City of Ann Arbor Retiree Health Benefits Plan & Trust

GASB Statement Nos. 74 and 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions June 30, 2022





November 11, 2022

Board of Trustees City of Ann Arbor Retiree Health Benefits Plan & Trust Ann Arbor, Michigan

Dear Trustees:

This report provides information on behalf of the City of Ann Arbor Retiree Health Benefits 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 Postemployment 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 postemployment benefits other than pension. This valuation updates the report originally delivered August 24, 2022 to incorporate information provided by the City in accordance with Covered Payroll.

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 Net OPEB Liability is not an appropriate measure for measuring the sufficiency of plan assets to cover the estimated cost of settling the employer's benefit obligation. The Net OPEB Liability is not an appropriate measure for assessing the need for or amount of future employer contributions. 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 City of Ann Arbor Retiree Health Benefits Plan & Trust only in its entirety and only with the permission of the City of Ann Arbor Retiree Health Benefits Plan & Trust. GRS is not responsible for unauthorized use of this report.

This report complements the actuarial valuation report prepared as of June 30, 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, demographic, health care trend, morbidity assumptions, and benefit provisions.

This report is based upon information, furnished to us by the City of Ann Arbor Retiree Health Benefits Plan & Trust, concerning Other Postemployment Benefits (OPEB), active members, deferred vested members, retirees and beneficiaries, and financial data. This information 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 City of Ann Arbor Retiree Health Benefits Plan & Trust as of the reporting date. 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 authors of this report prior to making such decision.

Board of Trustees City of Ann Arbor Retiree Health Benefits Plan & Trust November 11, 2022 Page 2

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.

This report was prepared during the recent and still-developing COVID-19 pandemic, which is likely to influence demographic, economic, and health care cost experience, at least in the short term. Results in this report are developed based on available data without adjustment. We will continue to monitor these developments and their impact on the Retiree Health Benefits Plan & Trust. Actual experience will be reflected in each subsequent report, as experience emerges.

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.

Section H of the report details the calculation of the single discount rate and is not required to be included in your financial statements. However, this information may be requested by your auditors; therefore, we have included it in this report.

James D. Anderson, Richard C. Koch Jr. and Francois Pieterse are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. The signing actuaries are independent of the plan sponsor.

Respectfully submitted, Gabriel, Roeder, Smith & Company

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Auditor's Note – This information is intended to assist in preparation of the financial statements of the City of Ann Arbor Retiree Health 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.									



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EXECUTIVE SUMMARY

Executive Summary as of June 30, 2022

Actuarial Valuation Date	Ju	une 30, 2021
Measurement Date of the Net OPEB Liability	Jı	une 30, 2022
Employer's Fiscal Year Ending Date (Reporting Date)	Jı	une 30, 2022
Membership		
Number of ⁽¹⁾		
- Retirees and Beneficiaries		1,048
- Inactive, Nonretired Members		0
- Active Members		707
- Total		1,755
Covered Payroll ⁽²⁾	\$	62,187,947
Net OPEB Liability		
Total OPEB Liability	\$	297,184,636
Plan Fiduciary Net Position		226,358,005
Net OPEB Liability	\$	70,826,631
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability		76.17 %
Net OPEB Liability as a Percentage of Covered Payroll		113.89 %
Development of the Single Discount Rate		
Single Discount Rate		6.80 %
Long-Term Municipal Bond Rate ⁽³⁾		3.69 %
Total OPEB Expense	\$	6,826,773

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	\$	2,917,542	\$	21,224,389	
Changes in assumptions		7,421,363		5,410,503	
Net difference between projected and actual earnings					
on OPEB plan investments		30,972,920		21,683,603	
Total	\$	41,311,825	\$	48,318,495	

⁽¹⁾ As of the actuarial valuation date. GRS does not have membership counts as of June 30, 2022. The City of Ann Arbor staff and auditors may decide that providing membership counts as of the valuation date is sufficient. Alternatively, the City may decide to update the membership counts to be as of the Plan's fiscal year end.



⁽²⁾ Covered payroll was provided by the City of Ann Arbor and may or may not meet the GASB Statement Nos. 74 and 75 definition of Covered Payroll.

⁽³⁾ 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 GO AA 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.

Discussion

Accounting Standard

For Other Postemployment Benefit (OPEB) plans that are administered through trusts or equivalent arrangements, Governmental Accounting Standards Board (GASB) Statement No. 74, "Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans," replaces the requirements of GASB Statement No. 43, "Financial Reporting for Postemployment 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 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 the 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.



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 health care 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.



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, the schedule covering each of the 10 most recent fiscal years of the actuarially determined contribution, contributions to the OPEB plan and related ratios.

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

Given the plan's contribution allocation procedure, if all actuarial assumptions are met (including the assumption of the plan earning 6.80% on the actuarial value of assets), then the following outcomes are expected:

- 1. The employer normal cost as a percentage of pay is expected to remain level as a percentage of payroll.
- 2. The unfunded liability will decrease as a dollar amount during the amortization period.
- 3. The funded status of the plan will increase gradually towards a 100% funded ratio.

This funding policy results in the expectation that the plan's assets will be able to fully pay for promised benefits through at least 2122 and a GASB single discount rate of 6.80%. 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.

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. For the employer's financial reporting purposes, the net OPEB liability and OPEB expense should be measured as of the employer's "measurement date," which may not be earlier than the employer's prior fiscal year end-date. If the actuarial valuation used to determine the total OPEB liability is not calculated as of the measurement date, the total OPEB liability is required to be rolled forward from the actuarial valuation date to the measurement date.

The total OPEB liability shown in this report is based on a replication of the actuarial valuation performed as of June 30, 2021 and a measurement date of June 30, 2022. The total OPEB liability was "rolled forward" from June 30, 2021 to June 30, 2022 using generally accepted actuarial principles.



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) 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 6.80%; 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 6.80%.

Actuarial Assumptions

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

Future Uncertainty or Risk

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

- 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 I. The 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, please alert the actuaries immediately, so they can be sure the proper provisions are valued.



SECTION B

FINANCIAL STATEMENTS

Auditor's Note – This information is intended to assist in preparation of the financial statements of the City of Ann Arbor Retiree Health 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

10. Total OPEB Expense	\$ 6,826,773
9. Recognition of Outflow (Inflow) of Resources due to Assets	1,190,958
8. Recognition of Outflow (Inflow) of Resources due to Liabilities	(1,653,329)
7. Other Changes in Plan Fiduciary Net Position	0
6. OPEB Plan Administrative Expense	156,737
5. Projected Earnings on Plan Investments (made negative for addition here)	(16,880,632)
4. Employee Contributions (made negative for addition here)	0
3. Current-Period Benefit Changes	0
2. Interest on the Total OPEB Liability	21,291,056
1. Service Cost	\$ 2,721,983

Recognition of Deferred Outflows and Inflows of Resources

Differences between expected and actual experience and changes in assumptions are recognized in the 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 that 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 7,023 years as of the valuation date. Additionally, the total plan membership (active employees and inactive employees) was 1,755 as of the valuation date. 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 4.0019 years.

Additionally, differences between projected and actual earnings on OPEB plan investments should be recognized in the 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.



Statement of Outflows and Inflows Arising from Current Reporting Period Fiscal Year Ended June 30, 2022

A. Outflows (Inflows) of Resources Due to Liabilities	
1. Difference between expected and actual experience of the Total OPEB Liability	
(gains) or losses	\$ (28,294,707)
2. Assumption Changes (gains) or losses	\$ 779,616
Recognition period for Liabilities: Average of the expected remaining service lives of all employees {in years}	4.0019
4. Outflow (Inflow) of Resources to be recognized in the current OPEB expense for the	
difference between expected and actual experience of the Total OPEB Liability	\$ (7,070,318)
5. Outflow (Inflow) of Resources to be recognized in the current OPEB expense for	
assumption changes	\$ 194,811
6. Outflow (Inflow) of Resources to be recognized in the current OPEB expense	
due to Liabilities	\$ (6,875,507)
7. Deferred Outflow (Inflow) of Resources to be recognized in future OPEB expenses for the	
difference between expected and actual experience of the Total OPEB Liability	\$ (21,224,389)
8. Deferred Outflow (Inflow) of Resources to be recognized in future OPEB expenses for	
assumption changes	\$ 584,805
9. Deferred Outflow (Inflow) of Resources to be recognized in future OPEB expenses	
due to Liabilities	\$ (20,639,584)
B. Outflows (Inflows) of Resources Due to Assets	
1. Net difference between projected and actual earnings on OPEB plan investments	
(gains) or losses	\$ 35,471,388
2. Recognition period for Assets {in years}	5.0000
3. Outflow (Inflow) of Resources to be recognized in the current OPEB expense	
due to Assets	\$ 7,094,278

4. Deferred Outflow (Inflow) of Resources to be recognized in future OPEB expenses



due to Assets

28,377,110

Statement of Outflows and Inflows Arising from Current and Prior Reporting Periods Fiscal Year Ended June 30, 2022

A. Outflows and Inflows of Resources by Source to be Recognized in Current OPEB Expense

	Outflows f Resources	of	Inflows Resources	et Outflows FResources
1. Differences between expected and actual experience	\$ 7,694,363	\$	7,070,318	\$ 624,045
2. Assumption changes	3,554,795		5,832,169	(2,277,374)
3. Net difference between projected and actual				
earnings on OPEB plan investments	 8,421,826		7,230,868	 1,190,958
4. Total	\$ 19,670,984	\$	20,133,355	\$ (462,371)

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

	Deferred Outflows of Resources						eferred Outflows f Resources
1. Differences between expected and actual experience	\$	2,917,542	\$	21,224,389	\$	(18,306,847)	
2. Assumption changes		7,421,363		5,410,503		2,010,860	
3. Net difference between projected and actual							
earnings on OPEB plan investments		30,972,920		21,683,603		9,289,317	
4. Total	\$	41,311,825	\$	48,318,495	\$	(7,006,670)	

C. Deferred Outflows and Deferred Inflows of Resources by Year to be Recognized in Future OPEB Expenses

Year Ending June 30	 Net Deferred Outflows of Resources		
2023	\$ (5,282,851)		
2024	(1,928,233)		
2025	(6,876,799)		
2026	7,081,213		
2027	0		
Thereafter	 0		
Total	\$ (7,006,670)		



Recognition of Deferred Outflows and Inflows of Resources Fiscal Year Ended June 30, 2022

Year Established	Initial Amount	Initial Recognition Period		Current Year Recognition	ı	Remaining Recognition	Remaining Recognition Period
Deferred Outflow (Inflow) Due to Differences Between Expected and Actual Experience on Liabilities							
			-		-		
2018	\$	0.0000	\$	0	\$	0	0.0000
2019	23,161,05			5,089,539		0	0.0000
2020	8,453,22	2 3.9277		2,152,207		1,996,601	0.9277
2021	1,826,17	5 4.0347		452,617		920,941	2.0347
2022	(28,294,70	7) 4.0019		(7,070,318)		(21,224,389)	3.0019
Total			\$	624,045	\$	(18,306,847)	
2018 2019 2020 2021 2022 Total	(Inflow) Due to Ass \$ (22,907,01 13,556,52 779,61	0 0.0000 0 3.8449 0) 3.9277 6 4.0347	\$	0 0 (5,832,169) 3,359,984 194,811 (2,277,374)	\$	0 0 (5,410,503) 6,836,558 584,805 2,010,860	0.0000 0.0000 0.9277 2.0347 3.0019
	(lefters) Due to Diff	fa waxaa a Dadawa a w				, ,	
	(Inflow) Due to Diff		-			_	
2018	\$ (15,00	•	\$	(3,000)	>	0	0.0000
2019	296,42			59,285		59,284	1.0000
2020	6,341,31			1,268,263		2,536,526	2.0000
2021	(36,139,33	•		(7,227,868)		(21,683,603)	3.0000
2022	35,471,38	5.0000		7,094,278		28,377,110	4.0000
Total			\$	1,190,958	\$	9,289,317	



Statement of Fiduciary Net Position as of June 30, 2022

	2022
Assets	
Cash and Deposits	\$ 0
Receivables	
Accounts Receivable - Sale of Investments	\$ 0
Accrued Interest and Other Dividends	186,458
Contributions	0
Accounts Receivable - Other	 484,613
Total Receivables	\$ 671,071
Investments	
Fixed Income	\$ 57,700,518
Domestic Equities	90,870,488
International Equities	39,868,666
Infrastructure	3,658,088
Real Estate	29,575,565
Other	 4,261,468
Total Investments	\$ 225,934,793
Total Assets	\$ 226,605,864
Liabilities	
Payables	
Accounts Payable - Purchase of Investments	\$ 0
Accrued Expenses	0
Accounts Payable - Other	 247,859
Total Liabilities	\$ 247,859
Net Position Restricted for OPEB	\$ 226,358,005



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

Additions Employer ⁽¹⁾ \$ 13,797,260 Nonemployer contributing entities 0 Active Employees 0 Other 0 Total Contributions \$ 13,797,260 Investment Income \$ 13,797,260 Net Appreciation in Fair Value of Investments \$ (22,305,800) Interest and Dividends 3,902,415 Less Investment Expense (187,101) Net Investment Income \$ 0 Other \$ 0 Total Additions \$ (18,590,756) Deductions \$ 13,036,696 OPEB Plan Administrative Expense 156,737 Other 0 Total Deductions \$ 13,193,433 Net Increase in Net Position \$ (17,986,929) Net Position Restricted for OPEB Beginning of Year \$ 244,344,934 End of Year \$ 226,358,005		2022
Employer (1) \$ 13,797,260 Nonemployer contributing entities 0 Active Employees 0 Other 0 Total Contributions \$ 13,797,260 Investment Income \$ 13,797,260 Net Appreciation in Fair Value of Investments \$ (22,305,800) Interest and Dividends 3,902,145 Less Investment Expense (187,101) Net Investment Income \$ (18,590,756) Other \$ 0 Total Additions \$ 13,036,696 OPEB Plan Administrative Expense 156,737 Other 0 Total Deductions \$ 13,193,433 Net Increase in Net Position \$ (17,986,929) Net Position Restricted for OPEB Beginning of Year \$ 244,344,934	Additions	_
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Active Employees 0 Other 0 Total Contributions \$ 13,797,260 Investment Income Net Appreciation in Fair Value of Investments \$ (22,305,800) Interest and Dividends 3,902,145 Less Investment Expense (187,101) Net Investment Income \$ (18,590,756) Other \$ 0 Total Additions \$ 13,036,696 OPEB Plan Administrative Expense 156,737 Other 0 Total Deductions \$ 13,193,433 Net Increase in Net Position \$ (17,986,929) Net Position Restricted for OPEB \$ 244,344,934		\$ 13,797,260
Other 0 Total Contributions \$ 13,797,260 Investment Income	Nonemployer contributing entities	0
Total Contributions \$ 13,797,260 Investment Income \$ (22,305,800) Net Appreciation in Fair Value of Investments \$ (22,305,800) Interest and Dividends 3,902,145 Less Investment Expense (187,101) Net Investment Income \$ (18,590,756) Other \$ 0 Total Additions \$ 13,036,696 Deductions \$ 13,036,696 OPEB Plan Administrative Expense 156,737 Other 0 Total Deductions \$ 13,193,433 Net Increase in Net Position \$ (17,986,929) Net Position Restricted for OPEB Beginning of Year \$ 244,344,934	Active Employees	0
Investment Income Net Appreciation in Fair Value of Investments Interest and Dividends Interest and Dividends Interest and Dividends Investment Expense Itan, 101 Net Investment Income Itan, 101 Net Investment Income Itan, 101 Net Investment Income Itan, 101 Total Additions Itan, 101 Solutions Benefit Payments (1) OPEB Plan Administrative Expense OPEB Plan Administrative Expense Itan, 101 Total Deductions Itan, 103 Net Increase in Net Position Itan, 103 Net Position Restricted for OPEB Beginning of Year Itan, 102 Solutions Itan, 103 Sol	Other	0
Net Appreciation in Fair Value of Investments \$ (22,305,800) Interest and Dividends 3,902,145 Less Investment Expense (187,101) Net Investment Income \$ (18,590,756) Other \$ 0 Total Additions \$ (4,793,496) Deductions \$ 13,036,696 OPEB Plan Administrative Expense 156,737 Other 0 Total Deductions \$ 13,193,433 Net Increase in Net Position \$ (17,986,929) Net Position Restricted for OPEB Beginning of Year \$ 244,344,934	Total Contributions	\$ 13,797,260
Interest and Dividends 3,902,145 Less Investment Expense (187,101) Net Investment Income \$ (18,590,756) Other \$ 0 Total Additions \$ (4,793,496) Deductions \$ 13,036,696 OPEB Plan Administrative Expense 156,737 Other 0 Total Deductions \$ 13,193,433 Net Increase in Net Position \$ (17,986,929) Net Position Restricted for OPEB \$ 244,344,934	Investment Income	
Less Investment Expense (187,101) Net Investment Income \$ (18,590,756) Other \$ 0 Total Additions \$ (4,793,496) Deductions Benefit Payments ⁽¹⁾ \$ 13,036,696 OPEB Plan Administrative Expense 156,737 Other 0 Total Deductions \$ 13,193,433 Net Increase in Net Position \$ (17,986,929) Net Position Restricted for OPEB \$ 244,344,934 Beginning of Year \$ 244,344,934	Net Appreciation in Fair Value of Investments	\$ (22,305,800)
Net Investment Income \$ (18,590,756) Other \$ 0 Total Additions \$ (4,793,496) Deductions \$ 13,036,696 OPEB Plan Administrative Expense 156,737 Other 0 Total Deductions \$ 13,193,433 Net Increase in Net Position \$ (17,986,929) Net Position Restricted for OPEB \$ 244,344,934 Beginning of Year \$ 244,344,934	Interest and Dividends	3,902,145
Other \$ 0 Total Additions \$ (4,793,496) Deductions Benefit Payments ⁽¹⁾ \$ 13,036,696 OPEB Plan Administrative Expense 156,737 Other 0 Total Deductions \$ 13,193,433 Net Increase in Net Position \$ (17,986,929) Net Position Restricted for OPEB \$ 244,344,934 Beginning of Year \$ 244,344,934	Less Investment Expense	 (187,101)
Total Additions \$ (4,793,496) Deductions Benefit Payments ⁽¹⁾ \$ 13,036,696 OPEB Plan Administrative Expense 156,737 Other 0 Total Deductions \$ 13,193,433 Net Increase in Net Position \$ (17,986,929) Net Position Restricted for OPEB Beginning of Year \$ 244,344,934	Net Investment Income	\$ (18,590,756)
Total Additions \$ (4,793,496) Deductions Benefit Payments ⁽¹⁾ \$ 13,036,696 OPEB Plan Administrative Expense 156,737 Other 0 Total Deductions \$ 13,193,433 Net Increase in Net Position \$ (17,986,929) Net Position Restricted for OPEB Beginning of Year \$ 244,344,934	Other	\$ 0
Benefit Payments ⁽¹⁾ \$ 13,036,696 OPEB Plan Administrative Expense 156,737 Other 0 Total Deductions \$ 13,193,433 Net Increase in Net Position \$ (17,986,929) Net Position Restricted for OPEB Beginning of Year \$ 244,344,934	Total Additions	(4,793,496)
Benefit Payments ⁽¹⁾ \$ 13,036,696 OPEB Plan Administrative Expense 156,737 Other 0 Total Deductions \$ 13,193,433 Net Increase in Net Position \$ (17,986,929) Net Position Restricted for OPEB Beginning of Year \$ 244,344,934		
OPEB Plan Administrative Expense 156,737 Other 0 Total Deductions \$ 13,193,433 Net Increase in Net Position \$ (17,986,929) Net Position Restricted for OPEB Beginning of Year \$ 244,344,934	Deductions	
Other0Total Deductions\$ 13,193,433Net Increase in Net Position\$ (17,986,929)Net Position Restricted for OPEB\$ 244,344,934Beginning of Year\$ 244,344,934	Benefit Payments ⁽¹⁾	\$ 13,036,696
Total Deductions \$ 13,193,433 Net Increase in Net Position \$ (17,986,929) Net Position Restricted for OPEB Beginning of Year \$ 244,344,934	OPEB Plan Administrative Expense	156,737
Net Increase in Net Position \$ (17,986,929) Net Position Restricted for OPEB Beginning of Year \$ 244,344,934	Other	0
Net Position Restricted for OPEB Beginning of Year \$ 244,344,934	Total Deductions	\$ 13,193,433
Beginning of Year \$ 244,344,934	Net Increase in Net Position	\$ (17,986,929)
	Net Position Restricted for OPEB	
End of Year \$ 226,358,005	Beginning of Year	 244,344,934
	End of Year	\$ 226,358,005

⁽¹⁾ Includes the amount being paid outside of the Trust.



SECTION C

REQUIRED SUPPLEMENTARY INFORMATION

Auditor's Note – This information is intended to assist in preparation of the financial statements of the City of Ann Arbor Retiree Health 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.

Schedule of Changes in Net OPEB Liability and Related Ratios Current Reporting Period Fiscal Year Ended June 30, 2022

A. Total OPEB Liability	
1. Service cost	\$ 2,721,983
2. Interest on the Total OPEB Liability	21,291,056
3. Changes of benefit terms	0
4. Difference between expected and actual experience	
of the Total OPEB Liability	(28,294,707)
5. Changes of assumptions	779,616
6. Benefit payments, including refunds	
of employee contributions ⁽¹⁾	(13,036,696)
7. Net change in Total OPEB Liability	(16,538,748)
8. Total OPEB Liability – Beginning	 313,723,384
9. Total OPEB Liability – Ending	\$ 297,184,636
B. Plan Fiduciary Net Position	
1. Contributions — employer ⁽¹⁾	\$ 13,797,260
2. Contributions – nonemployer contributing entities	0
3. Contributions – employee	0
4. Net investment income	(18,590,756)
5. Benefit payments, including refunds	
of employee contributions ⁽¹⁾	(13,036,696)
6. OPEB plan administrative expense	(156,737)
7. Other	 0
8. Net change in Plan Fiduciary Net Position	(17,986,929)
9. Plan Fiduciary Net Position – Beginning	 244,344,934
10. Plan Fiduciary Net Position – Ending	\$ 226,358,005
C. Net OPEB Liability	\$ 70,826,631
D. Plan Fiduciary Net Position as a percentage	
of the Total OPEB Liability	76.17 %
E. Covered-employee payroll ⁽²⁾	\$ 62,187,947
F. Net OPEB Liability as a percentage	
of covered-employee payroll	113.89 %

⁽¹⁾ Includes the amount being paid outside of the Trust.



⁽²⁾ Covered payroll was provided by the City of Ann Arbor and may or may not meet the GASB Statement Nos. 74 and 75 definition of Covered Payroll.

Schedules of Required Supplementary Information Schedule of Changes in Net OPEB Liability and Related Ratios Multiyear

					(2)							
Measurement Date - June 30,	 2022		2021	2020	2019 ⁽³⁾	2018	2017	2016	2015	20	14	2013
Total OPEB Liability												
Service cost	\$ 2,721,983	\$	3,070,762	\$ 2,169,920	\$ 2,623,068	\$ 3,331,000	\$ 3,071,000					
Interest on the Total OPEB Liability	21,291,056		19,890,079	20,212,994	17,926,505	17,099,000	17,058,000					
Changes of benefit terms ⁽⁴⁾	0		29,557	0	1,500,000	0	0					
Difference between expected and												
actual experience	(28,294,707)		1,826,175	8,453,222	23,161,053	0	0					
Changes of assumptions	779,616		13,556,526	(22,907,010)	0	0	0					
Benefit payments, including refunds												
of employee contributions (1)	 (13,036,696)	(14,516,628)	(11,468,614)	(13,171,225)	(14,273,000)	(13,207,000)					
Net change in Total OPEB Liability	(16,538,748)		23,856,471	(3,539,488)	32,039,401	6,157,000	6,922,000					
Total OPEB Liability - Beginning	313,723,384	2	89,866,913	293,406,401	261,367,000	255,210,000	247,107,000					
Total OPEB Liability - Ending (a)	\$ 297,184,636	\$3	13,723,384	\$ 289,866,913	\$ 293,406,401	\$ 261,367,000	\$ 254,029,000					
Plan Fiduciary Net Position												
Employer contributions	\$ 13,797,260	\$	15,625,495	\$ 12,241,536	\$ 15,987,768	\$ 17,724,000	\$ 16,667,000					
Nonemployer contributing entities												
contributions	0		0	0	0	0	0					
Employee contributions	0		0	0	0	0	0					
OPEB plan net investment income	(18,590,756)		49,728,641	6,722,726	11,824,566	11,114,000	17,225,000					
Benefit payments, including refunds												
of employee contributions (1)	(13,036,696)	(14,516,628)	(11,468,614)	(13,171,225)	(14,273,000)	(13,207,000)					
OPEB plan administrative expense	(156,737)		(142,053)	(177,731)	(116,900)	(97,000)	(130,000)					
Other	0		0	0	353	0	0					
Net change in Plan Fiduciary Net Position	(17,986,929)		50,695,455	7,317,917	14,524,562	14,468,000	20,555,000					
Plan Fiduciary Net Position - Beginning	244,344,934	1	93,649,479	186,331,562	171,807,000	157,339,000	136,784,000					
Plan Fiduciary Net Position - Ending (b)	\$ 226,358,005	\$2	44,344,934	\$ 193,649,479	\$ 186,331,562	\$ 171,807,000	\$ 157,339,000					
Net OPEB Liability - ending (a) - (b)	\$ 70,826,631	\$	69,378,450	\$ 96,217,434	\$ 107,074,839	\$ 89,560,000	\$ 96,690,000					
Plan Fiduciary Net Position as a percentage												
of Total OPEB Liability	76.17 %		77.89 %	66.81 %	63.51 %	65.73 %	61.94 %					
Covered-employee payroll ⁽²⁾	\$ 62,187,947	\$	60,232,543	\$ 57,970,915	\$ 57,077,636	\$ 55,458,000	\$ 53,583,000					
Net OPEB Liability as a percentage												
of covered-employee payroll	113.89 %		115.18 %	165.98 %	187.60 %	161.49 %	180.45 %					
Notes to Schedule:												

⁽⁴⁾ Cost for change in benefit terms for 2019 was calculated by the prior actuary but not reflected in their GASB report.



 $^{^{(1)}}$ Includes the amount being paid outside of the Trust.

⁽²⁾ Covered payroll was provided by the City of Ann Arbor and may or may not meet the GASB Statement Nos. 74 and 75 definition of Covered Payroll.

⁽³⁾ Results for 2018 and prior years were calculated by the City's prior actuaries. The 2019 entry for "Differences between expected and actual experience" includes changes in liabilities due to actuarial gain/loss, prior actuary change in assumptions, and change in actuarial provider.

Schedules of Required Supplementary Information Schedule of the Net OPEB Liability Multiyear

FY Ending June 30,	 Total OPEB Liability	Plan Net Position	Net OPEB Liability	Plan Net F as a % o OPEB Lia	f Total	Covered Payroll ⁽¹⁾	Net OPEB Liability as a % of Covered Payroll
2013							
2014							
2015							
2016							
2017	\$ 254,029,000	\$ 157,339,000	\$ 96,690,000	(51.94 %	\$ 53,583,000	180.45 %
2018	261,367,000	171,807,000	89,560,000	(55.73 %	55,458,000	161.49 %
2019 ⁽²⁾	293,406,401	186,331,562	107,074,839	(53.51 %	57,077,636	187.60 %
2020	289,866,913	193,649,479	96,217,434	(56.81 %	57,970,915	165.98 %
2021	313,723,384	244,344,934	69,378,450		77.89 %	60,232,543	115.18 %
2022	297,184,636	226,358,005	70,826,631		76.17 %	62,187,947	113.89 %

⁽¹⁾ Covered payroll was provided by the City of Ann Arbor and may or may not meet the GASB Statement Nos. 74 and 75 definition of Covered Payroll.



⁽²⁾ Results for 2018 and prior years were calculated by the City's prior actuaries.

Schedule of Contributions Multiyear

FY Ending June 30,	Actuarially Determined Contribution	Actual Contribution ⁽³⁾	Contribution Deficiency (Excess)	Covered Payroll ⁽¹⁾	Actual Contribution as a % of Covered Payroll
2013					
2014					
2015					
2016					
2017	\$ 11,168,000	\$ 16,819,824	\$ (5,651,824)	\$ 53,583,000	31.39 %
2018	9,683,000	17,724,000	(8,041,000)	55,458,000	31.96 %
2019 ⁽²⁾	9,234,000	15,987,768	(6,753,768)	57,077,636	28.01 %
2020	12,129,387	12,241,536	(112,149)	57,970,915	21.12 %
2021	11,663,630	15,625,495	(3,961,865)	60,232,543	25.94 %
2022	13,001,479	13,797,260	(795,781)	62,187,947	22.19 %

⁽¹⁾ Covered payroll was provided by the City of Ann Arbor and may or may not meet the GASB Statement Nos. 74 and 75 definition of Covered Payroll.



⁽²⁾ Results for 2018 and prior years were calculated by the City's prior actuaries.

⁽³⁾ Includes amount being paid outside of the Trust.

Notes to Schedule of Contributions

Methods and Assumptions Used to Determine Contribution Amounts for the Fiscal Year Ending June 30, 2022*:

Actuarial Cost Method Entry-Age Normal
Amortization Method Level Dollar
Remaining Amortization Period 22 years

Asset Valuation Method 5-year smoothed market

Wage Inflation 3.50%

Salary Increases 3.50% average including inflation.

Investment Rate of Return 6.90%, net of OPEB plan investment expense.

Retirement Age Experience-based table of rates that are specific to the type of eligibility condition.

Mortality Post-Retirement: RP-2014 Healthy Annuitant Tables, projected with scale MP-2017 from a base

year of 2006.

Pre-Retirement: RP-2014 Healthy Employee Tables, projected with scale MP-2017 from a base

year of 2006.

Health Care Trend Rates Initial trend of 8.25% gradually decreasing to an ultimate trend rate of 3.50% in year 10.

Other Information:

Notes



^{*} Based on valuation assumptions used in the June 30, 2020 actuarial valuation.

Schedule of Investment Returns Multiyear

FY Ending	Annual				
June 30,	Return ⁽¹⁾				
2013					
2014					
2015					
2016					
2017	11.78 %				
2018	7.21 %				
2019 ⁽²⁾	6.83 %				
2020	3.52 %				
2021	25.68 %				
2022	(7.69)%				

⁽¹⁾ Annual money-weighted rate of return, net of investment expenses.



⁽²⁾ Calculations for 2018 and prior were pulled from the City's financial statements and were not confirmed or calculated by GRS.

SECTION D

NOTES TO FINANCIAL STATEMENTS

Auditor's Note – This information is intended to assist in preparation of the financial statements of the City of Ann Arbor Retiree Health 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.

Long-Term Expected Return on Plan Assets

The assumed rate of investment return was adopted by the plan's trustees after considering input from the plan's investment consultant(s) and actuaries. Additional information about the assumed rate of investment return is included in the June 30, 2021 valuation report.

We have confirmed the current expected rate of return assumption to be appropriate. For each major asset class that is included in the OPEB plan's target asset allocation as of June 30, 2022, these best estimates of geometric real rates of return are summarized in the following table:

Asset Allocation

		Long-Term Expected
Asset Class	Target Allocation	Real Rate of Return ⁽¹⁾
Domestic Equity	33.00%	5.80%
Developed Foreign Equity	12.00%	6.80%
Emerging Markets Equity	7.00%	7.10%
Private Equity	5.00%	8.70%
Investment Grade Bonds	10.00%	1.80%
TIPS	2.00%	1.20%
High Yield Bonds	4.00%	4.90%
Private Debt	7.00%	6.40%
Real Estate	10.00%	5.70%
Natural Resources	3.00%	6.90%
Infrastructure (Core Private)	7.00%	5.80%
Total	100.00 %	

⁽¹⁾ Real rate of return is based on investment manager inflation assumption of 2.10%.

The figures in the above table were supplied by the City of Ann Arbor Retiree Health Benefits Plan and Trust's investment manager(s). Gabriel, Roeder, Smith & Company does not provide investment advice.



Single Discount Rate

A Single Discount Rate of 6.80% was used to measure the total OPEB liability. This Single Discount Rate was based on the expected rate of return on OPEB plan investments of 6.80%. The projection of cash flows used to determine this Single Discount Rate assumed that employer contributions will be made at rates equal to the actuarially determined contribution rate. Based on these assumptions, the OPEB plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

Summary of Membership Information(1)

The following table provides a summary of the number of participants in the plan:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	1,048
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	0
Active Plan Members	707
Total Plan Members	1,755

⁽¹⁾ As of the Actuarial Valuation Date. GRS does not have membership counts as of June 30, 2022. The City of Ann Arbor's staff and auditors may decide that providing membership counts as of the valuation date is sufficient. Alternatively, the City may decide to update the membership counts to be as of the Plan's fiscal year end.



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 6.80%, 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

Current Single Discount									
1% Decrease	Rate Assumption	1% Increase							
5.80%	6.80%	7.80%							
\$ 107,598,883	\$ 70,826,631	\$ 40,410,686							

Regarding the sensitivity of the net OPEB liability to changes in the health care 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 Health Care Cost Trend Rate Assumption

	Current Health Care Cost								
1% Decrease	Trend Rate Assumption	1% Increase							
\$ 38,035,610	\$ 70,826,631	\$ 110,343,799							





DEVELOPMENT OF BASELINE CLAIMS COSTS

Development of Baseline Claims Costs

This report complements the actuarial valuation report prepared as of June 30, 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 baseline claims costs.





SUMMARY OF PARTICIPANT DATA

Summary of Participant Data

This report complements the actuarial valuation report prepared as of June 30, 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.





Valuation Methods

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.

Actuarial gains/(losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

The retirement rates, rates of merit and seniority salary increase, rates of separation from active membership, and disability rates used in this valuation are based on the five-year experience study for the period July 1, 2013 through June 30, 2018 performed by the City's prior actuary. All assumptions are expectations of future experience, not market measures.



Actuarial Assumptions

The rate of net investment return was 6.80% a year, compounded annually net after investment expenses. Considering other assumptions used in the valuation, the 6.80% nominal rate translates to a net real return of 3.30% a year

The rates of salary increase used for individual members are in accordance with the following table. This assumption is used to project a member's current salary to the salaries upon which pension benefits will be based.

_	% Increase in Salary at Sample Ages								
Sample	Me	erit and Senio	rity	Base	Increase Next Year				
Ages	General	Police	Fire	(Economic)	General	Police	Fire		
20	4.00%	7.50%	7.29%	3.50%	7.50%	11.00%	10.79%		
25	3.58%	6.60%	6.52%	3.50%	7.08%	10.10%	10.02%		
30	2.82%	4.74%	4.86%	3.50%	6.32%	8.24%	8.36%		
35	2.14%	3.36%	3.44%	3.50%	5.64%	6.86%	6.94%		
40	1.84%	2.70%	2.70%	3.50%	5.34%	6.20%	6.20%		
45	1.47%	2.38%	2.38%	3.50%	4.97%	5.88%	5.88%		
50	0.98%	2.18%	2.18%	3.50%	4.48%	5.68%	5.68%		
55	0.68%	2.04%	2.04%	3.50%	4.18%	5.54%	5.54%		
60	0.50%	1.80%	1.90%	3.50%	4.00%	5.30%	5.40%		

Rates of separation from active membership were as shown below (rates do not apply to members eligible to retire and do not include separation on account of death or disability). This assumption measures the probabilities of members remaining in employment.

% of Active Members
Senarating within Next Year

C					
Sample	Years of _	Ger	neral		
Ages	Service	Males	Females	Police	Fire
	1	6.00%	16.00%	6.00%	4.50%
	2	4.80%	13.00%	6.00%	4.00%
	3	4.00%	11.00%	4.00%	3.60%
	4	3.20%	8.00%	3.00%	3.60%
	5	2.50%	6.00%	2.50%	3.60%
25	6 & Over	3.20%	4.50%	2.40%	1.40%
30		3.20%	4.50%	2.40%	1.10%
35		3.25%	3.50%	1.75%	0.90%
40		3.25%	3.50%	0.74%	1.00%
45		3.25%	3.50%	0.48%	0.90%
50		3.25%	3.50%	0.48%	0.50%
55		3.25%	3.50%	0.48%	0.50%
60		3.25%	3.50%	0.48%	0.50%
65		3.25%	3.50%	0.48%	0.50%



The mortality tables used are as follows:

- **Healthy Pre-Retirement:** The RP-2014 Employee Generational Mortality Tables, extended via cubic spline. This table is adjusted backwards to 2006 with the MP-2014 scale, resulting in a base year of 2006 with future mortality improvements assumed each year using scale MP-2017.
- **Healthy Post-Retirement:** The RP-2014 Healthy Annuitant Generational Mortality Tables, extended via cubic spline. This table is adjusted backwards to 2006 with the MP-2014 scale, resulting in a base year of 2006 with future mortality improvements assumed each year using scale MP-2017.
- **Disability Retirement:** The RP-2014 Disabled Mortality Table, extended via cubic spline. This table is adjusted backwards to 2006 with the MP-2014 scale, resulting in a base year of 2006 with future mortality improvements assumed each year using scale MP-2017.

	Healthy Pre-Retirement		Healthy Post	t-Retirement	Disabled R	Retirement	
Sample	Future Life		Futur	Future Life		Future Life	
Attained	Expectancy (Years)*		Expectancy (Years)*		Expectancy (Years)*		
Ages	Males	Females	Males Females		Males	Females	
55	31.34	35.56	29.83	32.22	21.47	25.19	
60	26.41	30.54	25.27	27.45	18.40	21.63	
65	21.75 25.64		20.93	22.90	15.50	18.19	
70	17.45	20.87	16.85	18.58	12.74	14.81	
75	13.48	16.29	13.08	14.53	10.11	11.64	
80	9.90	11.97	9.71	10.89	7.71	8.88	

^{*} Based on retirements in 2021. Retirements in future years will reflect improvements in life expectancy.

This assumption is used to measure the probabilities of members dying before retirement and the probabilities of each benefit payment being made after retirement.



The rates of retirement used to measure the probability of eligible members retiring during the next year were as follows:

Retirement	Gen	eral	Pol	ice	Fi	re	Retirement		
Ages	Normal	Early	Normal	Early	Normal	Early	Service	Police	Fire
	0.00			100/		100/		/	
50	25%	10%		10%		10%	25 yrs.	50%	25%
51	25%	10%		10%		10%	26	50%	25%
52	25%	10%		10%		10%	27	50%	25%
53	25%	10%		10%		10%	28	50%	25%
54	25%	10%		10%		10%	29	50%	25%
55	25%	10%	50%		25%		30	50%	25%
56	25%	10%	50%		25%		31	50%	25%
57	25%	10%	50%		25%		32	50%	25%
58	25%	10%	50%		25%		33	50%	25%
59	25%	10%	50%		25%		34	50%	25%
60	30%		100%		100%		35	100%	100%
61	30%								
62	30%								
63	30%								
64	30%								
65	60%								
66	40%								
67	40%								
68	40%								
69	40%								
70	100%								

Rates of disability among active members.

Sample

50

55

60

65

Ages	General	Police	Fire		
20	0.06%	0.08%	0.02%		
25	0.06%	0.08%	0.02%		
30	0.06%	0.08%	0.02%		
35	0.06%	0.08%	0.02%		
40	0.11%	0.14%	0.03%		
45	0.24%	0.32%	0.08%		

% Becoming Disabled within Next Year

0.56%

0.86%

1.14%

1.32%

For General members, 75% of the disabilities are assumed to be non-duty and 25% of the disabilities are assumed to be duty related. For Police/Fire members, 50% of the disabilities are assumed to be non-duty and 50% of the disabilities are assumed to be duty related.

0.42%

0.65%

0.86%

0.99%



0.14%

0.22%

0.29%

0.33%

Health care trend rates used in the valuation were as shown below:

The health care cost trend rate is the rate of change in per capita health care claims over time as a result of factors such as medical inflation, utilization of health care services, plan design, and technological improvements. It is a crucial economic assumption that is required for measuring retiree health care benefit obligations.

Retiree health care valuations use a health care cost trend assumption (trend vector) that changes over the years. The trend vector used in this valuation begins with a near-term trend assumption and declines over time to an ultimate trend rate. The near-term rates reflect the increases in the current cost of health care goods and services. The process of trending down to a lower ultimate trend relies on the theory that premium levels will moderate over the long term, otherwise the healthcare sector would eventually consume the entire GDP. It is on this basis that projected premium rate increases continue to exceed wage inflation for the next twelve years, but by less each year until leveling off at an ultimate rate, assumed to be 3.50% in this valuation; see below for further details regarding the trend vector used in this valuation.

While experience is often the best starting point for future costs, GRS does not rely on a group's experience in setting the near-term trend assumptions since trends vary significantly from year to year and are not credible for most groups. Therefore, professional judgment, trends from GRS' book of business and industry benchmarks (e.g., trend reports from various Pharmacy Benefit Management (PBM) organizations and national healthcare benefit consulting firms) are used in conjunction with a group's historical experience to establish the trend assumptions.

Year Beginning		Medical and Prescription Drugs				
	July 1,	Non-Medicare (Pre-65)	Medicare (Post-65)			
	2022	7.50 %	6.25 %			
	2023	7.25	6.00			
	2024	6.75	5.75			
	2025	6.50	5.50			
	2026	6.00	5.25			
	2027	5.75	5.00			
	2028	5.25	4.75			
	2029	5.00	4.50			
	2030	4.50	4.25			
	2031	4.25	4.00			
	2032	3.75	3.75			
	2033 & Later	3.50	3.50			



Miscellaneous and Technical Assumptions

Data Assumptions:

- The membership data provided for the pension valuation was used as the basis for this valuation.
- If a 2-person contract was indicated in the health data and no beneficiary information was provided in the pension data, the beneficiary information from the health data was used if it was available. If no beneficiary information was available in either data set, then male spouses were assumed to be three years older than female spouses.
- If a 1-person contract was indicated in the health data and the primary record on the contract was the beneficiary of a member in the pension data, a 2-person contract was valued.
- Members who were provided in the health data but not the pension data were included in the valuation.

Decrement Operation:

Disability and mortality decrements do not operate during the first five years of service. Disability also does not operate during normal retirement eligibility.

Decrement Relativity:

Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.

Decrement Timing:

Decrements of all types are assumed to occur mid-year.

Eligibility Testing:

Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.

Health Care Coverage at Retirement:

The table below shows the assumed portion of future retirees electing one-person or two-person/family coverage, or opting-out of coverage entirely.

		Two-Pers		
	One-Person	Electing	Continuing	Opt-Out
Male	15%	70%	100%	15%
Female	15%	70%	100%	15%

Marriage Assumption:

100% of males and 100% of females are assumed to be married for purposes of death-in-service benefits. Male spouses are assumed to be three years older than female spouses.

Other Liability Adjustments:

None.





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) 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 6.80%; the municipal bond rate is 3.69%; and the resulting Single Discount Rate is 6.80%.

We have assumed the funding policy for the Plan is to contribute the greater of the actuarial determined contribution and the prior year increased by 2%. This funding policy results in the expectation that the plan's assets will be able to fully pay for promised benefits through at least 2122 and a GASB single discount rate of 6.80%.

The City of Ann Arbor Retiree Health Care Benefits Plan & Trust is funded by Employer Contributions in accordance with the funding policy adopted by the Retirement Board, based on actuarially determined contributions (ADC), which require contributions be sufficient to pay the Normal Costs of active plan members, Plan expenses, and amortize the Unfunded Actuarial Accrued Liability over a declining period. The amortization period begins at 30 years as of June 30, 2017 decreasing by two years annually until the amortization period reaches 15 years. Once the plan hits 100% funded status, the amortization period will be set at one year.





SUMMARY OF BENEFITS

City of Ann Arbor Retiree Health Care Benefits Plan Brief Summary of Benefit Provisions Evaluated June 30, 2022

Regular Retirement

Union	5-Year Vesting	10-Year Vesting	Eligibility
Non-Union	Hired before July 1, 2011	Hired after July 1, 2011	Age 50 with 25 years of service or Age 60 and vested
American Federation of State, County, and Municipal Employees, AFL CIO (AFSCME)	Hired before August 29, 2011	Hired after August 29, 2011	Age 50 with 25 years of service or Age 60 and vested
Ann Arbor Police Officers Association (AAPOA)	Hired before January 1, 2012	Hired after January 1, 2012	25 years of service or Age 55 and vested
International Association of Fire Fighters (IAFF)	Hired before July 1, 2012	Hired after July 1, 2012	25 years of service or Age 55 and vested
Teamsters Fire Assistant Chief	Hired before January 1, 2016	Hired after January 1, 2016	25 years of service or Age 55 and vested
Teamsters Civilian Supervisiors	Hired before July 2, 2012	Hired after July 2, 2012	Age 50 with 25 years of service or Age 60 and vested
Teamsters Police Professional Assistants	Hired before July 2, 2012	Hired after July 2, 2012	Age 50 with 25 years of service or Age 60 and vested
Teamsters Police Deputy Chiefs	Hired before July 2, 2012	Hired after July 2, 2012	25 years of service or Age 55 and vested
Police Service Specialists	Hired before July 1, 2013	Hired after July 1, 2013	Age 50 with 25 years of service or Age 60 and vested
Command Officers Association of Michigan (COAM)	Hired before July 1, 2013	Hired after July 1, 2013	25 years of service or Age 55 and vested



City of Ann Arbor Retiree Health Care Benefits Plan Brief Summary of Benefit Provisions Evaluated June 30, 2022

Early Retirement

Eligibility – All Members: Age 50 with 20 or more years of service.

Deferred Retirement (vested benefit)

Eligibility – Not eligible for retiree health care benefits.

Duty Disability Retirement

Eligibility – No age or service requirement.

Non-Duty Disability Retirement

Eligibility – Must be vested. Refer to table on page 30.

Duty Death Before Retirement

Eligibility – No age or service requirements.

Non-Duty Death Before Retirement

Eligibility – Must be vested. Refer to table on page 30.



City of Ann Arbor Retiree Health Care Benefits Plan **Brief Summary of Benefit Provisions Evaluated** June 30, 2022

Retiree Health Care Benefits

Coverage - For members with a 5-year vesting period (refer to the table on page 30), the City of Ann Arbor will provide retiree health care coverage equivalent to the level of health care coverage the member was receiving on the date of retirement to eligible retirees. Retirees electing the high option will be required to pay for a portion of their health care coverage.

All other members are not eligible for City paid retiree health care coverage. These members earn the amounts below per year for each year of active service. The City funds their account upon retirement.

Employee Group	Effective Date <u>\$2,500 per Year</u>	Effective Date \$3,500 per Year	Effective Date \$4,000 per Year
AAPOA	1/1/2012	1/1/2017	
AFSCME	8/29/2011		
CSS/PSS	7/1/2013	1/1/2018	
DEPCHIEFS	7/2/2012	1/1/2019	
FIRE	7/1/2012	1/1/2017	1/1/2020
NON-UNION	7/1/2011	1/1/2018	
POLICEPRO/PPA	7/2/2012	1/1/2018	
TEAMSTERS	7/2/2012	1/1/2018	
COAM	7/1/2013	1/1/2018	
ASST FIRE CHIEF	7/1/2012	1/1/2019	

Life Insurance Benefits

Coverage - \$10,000 lump sum death benefit for all retirees (except those collecting a deferred benefit) in receipt of a City pension.



SECTION J

GLOSSARY OF **T**ERMS

Accrued Service

Service credited under the plan 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.



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

Postemployment 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:

- 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; and
- 2. The present value of the benefit payments not in (1) above, discounted using the municipal bond rate.



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 age(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.



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 Postemployment Benefits (OPEB)

All postemployment 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 postemployment health care benefits regardless of the manner in which they are provided. Other postemployment 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:

- 1. Service Cost
- 2. Interest on the Total OPEB Liability
- 3. Current-Period Benefit Changes
- 4. Employee Contributions (made negative for addition here)
- 5. Projected Earnings on Plan Investments (made negative for addition here)
- 6. OPEB Plan Administrative Expense
- 7. Other Changes in Plan Fiduciary Net Position
- 8. Recognition of Outflow (Inflow) of Resources due to Liabilities
- 9. 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.





November 11, 2022

Ms. Wendy Orcutt, CPA
Executive Director
City of Ann Arbor
Retiree Health Benefits Plan & Trust
532 S. Maple Road
Ann Arbor, Michigan 48103

Dear Ms. Orcutt:

Please find enclosed 12 copies of the GASB Statement Nos. 74 and 75 report of the City of Ann Arbor Retiree Health Benefits Plan & Trust.

Sincerely,

Gabriel, Roeder, Smith & Company

Richard C. Koch Jr., ASA, EA, MAAA

Kichael C. Koch J.

RCK:rl

Enclosures