

Montgomery County Public Schools Other Post-Employment Benefits Plan Trust

GASB Statement Nos. 74 and 75, Accounting and Financial
Reporting for Post-Employment Benefit Plans

Other Than Pensions

Measured as of June 30, 2022

Applicable to Plan's Fiscal Year End June 30, 2022

Applicable to Employer's Fiscal Year End June 30, 2023





September 23, 2022

Board of Trustees
Montgomery County Public Schools Other Post-Employment Benefits Plan Trust

Dear Trustees:

This report provides information on behalf of the Montgomery County Public Schools Other Post-Employment Benefits Plan Trust (MCPS OPEB Plan Trust) in connection with the Governmental Accounting Standards Board (GASB) Statement Nos. 74 and 75. GASB Statement No. 74 is the accounting standard, which applies to other post-employment benefits (OPEB) plans that are administered through trusts or equivalent arrangements. GASB Statement No. 75 establishes accounting and financial reporting requirements for state and local government employers that provide their employees with post-employment benefits other than pensions.

The calculation of the liability associated with the benefits described in this report was performed for the purpose of satisfying the requirements of GASB Statement Nos. 74 and 75. The calculation of the plan's liability for this report is not applicable for funding purposes of the plan. A calculation of the plan's liability for purposes other than satisfying the requirements of GASB Statement Nos. 74 and 75 may produce significantly different results. This report may be provided to parties other than the Montgomery County Public Schools Other Post-Employment Benefits Plan Trust only in its entirety and only with the permission of MCPS OPEB Plan Trust. GRS is not responsible for unauthorized use of this report.

This report complements the actuarial valuation report as of July 1, 2021, and information herein should be considered along with the information from that report, especially for additional discussions of the nature of actuarial calculations and for more information related to participant data, economic and demographic actuarial assumptions, health care trend, morbidity assumptions and benefit provisions.

Financial information was provided by MCPS. The information provided was checked for internal consistency, but it was not audited.

Based on the available data, the information contained in this report is accurate and fairly represents the actuarial position of the Montgomery County Public Schools Other Post-Employment Benefits Plan Trust as of the reporting date, for purposes of complying with GASB Statement Nos. 74 and 75. All calculations have been made in conformity with generally accepted actuarial principles and practices as well as the Actuarial Standards of Practice. If you have reason to believe that the information provided in this report is inaccurate, or is in any way incomplete, or if you need further information in order to make an informed decision on the subject matter of this report, please contact the author of the report prior to making such decision.

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; and changes in plan provisions or applicable law.

This report was prepared using our proprietary valuation model and related software which, in our professional judgment, has the capability to provide results that are consistent with the purposes of the valuation, and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled. We are relying on the GRS actuaries and Internal Software, Training, and Processes Team who developed and maintain the model.

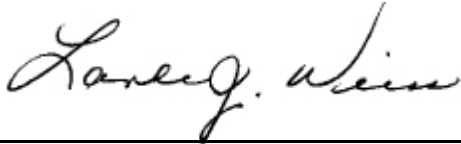
This report reflects the impact of COVID-19 through June 30, 2022 on assets, and through June 30, 2021 on member demographics. However, this report does not reflect the longer term and still developing future impact of COVID-19, which is likely to further influence demographic experience and economic expectations. We will continue to monitor these developments and their impact on the Fund and the actuarial assumptions. Actual experience will be reflected in each subsequent annual valuation, as experience emerges.

The signing individuals are independent of the plan sponsor.

Amy Williams and Lance Weiss 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.

Respectfully submitted,
Gabriel, Roeder, Smith & Company

By 
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By 
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Senior Consultant and Team Leader



Auditor's Note – This information is intended to assist in preparation of the financial statements of the Montgomery County Public Schools Other Post-Employment Benefits Plan Trust. Financial statements are the responsibility of management, subject to the auditor's review. Please let us know if the auditor recommends any changes.



Table of Contents

		<u>Page</u>
Section A	Executive Summary	
	Executive Summary.....	1
	Discussion.....	2-6
Section B	Financial Statements	
	Statement of OPEB Expense under GASB Statement No. 75	1
	Statement of Outflows and Inflows Arising from Current and Prior Reporting Periods	2-4
	Statement of Fiduciary Net Position	5
	Statement of Changes in Fiduciary Net Position	6
Section C	Required Supplementary Information	
	Schedule of Changes in Net OPEB Liability and Related Ratios Multiyear	1
	Schedule of the Net OPEB Liability Multiyear.....	2
	Schedule of Contributions Multiyear.....	3
	Notes to Schedule of Contributions.....	4
Section D	Notes to Financial Statements	
	Single Discount Rate	1
	Summary of Membership Information	1
	Sensitivity of Net OPEB Liability.....	2
Section E	Brief Summary of Benefits	1-5
Section F	Development of Baseline Claims Costs.....	1-2
Section G	Summary of Participant Data.....	1-3
Section H	Valuation Methods and Actuarial Assumptions	
	Valuation Methods	1
	Actuarial Assumptions, Economic Assumptions, Demographic Assumptions.....	2-7
	Miscellaneous and Technical Assumptions	8
	Healthcare-Related Actuarial Assumptions	9-10
Section I	Calculation of the Single Discount Rate	
	Calculation of the Single Discount Rate	1
	Projection of Contributions.....	2
	Projection of Plan Net Position	3
	Present Values of Projected Benefits.....	4-5
	Projection of Plan Net Position and Benefit Payments	6
Section J	Glossary of Terms.....	1-4



SECTION A

EXECUTIVE SUMMARY

Executive Summary as of June 30, 2022

Actuarial Valuation Date	July 1, 2021
Measurement Date of the Net OPEB Liability	June 30, 2022
OPEB Plan's Fiscal Year Ending Date (Reporting Date) for GASB 74	June 30, 2022
Employer's Fiscal Year Ending Date (Reporting Date) for GASB 75	June 30, 2023

Membership

Number of	
- Retirees and Beneficiaries	10,503
- Inactive, Nonretired Members	0
- Active Members	24,223
- Total	34,726
Covered Payroll [^]	\$ 1,764,352,468

Net OPEB Liability

Total OPEB Liability	\$ 2,808,330,020
Plan Fiduciary Net Position	722,881,009
Net OPEB Liability	\$ 2,085,449,011
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability	25.74 %
Net OPEB Liability as a Percentage of Covered Payroll	118.20 %

Development of the Single Discount Rate

Single Discount Rate	5.52 %
Long-Term Expected Rate of Investment Return	7.50 %
Long-Term Municipal Bond Rate*	3.69 %
Last year ending June 30 in the 2023 to 2122 projection period for which projected benefit payments are fully funded	2058
Single Discount Rate (prior measurement date)	3.93 %
Long-Term Expected Rate of Investment Return (prior measurement date)	7.50 %
Long-Term Municipal Bond Rate (prior measurement date)*	1.92 %
Last year for which projected benefit payments are fully funded (prior measurement date)	2059

Total OPEB Expense \$ 125,277,883

Deferred Outflows and Deferred Inflows of Resources by Source to be Recognized in Future OPEB Expenses

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	\$ 54,310,719	\$ 544,260,178
Changes in assumptions	398,216,454	769,957,773
Net difference between projected and actual earnings on OPEB plan investments	48,715,663	0
Employer Contributions Subsequent to June 30, 2022	TBD	
Total	\$ 501,242,836	\$ 1,314,217,951

*Source: Fixed-income municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in Fidelity Index's "20-Year Municipal GOAA Index" as of June 30, 2022. In describing this index, Fidelity notes that the municipal curves are constructed using option-adjusted analytics of a diverse population of over 10,000 tax-exempt securities.

[^]Covered employee payroll is equal to the valuation payroll from the actuarial valuation as of July 1, 2021, rolled forward with one year of payroll growth at 3.00%.



Discussion

Accounting Standard

For post-employment (OPEB) benefit plans that are administered through trusts or equivalent arrangements, Governmental Accounting Standards Board (GASB) Statement No. 74, "Financial Reporting for Post-employment Benefit Plans other than Pension Plans," replaces the requirements of GASB Statement No. 43, "Financial Reporting for Post-employment Benefit Plans Other Than Pension Plans." Similarly, GASB Statement No. 75 establishes standards for state and local government employers (as well as non-employer contributing entities) to account for and disclose net OPEB liability, OPEB expense and other information associated with providing OPEB to their employees (and former employees) on their financial statements.

GASB Statement Nos. 74 and 75 are effective for fiscal years beginning after June 15, 2016 and June 15, 2017, respectively.

The following discussion provides a summary of the information that is required to be disclosed under these accounting standards. A number of these disclosure items are provided in this report. However, certain non-actuarial information, such as notes regarding accounting policies and investments, is not included in this report. As a result, the plan sponsor will be responsible for preparing and disclosing the non-actuarial information needed to comply with these accounting standards.

Financial Statements

GASB Statement No. 75 requires state and local government employers to recognize the net OPEB liability and the OPEB expense on their financial statements, along with the related deferred outflows and inflows of resources. The net OPEB liability is the difference between the total OPEB liability and the plan's fiduciary net position. In traditional actuarial terms, this is analogous to the accrued liability less the market value of assets.

GASB Statement No. 75 states that employer contributions made to the OPEB plan subsequent to the measurement date and before the end of the employer's reporting period should be reported as a deferred outflow of resources. The information contained in this report does not incorporate any employer contributions made subsequent to the measurement date of June 30, 2022.

The OPEB expense recognized each fiscal year is equal to the change in the net OPEB liability from the beginning of the year to the end of the year, adjusted for deferred recognition of the liability and investment experience.

GASB Statement No. 74 requires defined benefit OPEB plans which are administered as trusts or equivalent arrangements to present two financial statements: a statement of fiduciary net position and a statement of changes in fiduciary net position. The statement of fiduciary net position presents the assets and liabilities of the OPEB plan at the end of the OPEB plan's reporting period. The statement of changes in fiduciary net position presents the additions, such as contributions and investment income, and deductions, such as benefit payments and expense, and net increase or decrease in the fiduciary net position.

Discussion

Notes to Financial Statements

GASB Statement No. 75 requires the notes of the employer's financial statements to disclose the total OPEB expense, the OPEB plan's liabilities and assets, and deferred outflows of resources and inflows of resources related to OPEB.

GASB Statement Nos. 74 and 75 require the notes of the financial statements for employers and OPEB plans to include certain additional information. The list of disclosure items should include:

- The name of the OPEB plan, the administrator of the OPEB plan and the identification of whether the OPEB plan is a single-employer, agent or cost-sharing OPEB plan;
- A description of the benefits provided by the plan;
- A brief description of changes in benefit terms or assumptions that affected the measurement of the total OPEB liability since the prior measurement date;
- The number of plan members by category and if the plan is closed;
- A description of the plan's funding policy, which includes member and employer contribution requirements;
- The OPEB plan's investment policies;
- The OPEB plan's fiduciary net position and the net OPEB liability;
- The net OPEB liability using +/- 1% on the discount rate;
- The net OPEB liability using +/- 1% on the healthcare trend rate;
- Significant assumptions and methods used to calculate the total OPEB liability;
- Inputs to the discount rates; and
- Certain information about mortality assumptions and the dates of experience studies.

OPEB plans that are administered through trusts or equivalent arrangements are required to disclose additional information in accordance with GASB Statement No. 74. This information includes:

- The composition of the OPEB plan's Board and the authority under which benefit terms may be amended;
- A description of how fair value is determined;
- Information regarding certain reserves and investments, which include concentrations of investments greater than or equal to 5%, receivables and insurance contracts excluded from plan assets; and
- Annual money-weighted rate of return.

Discussion

Required Supplementary Information

GASB Statement No. 74 requires a 10-year fiscal history of:

- Sources of changes in the net OPEB liability;
- Information about the components of the net OPEB liability and related ratios, including the OPEB plan's fiduciary net position as a percentage of the total OPEB liability, and the net OPEB liability as a percent of covered-employee payroll;
- Comparison of the actual employer contributions to the actuarially determined contributions based on the plan's funding policy; and
- For plans with an actuarially determined contribution, a schedule covering each of the 10 most recent fiscal years showing the actuarially determined contribution, contributions to the OPEB plan and related ratios.

Frequency and Timing of the Actuarial Valuation

An actuarial valuation to determine the total OPEB liability is required to be performed at least every two years. If the actuarial valuation is not calculated as of the plan's fiscal year end, the total OPEB liability is required to be rolled forward from the actuarial valuation date to the OPEB plan's fiscal year end. If update procedures are used to roll forward the total OPEB liability, the date of the actuarial valuation must be no more than 24 months earlier than the OPEB plan's most recent fiscal year-end.

The total OPEB liability shown in this report is based on an actuarial valuation performed as of July 1, 2021, and a measurement date of June 30, 2022.

Single Discount Rate

Projected benefit payments are required to be discounted to their actuarial present values using a Single Discount Rate that reflects (1) a long-term expected rate of return on OPEB plan investments (to the extent that the plan's fiduciary net position is projected to be sufficient to pay benefits) and (2) a tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this actuarial valuation, the expected rate of return on OPEB plan investments is 7.50%; the municipal bond rate is 3.69% (based on the daily rate closest to but not later than the measurement date of the Fidelity "20-Year Municipal GO AA Index"); and the resulting Single Discount Rate is 5.52%.

Discussion

Actuarial Assumptions

The actuarial assumptions used to value the liabilities are outlined in detail in Section H. The assumptions include details on the healthcare trend assumption, the aging factors, as well as the cost method used to develop the OPEB expense.

The following OPEB-specific assumptions have changed since the last actuarial valuation as of July 1, 2020 (measurement date as of June 30, 2021):

- Medical and Prescription Drug (Rx) trend rates have been refreshed to assume trend in 2022 is 8.00 percent for medical and 8.50 percent for Rx, 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 2021 and are net of Part D subsidies and prescription benefit rebates.

The Actuarially Determined Contribution (ADC) is equal to normal cost plus 30-year open period amortization of the unfunded liability. However, due to (1) the County contributing less than the ADC during the past several fiscal years and (2) the full additional contribution in excess of current year benefit payments under the funding policy not being used to prefund OPEB, the following contributions from the County were assumed for purposes of the projections used to calculate the Single Discount Rate:

1. Until fiscal year 2034, on a combined basis the County and MCPS will contribute the greater of 1) the Annual Required Contribution less \$27.2 million and 2) the projected net benefit payments.
2. Beginning in fiscal year 2034, on a combined basis the County and MCPS will contribute the Annual Required Contribution amount calculated in the funding actuarial valuation.

Future Uncertainty or Risk

Future results may differ from those anticipated in this valuation. Reasons include, but are not limited to:

- Investment earnings differing from expected;
- 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; and
 - Time of retirement or termination.

Benefits Valued

The benefit provisions that were valued are described in Section E. The actuarial valuation is required to be performed on the current benefit terms and existing legal agreements. Consideration is to be given to the written plan document as well as other communications between the employer and plan members and an established pattern of practice for cost sharing. The summary of major plan provisions is designed to outline principal plan benefits. If the plan summary is not in accordance with the actual provisions or administrative practices, please alert the actuaries, so they can be sure the proper provisions are valued.



Discussion

Effective Date and Transition

GASB Statement Nos. 74 and 75 are effective for fiscal years beginning after June 15, 2016 and June 15, 2017, respectively.

SECTION B

FINANCIAL STATEMENTS

Auditor's Note – This information is intended to assist in preparation of the financial statements of the Montgomery County Public Schools Other Post-Employment Benefits Plan Trust. Financial statements are the responsibility of management, subject to the auditor's review. Please let us know if the auditor recommends any changes.

Statement of OPEB Expense under GASB Statement No. 75

Fiscal Year Ended June 30, 2022*

A. Expense

1. Service Cost	\$	155,942,782
2. Interest on the Total OPEB Liability		143,070,402
3. Current-Period Benefit Changes		0
4. Employee Contributions (made negative for addition here)		0
5. Projected Earnings on Plan Investments (made negative for addition here)		(58,648,544)
6. OPEB Plan Administrative Expense		371,945
7. Other Changes in Plan Fiduciary Net Position		0
8. Recognition of Outflow (Inflow) of Resources due to Liabilities		(123,770,960)
9. Recognition of Outflow (Inflow) of Resources due to Assets		8,312,258
10. Total OPEB Expense	\$	125,277,883

Recognition of Deferred Outflows and Inflows of Resources

Differences between expected and actual experience and changes in assumptions are recognized in OPEB expense using a systematic and rational method over a closed period equal to the average of the expected remaining service lives of all employees who are provided with OPEB through the OPEB plan (active employees and inactive employees) determined as of the beginning of the measurement period.

At the beginning of the current measurement period, the expected remaining service lives of all active employees in the plan was approximately 323,617 years. Additionally, the total plan membership (active employees and inactive employees) was 34,726. As a result, the average of the expected remaining service lives for purposes of recognizing the applicable deferred outflows and inflows of resources established in the current measurement period is 9.3192 years.

Additionally, differences between projected and actual earnings on OPEB plan investments should be recognized in OPEB expense using a systematic and rational method over a closed five-year period. For this purpose, the deferred outflows and inflows of resources are recognized in the OPEB expense as a level dollar amount over the closed period identified above.

**Based on a measurement date of June 30, 2022. Will be used for fiscal year ending June 30, 2023. Employers' proportionate share of calculations of the net OPEB liability, OPEB expense and deferred inflows and outflows, if applicable, are outside the scope of this report.*



Statement of Outflows and Inflows Arising from Current and Prior Reporting Periods

Fiscal Year Ended June 30, 2022*

Year Ending June 30	Difference between expected and actual experience	Recognition Period (Years)	Total Deferred (2023 & After)	Increase (Decrease) in OPEB Expense Arising from difference between expected and actual experience							
				Recognized in Year Ending June 30							
				2020 & Prior	2021	2022	2023	2024	2025	2026 & After	
2017	-	8.6792									
2018	\$ (216,455,378)	9.0379	\$ (96,706,668)	\$ (71,849,226)	\$ (23,949,742)	\$ (23,949,742)	\$ (23,949,742)	\$ (23,949,742)	\$ (23,949,742)	\$ (23,949,742)	\$ (24,857,442)
2019	(73,824,566)	9.0287	(41,117,946)	(16,353,310)	(8,176,655)	(8,176,655)	(8,176,655)	(8,176,655)	(8,176,655)	(8,176,655)	(16,587,981)
2020	(269,627,645)	9.2824	(182,486,072)	(29,047,191)	(29,047,191)	(29,047,191)	(29,047,191)	(29,047,191)	(29,047,191)	(29,047,191)	(95,344,499)
2021	69,057,445	9.3658	54,310,719		7,373,363		7,373,363		7,373,363		32,190,630
2022	(250,869,087)	9.3192	(223,949,492)			(26,919,595)	(26,919,595)	(26,919,595)	(26,919,595)	(26,919,595)	(143,190,707)
Total			(489,949,459)	(117,249,727)	(53,800,225)	(80,719,820)	(80,719,820)	(80,719,820)	(80,719,820)	(80,719,820)	(247,789,999)

Year Ending June 30	Changes in assumptions	Recognition Period (Years)	Total Deferred (2023 & After)	Increase (Decrease) in OPEB Expense Arising from changes in assumptions							
				Recognized in Year Ending June 30							
				2020 & Prior	2021	2022	2023	2024	2025	2026 & After	
2017	\$ (270,838,727)	8.6792	\$ (83,605,763)	\$ (124,821,976)	\$ (31,205,494)	\$ (31,205,494)	\$ (31,205,494)	\$ (31,205,494)	\$ (31,205,494)	\$ (21,194,775)	\$ -
2018	203,760,125	9.0379	91,034,755	67,635,222	22,545,074	22,545,074	22,545,074	22,545,074	22,545,074	22,545,074	23,399,533
2019	169,486,009	9.0287	94,398,341	37,543,834	18,771,917	18,771,917	18,771,917	18,771,917	18,771,917	18,771,917	38,082,590
2020	28,494,417	9.2824	19,285,242	3,069,725	3,069,725	3,069,725	3,069,725	3,069,725	3,069,725	3,069,725	10,076,067
2021	246,037,722	9.3658	193,498,116		26,269,803	26,269,803	26,269,803	26,269,803	26,269,803	26,269,803	114,688,707
2022	(768,854,175)	9.3192	(686,352,010)		(82,502,165)	(82,502,165)	(82,502,165)	(82,502,165)	(82,502,165)	(82,502,165)	(438,845,515)
Total			(371,741,319)	(16,573,195)	39,451,025	(43,051,140)	(43,051,140)	(43,051,140)	(43,051,140)	(33,040,421)	(252,598,618)

Year Ending June 30	Difference between projected and actual earnings on OPEB plan investments	Recognition Period (Years)	Total Deferred (2023 & After)	Increase (Decrease) in OPEB Expense Arising from net difference between projected and actual earnings on OPEB plan investments							
				Recognized in Year Ending June 30							
				2020 & Prior	2021	2022	2023	2024	2025	2026 & After	
2017	\$ (11,711,667)	5.0000	\$ -	\$ (9,369,332)	\$ (2,342,335)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	(1,135,337)	5.0000	-	(681,201)	(227,067)	(227,069)	-	-	-	-	-
2019	(628,972)	5.0000	(125,796)	(251,588)	(125,794)	(125,794)	(125,796)	-	-	-	-
2020	17,017,748	5.0000	6,807,098	3,403,550	3,403,550	3,403,550	3,403,550	3,403,548	-	-	-
2021	(104,940,375)	5.0000	(62,964,225)		(20,988,075)	(20,988,075)	(20,988,075)	(20,988,075)	(20,988,075)	(20,988,075)	-
2022	131,248,232	5.0000	104,998,586		26,249,646	26,249,646	26,249,646	26,249,646	26,249,646	26,249,646	26,249,648
Total			48,715,663	(6,898,571)	(20,279,721)	8,312,258	8,539,325	8,665,119	5,261,571		26,249,648

Year Ending June 30	Total Difference	Recognition Period (Years)	Total Deferred (2023 & After)	Increase (Decrease) in OPEB Expense Arising from All Sources						
				Recognized in Year Ending June 30						
				2020 & Prior	2021	2022	2023	2024	2025	2026 & After
2017	\$ (282,550,394)	Varies by Type	\$ (83,605,763)	\$ (134,191,308)	\$ (33,547,829)	\$ (31,205,494)	\$ (31,205,494)	\$ (31,205,494)	\$ (21,194,775)	\$ -
2018	(13,830,590)	Varies by Type	(5,671,913)	(4,895,205)	(1,631,735)	(1,631,737)	(1,404,668)	(1,404,668)	(1,404,668)	(1,457,909)
2019	95,032,471	Varies by Type	53,154,599	20,938,936	10,469,468	10,469,468	10,469,466	10,595,262	10,595,262	21,494,609
2020	(224,115,480)	Varies by Type	(156,393,732)	(22,573,916)	(22,573,916)	(22,573,916)	(22,573,916)	(22,573,918)	(25,977,466)	(85,268,432)
2021	210,154,792	Varies by Type	184,844,610		12,655,091	12,655,091	12,655,091	12,655,091	12,655,091	146,879,337
2022	(888,475,030)	Varies by Type	(805,302,916)		(83,172,114)	(83,172,114)	(83,172,114)	(83,172,114)	(83,172,114)	(555,786,574)
Total			(812,975,115)	(140,721,493)	(34,628,921)	(115,458,702)	(115,231,635)	(115,105,841)	(108,498,670)	(474,138,969)

*Based on a measurement date of June 30, 2022. Will be used for fiscal year ending June 30, 2023. Employers' proportionate share of calculations of the net OPEB liability, OPEB expense and deferred inflows and outflows, if applicable, are outside the scope of this report.



Statement of Outflows and Inflows Arising from Current and Prior Reporting Periods

Fiscal Year Ended June 30, 2022*

	Total		Outflow of Resources						
	Deferred		Recognized in Year Ending June 30						
	(2023 & After)	2020 & Prior	2021	2022	2023	2024	2025	2026 & After	
Difference between expected and actual experience	\$ 54,310,719	\$ -	\$ 7,373,363	\$ 7,373,363	\$ 7,373,363	\$ 7,373,363	\$ 7,373,363	\$ 7,373,363	\$ 32,190,630
Changes in assumptions	398,216,454	108,248,781	70,656,519	70,656,519	70,656,519	70,656,519	70,656,519	70,656,519	186,246,897
Difference between projected and actual earnings on investments	48,715,663	(6,898,571)	(20,279,721)	8,312,258	8,539,325	8,665,119	5,261,571	26,249,648	
Total	501,242,836	101,350,210	57,750,161	86,342,140	86,569,207	86,695,001	83,291,453	244,687,175	

	Deferred		Inflow of Resources						
	Deferred		Recognized in Year Ending June 30						
	(2023 & After)	2020 & Prior	2021	2022	2023	2024	2025	2026 & After	
Difference between expected and actual experience	\$ (544,260,178)	\$ (117,249,727)	\$ (61,173,588)	\$ (88,093,183)	\$ (88,093,183)	\$ (88,093,183)	\$ (88,093,183)	\$ (279,980,629)	
Changes in assumptions	(769,957,773)	(124,821,976)	(31,205,494)	(113,707,659)	(113,707,659)	(113,707,659)	(103,696,940)	(438,845,515)	
Difference between projected and actual earnings on investments	-	-	-	-	-	-	-	-	
Total	(1,314,217,951)	(242,071,703)	(92,379,082)	(201,800,842)	(201,800,842)	(201,800,842)	(191,790,123)	(718,826,144)	

	Deferred		Increase (Decrease) in OPEB Expense Arising from Assets and Liabilities						
	Deferred		Recognized in Year Ending June 30						
	(2023 & After)	2020 & Prior	2021	2022	2023	2024	2025	2026 & After	
Total Liabilities	\$ (861,690,778)	\$ (133,822,922)	\$ (14,349,200)	\$ (123,770,960)	\$ (123,770,960)	\$ (123,770,960)	\$ (113,760,241)	\$ (500,388,617)	
Total Assets	48,715,663	(6,898,571)	(20,279,721)	8,312,258	8,539,325	8,665,119	5,261,571	26,249,648	
Total	(812,975,115)	(140,721,493)	(34,628,921)	(115,458,702)	(115,231,635)	(115,105,841)	(108,498,670)	(474,138,969)	

*Based on a measurement date of June 30, 2022. Will be used for fiscal year ending June 30, 2023. Employers' proportionate share of calculations of the net OPEB liability, OPEB expense and deferred inflows and outflows, if applicable, are outside the scope of this report.



Statement of Outflows and Inflows Arising from Current and Prior Reporting Periods

Fiscal Year Ended June 30, 2022*

A. Outflows and Inflows of Resources Due to Liabilities and Assets to Be Recognized in Current OPEB Expense

	Outflows of Resources	Inflows of Resources	Net (Inflows)/Outflows of Resources
1. Due to Liabilities	\$ 78,029,882	\$ 201,800,842	\$ (123,770,960)
2. Due to Assets	8,312,258	0	8,312,258
3. Total	\$ 86,342,140	\$ 201,800,842	\$ (115,458,702)

B. Outflows and Inflows of Resources by Source to Be Recognized in Current OPEB Expense

	Outflows of Resources	Inflows of Resources	Net (Inflows)/Outflows of Resources
1. Differences between expected and actual experience	\$ 7,373,363	\$ 88,093,183	\$ (80,719,820)
2. Assumption changes	70,656,519	113,707,659	(43,051,140)
3. Net difference between projected and actual earnings on OPEB plan investments	8,312,258	0	8,312,258
4. Total	\$ 86,342,140	\$ 201,800,842	\$ (115,458,702)

C. Deferred Outflows and Deferred Inflows of Resources by Source to Be Recognized in Future OPEB Expenses

	Deferred Outflows of Resources	Deferred Inflows of Resources	Net Deferred (Inflows)/ Outflows of Resources
1. Differences between expected and actual experience	\$ 54,310,719	\$ 544,260,178	\$ (489,949,459)
2. Assumption changes	398,216,454	769,957,773	(371,741,319)
3. Net difference between projected and actual earnings on OPEB plan investments	48,715,663	0	48,715,663
4. Total	\$ 501,242,836	\$ 1,314,217,951	\$ (812,975,115)

D. Deferred Outflows and Deferred Inflows of Resources by Year to Be Recognized in Future OPEB Expenses

Year Ending June 30	Net Deferred (Inflows)/ Outflows of Resources
2023	\$ (115,231,635)
2024	(115,105,841)
2025	(108,498,670)
2026	(66,315,818)
2027	(91,214,039)
Thereafter	(316,609,112)
Total	\$ (812,975,115)

E. Deferred Outflow of Resources Due to Employer Contributions Subsequent to June 30, 2022 but before June 30, 2023

TBD

Employer contributions that were made subsequent to the measurement date of the net OPEB liability of June 30, 2022, and prior to the end of the employer's reporting period of June 30, 2023, should be reported by the employer as a deferred outflow of resources related to OPEB. The information contained in this report does not incorporate any contributions made subsequent to the measurement date of June 30, 2022.

See paragraph 44 of GASB 75 for single and agent employers with trusted plans.

Also, Question 4.32 of Implementation Guide No. 2017-1 provides additional guidance for trusted plans.

*Based on a measurement date of June 30, 2022. Will be used for fiscal year ending June 30, 2023. Employers' proportionate share of calculations of the net OPEB liability, OPEB expense and deferred inflows and outflows, if applicable, are outside the scope of this report.



Statement of Fiduciary Net Position as of June 30, 2022

	<u>2022</u>
Assets	
Cash and Deposits	\$ 0
Receivables	
Accounts Receivable	\$ 1,793,079
Due from Internal Service Fund	26,580,289
Due from General Fund	<u>0</u>
Total Receivables	<u>\$ 28,373,368</u>
Investments	
Short-term investments/CRHBT	<u>\$ 702,881,321</u>
Total Investments	<u>\$ 702,881,321</u>
Total Assets	<u>\$ 731,254,689</u>
Liabilities	
Payables	
Accounts Payable	\$ 60,017
Claims Payable	7,159,121
Due to General Fund	<u>1,154,542</u>
Total Liabilities	<u>\$ 8,373,680</u>
Net Position Restricted for OPEB	<u>\$ 722,881,009</u>

Statement of Changes in Fiduciary Net Position for Year Ended June 30, 2022

	2022
Additions	
Contributions	
Employer	\$ 94,655,970
Federal government - Medicare Part D	34,112,264
Members	40,761,969
Other	0
Total Contributions	\$ 169,530,203
Investment Income	
Net Investment Income	\$ (72,599,688)
Other	\$ 0
Total Additions	\$ 96,930,515
 Deductions	
Benefit Payments and Premiums to Insurance Companies	\$ 142,637,497
OPEB Plan Administrative Expense	371,945
Other	0
Total Deductions	\$ 143,009,442
Net Increase in Net Position	\$ (46,078,927)
 Net Position Restricted for OPEB	
Beginning of Year	\$ 768,959,936
End of Year	\$ 722,881,009



SECTION C

REQUIRED SUPPLEMENTARY INFORMATION

Auditor's Note – This information is intended to assist in preparation of the financial statements of the Montgomery County Public Schools Other Post-Employment Benefits Plan Trust. Financial statements are the responsibility of management, subject to the auditor's review. Please let us know if the auditor recommends any changes.

Statement of Required Supplementary Information

Schedule of Changes in Net OPEB Liability and Related Ratios Multiyear

Last 10 Fiscal Years (which may be built prospectively)

Plan fiscal year ending June 30,	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Employer fiscal year ending June 30,	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total OPEB liability										
Service cost	\$ 155,942,782	\$ 131,125,105	\$ 109,249,061	\$ 104,162,538	\$ 88,364,530	\$ 125,216,637				
Interest on the total OPEB liability	143,070,402	138,193,669	151,919,286	153,797,183	157,630,126	146,230,235				
Changes of benefit terms	0	0	0	0	0	0				
Difference between expected and actual experience	(250,869,087)	69,057,445	(269,627,645)	(73,824,566)	(216,455,378)	0				
Changes of assumptions	(768,854,175)	246,037,722	28,494,417	169,486,009	203,760,125	(270,838,727)				
Benefit payments, including refunds of employee contributions*	(67,763,264)	(55,866,601)	(59,609,650)	(83,877,327)	(72,763,620)	(70,432,337)				
Net change in total OPEB liability	(788,473,342)	528,547,340	(39,574,531)	269,743,837	160,535,784	(69,824,192)				
Total OPEB liability - beginning	3,596,803,362	3,068,256,022	3,107,830,553	2,838,086,716	2,677,550,932	2,747,375,124				
Total OPEB liability - ending (a)	\$ 2,808,330,020	\$ 3,596,803,362	\$ 3,068,256,022	\$ 3,107,830,553	\$ 2,838,086,716	\$ 2,677,550,932				
Plan fiduciary net position										
Employer contributions	\$ 94,655,970	\$ 106,594,397	\$ 115,201,749	\$ 62,667,044	\$ 90,580,304	\$ 96,333,627				
Nonemployer contributing entities										
Medicare Part D subsidies	34,112,264	31,293,901	26,546,554	22,561,041	21,197,806	18,725,635				
Member contributions	40,761,969	41,581,285	42,290,716	38,743,969	39,875,875	37,315,988				
OPEB plan net investment income	(72,599,688)	149,472,797	21,895,304	34,845,670	31,492,273	36,233,300				
Benefit payments, including refunds of employee contributions	(142,637,497)	(128,741,787)	(128,446,920)	(122,621,296)	(112,639,495)	(107,748,325)				
OPEB plan administrative expense	(371,945)	(198,248)	(187,904)	(194,702)	(207,208)	(292,732)				
Other	0	0	0	0	0	0				
Net change in plan fiduciary net position	(46,078,927)	200,002,345	77,299,499	36,001,726	70,299,555	80,567,493				
Plan fiduciary net position - beginning	768,959,936	568,957,591	491,656,788	455,655,062	385,355,507	304,788,014				
Adjustment as of July 1, 2019	0	0	1,304	0	0	0				
Plan fiduciary net position - ending (b)	\$ 722,881,009	\$ 768,959,936	\$ 568,957,591	\$ 491,656,788	\$ 455,655,062	\$ 385,355,507				
Net OPEB liability - ending (a) - (b)	\$ 2,085,449,011	\$ 2,827,843,426	\$ 2,499,298,431	\$ 2,616,173,765	\$ 2,382,431,654	\$ 2,292,195,425				
Plan fiduciary net position as a percentage of total OPEB liability	25.74 %	21.38 %	18.54 %	15.82 %	16.06 %	14.39 %				
Covered-employee payroll**	\$ 1,764,352,468	\$ 1,710,734,313	\$ 1,634,125,189	\$ 1,600,129,357	\$ 1,563,346,475	\$ 1,546,150,104				
Net OPEB liability as a percentage of covered-employee payroll	118.20 %	165.30 %	152.94 %	163.50 %	152.39 %	148.25 %				

Notes to Schedule:

For fiscal year 2017, the beginning of year total OPEB liability is based on a single discount rate (SDR) of 5.27% and the end of year total OPEB liability based on a SDR of 5.87%. For fiscal years 2018, 2019, 2020, 2021 and 2022, the end of year SDRs are 5.40%, 4.85%, 4.45%, 3.93%, and 5.52% respectively.

Total OPEB liability is based on an actuarial valuation date one year prior to the fiscal year end.

The measurement date of the net OPEB liability is one year prior to the employer's applicable fiscal year.

*Total OPEB liability (TOL) is reduced by the employer paid benefit amounts reflected in the TOL (total benefit amounts net of retiree paid premiums and Part D).

**Covered employee payroll is equal to the valuation payroll from the applicable actuarial valuation, rolled forward with one year of payroll growth at 3.00%.



Schedules of Required Supplementary Information

Schedule of the Net OPEB Liability Multiyear

Last 10 Fiscal Years (which may be built prospectively)

FY Ending June 30,	Total OPEB Liability	Plan Net Position	Net OPEB Liability	Plan Net Position as a % of Total OPEB Liability	Covered Payroll	Net OPEB Liability as a % of Covered Payroll
2017	\$2,677,550,932	\$385,355,507	\$2,292,195,425	14.39 %	\$1,546,150,104	148.25 %
2018	2,838,086,716	455,655,062	2,382,431,654	16.06 %	1,563,346,475	152.39 %
2019	3,107,830,553	491,656,788	2,616,173,765	15.82 %	1,600,129,357	163.50 %
2020	3,068,256,022	568,957,591	2,499,298,431	18.54 %	1,634,125,189	152.94 %
2021	3,596,803,362	768,959,936	2,827,843,426	21.38 %	1,710,734,313	165.30 %
2022	2,808,330,020	722,881,009	2,085,449,011	25.74 %	1,764,352,468	118.20 %

The measurement date of the net OPEB liability is one year prior to the employer's applicable fiscal year.

Covered employee payroll is equal to the valuation payroll from the applicable actuarial valuation, rolled forward with one year of payroll growth at 3.00%.



Schedules of Contributions Multiyear

Last 10 Fiscal Years (which may be built prospectively)

FY Ending June 30,	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
2017	\$136,339,000	\$115,059,262	\$ 21,279,738	\$ 1,546,150,104	7.44 %
2018	168,287,000	111,778,110	56,508,890	1,563,346,475	7.15 %
2019	159,436,200	85,228,085	74,208,115	1,600,129,357	5.33 %
2020	154,363,013	141,748,303	12,614,710	1,634,125,189	8.67 %
2021	142,970,371	137,888,298	5,082,073	1,710,734,313	8.06 %
2022	149,523,526	128,768,234	20,755,292	1,764,352,468	7.30 %

Actuarially determined contribution was calculated and provided in the actuarial valuation report from the prior actuary for fiscal year 2017 and from GRS for subsequent fiscal years and is equal to normal cost plus 30-year open level-percentage-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.

For fiscal year 2022, actual additional contribution in excess of current year benefit payments and expenses of \$26,520,761 compared to an amount of \$73,048,269 based on the funding policy for the actuarially determined contribution and calculated in the funding actuarial valuation report as of July 1, 2020.

Covered employee payroll is equal to the valuation payroll from the applicable actuarial valuation, rolled forward with one year of payroll growth at 3.00%.



Notes to Schedule of Contributions

Methods and Assumptions Used to Determine Actuarially Determined Contribution:

Valuation Date	July 1, 2020
Notes	Actuarially determined contribution rates are calculated as of June 30, which is 12 months prior to the beginning of the fiscal year in which contributions are reported.
Actuarial Cost Method	Projected Unit Credit
Amortization Method	Level Percentage of Payroll, Open
Remaining Amortization Period	30 years
Asset Valuation Method	Fair Market Value
Inflation	2.50%
Salary Increases	2.50% to 13.50%, including inflation
Investment Rate of Return	7.50%, net of OPEB plan investment expense, including inflation
Retirement Age	Experience-based table of rates.
Mortality	Pre-retirement: Pub-2010 Employee mortality table (for General Employees), sex distinct, with generational mortality improvements from 2010 using scale MP-2018. Post-retirement healthy lives: Pub-2010 Healthy Retiree mortality table (for General Employees), sex distinct, with 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.
Health Care Trend Rates:	Initial trend rates of 8.50% for Rx, 8.00% for medical, decreasing to an ultimate trend rate of 4.25%, 4.25% dental trend rate, 3.25% vision trend rate

Methods and Assumptions Used to Determine GASB 74/75 Net OPEB Liability:

Valuation Date	July 1, 2021
Actuarial Cost Method	Entry Age Normal
Asset Valuation Method	Fair Market Value
Inflation	2.50%
Salary Increases	2.50% to 13.50%, including inflation
Investment Rate of Return	7.50%, net of OPEB plan investment expense, including inflation
Retirement Age	Experience-based table of rates.
Mortality	Pre-retirement: Pub-2010 Employee mortality table (for General Employees), sex distinct, with generational mortality improvements from 2010 using scale MP-2018. Post-retirement healthy lives: Pub-2010 Healthy Retiree mortality table (for General Employees), sex distinct, with 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.
Health Care Trend Rates:	Initial trend rates of 8.50% for Rx, 8.00% for medical, decreasing to an ultimate trend rate of 4.25%, 4.25% dental trend rate, 3.25% vision trend rate



SECTION D

NOTES TO FINANCIAL STATEMENTS

Auditor's Note – This information is intended to assist in preparation of the financial statements of the Montgomery County Public Schools Other Post-Employment Benefits Plan Trust. Financial statements are the responsibility of management, subject to the auditor's review. Please let us know if the auditor recommends any changes.

Notes to Financial Statements

Single Discount Rate

A Single Discount Rate of 5.52% was used to measure the total OPEB liability as of June 30, 2022. This Single Discount Rate was based on an expected rate of return on OPEB plan investments of 7.50% and a municipal bond rate of 3.69%. The projection of cash flows used to determine this Single Discount Rate assumed that employer contributions will be made as follows:

- If the Annual Required Contribution calculated in the funding actuarial valuation is higher than projected net benefit payments, on a combined basis the County and MCPS will contribute:
 - The greater of 1) the Annual Required Contribution less \$27.2 million and 2) the projected net benefit payments
 - Current trust assets will not be used to pay benefit payments during this time (projected to be until 2033)
- If the Annual Required Contribution calculated in the funding actuarial valuation is lower than projected net benefit payments, on a combined basis the County and MCPS will contribute:
 - The Annual Required Contribution
 - A portion of the current trust assets will be used to pay benefit payments during this time (projected to begin in 2034)

Based on these assumptions, the OPEB plan's fiduciary net position and future contributions were sufficient to finance the benefit payments through the year 2058. As a result, the long-term expected rate of return on OPEB plan investments was applied to projected benefit payments through the year 2058, and the municipal bond rate was applied to all benefit payments after that date.

The Single Discount Rate as of June 30, 2021 was 3.93%, based on an expected rate of return on OPEB plan investments of 7.50% and a municipal bond rate 1.92%.

Summary of Membership Information

The following table provides a summary of the number of participants in the plan as of the actuarial valuation date:

Inactive Plan Members with Medical Coverage	10,503
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	-
Active Plan Members	<u>24,223</u>
Total Plan Members	34,726

Inactive Plan member count does not include covered spouses or dependents. There are 4,653 retired members with either two-person or family coverage.



Notes to Financial Statements

Sensitivity of Net OPEB Liability

Regarding the sensitivity of the net OPEB liability to changes in the Single Discount Rate, the following presents the plan's net OPEB liability, calculated using a Single Discount Rate of 5.52%, as well as what the plan's net OPEB liability would be if it were calculated using a Single Discount Rate that is one percent lower or one percent higher:

Sensitivity of Net OPEB Liability To the Single Discount Rate Assumption

1% Decrease	Current Single Discount Rate Assumption	1% Increase
4.52%	5.52%	6.52%
\$ 2,543,869,962	\$ 2,085,449,011	\$ 1,715,229,820

Regarding the sensitivity of the net OPEB liability to changes in the healthcare cost trend rates, the following presents the plan's net OPEB liability, calculated using the assumed trend rates as well as what the plan's net OPEB liability would be if it were calculated using a trend rate that is one percent lower or one percent higher:

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

1% Decrease	Current Healthcare Cost Trend Rate Assumption	1% Increase
\$ 1,653,023,877	\$ 2,085,449,011	\$ 2,641,895,867



SECTION E

BRIEF SUMMARY OF BENEFITS

Brief Summary of Benefits

It should be noted that the purpose of this section 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 EPO
- Kaiser HMO
- CareFirst BlueChoice Advantage Indemnity/Medicare Supplemental Plan (PPO)

Prescription Drug Plans

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

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.



Brief Summary of Benefits

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: <ul style="list-style-type: none"> • 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	40%	60%
	15-19	50%	50%
	20+	64%	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 Care-First, Cigna 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

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



Brief Summary of Benefits

Life Insurance Benefits

Group 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



Brief Summary of Benefits

Monthly Retiree Rates Effective January 1, 2021*

	Non Medicare			Medicare	
	INDIVIDUAL	2-PARTY	FAMILY	INDIVIDUAL	2-PARTY
Medical Only					
CareFirst BC Adv Indemnity/Medicare Supp	\$ 802.67	\$ 1,605.37	\$ 2,184.16	\$ 241.94	\$ 483.88
CareFirst BlueChoice Adv (POS/PPO)	735.39	1,470.80	2,001.00	N/A	N/A
CareFirst BlueChoice HMO	516.70	971.18	1,591.07	283.49	566.98
Kaiser Permanente HMO	581.28	1,160.07	1,680.96	347.41	694.82
Prescription Drugs					
Caremark Prescription Option A	\$ 478.94	\$ 957.88	\$ 1,197.36	\$ 478.94	\$ 957.88
Caremark Prescription Option B	253.13	506.23	632.81	253.13	506.23
Kaiser Permanente Prescription	74.23	148.14	214.65	<i>Included in Medical</i>	
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

DEVELOPMENT OF BASELINE CLAIMS COSTS

Development of Baseline Claims Cost

The MCPS offers benefits on a fully-insured basis and on a self-insured basis. The fully-insured and self-insured per capita claims costs are developed separately and then 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, 2021, 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, 2021, 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 health care utilization and cost at that age.

Development of Baseline Claims Cost

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

Age	Medical				RX			
	Kaiser Permanente		CFBC Blue Choice		Kaiser Permanente		Caremark CVS	
	Male	Female	Male	Female	Male	Female	Male	Female
40	\$ 4,564	\$ 7,600	\$ 3,795	\$ 6,320	(included in Medical)		\$ 2,260	\$ 3,763
45	5,673	7,897	4,717	6,567			2,809	3,910
50	7,305	9,032	6,074	7,511			3,617	4,472
55	9,642	10,603	8,018	8,818			4,774	5,250
60	12,496	12,304	10,392	10,232			6,187	6,093
64	15,195	14,340	12,636	11,925			7,524	7,101
65	3,718	3,507	2,267	2,138			2,328	2,196
70	4,051	3,920	2,470	2,390			2,536	2,454
75	4,350	4,245	2,652	2,588			2,724	2,658
80	4,567	4,487	2,784	2,736			2,860	2,810

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, 2021. Based on this experience data, average net costs, before the retired member's share of the premium, are approximately 42 percent of average gross costs. Our actuarial valuation assumes average employer costs for prescription benefit of Medicare eligible retiree increase gradually to an ultimate rate of 50 percent of average gross costs over the next 16 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 CFBC Blue Choice 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 \$423.33 (\$35.28 monthly) and vision claims costs used in this actuarial valuation are \$11.12 (\$0.93 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 health care rates shown above.

Alex Rivera

Alex Rivera, FSA, EA, MAAA, FCA



SECTION G

SUMMARY OF PARTICIPANT DATA

Summary of Participant Data

Actives

Employees' Retirement System – Teachers

Current Age	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 and Over	Totals	Valuation 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	1	7	2	12	1,369,446
70-74										0	-
75 and Over								6		6	723,033
Total	-	-	-	-	1	1	1	13	2	18	\$ 2,092,479

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

Current Valuation		Previous Valuation	
Number:	18	Number:	20
Average Age:	70.7	Average Age:	69.4
Average Service:	35.5	Average Service:	35.3
Average Annual Pay:	\$ 116,249	Average Annual Pay:	\$ 113,465

Employees' Retirement System – Non-Teachers

Current Age	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 and Over	Totals	Valuation 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								7	1	8	515,193
65-69								3		3	151,811
70-74									1	1	85,316
75 and Over								1		1	92,812
Total	-	-	-	-	-	-	-	11	2	13	\$ 845,132

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

Current Valuation		Previous Valuation	
Number:	13	Number:	17
Average Age:	65.4	Average Age:	65.3
Average Service:	37.8	Average Service:	37.3
Average Annual Pay:	\$ 65,010	Average Annual Pay:	\$ 68,167



Summary of Participant Data

Actives

Employees' Pension System – Teachers

Current Age	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 and Over	Totals	Valuation Payroll
Under 25	498	2								500	\$ 22,884,733
25-29	1,341	578	2							1,921	103,652,463
30-34	730	1,180	379	4						2,293	150,339,288
35-39	528	651	775	502						2,456	193,472,929
40-44	531	443	372	833	400	1				2,580	225,764,352
45-49	440	393	284	490	733	164	1			2,505	226,520,152
50-54	399	436	310	420	532	402	103	2		2,604	227,291,799
55-59	210	282	298	380	377	227	162	40	1	1,977	161,554,688
60-64	136	156	210	281	294	123	107	65	17	1,389	101,824,395
65-69	41	71	56	110	105	71	35	23	13	525	35,152,407
70-74	10	25	25	27	28	23	9	10	9	166	10,326,989
75 and Over	3	3	6	14	3	2	4	1	6	42	2,003,711
Total	4,867	4,220	2,717	3,061	2,472	1,013	421	141	46	18,958	\$ 1,460,787,906

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

Current Valuation		Previous Valuation	
Number:	18,958	Number:	18,788
Average Age:	44.7	Average Age:	44.7
Average Service:	11.9	Average Service:	11.9
Average Annual Pay:	\$ 77,054	Average Annual Pay:	\$ 75,277

Employees' Pension System – Non-Teachers

Current Age	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 and Over	Totals	Valuation Payroll
Under 25	66	2								68	\$ 2,123,268
25-29	139	51	3							193	6,936,809
30-34	161	109	29	7						306	12,818,454
35-39	164	122	62	53	2					403	18,366,579
40-44	190	141	65	84	36	2				518	25,000,717
45-49	197	143	87	105	55	32	2			621	29,736,061
50-54	175	138	140	168	123	49	29	6		828	41,050,320
55-59	162	186	140	218	147	81	50	21	4	1,009	49,945,786
60-64	88	117	116	159	156	58	35	21	18	768	38,736,949
65-69	32	61	67	86	64	19	21	5	17	372	18,252,469
70-74	4	11	24	26	22	7	11	1	2	108	4,751,580
75 and Over		3	8	10	10	4	3		2	40	1,519,051
Total	1,378	1,084	741	916	615	252	151	54	43	5,234	\$ 249,238,043

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

Current Valuation		Previous Valuation	
Number:	5,234	Total Participants:	5,359
Average Age:	51.4	Average Age:	51.0
Average Service:	12.4	Average Service:	11.9
Average Annual Pay:	\$ 47,619	Average Annual Pay:	\$ 45,376



Summary of Participant Data

Retirees and Beneficiaries

Retiree Summary by Plan and Tier

Medical Plan	1 Person	2 Person	Family	Total
CareFirst BlueChoice HMO	1,657	1,738	102	3,497
CareFirst BlueChoice Adv (POS/PPO)	183	124	73	380
CareFirst BC Adv Indemnity/Medicare Supp	3,334	1,902	40	5,276
Kaiser Permanente HMO	676	639	35	1,350
Total	5,850	4,403	250	10,503

Prescription Plan	1 Person	2 Person	Family	Total
Caremark/SilverScript Option A	1,887	838	36	2,761
Caremark/SilverScript Option B	3,123	2,809	179	6,111
Kaiser Permanente Prescription	675	639	35	1,349
Total	5,685	4,286	250	10,221

Dental Plan	1 Person	2 Person	Family	Total
Aetna Dental DMO	341	204	16	561
CareFirst Dental PPO	5,727	4,776	205	10,708
Total	6,068	4,980	221	11,269

Dental Plan	1 Person	2 Person	Family	Total
Davis Vision	5,700	4,456	187	10,343



SECTION H

VALUATION METHODS AND ACTUARIAL ASSUMPTIONS

Valuation Methods and Actuarial Assumptions

Valuation Methods – Calculation of the Total OPEB Liability

Entry Age Normal Method

Actuarial Cost Method – Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using an Individual Entry-Age Actuarial Cost Method having the following characteristics:

- (i) The annual normal cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member’s benefit at the time of retirement; and
- (ii) Each annual normal cost is a constant percentage of the member’s year by year projected covered pay.

Valuation Methods – Calculation of Contributions

Projected Unit Credit Method

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 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.

This contribution is determined as a level percentage of pay based on 30-year open period amortization of the unfunded liability.

The Actuarially Determined Contribution (ADC) is equal to normal cost plus 30-year open period amortization of the unfunded liability. However, due to the County contributing less than the ADC during the past several fiscal years and the full additional contribution in excess of current year benefit payments under the funding policy not being used to prefund OPEB, the following contributions from the County were assumed for purposes of the projections used to calculate the Single Discount Rate:

1. Until fiscal year 2034, on a combined basis the County and MCPS will contribute the greater of 1) the Annual Required Contribution less \$27.2 million and 2) the projected net benefit payments.
2. Beginning in fiscal year 2034, on a combined basis the County and MCPS will contribute the Annual Required Contribution amount calculated in the funding actuarial valuation.



Valuation Methods and Actuarial Assumptions

Long-Term Expected 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%.

Pension-Related Actuarial Assumptions

The pension-related assumptions disclosed in the Montgomery County Public Schools Employees’ Retirement and Pension Systems actuarial valuation report as of July 1, 2021, are assumed. Most assumptions were first adopted for use in the actuarial valuation as of July 1, 2019.

Annual Compensation Increases. The total assumed increase follows:

Staff

Age	Years of Credited Service						
	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%

Teachers

Age	Years of Credited Service						
	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%



Valuation Methods and Actuarial Assumptions

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 Healthy Lives	Pub-2010 Healthy Retiree mortality table (for General Employees), sex distinct, with 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.

Age	Healthy Mortality				Disabled Mortality	
	Pre-Retirement		Post-Retirement		Future Life	
	Future Life		Future Life		Future Life	
	Expectancy (years) in 2021		Expectancy (years) in 2021		Expectancy (years) in 2021	
	Male	Female	Male	Female	Male	Female
20	71.00	73.48	67.69	70.86	53.43	56.83
25	65.71	68.17	62.31	65.45	48.53	51.61
30	60.42	62.85	56.92	60.05	43.58	46.40
35	55.18	57.56	51.58	54.67	38.91	41.54
40	49.98	52.30	46.26	49.31	34.49	37.04
45	44.80	47.06	40.98	43.98	30.26	32.83
50	39.66	41.85	35.83	38.77	26.33	28.97
55	34.59	36.69	30.91	33.78	22.81	25.54
60	29.64	31.61	26.17	28.90	19.68	22.35
65	24.83	26.63	21.65	24.14	16.78	19.12
70	20.13	21.73	17.37	19.58	13.99	15.76
75	15.54	16.96	13.42	15.30	11.25	12.49
80	11.07	12.35	9.93	11.45	8.69	9.57
85	7.15	8.27	7.06	8.20	6.48	7.18
90	4.94	5.71	4.94	5.71	4.71	5.40
95	3.48	3.99	3.48	3.99	3.44	3.96
100	2.49	2.80	2.49	2.80	2.49	2.80
105	1.88	2.04	1.88	2.04	1.88	2.04

Valuation Methods and Actuarial Assumptions

Disability. A table of disability incidence with rates follows:

Age	Staff		Teacher	
	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	0.75%	1.05%	0.35%	0.35%
61	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.



Valuation Methods and Actuarial Assumptions

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

Staff

Age	Staff Hired before July 1, 2011								Age	Staff Hired on or after July 1, 2011								
	Years of Eligibility Service									Years of Eligibility Service								
	2	3	4	5-9	10-14	15-19	20-24	25-29	30+		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%



Valuation Methods and Actuarial Assumptions

Teachers

Teachers Hired before July 1, 2011										Teachers Hired on or after July 1, 2011							
Years of Eligibility Service										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%



Valuation Methods and Actuarial Assumptions

General Turnover. A sample of these rates follows:

Service	Staff Age			Service	Teachers
	Under 30	30-34	35+		
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%

Valuation Methods and Actuarial Assumptions

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 Year	Actual Administrative Expenses				Assumed Expenses Added to Normal Cost
	3 Years Prior	2 Years Prior	1 Year Prior	3-Year Average	
2019	\$292,732	\$207,208	\$194,702	\$231,547	\$243,100
2020	207,208	194,702	187,904	196,605	206,400
2021	194,702	187,904	198,248	193,618	203,300

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.)

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, 2021 who were also in the active data were included as active members and excluded from the retiree member counts.



Valuation Methods and Actuarial Assumptions

Healthcare-Related Actuarial Assumptions

Health Care Trend Assumptions

<u>Year</u>	<u>Medical</u>	<u>Rx</u>	<u>Dental</u>	<u>Vision</u>
2022	8.00%	8.50%	4.25%	3.25%
2023	7.75%	8.25%	4.25%	3.25%
2024	7.50%	8.00%	4.25%	3.25%
2025	7.25%	7.75%	4.25%	3.25%
2026	7.00%	7.50%	4.25%	3.25%
2027	6.75%	7.25%	4.25%	3.25%
2028	6.50%	7.00%	4.25%	3.25%
2029	6.25%	6.75%	4.25%	3.25%
2030	6.00%	6.50%	4.25%	3.25%
2031	5.75%	6.25%	4.25%	3.25%
2032	5.50%	6.00%	4.25%	3.25%
2033	5.25%	5.75%	4.25%	3.25%
2034	5.00%	5.50%	4.25%	3.25%
2035	4.75%	5.25%	4.25%	3.25%
2036	4.50%	5.00%	4.25%	3.25%
2037	4.25%	4.75%	4.25%	3.25%
2038	4.25%	4.50%	4.25%	3.25%
2039+	4.25%	4.25%	4.25%	3.25%

Trend is assumed to increase January 1 each year.

The trend rates shown above are net of any increases due to the potential wear-away of the EGWP-Wrap design changes by 2037. Effective trend for the Post-Medicare plans affected by the EGWP-Wrap design changes would be higher until the year 2037. These higher effective trend rates gradually eliminate the approximately 19 percent savings remaining as of June 30, 2021, due to the EGWP-Wrap plan design.

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.



Valuation Methods and Actuarial Assumptions

Election Percentage. It was assumed that 80% of future retirees would elect retiree health care benefits. Of the retirees assumed to elect retiree health care 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.

Roll Forward Disclosure

The total OPEB liability was determined by an actuarial valuation as of July 1, 2021. Update procedures were used to roll forward the total OPEB liability to the OPEB plan's fiscal year end.

SECTION I

CALCULATION OF THE SINGLE DISCOUNT RATE

Calculation of the Single Discount Rate

GASB Statement No. 74 includes a specific requirement for the discount rate that is used for the purpose of the measurement of the Total OPEB Liability. This rate considers the ability of the fund to meet benefit obligations in the future. To make this determination, employer contributions, employee contributions, benefit payments, expenses and investment returns are projected into the future. The Plan Net Position (assets) in future years can then be determined and compared to its obligation to make benefit payments in those years. As long as assets are projected to be on hand in a future year, the assumed valuation discount rate is used. In years where assets are not projected to be sufficient to meet benefit payments, the use of a municipal bond rate is required, as described in the following paragraph.

The Single Discount Rate (SDR) is equivalent to applying these two rates to the benefits that are projected to be paid during the different time periods. The SDR reflects (1) the long-term expected rate of return on OPEB plan investments (during the period in which the fiduciary net position is projected to be sufficient to pay benefits) and (2) a tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on OPEB plan investments is 7.50%; the municipal bond rate is 3.69%; and the resulting Single Discount Rate is 5.52%. The projected crossover year is 2058 (year 37 in the projection exhibits).

The tables in this section provide background for the development of the Single Discount Rate.

The **Projection of Contributions** table shows the development of expected contributions in future years. Normal Cost contributions for future hires are not included (nor are their liabilities).

The **Projection of Plan Fiduciary Net Position** table shows the development of expected asset levels in future years.

The **Present Values of Projected Benefit Payments** table shows the development of the Single Discount Rate (SDR). It breaks down the benefit payments into present values for funded and unfunded portions and shows the equivalent total at the SDR.

The projections in this report are strictly for the purpose of determining the GASB single discount rate and are different from a funding projection for the ongoing plan. Contribution amounts shown are strictly for the purpose of testing for a GASB depletion date and may differ from those determined by a funding valuation.

Single Discount Rate Development

Projection of Contributions Ending June 30 for 2022 to 2071

Year	Projected Payroll for Current Employees	Projected Contributions from Current Employees	Projected Service Cost and Expense Contributions	Projected UAL Contributions	Projected Total Contributions
0	\$ 1,712,963,560				
1	1,791,066,271	\$ 0	\$ 63,398,244	\$ 27,774,337	\$ 91,172,581
2	1,753,356,591	0	61,230,036	41,875,754	103,105,790
3	1,719,285,584	0	59,386,185	53,499,965	112,886,149
4	1,684,924,617	0	57,578,415	56,858,837	114,437,252
5	1,651,407,673	0	55,902,463	59,484,895	115,387,358
6	1,615,914,261	0	54,153,322	62,353,210	116,506,532
7	1,579,233,136	0	52,429,204	65,002,125	117,431,330
8	1,540,222,019	0	50,657,004	67,639,788	118,296,792
9	1,498,731,891	0	48,855,450	70,815,263	119,670,713
10	1,455,614,457	0	47,058,356	80,351,354	127,409,710
11	1,410,155,484	0	45,263,916	90,044,012	135,307,928
12	1,363,274,929	0	43,497,130	99,725,395	143,222,525
13	1,314,675,003	0	41,693,689	106,047,889	147,741,577
14	1,263,825,583	0	39,850,420	107,026,882	146,877,302
15	1,210,611,773	0	37,957,144	107,664,278	145,621,422
16	1,155,737,813	0	36,054,055	108,272,848	144,326,902
17	1,100,246,989	0	34,149,998	108,870,540	143,020,538
18	1,045,535,148	0	32,293,371	109,377,095	141,670,466
19	990,939,961	0	30,457,170	110,014,047	140,471,217
20	936,987,329	0	28,656,343	110,777,219	139,433,562
21	885,249,622	0	26,929,566	111,711,819	138,641,385
22	835,402,569	0	25,286,189	113,000,426	138,286,615
23	786,609,723	0	23,695,954	114,552,742	138,248,695
24	737,347,413	0	22,120,269	116,269,474	138,389,744
25	686,364,415	0	20,526,158	118,016,274	138,542,432
26	633,264,106	0	18,917,417	119,654,752	138,572,168
27	579,161,294	0	17,298,246	121,092,875	138,391,121
28	523,786,644	0	15,658,741	122,359,266	138,018,007
29	467,878,904	0	14,008,954	123,455,564	137,464,518
30	411,291,787	0	12,347,473	124,480,026	136,827,499
31	355,983,546	0	10,723,574	125,407,802	136,131,376
32	302,729,711	0	9,159,105	126,369,106	135,528,211
33	251,936,448	0	7,658,089	127,417,599	135,075,688
34	205,415,711	0	6,269,805	128,556,891	134,826,695
35	165,258,082	0	5,062,579	129,814,231	134,876,810
36	130,780,960	0	4,025,703	131,319,353	135,345,057
37	101,518,740	0	3,137,782	132,842,836	135,980,618
38	77,161,632	0	2,397,266	134,360,043	136,757,309
39	57,482,078	0	1,793,025	135,877,431	137,670,456
40	42,004,669	0	1,316,034	137,400,987	138,717,020
41	30,223,310	0	949,322	138,913,677	139,862,999
42	21,422,549	0	674,013	140,408,641	141,082,654
43	14,992,981	0	473,944	141,870,488	142,344,432
44	10,389,704	0	327,696	143,311,535	143,639,231
45	7,116,358	0	225,583	144,737,862	144,963,445
46	4,801,998	0	151,576	146,164,348	146,315,924
47	3,194,290	0	101,198	147,591,243	147,692,441
48	2,093,436	0	65,837	149,025,052	149,090,889
49	1,359,060	0	42,637	150,467,826	150,510,463
50	872,395	0	27,873	151,924,634	151,952,506

Year 1 is the year ending June 30, 2022. Projected contributions exclude premiums paid by retirees.



Single Discount Rate Development

Projection of Plan Net Position Ending June 30 for 2022 to 2071

Year	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings at 7.500%	Projected Ending Plan Net Position
	(a)	(b)	(c)	(d)	(e)	(f)=(a)+(b)-(c)-(d)+(e)
1						\$ 722,881,009
2	\$ 722,881,009	\$ 103,105,790	\$ 79,633,363	\$ 383,095	\$ 59,002,638	804,972,979
3	804,972,979	112,886,149	88,369,861	394,565	65,570,945	894,665,647
4	894,665,647	114,437,252	98,020,354	406,364	72,058,442	982,734,623
5	982,734,623	115,387,358	108,193,170	418,503	78,359,842	1,067,870,151
6	1,067,870,151	116,506,532	118,813,787	430,994	84,437,412	1,149,569,313
7	1,149,569,313	117,431,330	130,060,776	443,847	90,219,598	1,226,715,618
8	1,226,715,618	118,296,792	141,545,399	457,072	95,647,106	1,298,657,045
9	1,298,657,045	119,670,713	153,653,135	470,682	100,699,424	1,364,903,366
10	1,364,903,366	127,409,710	165,967,660	484,688	105,794,361	1,431,655,090
11	1,431,655,090	135,307,928	178,516,589	498,949	110,930,504	1,498,877,983
12	1,498,877,983	143,222,525	191,117,453	513,266	116,101,299	1,566,571,088
13	1,566,571,088	147,741,577	204,073,488	527,842	121,039,606	1,630,750,942
14	1,630,750,942	146,877,302	216,229,967	542,665	125,340,102	1,686,195,713
15	1,686,195,713	145,621,422	227,878,134	557,727	128,974,804	1,732,356,079
16	1,732,356,079	144,326,902	239,406,563	572,605	131,914,694	1,768,618,508
17	1,768,618,508	143,020,538	250,036,863	586,819	134,144,446	1,795,159,811
18	1,795,159,811	141,670,466	260,319,181	600,841	135,654,656	1,811,564,911
19	1,811,564,911	140,471,217	269,997,844	614,755	136,438,194	1,817,861,723
20	1,817,861,723	139,433,562	279,417,647	628,524	136,485,267	1,813,734,381
21	1,813,734,381	138,641,385	287,836,513	641,913	135,805,810	1,799,703,150
22	1,799,703,150	138,286,615	294,913,779	654,748	134,465,788	1,776,887,027
23	1,776,887,027	138,248,695	301,348,511	666,957	132,514,345	1,745,634,600
24	1,745,634,600	138,389,744	307,603,831	678,547	129,950,231	1,705,692,196
25	1,705,692,196	138,542,432	313,641,829	689,452	126,743,269	1,656,646,617
26	1,656,646,617	138,572,168	319,121,605	699,479	122,864,935	1,598,262,638
27	1,598,262,638	138,391,121	325,152,238	708,506	118,250,166	1,529,043,181
28	1,529,043,181	138,018,007	331,564,934	716,725	112,794,291	1,447,573,821
29	1,447,573,821	137,464,518	339,104,609	724,498	106,364,665	1,351,573,897
30	1,351,573,897	136,827,499	346,794,480	731,525	98,833,479	1,239,708,870
31	1,239,708,870	136,131,376	354,769,613	737,625	90,097,507	1,110,430,515
32	1,110,430,515	135,528,211	361,876,431	741,823	80,094,551	963,435,022
33	963,435,022	135,075,688	368,252,799	743,840	68,801,084	798,315,156
34	798,315,156	134,826,695	372,523,792	742,629	56,241,197	616,116,628
35	616,116,628	134,876,810	374,593,634	737,636	42,504,035	418,166,204
36	418,166,204	135,345,057	373,288,673	727,365	27,741,301	207,236,523
37	207,236,523	135,980,618	369,427,720	712,386	12,111,962	0
38	0	136,757,309	365,825,850	695,223	0	0
39	0	137,670,456	359,837,761	674,706	0	0
40	0	138,717,020	352,106,239	651,729	0	0
41	0	139,862,999	344,913,966	629,236	0	0
42	0	141,082,654	338,821,233	608,556	0	0
43	0	142,344,432	333,144,061	589,114	0	0
44	0	143,639,231	330,057,003	573,890	0	0
45	0	144,963,445	326,735,932	560,205	0	0
46	0	146,315,924	323,086,899	546,271	0	0
47	0	147,692,441	319,139,829	532,142	0	0
48	0	149,090,889	314,447,881	517,272	0	0
49	0	150,510,463	309,111,083	501,694	0	0
50	0	151,952,506	303,035,113	485,331	0	0

Year 1 is the year ending June 30, 2022.

Based on a projection of results from the actuarial valuation as of July 1, 2021.

Projected contributions exclude premiums paid by retirees. Projected benefit payments are net of retiree paid premiums.



Single Discount Rate Development

Present Values of Projected Benefits Ending June 30 for 2022 to 2071

Year	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Projected Benefit Payments	Unfunded Portion of Projected Benefit Payments	Present Value of Funded Benefit Payments Using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments Using Municipal Bond Rate (vf)	Present Value of All Benefit Payments Using Single Discount Rate (SDR)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v ⁿ /(a)-.5	(g)=(e)*vf ⁿ /(a)-.5	(h)=(c)/(1+SDR) ⁿ (a)-.5
1	\$ 768,959,936	\$ 70,922,395	\$ 70,922,395	\$ 0	\$ 68,403,632	\$ 0	\$ 69,043,214
2	722,881,009	79,633,363	79,633,363	0	71,446,731	0	73,469,633
3	804,972,979	88,369,861	88,369,861	0	73,753,564	0	77,266,669
4	894,665,647	98,020,354	98,020,354	0	76,100,348	0	81,223,088
5	982,734,623	108,193,170	108,193,170	0	78,137,904	0	84,964,652
6	1,067,870,151	118,813,787	118,813,787	0	79,821,574	0	88,426,103
7	1,149,569,313	130,060,776	130,060,776	0	81,281,428	0	91,735,028
8	1,226,715,618	141,545,399	141,545,399	0	82,287,198	0	94,614,962
9	1,298,657,045	153,653,135	153,653,135	0	83,093,964	0	97,337,614
10	1,364,903,366	165,967,660	165,967,660	0	83,491,653	0	99,640,970
11	1,431,655,090	178,516,589	178,516,589	0	83,539,084	0	101,570,659
12	1,498,877,983	191,117,453	191,117,453	0	83,196,108	0	103,054,093
13	1,566,571,088	204,073,488	204,073,488	0	82,638,188	0	104,286,164
14	1,630,750,942	216,229,967	216,229,967	0	81,451,974	0	104,720,376
15	1,686,195,713	227,878,134	227,878,134	0	79,850,920	0	104,590,725
16	1,732,356,079	239,406,563	239,406,563	0	78,037,771	0	104,136,213
17	1,768,618,508	250,036,863	250,036,863	0	75,816,614	0	103,073,015
18	1,795,159,811	260,319,181	260,319,181	0	73,427,382	0	101,700,319
19	1,811,564,911	269,997,844	269,997,844	0	70,844,103	0	99,965,847
20	1,817,861,723	279,417,647	279,417,647	0	68,200,692	0	98,043,858
21	1,813,734,381	287,836,513	287,836,513	0	65,354,029	0	95,716,686
22	1,799,703,150	294,913,779	294,913,779	0	62,289,247	0	92,942,006
23	1,776,887,027	301,348,511	301,348,511	0	59,207,756	0	90,003,881
24	1,745,634,600	307,603,831	307,603,831	0	56,220,257	0	87,068,114
25	1,705,692,196	313,641,829	313,641,829	0	53,324,477	0	84,134,977
26	1,656,646,617	319,121,605	319,121,605	0	50,470,821	0	81,128,607
27	1,598,262,638	325,152,238	325,152,238	0	47,836,836	0	78,339,314
28	1,529,043,181	331,564,934	331,564,934	0	45,377,005	0	75,707,137
29	1,447,573,821	339,104,609	339,104,609	0	43,171,035	0	73,379,902
30	1,351,573,897	346,794,480	346,794,480	0	41,069,790	0	71,119,848
31	1,239,708,870	354,769,613	354,769,613	0	39,083,033	0	68,950,952
32	1,110,430,515	361,876,431	361,876,431	0	37,084,606	0	66,654,482
33	963,435,022	368,252,799	368,252,799	0	35,105,161	0	64,282,140
34	798,315,156	372,523,792	372,523,792	0	33,034,707	0	61,627,350
35	616,116,628	374,593,634	374,593,634	0	30,900,704	0	58,729,334
36	418,166,204	373,288,673	373,288,673	0	28,644,704	0	55,464,449
37	207,236,523	369,427,720	214,867,400	154,560,319	15,337,748	41,181,493	52,020,507
38	0	365,825,850	0	365,825,850	0	94,002,975	48,819,654
39	0	359,837,761	0	359,837,761	0	89,173,758	45,509,520
40	0	352,106,239	0	352,106,239	0	84,152,530	42,203,109
41	0	344,913,966	0	344,913,966	0	79,500,043	39,179,304
42	0	338,821,233	0	338,821,233	0	75,316,534	36,474,703
43	0	333,144,061	0	333,144,061	0	71,419,188	33,988,221
44	0	330,057,003	0	330,057,003	0	68,239,355	31,912,477
45	0	326,735,932	0	326,735,932	0	65,148,734	29,939,440
46	0	323,086,899	0	323,086,899	0	62,128,599	28,057,006
47	0	319,139,829	0	319,139,829	0	59,185,640	26,265,048
48	0	314,447,881	0	314,447,881	0	56,240,236	24,525,680
49	0	309,111,083	0	309,111,083	0	53,318,284	22,848,736
50	0	303,035,113	0	303,035,113	0	50,410,112	21,228,327

Year 1 is the year ending June 30, 2022.

Based on a projection of results from the actuarial valuation as of July 1, 2021.

Projected benefit payments are net of retiree paid premiums.



Single Discount Rate Development

Present Values of Projected Benefits Ending June 30 for 2072 to 2121 (Concluded)

Year	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Projected Benefit Payments	Unfunded Portion of Projected Benefit Payments	Present Value of Funded Benefit Payments Using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments Using Municipal Bond Rate (vf)	Present Value of All Benefit Payments Using Single Discount Rate (SDR)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v ^a ((a)-.5)	(g)=(e)*vf ^a ((a)-.5)	(h)=(c)/(1+SDR) ^a ((a)-.5)
51	\$	0	\$ 296,192,591	\$ 0	\$ 296,192,591	\$ 47,518,424	\$ 19,664,016
52		0	288,576,845	0	288,576,845	44,649,073	18,156,608
53		0	280,215,124	0	280,215,124	41,812,454	16,708,598
54		0	271,138,933	0	271,138,933	39,018,368	15,322,002
55		0	261,387,926	0	261,387,926	36,276,540	13,998,593
56		0	251,002,025	0	251,002,025	33,595,468	12,739,468
57		0	240,033,258	0	240,033,258	30,984,038	11,545,711
58		0	228,537,242	0	228,537,242	28,450,290	10,417,931
59		0	216,587,598	0	216,587,598	26,003,178	9,356,928
60		0	204,265,484	0	204,265,484	23,651,079	8,363,150
61		0	191,637,565	0	191,637,565	21,399,308	7,435,852
62		0	178,793,570	0	178,793,570	19,254,583	6,574,719
63		0	165,815,801	0	165,815,801	17,221,511	5,778,651
64		0	152,812,174	0	152,812,174	15,306,166	5,047,004
65		0	139,868,918	0	139,868,918	13,511,165	4,377,964
66		0	127,075,374	0	127,075,374	11,838,485	3,769,533
67		0	114,540,675	0	114,540,675	10,291,000	3,220,039
68		0	102,372,224	0	102,372,224	8,870,398	2,727,462
69		0	90,687,525	0	90,687,525	7,578,297	2,289,809
70		0	79,595,468	0	79,595,468	6,414,688	1,904,651
71		0	69,184,436	0	69,184,436	5,377,232	1,568,955
72		0	59,493,954	0	59,493,954	4,459,501	1,278,646
73		0	50,614,168	0	50,614,168	3,658,885	1,030,919
74		0	42,594,499	0	42,594,499	2,969,568	822,207
75		0	35,449,800	0	35,449,800	2,383,508	648,510
76		0	29,149,649	0	29,149,649	1,890,163	505,372
77		0	23,665,890	0	23,665,890	1,479,967	388,845
78		0	18,918,877	0	18,918,877	1,141,005	294,594
79		0	14,873,231	0	14,873,231	865,089	219,487
80		0	11,486,177	0	11,486,177	644,309	160,640
81		0	8,699,137	0	8,699,137	470,606	115,300
82		0	6,454,281	0	6,454,281	336,738	81,073
83		0	4,684,099	0	4,684,099	235,686	55,761
84		0	3,320,811	0	3,320,811	161,144	37,465
85		0	2,296,858	0	2,296,858	107,490	24,558
86		0	1,548,328	0	1,548,328	69,881	15,689
87		0	1,016,115	0	1,016,115	44,229	9,758
88		0	648,655	0	648,655	27,229	5,903
89		0	402,619	0	402,619	16,300	3,473
90		0	243,051	0	243,051	9,490	1,987
91		0	142,737	0	142,737	5,375	1,106
92		0	81,529	0	81,529	2,961	599
93		0	45,303	0	45,303	1,587	315
94		0	24,372	0	24,372	823	161
95		0	12,637	0	12,637	412	79
96		0	6,236	0	6,236	196	37
97		0	2,928	0	2,928	89	16
98		0	1,260	0	1,260	37	7
99		0	559	0	559	16	3
100		0	334	0	334	9	2
Totals					\$ 2,298,332,746	\$ 1,459,421,520	\$ 3,757,754,266

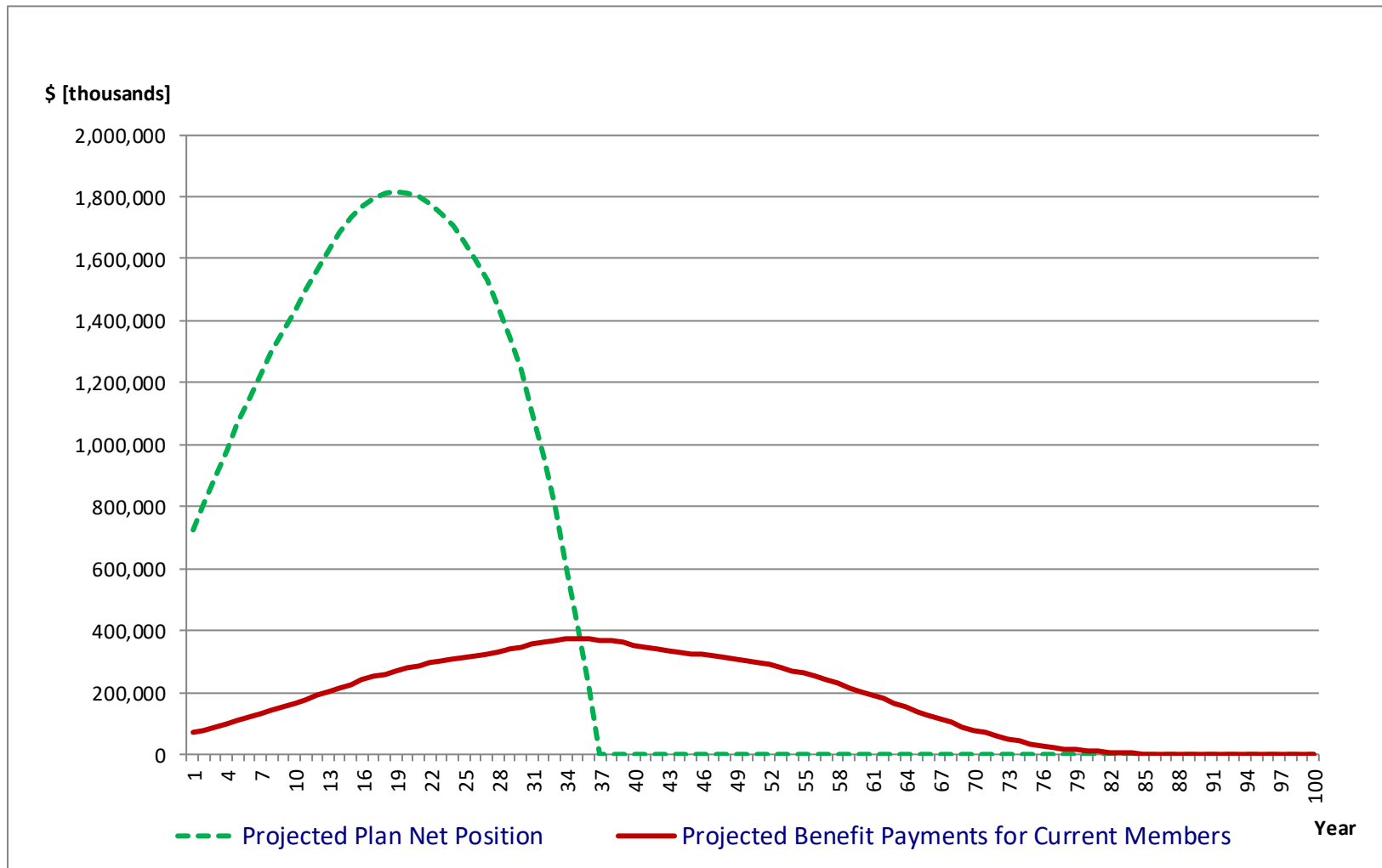
Year 1 is the year ending June 30, 2022.

Based on a projection of results from the actuarial valuation as of July 1, 2021.

Projected benefit payments are net of retiree paid premiums.



Projection of Plan Net Position and Benefit Payments



SECTION J

GLOSSARY OF TERMS

Glossary of Terms

Accrued Service	Service credited under the system that was rendered before the date of the actuarial valuation.
Actuarial Accrued Liability (AAL)	The AAL is the difference between the actuarial present value of all benefits and the actuarial value of future normal costs. The definition comes from the fundamental equation of funding which states that the present value of all benefits is the sum of the Actuarial Accrued Liability and the present value of future normal costs. The AAL may also be referred to as "accrued liability" or "actuarial liability."
Actuarial Assumptions	These assumptions are estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and compensation increases. Actuarial assumptions are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (compensation increases, payroll growth, inflation and investment return) consist of an underlying real rate of return plus an assumption for a long-term average rate of inflation.
Actuarial Cost Method	A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of the OPEB trust benefits between future normal cost and actuarial accrued liability. The actuarial cost method may also be referred to as the actuarial funding method.
Actuarial Equivalent	A single amount or series of amounts of equal actuarial value to another single amount or series of amounts, computed on the basis of appropriate actuarial assumptions.
Actuarial Gain (Loss)	The difference in liabilities between actual experience and expected experience during the period between two actuarial valuations is the gain (loss) on the accrued liabilities.
Actuarial Present Value (APV)	The amount of funds currently required to provide a payment or series of payments in the future. The present value is determined by discounting future payments at predetermined rates of interest and probabilities of payment.
Actuarial Valuation	The actuarial valuation report determines, as of the actuarial valuation date, the service cost, total OPEB liability and related actuarial present value of projected benefit payments for OPEB.
Actuarial Valuation Date	The date as of which an actuarial valuation is performed.

Glossary of Terms

Actuarially Determined Contribution (ADC) or Annual Required Contribution (ARC)	A calculated contribution into an OPEB plan for the reporting period, most often determined based on the funding policy of the plan. Typically, the Actuarially Determined Contribution has a normal cost payment and an amortization payment.
Amortization Method	The method used to determine the periodic amortization payment may be a level dollar amount, or a level percent of pay amount. The period will typically be expressed in years, and the method will either be “open” (meaning, reset each year) or “closed” (the number of years remaining will decline each year).
Amortization Payment	The amortization payment is the periodic payment required to pay off an interest-discounted amount with payments of interest and principal.
Cost-of-Living Adjustments	Post-employment benefit changes intended to adjust benefit payments for the effects of inflation.
Cost-Sharing Multiple-Employer Defined Benefit OPEB Plan (cost-sharing OPEB plan)	A multiple-employer defined benefit OPEB plan in which the OPEB obligations to the employees of more than one employer are pooled and OPEB plan assets can be used to pay the benefits of the employees of any employer that provides benefits through the OPEB plan.
Covered-Employee Payroll	The payroll of employees that are provided with benefits through the OPEB plan.
Deferred Inflows and Outflows	The deferred inflows and outflows of OPEB resources are amounts used under GASB Statement No. 75 in developing the annual OPEB expense. Deferred inflows and outflows arise with differences between expected and actual experiences; changes of assumptions. The portion of these amounts not included in the OPEB expense should be included in the deferred inflows or outflows of resources.
Discount Rate	For GASB purposes, the discount rate is the single rate of return that results in the present value of all projected benefit payments to be equal to the sum of the funded and unfunded projected benefit payments, specifically: <ol style="list-style-type: none">1. The benefit payments to be made while the OPEB plans’ fiduciary net position is projected to be greater than the benefit payments that are projected to be made in the period; and2. The present value of the benefit payments not in (1) above, discounted using the municipal bond rate.

Glossary of Terms

Entry Age Actuarial Cost Method (EAN)	The EAN is a cost method for allocating the costs of the plan between the normal cost and the accrued liability. The actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis (either level dollar or level percent of pay) over the earnings or service of the individual between entry age and assumed exit ages(s). The portion of the actuarial present value allocated to a valuation year is the normal cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is the actuarial accrued liability. The sum of the accrued liability plus the present value of all future normal costs is the present value of all benefits.
Fiduciary Net Position	The fiduciary net position is the market value of the assets of the trust dedicated to the defined benefit provisions.
GASB	The Governmental Accounting Standards Board is an organization that exists in order to promulgate accounting standards for governmental entities.
Long-Term Expected Rate of Return	The long-term rate of return is the expected return to be earned over the entire trust portfolio based on the asset allocation of the portfolio.
Money-Weighted Rate of Return	The money-weighted rate of return is a method of calculating the returns that adjusts for the changing amounts actually invested. For purposes of GASB Statement No. 74, the money-weighted rate of return is calculated as the internal rate of return on OPEB plan investments, net of OPEB plan investment expense.
Multiple-Employer Defined Benefit OPEB Plan	A multiple-employer plan is a defined benefit OPEB plan that is used to provide OPEB payments to the employees of more than one employer.
Municipal Bond Rate	The Municipal Bond Rate is the discount rate to be used for those benefit payments that occur after the assets of the trust have been depleted.
Net OPEB Liability (NOL)	The NOL is the liability of employers and non-employer contributing entities to plan members for benefits provided through a defined benefit OPEB plan.
Non-Employer Contributing Entities	Non-employer contributing entities are entities that make contributions to an OPEB plan that is used to provide OPEB payments to the employees of other entities. For purposes of the GASB accounting statements, plan members are not considered non-employer contributing entities.



Glossary of Terms

Normal Cost	The portion of the actuarial present value allocated to a valuation year is called the normal cost. For purposes of application to the requirements of this Statement, the term normal cost is the equivalent of service cost.
Other Post-Employment Benefits (OPEB)	All post-employment benefits other than retirement income (such as death benefits, life insurance, disability and long-term care) that are provided separately from a pension plan, as well as post-employment healthcare benefits regardless of the manner in which they are provided. Other post-employment benefits do not include termination benefits.
Real Rate of Return	The real rate of return is the rate of return on an investment after adjustment to eliminate inflation.
Service Cost	The service cost is the portion of the actuarial present value of projected benefit payments that is attributed to a valuation year.
Total OPEB Expense	The total OPEB expense is the sum of the following items that are recognized at the end of the employer's fiscal year: <ol style="list-style-type: none">1. Service Cost2. Interest on the Total OPEB Liability3. Current-Period Benefit Changes4. Employee Contributions (made negative for addition here)5. Projected Earnings on Plan Investments (made negative for addition here)6. OPEB Plan Administrative Expense7. Other Changes in Plan Fiduciary Net Position8. Recognition of Outflow (Inflow) of Resources due to Liabilities9. Recognition of Outflow (Inflow) of Resources due to Assets
Total OPEB Liability (TOL)	The TOL is the portion of the actuarial present value of projected benefit payments that is attributed to past periods of member service.
Unfunded Actuarial Accrued Liability (UAAL)	The UAAL is the difference between actuarial accrued liability and valuation assets.
Valuation Assets	The valuation assets are the assets used in determining the unfunded liability of the plan. For purposes of GASB Statement Nos. 74 and 75, the valuation assets are equal to the market value of assets.