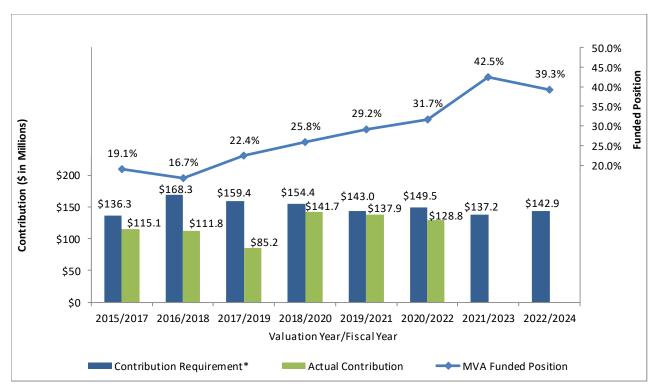
_





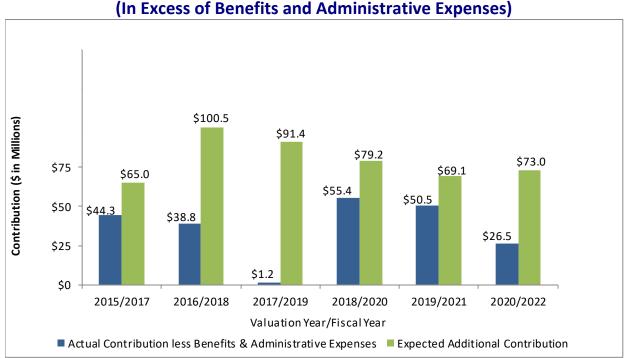
Actua Valua Dat	tion	Narket Value of Assets (a)	Actuarial Accrued Liability (b)	Unfunded AAL (UAAL) (b – a)	Funded Ratio (MVA) (a / b)
7/1/2	015	\$ 286,214,000	\$1,501,413,000	\$1,215,199,000	19.1 %
7/1/2	016	304,788,000	1,821,277,000	1,516,489,000	16.7
7/1/2	017	385,355,507	1,722,199,977	1,336,844,470	22.4
7/1/2	018	455,655,062	1,764,346,369	1,308,691,307	25.8
7/1/2	019	491,656,788	1,686,133,505	1,194,476,717	29.2
7/1/2	020	568,957,591	1,793,667,955	1,224,710,364	31.7
7/1/2	021	768,959,936	1,810,259,570	1,041,299,634	42.5
7/1/2	022	722,881,009	1,837,862,990	1,114,981,981	39.3





Contribution Requirement and Funded Ratio History

* Contribution requirements are net of member (retiree) paid premiums, Part D subsidies and prescription benefit rebates.



Additional Employer Contributions (In Excess of Benefits and Administrative Expenses)



Statement of Fiduciary Net Position

Assets	June 30, 2021	June 30, 2022
Cash and Deposits	\$-	\$-
Receivables		
Accounts Receivable	2,334,896	1,793,079
Due from Internal Service Fund	42,844,802	26,580,289
Due from General Fund	2,250,661	0
Total Receivables	\$ 47,430,359	\$ 28,373,368
Investments, at fair value		
Short-term investments/CRHBT	\$ 729,670,417	\$ 702,881,321
Total Investments	\$ 729,670,417	\$ 702,881,321
Total Assets	\$ 777,100,776	\$ 731,254,689
Liabilities		
Payables		
Accounts payable	\$ 96,560	\$ 60,017
Claims payable	8,044,280	7,159,121
Due to general fund		1,154,542
Total Liabilities	\$ 8,140,840	\$ 8,373,680
Net position restricted for OPEB	\$ 768,959,936	\$ 722,881,009



Statement of Changes in Fiduciary Net Position

	June 30, 2021	June 30, 2022
Additions:		
Contributions		
Employer	\$ 106,594,397	\$ 94,655,970
Federal government - Medicare Part D	31,293,901	34,112,264
Members	41,581,285	40,761,969
Other	0	0
Total Contributions	\$ 179,469,583	\$ 169,530,203
Investment Income		
Net Appreciation in Fair Value of Investments	\$0	\$0
Interest and Dividends	149,472,797	(72,599,688)
Less Investment Expense	0	0
Net Investment Income	\$ 149,472,797	\$ (72,599,688)
Other	\$ 0	\$ 0
Total Additions	\$ 328,942,380	\$ 96,930,515
Deductions		
Benefit Payments and Premiums to Insurance Companies	\$ 128,741,787	\$ 142,637,497
OPEB Plan Administrative Expense	198,248	371,945
Other	0	0
Total Deductions	\$ 128,940,035	\$ 143,009,442
Net Increase in Net Position	\$ 200,002,345	\$ (46,078,927)
Net Position Restricted for OPEB		
Beginning of Year	\$ 568,957,591	\$ 768,959,936
End of Year	\$ 768,959,936	\$ 722,881,009



Estimated Market Value Rate of Return on Total Plan Assets

FY Ending	Annual
June 30,	Return
2017	11.08 %
2018	7.78 %
2019	7.64 %
2020	4.22 %
2021	25.15 %
2022	(9.28)%



SECTION B

ACTUARIAL VALUATION DATA

									40 and		١	/aluation
Current Age	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	Over	Totals		Payroll
Under 25										0	\$	-
25-29										0		-
30-34										0		-
35-39										0		-
40-44										0		-
45-49										0		-
50-54										0		-
55-59										0		-
60-64										0		-
65-69						1	1	4	2	8		993,931
70-74								1		1		98,595
75 and Over								5		5		592,809
Total	-	-	-	-	-	1	1	10	2	14	\$	1,685,335

Employees' Retirement System – Teachers

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

Current Valuation		Previous Valuation	
Total Participants:	14	Total Participants:	18
Average Age:	71.8	Average Age:	70.7
Average Service:	36.5	Average Service:	35.5
Average Annual Pay:	\$ 120,381	Average Annual Pay:	\$ 116,249

Employees' Retirement System – Non-Teachers

									40 and		v	aluation
Current Age	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	Over	Totals		Payroll
Under 25										0	\$	-
25-29										0		-
30-34										0		-
35-39										0		-
40-44										0		-
45-49										0		-
50-54										0		-
55-59										0		-
60-64								4		4		262,518
65-69								4	1	5		279,653
70-74									1	1		88,322
75 and Over								1		1		94,211
Total	-	-	-	-	-	-	_	9	2	11	\$	724,704

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

Current Valuation		Previous Valuation	
Total Participants:	11	Total Participants:	13
Average Age:	66.6	Average Age:	65.4
Average Service:	38.2	Average Service:	37.8
Average Annual Pay:	\$ 65,882	Average Annual Pay: \$ 6	5,010



Age/Service by Group as of July 1, 2022

									40 and			Valuation
Current Age	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	Over	Totals		Payroll
Under 25	506	3								509	\$	23,124,303
25-29	1,222	553	4							1,779		96,988,089
30-34	734	1,162	425	2						2,323		155,910,411
35-39	547	632	741	483						2,403		189,213,730
40-44	520	491	378	860	382	1				2,632		233,582,543
45-49	464	414	252	508	736	169	1			2,544		232,873,948
50-54	428	424	298	401	592	476	79			2,698		242,436,005
55-59	250	307	284	363	393	221	166	41	1	2,026		168,696,073
60-64	144	169	168	293	279	142	90	61	19	1,365		101,825,112
65-69	48	70	67	104	82	69	35	23	11	509		33,693,183
70-74	12	17	25	30	22	25	14	11	8	164		9,832,487
75 and Over	8	5	5	15	8	2	5		4	52		2,398,172
Total	4,883	4,247	2,647	3,059	2,494	1,105	390	136	43	19,004	\$:	1,490,574,056

Employees' Pension System – Teachers

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

Current Valuation		Previous Valuation	
Total Participants:	19,004	Total Participants:	18,958
Average Age:	44.9	Average Age:	44.7
Average Service:	12.0	Average Service:	11.9
Average Annual Pay:	\$ 78,435	Average Annual Pay:	\$ 77,054

Employees' Pension System – Non-Teachers

									40 and		Valuation
Current Age	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	Over	Totals	Payroll
Under 25	80	1								81	\$ 2,566,570
25-29	131	49	2							182	6,866,746
30-34	152	115	24	7						298	12,659,348
35-39	177	125	64	55	6					427	20,087,527
40-44	203	146	70	81	40	1				541	26,883,466
45-49	203	146	81	84	58	37				609	29,468,936
50-54	192	149	131	168	123	42	24	2		831	41,636,571
55-59	178	181	129	222	133	85	47	17	1	993	49,846,322
60-64	104	127	96	178	147	73	34	24	13	796	40,339,634
65-69	47	58	59	85	78	23	16	4	14	384	19,034,531
70-74	6	12	21	24	20	9	8	4	1	105	4,592,521
75 and Over		3	6	11	7	9	2	1	2	41	1,767,132
Total	1,473	1,112	683	915	612	279	131	52	31	5,288	\$ 255,749,304

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

Current Valuation		Previous Valuation	
Total Participants:	5,288	Total Participants:	5,234
Average Age:	51.4	Average Age:	51.4
Average Service:	11.9	Average Service:	12.4
Average Annual Pay:	\$ 48,364	Average Annual Pay: \$	47,619



Retiree Summary as of July 1, 2022

Retiree Summary by Plan and Tier										
Medical Plan	1 Person	2 Person	Family	Total	Pre-Medicare	Post-Medicare				
CareFirst BlueChoice HMO	1,702	1,780	108	3,590	735	2,855				
CareFirst BlueChoice Adv (POS/PPO)	185	138	91	414	414	-				
CareFirst BC Adv Indemnity/Medicare Supp	3,317	1,935	34	5,286	126	5,160				
Kaiser Permanente HMO	690	616	34	1,340	186	1,154				
Total	5,894	4,469	267	10,630	1,461	9,169				
Prescription Drug Plan	1 Person	2 Person	Family	Total	Pre-Medicare	Post-Medicare				
Caremark/SilverScript Option A	1,782	808	43	2,633	206	2,427				
Caremark/SilverScript Option B	3,229	2,944	190	6,363	1,047	5,316				
Kaiser Permanente Prescription	688	616	34	1,338	185	1,153				
Total	5,699	4,368	267	10,334	1,438	8,896				
Dental Plan	1 Person	2 Person	Family	Total						
Aetna Dental DMO	341	189	22	552						
CareFirst Dental PPO	5,747	4,813	322	10,882						
Total	6,088	5,002	344	11,434						
Vision Plan	1 Person	2 Person	Family	Total						

4,523

10,477

203

There are 11,696 retirees who are covered under at least one of the insurance plans listed above. There are an additional 1,598 retirees who have life insurance only.

5,751



Davis Vision

SECTION C

RETIREE PER CAPITA CLAIMS COSTS

Retiree Per Capita Claims Costs

The MCPS offers benefits on a fully-insured basis and on a self-insured basis. The Kaiser Permanente fully-insured and CareFirst BlueChoice self-insured per capita claims costs are developed separately. The Kaiser Permanente fully-insured and CareFirst BlueChoice self-insured age-adjusted per capita claims costs are used for current retirees based on the healthcare plan they are currently in. For future retirees, the age-adjusted per capita claims costs are blended together at the end to create a single set of costs for use in the actuarial valuation.

Initial self-insured per capita claims costs were developed separately for each class (Medicare (post-65) and Non-Medicare (pre-65) retirees). The costs were calculated by using paid claims and exposure data for the three-year period ending June 30, 2022, adjusted for catastrophic claims, plus the load for administration, network access fee and stop loss premiums. We reviewed claim and exposure data for the three-year period ending June 30, 2022, and developed average costs separately for non-Medicare medical, non-Medicare prescription, Medicare medical and Medicare prescription coverage.

Age graded and sex distinct per capita claims costs are utilized by this actuarial valuation. The per capita claims costs developed by the preceding process are appropriate for the unique age and sex distribution currently existing. Over the future years covered by this actuarial valuation, the age and sex distribution will most likely change. Therefore, our process "distributes" the average costs over all age/sex combinations and assigns a unique per capita claims cost for each combination. The age/sex specific per capita claims costs more accurately reflect the healthcare utilization and cost at that age.



	Medical					RX	
				e Choice		Caram	
			HMO, Advantage				ark CVS
	Kaiser Pe	rmanente	and Ind	lemnity	Kaiser Permaner	te Optio	on A/B
Age	Male	Female	Male	Female	Male Fema	le Male	Female
40	\$ 4,554	\$ 7,584	\$ 3,888	\$ 6,475	(included in Med	cal) \$ 2,319	\$ 3,862
45	5,661	7,880	4,833	6,728		2,883	4,013
50	7,289	9,013	6,224	7,695		3,712	4,590
55	9,622	10,581	8,215	9,034		4,900	5,388
60	12,470	12,279	10,647	10,483		6,350	6,253
64	15,164	14,311	12,947	12,218		7,722	7,287
65	3,706	3,496	2,325	2,193		2,141	2,019
70	4,037	3,907	2,532	2,451		2,332	2,256
75	4,336	4,231	2,720	2,654		2,504	2,444
80	4,552	4,473	2,855	2,805		2,629	2,583

The annual one-person medical and drug age adjusted claims costs at select ages are shown below.

Effective January 1, 2015, MCPS Medicare Retirees not participating in the Kaiser Permanente HMO receive prescription benefit coverage through an Employer Group Waiver Plan (EGWP). The employer's per capita costs for prescription coverage of Medicare eligible members is based on gross average costs less Medicare Part D revenues less prescription benefit rebates using experience over the three-year period ending June 30, 2022. Based on this experience data, average net costs, before the retired member's share of the premium, are approximately 36 percent of average gross costs. Our actuarial valuation assumes average employer costs for prescription benefits of Medicare eligible retirees increase gradually to approximately 40 percent of average gross costs over the next 20 years.

The age-adjusted claims costs for future retirees are assumed to be a blend of 13 percent of the Kaiser Permanente amounts and 87 percent of the CareFirst BlueChoice amounts.

The dental and vision claims costs were not "age graded" for this actuarial valuation since these claims do not vary significantly by age. The dental claims costs used in this actuarial valuation are \$407.04 (\$33.92 monthly) and vision claims costs used in this actuarial valuation are \$9.60 (\$0.80 monthly).

Alex Rivera is a Member of the American Academy of Actuaries (MAAA) and meets the Qualification Standards of the American Academy of Actuaries to certify the per capita retiree healthcare rates shown above.

alex Rivera

Alex Rivera, FSA, EA, MAAA, FCA



SECTION D

ACTUARIAL VALUATION METHODS AND ASSUMPTIONS

Normal cost and the allocation of benefit values between service rendered before and after the actuarial valuation date were determined using the **Projected Unit Credit** actuarial cost method having the following characteristics.

The Projected Unit Credit Method is the method used for the funding actuarial valuation for MCPS. The concept of this method is that funding of benefits should occur as benefits are accrued (earned) by active members of MCPS.

The Normal Cost ("NC") for a fiscal year under this method is the actuarial present value of all benefits expected to be accrued during the fiscal year adjusted for future expected salary increases. The Actuarial Accrued Liability ("AAL") under this method is the actuarial present value of all benefits accrued to the actuarial valuation date. To the extent that the assets of the fund are insufficient to cover the AAL, an Unfunded Actuarial Accrued Liability ("UAAL") develops. Under the classical application of this method, the contribution for a year is the NC for that year plus an amount to amortize the UAAL.

Financing of Unfunded Actuarial Accrued Liabilities. The unfunded actuarial accrued liability is amortized using level-percentage of pay amortization based on a 30-year open amortization period.



The contribution and benefit values of the System are calculated by applying actuarial assumptions to the benefit provisions and census information furnished, using the actuarial cost method described on the previous page.

The principal areas of financial risk which require assumptions about future experiences are:

- Long-term rates of investment return to be generated by the assets of the Plan;
- Patterns of pay increases to members;
- Rates of mortality among members, retirees and beneficiaries;
- Rates of withdrawal of active members;
- Rates of disability among members; and
- The age patterns of actual retirement.

In an actuarial valuation, the monetary effect of each actuarial assumption is calculated for as long as a present covered person survives; a period of time which can be as long as a century.

Actual experience of the Plan will not coincide exactly with assumed experience. Each actuarial valuation provides a complete recalculation of assumed future experience and considers all past differences between assumed and actual experience. The result is a continual series of adjustments (usually small) to the computed contribution rate.

From time to time it becomes appropriate to modify one or more of the assumptions, to reflect experience trends (but not random year-to-year fluctuations). An experience review of the Montgomery County Public Schools Employees' Retirement and Pension Systems and the Montgomery County Public Schools OPEB Plan was most recently completed in August 2019 covering the years 2014 through 2018. Most of the actuarial assumptions described in this section were adopted for use beginning with the July 1, 2019 actuarial valuation, except as noted. Additional information regarding the rationale for the actuarial assumptions may be found in the 2019 experience review report. All actuarial assumptions are expectations of future experience, not current market measures.

GRS believes the assumptions are reasonable for the purpose of the measurement.



Rate of Investment Return. 7.50% per annum. This assumption is net of investment expenses.

Price Inflation (Increase in Consumer Price Index "CPI"). The assumed rate is 2.50% per annum.

Payroll Growth. The assumed rate of total payroll growth is 3.00%.

The rate of investment return and the payroll growth assumptions are those used for the entities that participate in the Montgomery County Consolidated Retiree Health Benefits Trust (CRHBT).

Pension-Related Assumptions

The pension-related assumptions disclosed in the Montgomery County Public Schools Employees' Retirement and Pension Systems actuarial valuation report as of July 1, 2022 are assumed. Most assumptions were first adopted for use in the actuarial valuation as of July 1, 2019.

Staff

Annual Compensation Increases. The total assumed increase follows:

			Sta	tt								
Years of Credited Service												
Age	0	1-4	5-9	10-14	15-19	20-24	25+					
Under 25	13.50%	12.50%	8.50%	6.50%	3.75%	3.25%	3.25%					
25-29	11.50%	10.50%	7.00%	6.50%	3.75%	3.25%	3.25%					
30-34	9.50%	8.50%	6.00%	5.50%	3.75%	3.25%	3.25%					
35-39	9.00%	8.00%	5.75%	5.25%	3.75%	3.25%	3.25%					
40-44	9.00%	8.00%	5.75%	4.75%	3.75%	3.25%	3.25%					
45-49	9.00%	8.00%	5.75%	4.75%	3.25%	3.00%	3.00%					
50-54	9.00%	8.00%	5.25%	4.25%	3.25%	2.75%	2.75%					
55-59	9.00%	8.00%	5.25%	3.75%	3.00%	2.75%	2.75%					
60-64	9.00%	8.00%	4.75%	3.75%	3.00%	2.75%	2.75%					
65-69	8.00%	7.00%	4.75%	3.75%	3.00%	2.75%	2.75%					
70+	8.00%	7.00%	4.25%	2.75%	2.50%	2.50%	2.50%					
			Teach	ners								
			Years of	Credited S	Service							
Age	0	1-4	5-9	10-14	15-19	20-24	25+					
Under 25	7.75%	5.75%	5.25%	6.50%	5.00%	3.00%	2.75%					
25-29	9.50%	7.50%	7.00%	6.50%	5.00%	3.00%	2.75%					
30-34	9.50%	7.50%	6.00%	5.75%	5.00%	3.00%	2.75%					
35-39	9.50%	7.50%	6.00%	5.75%	5.00%	3.00%	2.75%					
40-44	9.50%	7.50%	6.00%	5.25%	4.50%	3.00%	2.75%					
45-49	9.50%	7.50%	6.00%	4.75%	3.50%	2.50%	2.75%					
50-54	9.50%	7.50%	6.00%	4.75%	3.25%	2.50%	2.50%					
55-59	7.50%	7.50%	5.00%	4.50%	3.25%	2.50%	2.50%					
60-64	7.50%	7.50%	5.00%	3.75%	2.75%	2.50%	2.50%					
65-69	7.50%	7.50%	4.25%	3.25%	2.50%	2.50%	2.50%					
70+	7.50%	7.50%	3.75%	3.25%	2.50%	2.50%	2.50%					



Mortality. The mortality assumptions are as follows:

Pre-retirement	Pub-2010 Employee mortality table (for General Employees), sex distinct, with generational mortality improvements from 2010 using scale MP-2018
Post-retirement	Pub-2010 Healthy Retiree mortality table (for General Employees), sex distinct, with
Healthy lives	generational mortality improvements from 2010 using scale MP-2018
Disabled lives	Pub-2010 Disabled Retiree mortality table (for General Employees), sex distinct,
	with generational mortality improvements from 2010 using scale MP-2018

The provision for future mortality improvement for healthy lives is based on the generational application of the MP-2018 improvement scales.

		Healthy	Disabled Mortality						
	Pre-Retir	ement	Post-Reti	rement					
	Future	Life	Future	e Life	Future Life				
	Expectancy (ye	ears) in 2022	Expectancy (ye	ears) in 2022	Expectancy (years) in 2022				
Age	Male	Female	Male	Female	Male	Female			
20	71.08	73.56	67.79	70.94	53.60	57.00			
25	65.79	68.24	62.41	65.54	48.69	51.76			
30	60.50	62.92	57.02	60.14	43.73	46.56			
35	55.26	57.63	51.67	54.75	39.05	41.68			
40	50.05	52.37	46.36	49.40	34.61	37.16			
45	44.87	47.13	41.07	44.07	30.38	32.95			
50	39.74	41.92	35.92	38.85	26.44	29.09			
55	34.67	36.76	31.00	33.87	22.93	25.65			
60	29.71	31.68	26.25	28.98	19.78	22.45			
65	24.89	26.69	21.73	24.22	16.87	19.20			
70	20.19	21.79	17.44	19.64	14.06	15.84			
75	15.60	17.02	13.48	15.36	11.31	12.56			
80	11.12	12.40	9.98	11.51	8.74	9.62			
85	7.19	8.31	7.11	8.24	6.53	7.23			
90	4.97	5.74	4.97	5.74	4.73	5.43			
95	3.50	4.01	3.50	4.01	3.46	3.98			
100	2.51	2.81	2.51	2.81	2.51	2.81			
105	1.89	2.05	1.89	2.05	1.89	2.05			



Disability. A table of disability incidence with rates follows:

	St	aff	Teacher					
Age	Male	Female	Male	Female				
Under 25	0.02%	0.02%	0.01%	0.01%				
25	0.02%	0.02%	0.01%	0.01%				
26	0.04%	0.02%	0.01%	0.01%				
27	0.06%	0.02%	0.01%	0.01%				
28	0.08%	0.02%	0.01%	0.01%				
29	0.10%	0.02%	0.01%	0.01%				
30	0.10%	0.04%	0.03%	0.02%				
31	0.11%	0.06%	0.03%	0.02%				
32	0.12%	0.08%	0.03%	0.02%				
33	0.13%	0.10%	0.03%	0.02%				
34	0.14%	0.12%	0.03%	0.02%				
35	0.15%	0.12%	0.04%	0.03%				
36	0.16%	0.14%	0.04%	0.04%				
37	0.17%	0.16%	0.04%	0.05%				
38	0.18%	0.18%	0.04%	0.06%				
39	0.19%	0.20%	0.04%	0.07%				
40	0.20%	0.24%	0.06%	0.08%				
41	0.22%	0.26%	0.07%	0.09%				
42	0.24%	0.28%	0.08%	0.10%				
43	0.26%	0.30%	0.09%	0.11%				
44	0.28%	0.32%	0.10%	0.12%				
45	0.30%	0.36%	0.12%	0.13%				
46	0.33%	0.39%	0.14%	0.14%				
47	0.36%	0.42%	0.16%	0.15%				
48	0.39%	0.45%	0.18%	0.16%				
49	0.42%	0.48%	0.20%	0.17%				
50	0.45%	0.50%	0.22%	0.18%				
51	0.48%	0.56%	0.25%	0.21%				
52	0.51%	0.62%	0.28%	0.24%				
53	0.54%	0.68%	0.31%	0.27%				
54	0.57%	0.74%	0.34%	0.31%				
55	0.60%	0.80%	0.35%	0.35%				
56	0.63%	0.85%	0.35%	0.35%				
57	0.66%	0.90%	0.35%	0.35%				
58	0.69%	0.95%	0.35%	0.35%				
59	0.72%	1.00%	0.35%	0.35%				
60 C1	0.75%	1.05%	0.35%	0.35%				
61 62	0.80%	1.10%	0.35%	0.35%				
62+	0.85%	1.15%	0.35%	0.35%				

20% of disabilities for Staff and 10% of disabilities for Teachers are assumed to be accidental disabilities. Disability rates do not apply once members are eligible for normal retirement.



Retirement. Upon eligibility, active members are assumed to retire as follows:

Staff

					d before J f Eligibility	uly 1, 2011 / Service					Staff Hired on or after July 1, 2011 Years of Eligibility Service									
Age	2	3	4	5-9	10-14	15-19	20-24	25-29	30+	Age	10	11-14	15	16-19	20-24	25-29	30+			
Under 55					_				8%	Under 55							8%			
55						4%	4%	4%	9%	55							9%			
56						6%	7%	7%	9%	56							9%			
57						6%	7%	7%	9%	57							9%			
58						6%	7%	7%	9%	58							9%			
59						6%	7%	7%	9%	59		_					9%			
60						6%	7%	7%	11%	60			6%	6%	7%	7%	11%			
61						6%	7%	7%	13%	61			6%	6%	7%	7%	13%			
62				6%	10%	10%	10%	20%	20%	62			10%	6%	7%	10%	20%			
63			4%	6%	10%	10%	10%	20%	25%	63			15%	6%	7%	15%	25%			
64		4%	4%	6%	10%	10%	10%	20%	25%	64			20%	6%	7%	20%	25%			
65	4%	4%	4%	15%	15%	20%	20%	20%	25%	65	25%	15%	35%	20%	20%	20%	25%			
66	4%	4%	4%	15%	15%	20%	20%	20%	25%	66	35%	15%	20%	20%	20%	20%	25%			
67	4%	4%	4%	15%	15%	20%	20%	20%	35%	67	40%	15%	20%	20%	20%	20%	35%			
68	4%	4%	4%	12%	15%	20%	20%	20%	30%	68	45%	15%	20%	20%	20%	20%	30%			
69	4%	4%	4%	12%	15%	20%	20%	20%	30%	69	50%	15%	20%	20%	20%	20%	30%			
70-79	4%	4%	4%	20%	25%	25%	30%	30%	35%	70-79	50%	25%	25%	25%	30%	30%	35%			
80+	100%	100%	100%	100%	100%	100%	100%	100%	100%	80+	100%	100%	100%	100%	100%	100%	100%			

Reduced retirement benefits are provided at age 55 with 15 years of eligibility service (age 60 with 15 years of eligibility service, if hired on or after July 1, 2011).



Teachers

Teachers Hired before July 1, 2011 Years of Eligibility Service										Teachers Hired on or after July 1, 2011 Years of Eligibility Service							
Age	2	3	4	5-9	10-14	15-19	20-24	25-29	30+	Age	10	11-14	15	16-19	20-24	25-29	30+
Under 55					_				11%	Under 55							11%
55						4%	4%	4%	13%	55							13%
56						6%	7%	7%	13%	56							13%
57						6%	7%	7%	13%	57							13%
58						6%	7%	7%	13%	58							13%
59						6%	7%	7%	13%	59		_					13%
60						6%	7%	7%	15%	60			6%	6%	7%	7%	15%
61						6%	7%	7%	17%	61			6%	6%	7%	7%	17%
62				10%	10%	17%	17%	21%	25%	62			17%	6%	7%	10%	25%
63			4%	10%	10%	17%	17%	21%	25%	63			22%	6%	7%	15%	25%
64		4%	4%	10%	10%	17%	17%	21%	25%	64			27%	6%	7%	25%	25%
65	4%	4%	4%	20%	20%	20%	25%	25%	30%	65	35%	20%	35%	25%	25%	30%	30%
66	4%	4%	4%	20%	20%	20%	25%	25%	30%	66	45%	20%	20%	25%	25%	30%	30%
67	4%	4%	4%	20%	20%	20%	25%	25%	30%	67	55%	20%	20%	25%	25%	30%	30%
68	4%	4%	4%	15%	15%	20%	25%	25%	30%	68	55%	15%	20%	25%	25%	30%	30%
69	4%	4%	4%	15%	15%	20%	25%	25%	30%	69	60%	15%	20%	25%	25%	30%	30%
70-79	4%	4%	4%	25%	25%	25%	30%	30%	35%	70-79	60%	25%	25%	30%	30%	35%	35%
80+	100%	100%	100%	100%	100%	100%	100%	100%	100%	80+	100%	100%	100%	100%	100%	100%	100%

Reduced retirement benefits are provided at age 55 with 15 years of eligibility service (age 60 with 15 years of eligibility service, if hired on or after July 1, 2011).



General Turnover. A sample of these rates follows:

		Staff Age			Teachers
Service	Under 30	30-34	35+	Service	
0	15.50%	12.50%	11.00%	0	11.00%
1	14.00%	11.00%	9.50%	1	9.00%
2	12.50%	9.50%	8.00%	2	7.50%
3	11.50%	8.50%	7.00%	3	6.75%
4	10.00%	7.00%	5.50%	4	6.00%
5	8.00%	5.00%	3.50%	5	5.50%
6	7.75%	4.75%	3.25%	6	5.00%
7	7.50%	4.50%	3.00%	7	4.25%
8	7.25%	4.25%	2.75%	8	4.00%
9	7.00%	4.00%	2.50%	9	3.50%
10	6.75%	3.75%	2.25%	10	3.00%
11	6.50%	3.50%	2.00%	11	2.75%
12	6.25%	3.25%	1.75%	12	2.50%
13+	6.00%	3.00%	1.50%	13	2.25%
				14	2.00%
				15	1.75%
				16	1.50%
				17	1.25%
				18	1.00%
				19+	0.75%

Administrative Expenses. Assumed administrative expenses were added to the Normal Cost and are equal to 105% of the average administrative expenses over the past three years. (First effective with the actuarial valuation as of July 1, 2017.)

Valuation		Actual Administ	Assumed Expenses		
Year	3 Years Prior	2 Years Prior	1 Year Prior	3-Year Average	Added to Normal Cost
2020	\$207,208	\$194,702	\$187,904	\$196,605	\$206,400
2021	194,702	187,904	198,248	193,618	203,300
2022	187,904	198,248	371,945	252,699	265,300

Marital Status. 80% of active members are assumed to be married.

Spouse Age. The female spouse is assumed to be 3 years younger than the male spouse.

Decrement Timing. Retirements and terminations are assumed to occur at the end of the year and deaths and disabilities are assumed to occur in the middle of the year. (First effective with the actuarial valuation as of July 1, 2017.)



Actuarial Valuation Assumptions

Decrement Operation. Turnover decrements do not operate after the member reaches retirement eligibility. Disability decrements operate during retirement eligibility.

Pay Increase rates are applied based on credited service.

Retirement rates are applied based on eligibility service.

Termination rates are applied based on the difference between participant age based on date of birth and hire age based on plan entry date.

Eligibility Testing. Eligibility for benefits is determined based upon the exact age and service on the date the decrement is assumed to occur.

Pay Increase Timing. Beginning of the (fiscal) year. (First effective with the actuarial valuation as of July 1, 2017.)

Assumption for Missing Data. If the scheduled pay provided was equal to \$0, the scheduled pay was set equal to the annualized pay provided. If scheduled and annualized pay that were provided were both equal to \$0, then the scheduled pay was assumed to be \$45,000.

Beneficiaries with missing gender codes were assumed to be the opposite gender of the retiree.

Members with retirement dates after July 1, 2022 who were also in the active data were included as active members and excluded from the retiree member counts.

Healthcare Related Assumptions

Election Percentage. It was assumed that 80% of future retirees would elect retiree healthcare benefits. Of the retirees assumed to elect retiree healthcare benefits, retirees were assumed to elect one-person or two-person coverage as follows:

	1 Person Coverage	2 Person Coverage
Under 65 at Retirement		
Males	30%	70%
Females	40%	60%
65+ at Retirement		
Males	30%	70%
Females	50%	50%

For those that elect two-person coverage, it was assumed that coverage would continue to the spouse upon death of the retiree, if eligible.



Current retirees who have coverage under one of the CareFirst BlueChoice plans are assumed to pay premiums (on average) based on the percentage of the actual number of members in each CareFirst BlueChoice healthcare plan. Actual premiums are used for current retirees participating in the Kaiser Permanente plan.

Healthcare Trend Assumptions

					Post-Medicare		
	Pre-Medicare	Post-Medicare	Pre-Medicare	Post-Medicare	Rx (Per Capita		
Year	Medical	Medical	Rx	Rx (Premiums)	Costs)	Dental	Vision
2023	4.00%	4.00%	6.00%	7.00%	7.62%	4.25%	3.25%
2024	8.00%	8.00%	8.50%	9.00%	9.62%	4.25%	3.25%
2025	7.75%	7.75%	8.25%	8.75%	9.37%	4.25%	3.25%
2026	7.50%	7.50%	8.00%	8.50%	9.12%	4.25%	3.25%
2027	7.25%	7.25%	7.75%	8.25%	8.87%	4.25%	3.25%
2028	7.00%	7.00%	7.50%	8.00%	8.62%	4.25%	3.25%
2029	6.75%	6.75%	7.25%	7.75%	8.37%	4.25%	3.25%
2030	6.50%	6.50%	7.00%	7.50%	8.12%	4.25%	3.25%
2031	6.25%	6.25%	6.75%	7.25%	7.87%	4.25%	3.25%
2032	6.00%	6.00%	6.50%	7.00%	7.62%	4.25%	3.25%
2033	5.75%	5.75%	6.25%	6.75%	7.37%	4.25%	3.25%
2034	5.50%	5.50%	6.00%	6.50%	7.12%	4.25%	3.25%
2035	5.25%	5.25%	5.75%	6.25%	6.87%	4.25%	3.25%
2036	5.00%	5.00%	5.50%	6.00%	6.62%	4.25%	3.25%
2037	4.75%	4.75%	5.25%	5.75%	6.37%	4.25%	3.25%
2038	4.50%	4.50%	5.00%	5.50%	6.12%	4.25%	3.25%
2039	4.25%	4.25%	4.75%	5.25%	5.87%	4.25%	3.25%
2040	4.25%	4.25%	4.50%	5.00%	5.62%	4.25%	3.25%
2041	4.25%	4.25%	4.25%	4.75%	5.37%	4.25%	3.25%
2042	4.25%	4.25%	4.25%	4.50%	5.12%	4.25%	3.25%
2043+	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	3.25%

Trend is assumed to increase January 1 each year.

Medicare Coverage. Assumed to be available for all covered employees on attainment of age 65. Disabled retirees were assumed to be eligible for Medicare coverage at age 65.



SECTION E

BRIEF SUMMARY OF BENEFITS AS OF JULY 1, 2022

It should be noted that the purpose of this Appendix is to describe the benefit structures of MCPS for which actuarial values have been generated. Some portions are described in a manner which is not intended to be legally complete or precise.

It is not our intent to provide an exhaustive description of all benefits provided under MCPS or the policies and procedures utilized by MCPS staff.

Plans

Medical Plans

- CareFirst BlueChoice Advantage (POS)
- CareFirst BlueChoice HMO Open Access
- CareFirst Exclusive Provider Option (EPO)
- Kaiser Permanente HMO
- CareFirst BlueChoice Advantage Indemnity/Medicare Supplemental Plan (PPO)

Prescription Drug Plans

- CVS Caremark Prescription Drug Option A or B
- Kaiser Permanente Prescription Drug
- Medicare Part D (Silverscript/Caremark) Prescription Drug Option A or B

Dental Plans

- CareFirst Dental Plan Preferred Provider Organization (PPO)
- Aetna Dental Maintenance Organization (DMO)

Vision Plan

• Davis Vision (provided through CareFirst)

Life Insurance

• MetLife

These are single employer plans.



Brief Summary of Benefits as of July 1, 2022

Eligibility	Montgomery County Public Schools employees are eligible to continue group insurance coverage after retirement provided that:
	Retiring employees qualify for pension benefits under either the Employees' Pension System (EPS) or Employees' Retirement System (ERS).
	Normal retirement age and service requirements:
	 EPS (hired on or before 06/30/2011): Age 62 with five years of eligibility service, or age 63 with four years of eligibility service, or age 65 with two years of eligibility service, or 30 years of eligibility service ERS (closed to new employees as of 12/31/1979): Age 60 with at least five cumulative years of MCPS credited service, or 30 years of credited service Reformed Pension System (hired on or after 7/1/2011): Age 65 with at least 10 cumulative years of MCPS eligibility service, or the age plus years of eligibility service is equal to 90
	Early retirement age and service requirements:
	 EPS: Age 55 with 15 years of eligibility service ERS: 25 years of credited service with any age Reformed Pension System: Age 60 with 15 years of MCPS eligibility service
	Retirement commences on the first of the month, following the last day they are employed.
Coverage of Spouse and Dependent after Death of Retiree	The surviving spouses and disabled dependent children who are covered under any of MCPS sponsored health plans (medical, vision, prescription or dental) have the right to continue coverage upon the death of the MCPS employee/retiree.
Medicare Parts A & B	Retirees/spouses who are eligible for Medicare Parts A & B must enroll for Medicare coverage in order to retain coverage under the MCPS' plans.



Eligibility	Year of Service	% MCPS Pays	% Retiree Pays
 Retired before 7/1/2011, or Retired after 7/1/2011 but meet one of the following: Hired prior to 7/1/2011 and at least 55 years of age as of 7/1/2011 Hired prior to 7/1/2006 Hired prior to 7/1/2011 with 30 years of service in the State Core Plan as of 7/1/2011 	5+	64%	36%
Hired after 7/1/2006	10-14 15-19 20+	40% 50% 64%	60% 50% 36%

In addition, each year, if the retiree is a non-Medicare eligible retiree who is covered by an MCPS-provided medical insurance plan through CareFirst or Kaiser Permanente, the retiree will have the opportunity to reduce his/her contributions to the health insurance by participating in the wellness initiatives program.

The non-Medicare retiree rates are based on two parameters:

- Biometric 1% reduction to retiree cost
- HRA 1% reduction to retiree cost

	% of Total Pr	emium Paio	d by Retiree
Health Risk Assessment or Biometric Health Screening	Neither	Both	One
Years of Active Employment			
10-15	60%	58%	59%
15-20	50%	48%	49%
20+	36%	34%	35%



Brief Summary of Benefits as of July 1, 2022

Life Insurance BenefitsGroup life insurance may be continued for retirees with 10 years of
service prior to retirement.

Eligible employees will have their life insurance coverage modified, in accordance with the following:

- (a) Active employees receive basic term life insurance equal to two times annual salary. Upon retirement, the life insurance amount reduces to 42.5 percent of the active employee basic term life insurance amount (85 percent of annual salary). On each of the next four anniversaries, the coverage will be reduced by 7.5 percent of the active employee basic term life insurance amount (15 percent of annual salary). On the fourth anniversary of retirement, the life insurance amount is 12.5 percent of the active employee basic term life insurance amount (25 percent of annual salary) and will remain at that level for the retiree's lifetime.
- (b) Retiree contributions:

Pre-July 1, 2000, retirees:	\$0
Post-June 30, 2000, retirees:	36%
Post-June 30, 2000, disabled:	\$0 until age 62;
	36% thereafter



Health Maintenance Organization (HMO) Plans

Plan Feature	Kaiser Permanente HMO				
Annual Deductible		No	one		
Covered Services		<u>Co-ins</u>	<u>urance</u>		
-Office Visits		\$10 copay (\$15 cc	opay for specialis	st)	
-Emergency Room Treatment (Emergency Services)	100% after \$100 emergency room copay unless admitted				
-Inpatient Services	100%				
-Outpatient Services	\$15 copay (Surgical Procedures) 100% (Professional Fees)				
Prescription Drug Co-pays	Supply Co-pay	Kaiser Medical Center Pharmacy 60-day \$10	Kaiser Network Pharmacy 60-day \$15	Mail Order 90-day \$10	
Maximum Lifetime Benefit	Unlimited				



Health Maintenance Organization (HMO) Plans

Plan Feature		CareFirst Blu	eChoice HMO ¹			
Annual Deductible	None					
Covered Services		<u>Co-in</u>	surance			
-Office Visits		\$10 copay (\$15 c	copay for specialist)			
-Emergency Room Treatment (Emergency Services)	100% after \$100 emergency room copay unless admitted					
-Inpatient Services	100%					
-Outpatient Services	100% (Surgical Procedures) \$15 copay (Professional Fees)					
Prescription Drug	Supply	Retail 30-day	CVS Retail Pharmacy 90-day	CVS Caremark Mail Service Pharmacy 90-day		
Co-pays	<u>Option A</u> Generic Preferred Brand Non-Preferred Brand	\$5 \$15 \$25	\$10 \$30 \$50	\$10 \$30 \$50		
	Option B Generic Preferred Brand Non-Preferred Brand	\$10 \$25 \$35	\$20 \$50 \$70	\$20 \$50 \$70		
Maximum Lifetime Benefit	Unlimited					

¹ CareFirst BlueChoice HMO Open Access (Maryland service area) and CareFirst EPO (outside Maryland service area).



E-6

CareFirst BlueChoice Advantage (POS)

Plan Feature	In-Netw	vork	Out-of-Ne	etwork
Annual Deductible	None		\$300 per	
			\$600 per family	
Covered Services	<u>Co-insura</u>	ince	<u>Co-insur</u>	ance
-Office Visits	\$15 copay (\$20 copa	y for specialist)	80% after de	eductible
-Emergency Room Treatment (Emergency Services)	100% after \$100 emergency room copay unless admitted		100% after \$100 emergency room copay unless admitted	
-Inpatient Services	100%		80% after de	eductible
-Outpatient Services	\$20 cop	ay	80% after deductible	
Prescription Drug Co-pays	Supply	Retail 30-day	CVS Retail Pharmacy 90-day	CVS Caremark Mail Service Pharmacy 90-day
	Option A Generic Preferred Brand Non-Preferred Brand Option B Generic	\$5 \$15 \$25 \$10	\$10 \$30 \$50 \$20	\$10 \$30 \$50 \$20
	Preferred Brand	\$25	\$50	\$50
	Non-Preferred Brand	\$35	\$70	\$70
Maximum Lifetime Benefit		Unlin	nited	



CareFirst BlueChoice Indemnity Medicare Supplemental Plan

Plan Feature	CareFirst Blue	Choice Indemni	ty Medicare Supp	plemental Plan		
Annual Deductible		\$200 p	er person			
Annual Deductible		\$400 p	er family			
Covered Services		<u>Co-in</u>	<u>surance</u>			
-Office Visits		80% after	r deductible			
-Emergency Room		100% after \$	100 emergency			
Treatment		room co	pay unless			
(Emergency Services)		adr	nitted			
-Inpatient Services	90% after deductible					
-Outpatient Services		90% after	r deductible			
		CVS Retail	Non-CVS Retail	CVS Network		
		Pharmacy	Pharmacy	Service Pharmacy		
Prescription Drug	Supply	30-day	90-day	90-day		
Co-pays						
. ,	Plan A	4-	4	410		
	Generic	\$5	\$15	\$10		
	Preferred Brand	\$15	\$45	\$30		
	Non-Preferred	\$25	\$75	\$50		
	Brand	·	·			
	<u>Plan B</u>	640	ć a o	ćao.		
	Generic	\$10	\$30	\$20		
	Preferred Brand	\$25	\$75	\$50		
	Non-Preferred Brand	\$35	\$105	\$70		
Maximum Lifetime	Unlimited					
Benefit						



Medicare Supplemental Plans

	CaroEirct	DiugChaisa				
		BlueChoice				
CareFirst BlueChoice	Advantag	e Medicare				
НМО	Suppl	emental	Kaiser Medicare HMO			
Pays Medicare Part B	Pays Medicare Part B		Pays Medicare Part B			
deductible and 20% Medicare	deductible and 20% Medicare		deductible and 20% Medicare			
coinsurance	coins	surance	coinsurance			
Pays Medicare Part B	Pays Mec	licare Part B	Pays Medicare Part B			
deductible	ded	uctible	deductible and 20% Medicare			
Medicare coinsurance	Medicare	coinsurance	coinsurance; covered in full			
Covered in full	Cover	ed in full	Medicare- covered preventiv			
Devis Devit A Devisitiele	Davis Davit	A Darduratilata				
Pays Part A Deductible	Pays Part	A Deductible	Pays Part A Deductible			
Covered in full	Cover	ed in full	Covered in full			
Coverage not provided	Coverage	not provided	Pays 100%			
Pays Part A Deductible up to 60 days/year			Pays Part A Deductible (covered in full up to 100 days per benefit period)			
Coverage not provided	Coverage	not provided	Pays 100%			
	CVS Retail Non-CVS Ret Pharmacy Pharmacy		ail CVS Network Service			
			Pharmacy			
Supply	30-day 90-day		90-day			
Plan A						
Generic	\$5 \$15		\$10			
Preferred Brand			\$30			
Non-Preferred Brand	\$25	\$75	\$50			
<u>Plan B</u>						
Generic	\$10\$30\$25\$75\$35\$105		\$20			
Preferred Brand			\$50			
Non-Preferred Brand			\$70			
Unlimited						
	Pays Medicare Part B deductible and 20% Medicare coinsurance Pays Medicare Part B deductible Medicare coinsurance Covered in full Pays Part A Deductible Coverage not provided Pays Part A Deductible up to 60 days/year Coverage not provided Supply <u>Plan A</u> Generic Preferred Brand Non-Preferred Brand Plan B Generic Preferred Brand	Pays Medicare Part B deductible and 20% Medicare coinsurancePays Medicare deductible and coinsurancePays Medicare Part B deductible Medicare coinsurancePays Medicare deductible MedicarePays Medicare coinsurancePays Medicare ded dedCovered in fullCoverPays Part A Deductible Coverage not providedPays Part CoverageCoverage not providedCoveragePays Part A Deductible up to 60 days/yearPays Part A D 60 dayCoverage not providedCoverageCoverage not providedCoverageCoverage not providedCoveragePays Part A Deductible up to 60 days/yearCoverageCoverage not providedCoverageCoverage not providedCoveragePays Datt A Deductible up to 60 days/yearCoveragePays Part A Deductible up to 60 days/yearCoveragePays Part A Deductible up to 60 days/yearCoveragePays Part A Deductible up to 60 days/yearCoveragePays Datt A Deductible up to 60 days/yearCoveragePays Part A Deductible up to 60 days/yearCoverageSupply30-dayPlan A Generic\$15Non-Preferred Brand\$25Plan B Generic\$10Preferred Brand\$25Non-Preferred Brand\$35	Pays Medicare Part B deductible and 20% Medicare coinsurancePays Medicare Part B deductible and 20% Medicare coinsurancePays Medicare Part B deductiblePays Medicare Part B deductibleMedicare coinsurancePays Medicare Part B deductibleMedicare coinsurancePays Medicare Part B deductibleMedicare coinsurancePays Medicare Part B deductibleMedicare coinsuranceMedicare coinsuranceCovered in fullCovered in fullPays Part A Deductible Covered in fullCoverage not providedCoverage not providedCoverage not providedPays Part A Deductible up to 60 days/yearPays Part A Deductible up to 60 days/yearCoverage not providedCoverage not providedVerage not providedCoverage not providedCoverage not providedCoverage not providedSupply30-day90-dayPlan A Generic\$5\$15 \$45 \$15 \$45 \$16Pian B Generic\$10\$30 \$30 \$35Preferred Brand\$25\$75 \$105			



Dental Benefits

	CareF	Aetna DMO			
Plan Feature	In-Network	Out-of-Network	In-Network None None None Co-insurance 100%		
Maximum Annual Benefit	\$2,000	\$2,000			
Annual Deductible Class I Class II Class III Diagnostic (Class I) -Routine Exams -X-rays -Prophylaxis -Fluoride -Sealants -Oral Hygiene Instruction	None \$50 \$50 <u>Co-insurance</u> 100%; Oral Hygiene Instruction not covered	None \$100 <u>\$100</u> <u>Co-insurance</u> 80%; Oral Hygiene Instruction not covered			
<u>Basic (Class II)</u> -Amalgam -Composite Filling -Pulp Capping -Root Canal Therapy -Scaling and Root Planing	100%	80%	100%		
<u>Basic (Class II)</u> -Space Maintainers -Molar Root Canal Therapy -Osseous Surgery -General Anesthesia -Surgical Removal of Impacted Teeth	100%	80%	75%		
<u>Major (Class III)</u> -Inlays, Onlays, and Crowns -Full and Partial Dentures -Bridge Pontics and Abutments	50%	40%; Maximum eligible charge per service: \$400	75%		



Monthly Retiree Rates Effective January 1, 2022*

	Non Medicare						Medicare			
	INDIVIDUAL		2-PARTY		FAMILY		INDIVIDUAL		2-PARTY	
Medical Only										
CareFirst BC Adv Indemnity/Medicare Supp	\$	908.14	\$	1,816.32	\$	2,471.16	\$	273.73	\$	547.46
CareFirst BlueChoice Adv (POS/PPO)		832.02		1,664.07		2,263.93		N/A		N/A
CareFirst BlueChoice HMO		586.38		1,102.15		1,805.64		321.72		643.44
Kaiser Permanente HMO		581.28		1,160.07		1,680.96		347.41		694.82
Prescription Drugs										
Caremark Prescription Option A	\$	342.52	\$	685.03	\$	856.30	\$	342.52	\$	685.03
Caremark Prescription Option B		181.03		362.03		452.56		181.03		362.03
Kaiser Permanente Prescription		74.23		148.14		214.65	Included in Medical			edical
Dental										
CareFirst Dental PPO	\$	33.67	\$	67.35	\$	99.04	\$	33.67	\$	67.35
Aetna Dental DMO		21.55		43.12		63.38		21.55		43.12
Vision										
Davis Vision	\$	0.78	\$	1.44	\$	1.83	\$	0.78	\$	1.44
Life Insurance										
Cost Per \$1,000		\$1.60								

* Retirees pay a percentage of the total premium rates shown above (ranging from 34% to 60%) depending on hire date, years of service at retirement and adjustments based on the wellness initiatives program.



SECTION F

GLOSSARY OF TERMS

Actuarial Accrued Liability (AAL). The difference between (i) the actuarial present value of future plan benefits, and (ii) the actuarial present value of future normal cost. Sometimes referred to as "accrued liability" or "past service liability."

Actuarial Assumptions. Estimates of future plan experience such as investment return, expected lifetimes and the likelihood of receiving benefits from the Plan. Demographic, or "people" assumptions, include rates of mortality, retirement and separation. Economic, or "money" assumptions, include expected investment return, inflation and salary increases.

Actuarial Cost Method. A mathematical budgeting procedure for allocating the dollar amount of the "actuarial present value of future plan benefits" between the actuarial present value of future normal cost and the actuarial accrued liability. Sometimes referred to as the "actuarial funding method."

Actuarial Present Value of Future Plan Benefits. The amount of funds presently required to provide a payment or series of payments in the future. It is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Amortization. Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.

Annual Required Contribution. The sum of the normal cost and amortization of the unfunded actuarial accrued liability.

Asset Return. The net investment return for the asset divided by the mean asset value. Example: if \$1.00 is invested and yields \$1.075 after a year, the asset return is 7.50 percent.

Funded Ratio. The actuarial value of assets divided by the actuarial accrued liability. Measures the portion of the actuarial accrued liability that is currently funded.

Market Value of Assets (MVA). The value of assets currently held in the trust available to pay for benefits of the Plan. Each of the investments in the trust is valued at market price which is the price at which buyers and sellers trade similar items in the open market.

Normal Cost (NC). The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as "current service cost." Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.

Unfunded Actuarial Accrued Liability (UAAL). The difference between the actuarial accrued liability and actuarial valuation assets. Sometimes referred to as "unfunded accrued liability."

