

Manchester Employees' Contributory Retirement System

GASB Statement Nos. 74 and 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions Measured as of December 31, 2023 for Fiscal Year Ending June 30, 2024





May 2, 2024

Board of Trustees
City of Manchester Employees'
Contributory Retirement System
1045 Elm Street, Suite 403
Manchester, New Hampshire 03101-1824

Dear Board Members:

This report provides information related to the City of Manchester Employees' Contributory Retirement System (MECRS) 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 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 MECRS and/or the City only in its entirety and only with the permission of MECRS and/or the City. GRS is not responsible for unauthorized use of this report.

This report is based upon information, furnished to us by MECRS, 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.

The data, actuarial assumptions, and benefit provisions used in this report are the same as those used in the December 31, 2023 actuarial valuation unless otherwise noted. Please refer to that valuation for additional discussion regarding the data, assumptions, benefit provisions, and the nature of actuarial calculations.

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.

Based on the available data, the information contained in this report is accurate and fairly represents the actuarial position of the retiree health subsidy provided by the City of Manchester Employees' Contributory Retirement System 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 the report prior to making such decision.

The benefits provided by MECRS are dollar benefits. Although the City may provide health insurance access, MECRS does not. The liabilities computed herein are based on the dollar benefits, not claims costs or premiums. Therefore, this report comprises only a portion of the City's reporting under GASB Statement No. 75. It is our understanding that liabilities associated with any implicit subsidies are provided from other sources. A review of those liabilities was outside the scope of this engagement.

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 G 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.

Heidi G. Barry and Kevin T. Noelke 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



Heidi G. Barry, ASA, FCA, MAAA



Kevin T. Noelke, ASA, FCA, MAAA

HGB/KTN:rmn



Auditor's Note – This information is intended to assist in preparation of the financial statements of the retiree health subsidy provided by the Manchester Employees' Contributory Retirement System. 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

Page

Section A Executive Summary

Executive Summary	1
Discussion	2

Section B Financial Statements

Statement of OPEB Expense under GASB Statement No. 75	6
Statement of Outflows and Inflows Arising from Current Reporting Period	7
Statement of Outflows and Inflows Arising from Current and Prior Reporting Periods	8
Recognition of Deferred Outflows and Inflows of Resources	9
Statement of Fiduciary Net Position.....	10
Statement of Changes in Fiduciary Net Position	11
Schedule of Proportionate Employer Share	12

Section C Required Supplementary Information

Schedule of Changes in Net OPEB Liability and Related Ratios Current Reporting Period	14
Schedule of Changes in Net OPEB Liability and Related Ratios Multiyear	15
Schedule of the Net OPEB Liability Multiyear	16
Schedule of Contributions Multiyear	17
Notes to Schedule of Contributions	18

Section D Notes to Financial Statements

Single Discount Rate	19
Summary of Population Statistics.....	19
Sensitivity of Net OPEB Liability	20

Section E Summary of Benefits..... 21

Section F Actuarial Cost Method and Actuarial Assumptions

Actuarial Cost Method.....	22
Actuarial Assumptions	23
Miscellaneous and Technical Assumptions	29

Section G Calculation of the Single Discount Rate

Calculation of the Single Discount Rate.....	30
Projection of Contributions	31
Projection of Plan Net Position.....	33
Present Values of Projected Benefits	35
Projection of Plan Net Position and Benefit Payments	37

Section H Glossary of Terms..... 38



SECTION A

EXECUTIVE SUMMARY

Executive Summary as of December 31, 2023

Actuarial Valuation Date	December 31, 2023
Measurement Date of the Net OPEB Liability	December 31, 2023
Employer's Fiscal Year Ending Date (Reporting Date)	June 30, 2024

Membership

Number of	
- Retirees and Beneficiaries	459
- Inactive, Nonretired Members	126
- Active Members	1,119
- Total	1,704
Covered Payroll [^]	\$ 62,181,204

Net OPEB Liability

Total OPEB Liability	\$ 34,864,381
Plan Fiduciary Net Position	21,370,459
Net OPEB Liability	\$ 13,493,922
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability	61.30 %
Net OPEB Liability as a Percentage of Covered Payroll	21.70 %

Development of the Single Discount Rate

Single Discount Rate	6.75 %
Long-Term Expected Rate of Investment Return	6.75 %
Long-Term Municipal Bond Rate*	3.77 %
Last year ending December 31 in the 2024 to 2123 projection period for which projected benefit payments are fully funded	2123

Total OPEB Expense \$ 1,467,522

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	\$ 610,458	\$ 5,424,100
Changes in assumptions	1,444,110	-
Net difference between projected and actual earnings on OPEB plan investments	2,446,157	1,439,431
Total	\$ 4,500,725	\$ 6,863,531

[^] Based on valuation payroll as of December 31, 2023.

*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 December 29, 2023, the most recent date available on or before the measurement date. 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.

The deferred outflows and inflows originating from before 2019 that were used in the City's prior year's financial reports were provided by the City's auditor.



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 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.

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 December 31, 2023.

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 (if applicable);
- 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, the schedule covering each of the 10 most recent fiscal years of 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. 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 an actuarial valuation performed as of December 31, 2023 and a measurement date of December 31, 2023.

Single Discount Rate

Projected benefit payments are required to be discounted to their actuarial present values using a Single Discount Rate (SDR) 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 6.75%; the municipal bond rate is 3.77% (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 6.75%.

Analysis of any implicit rate subsidy that may exist was outside the scope of this engagement. In particular we have not analyzed whether or not the implicit subsidy would affect the calculation of the SDR; nor have we been provided the data to perform such an analysis.



Discussion

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;
 - Time of retirement or termination.

Benefits Valued

The benefit provisions that were valued are described in Section E. 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 both be sure the proper provisions are valued.

Actuarial Assumptions

There were no assumption changes during the year.

Benefit Changes

There were no benefit changes during the year.

SECTION B

FINANCIAL STATEMENTS

Auditor's Note – This information is intended to assist in preparation of the financial statements of the Manchester Employees' Contributory Retirement System. 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 for Fiscal Year Ending June 30, 2024 with Measurement Date December 31, 2023

A. Expense

1. Service Cost	\$	828,254
2. Interest on the Total OPEB Liability		2,608,199
3. Current-Period Benefit Changes		-
4. Employee Contributions (made negative for addition here)		(778,070)
5. Projected Earnings on Plan Investments (made negative for addition here)		(1,251,511)
6. OPEB Plan Administrative Expense		58,905
7. Other Changes in Plan Fiduciary Net Position		-
8. Recognition of Outflow (Inflow) of Resources due to Liabilities		11,282
9. Recognition of Outflow (Inflow) of Resources due to Assets		(9,537)
10. Total OPEB Expense	\$	1,467,522

Statement of Outflows and Inflows Arising from Current Reporting Period for Fiscal Year Ending June 30, 2024 with Measurement Date December 31, 2023

A. Outflows (Inflows) of Resources due to Liabilities

1. Difference between expected and actual experience of the Total OPEB Liability (gains) or losses	\$ (6,029,325)
2. Assumption Changes (gains) or losses	-
3. Recognition period for Liabilities: Average of the expected remaining service lives of all employees {in years}	6.3601
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	(947,992)
5. Outflow (Inflow) of Resources to be recognized in the current OPEB expense for assumption changes	-
6. Outflow (Inflow) of Resources to be recognized in the current OPEB expense due to Liabilities	\$ (947,992)
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	(5,081,333)
8. Deferred Outflow (Inflow) of Resources to be recognized in future OPEB expenses for assumption changes	-
9. Deferred Outflow (Inflow) of Resources to be recognized in future OPEB expenses due to Liabilities	\$ (5,081,333)

B. Outflows (Inflows) of Resources due to Assets

1. Net difference between projected and actual earnings on OPEB plan investments (gains) or losses	\$ (1,101,583)
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	(220,317)
4. Deferred Outflow (Inflow) of Resources to be recognized in future OPEB expenses due to Assets	\$ (881,266)



Statement of Outflows and Inflows Arising from Current and Prior Reporting Periods for Fiscal Year Ending June 30, 2024 with Measurement Date December 31, 2023

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

	Outflows of Resources	Inflows of Resources	Net Outflows of Resources
1. Differences between expected and actual experience	\$ 251,587	\$ 1,051,688	\$ (800,101)
2. Assumption changes	811,383	-	811,383
3. Net difference between projected and actual earnings on OPEB plan investments	815,385	824,922	(9,537)
4. Total	\$ 1,878,355	\$ 1,876,610	\$ 1,745

B. 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 Outflows of Resources
1. Differences between expected and actual experience	\$ 610,458	\$ 5,424,100	\$ (4,813,642)
2. Assumption changes	1,444,110	-	1,444,110
3. Net difference between projected and actual earnings on OPEB plan investments	2,446,157	1,439,431	1,006,726
4. Total	\$ 4,500,725	\$ 6,863,531	\$ (2,362,806)

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
2025	\$ (46,531)
2026	67,561
2027	86,487
2028	(1,150,329)
2029	(978,621)
Thereafter	(341,373)
Total	\$ (2,362,806)

Employer contributions that were made subsequent to the measurement date of the net OPEB liability and prior to the end of the employer's reporting period 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.

See paragraph 44 of GASB Statement No. 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.



Recognition of Deferred Outflows and Inflows of Resources

(Reporting) Year Established	Initial Amount	Initial Recognition Period #	Current Year Recognition	Remaining Recognition	Remaining Recognition Period
Deferred Outflow (Inflow) due to Differences Between Expected and Actual Experience on Liabilities					
2018	\$ (139,278)	6.9200	\$ (18,516)	\$ -	0.0000
2019	871,321	7.2683	119,880	152,041	1.2683
2020	108,038	6.9381	15,572	30,178	1.9381
2021	(158,010)	6.7747	(23,324)	(64,714)	2.7747
2022	776,644	6.6874	116,135	428,239	3.6874
2023	(401,765)	6.4952	(61,856)	(278,053)	4.4952
2024	(6,029,325)	6.3601	(947,992)	(5,081,333)	5.3601
Total			\$ (800,101)	\$ (4,813,642)	
Deferred Outflow (Inflow) due to Assumption Changes					
2018	\$ 2,188,276	6.9200	\$ 290,926	\$ -	0.0000
2019	-	7.2683	-	-	1.2683
2020	-	6.9381	-	-	1.9381
2021	3,525,938	6.7747	520,457	1,444,110	2.7747
2022	-	6.6874	-	-	3.6874
2023	-	6.4952	-	-	4.4952
2024	-	6.3601	-	-	5.3601
Total			\$ 811,383	\$ 1,444,110	
Deferred Outflow (Inflow) due to Differences Between Projected and Actual Earnings on Plan Investments					
2020	\$ (1,120,662)	5.0000	\$ (224,134)	\$ -	0.0000
2021	(1,013,890)	5.0000	(202,778)	(202,778)	1.0000
2022	(888,466)	5.0000	(177,693)	(355,387)	2.0000
2023	4,076,927	5.0000	815,385	2,446,157	3.0000
2024	(1,101,583)	5.0000	(220,317)	(881,266)	4.0000
Total			\$ (9,537)	\$ 1,006,726	

The Initial Recognition Period for 2018 was provided to GRS by the City auditor.

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 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 10,297 years. Additionally, the total plan membership (active employees and inactive employees) was 1,619. 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 6.3601 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.



Statement of Fiduciary Net Position as of December 31, 2023

Assets

Cash and Deposits	\$	8,154,372
Receivables		
Accounts Receivable - Sale of Investments	\$	473,693
Accrued Interest and Other Dividends		194,201
Additional Contribution Account		-
Property, Plant, Equipment		6,716
Total Receivables	\$	<u>674,610</u>
Investments	\$	288,391,790
Total Assets	\$	<u>297,220,772</u>

Liabilities

Payables		
Accounts Payable and Accrued Expenses	\$	143,369
Benefits Payable		<u>2,113,963</u>
Total Liabilities	\$	2,257,332
Assets Held for Pensions	\$	<u>273,592,981</u>
Net Position Restricted for OPEB	\$	<u>21,370,459</u>

Statement of Changes in Fiduciary Net Position for Year Ended December 31, 2023

Additions

Contributions	
Employer	\$ 1,770,966
Nonemployer contributing entities	-
Active Employees	778,070
Other	-
Total Contributions	<u>\$ 2,549,036</u>
Investment Income	
Net Appreciation in Fair Value of Investments	\$ 2,206,955
Interest and Dividends	200,182
Less Investment Expense	(54,043)
Net Investment Income	<u>\$ 2,353,094</u>
Other	-
Total Additions	<u>\$ 4,902,130</u>

Deductions

Benefit Payments	\$ 1,537,208
OPEB Plan Administrative Expense	58,905
Other	-
Total Deductions	<u>\$ 1,596,113</u>
Net Increase in Net Position	\$ 3,306,017

Net Position Restricted for OPEB

Beginning of Year	\$ 18,064,442
Prior Year Adjustment	-
End of Year	<u>\$ 21,370,459</u>

Schedule of Proportionate Employer Share for Fiscal Year Ending June 30, 2024 with Measurement Date December 31, 2023

Deferred Outflows of Resources

Covered Payroll	Employer	Prop. Share End of Year	Prop. Share Beginning of Year	Net OPEB Liability	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on OPEB Plan Investments*	Changes of Assum.	Changes in Proportion and Differences Between Employer Cont. and Share of Cont.	Total Deferred Outflows of Resources
\$ 5,846,961	Airport	9.40%	8.83%	\$ 1,268,429	\$ 57,383	\$ 94,632	\$ 135,746	\$ 217,908	\$ 505,669
618,939	Parking Control	1.00%	1.03%	134,939	6,105	10,067	14,441	44,320	74,933
2,836,983	Environmental Protection	4.56%	4.77%	615,323	27,837	45,907	65,851	103,916	243,511
11,954,117	School District	19.22%	16.22%	2,593,531	117,330	193,493	277,558	270,229	858,610
5,970,866	Water Works	9.60%	9.96%	1,295,417	58,604	96,646	138,635	200,163	494,048
34,953,338	General Fund City Departments	56.22%	59.19%	7,586,283	343,199	565,981	811,879	22,022	1,743,081
\$ 62,181,204	Total for All Employers	100.00%	100.00%	\$ 13,493,922	\$ 610,458	\$ 1,006,726	\$ 1,444,110	\$ 858,558	\$ 3,919,852

* We understand that the recommendation of the American Institute of Certified Public Accountants (AICPA) is for the deferred inflows resulting from the net difference between projected and actual investment earnings on pension plan investments to be shown net of the respective outflows resulting from this difference. Beginning in the 2019 report, only the net amount is shown.



**Schedule of Proportionate Employer Share
for Fiscal Year Ending June 30, 2024
with Measurement Date December 31, 2023(Concluded)**

Deferred Inflows of Resources				OPEB Expense			
Differences Between Expected and Actual Experience	Changes of Assum.	Changes in Proportion and Differences Between Employer Cont. and Share of Cont.	Total Deferred Inflows of Resources	Prop. Share of Plan OPEB Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Employer OPEB Expense	
\$ 509,865	\$ -	\$ 76,892	\$ 586,757	\$ 137,947	\$ 49,462	\$ 187,409	
54,241	-	20,396	74,637	14,675	6,526	21,201	
247,339	-	14,997	262,336	66,919	31,934	98,853	
1,042,512	-	230,297	1,272,809	282,058	(22,040)	260,018	
520,714	-	27,604	548,318	140,882	61,759	202,641	
3,049,429	-	488,372	3,537,801	825,041	(127,641)	697,400	
\$ 5,424,100	\$ -	\$ 858,558	\$ 6,282,658	\$ 1,467,522	\$ -	\$ 1,467,522	



SECTION C

REQUIRED SUPPLEMENTARY INFORMATION

Auditor's Note – This information is intended to assist in preparation of the financial statements of the Manchester Employees' Contributory Retirement System. 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

for Fiscal Year Ending June 30, 2024

with Measurement Date December 31, 2023

A. Total OPEB liability	
1. Service cost	\$ 828,254
2. Interest on the total OPEB liability	2,608,199
3. Changes of benefit terms	0
4. Difference between expected and actual experience of the total OPEB liability	(6,029,325)
5. Changes of assumptions	0
6. Benefit payments, including refunds of employee contributions	(1,537,208)
7. Net change in total OPEB liability	(4,130,080)
8. Total OPEB liability – beginning	38,994,461
9. Total OPEB liability – ending	\$ 34,864,381
B. Plan fiduciary net position	
1. Contributions – employer	\$ 1,770,966
2. Contributions – nonemployer contributing entities	0
3. Contributions – employee	778,070
4. Net investment income	2,353,094
5. Benefit payments, including refunds of employee contributions	(1,537,208)
6. OPEB plan administrative expense	(58,905)
7. Other	0
8. Net change in plan fiduciary net position	3,306,017
9. Plan fiduciary net position – beginning*	18,064,442
10. Plan fiduciary net position – ending	\$ 21,370,459
C. Net OPEB liability	\$ 13,493,922
D. Plan fiduciary net position as a percentage of the total OPEB liability	61.30 %
E. Covered-employee payroll	\$ 62,181,204
F. Net OPEB liability as a percentage of covered-employee payroll	21.70 %

* Net of post-valuation adjustment (if any).



Schedules of Required Supplementary Information

Schedule of Changes in Net OPEB Liability and Related Ratios Multiyear

Ultimately 10 Fiscal Years Will be Displayed (which may be built prospectively)

Measurement Period Ending December 31,	2023	2022	2021	2020	2019	2018	2016	2015	2014
Total OPEB liability									
Service cost	\$ 828,254	\$ 836,879	\$ 800,532	\$ 750,882	\$ 722,950	\$ 667,057			
Interest on the total OPEB liability	2,608,199	2,516,831	2,355,738	2,103,564	1,993,098	1,834,405			
Changes of benefit terms	0	0	0	0	0	0			
Difference between expected and actual experience	(6,029,325)	(401,765)	776,644	(158,010)	108,038	871,321			
Changes of assumptions	0	0	0	3,525,938	0	0			
Benefit payments, including refunds of employee contributions	(1,537,208)	(1,650,847)	(1,478,210)	(1,318,384)	(1,201,543)	(1,065,835)			
Net change in total OPEB liability	(4,130,080)	1,301,098	2,454,704	4,903,990	1,622,543	2,306,948			
Total OPEB liability - beginning	38,994,461	37,693,363	35,238,659	30,334,669	28,712,126	26,405,178			
Total OPEB liability - ending (a)	<u>\$ 34,864,381</u>	<u>\$ 38,994,461</u>	<u>\$ 37,693,363</u>	<u>\$ 35,238,659</u>	<u>\$ 30,334,669</u>	<u>\$ 28,712,126</u>			
Plan fiduciary net position									
Employer contributions	\$ 1,770,966	\$ 1,615,726	\$ 1,439,820	\$ 1,252,923	\$ 1,075,844	\$ 856,677			
Nonemployer contributing entities contributions	0	0	0	0	0	0			
Employee contributions	778,070	721,128	710,291	702,739	682,470	674,011			
OPEB plan net investment income	2,353,094	(2,696,932)	2,085,283	2,074,039	2,002,516	(688,995)			
Benefit payments, including refunds of employee contributions	(1,537,208)	(1,650,847)	(1,478,210)	(1,318,384)	(1,201,543)	(1,065,835)			
OPEB plan administrative expense	(58,905)	(52,011)	(48,968)	(58,908)	(47,490)	(37,111)			
Other	0	0	0	(128)	(2,239)	(3,484)			
Net change in plan fiduciary net position	3,306,017	(2,062,936)	2,708,216	2,652,281	2,509,558	(264,737)			
Plan fiduciary net position - beginning	18,064,442	20,127,378	17,419,162	14,772,702	12,268,459	12,535,536			
Adjustment	-	-	-	(5,821)	(5,315)	(2,340)			
Plan fiduciary net position - ending (b)	<u>\$ 21,370,459</u>	<u>\$ 18,064,442</u>	<u>\$ 20,127,378</u>	<u>\$ 17,419,162</u>	<u>\$ 14,772,702</u>	<u>\$ 12,268,459</u>			
Net OPEB liability - ending (a) - (b)	<u>\$ 13,493,922</u>	<u>\$ 20,930,019</u>	<u>\$ 17,565,985</u>	<u>\$ 17,819,497</u>	<u>\$ 15,561,967</u>	<u>\$ 16,443,667</u>			
Plan fiduciary net position as a percentage of total OPEB liability	61.30 %	46.33 %	53.40 %	49.43 %	48.70 %	42.73 %			
Covered-employee payroll	\$ 62,181,204	\$ 56,969,297	\$ 55,323,580	\$ 54,254,463	\$ 52,895,992	\$ 51,787,265			
Net OPEB liability as a percentage of covered-employee payroll	21.70 %	36.74 %	31.75 %	32.84 %	29.42 %	31.75 %			
Notes to Schedule:	N/A	N/A	N/A	N/A	N/A	N/A			



Schedules of Required Supplementary Information

Schedule of the Net OPEB Liability Multiyear

(Ultimately 10 Years Will Be Displayed)

Measurement Date December 31	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	\$ 26,405,178	\$ 12,535,536	\$ 13,869,642	47.47 %	\$ 53,364,536	25.99 %
2018	28,712,126	12,268,459	16,443,667	42.73 %	51,787,265	31.75 %
2019	30,334,669	14,772,702	15,561,967	48.70 %	52,895,992	29.42 %
2020	35,238,659	17,419,162	17,819,497	49.43 %	54,254,463	32.84 %
2021	37,693,363	20,127,378	17,565,985	53.40 %	55,323,580	31.75 %
2022	38,994,461	18,064,442	20,930,019	46.33 %	56,969,297	36.74 %
2023	34,864,381	21,370,459	13,493,922	61.30 %	62,181,204	21.70 %

**Based on valuation payroll as of plan year ending December 31.*



Schedule of Contributions Multiyear

(Ultimately 10 Years Will Be Displayed)

<u>Fiscal Year Ending June 30</u>	<u>Actuarially Determined Contribution (ADC)[#]</u>	<u>Actual Contribution</u>	<u>Contribution Deficiency (Excess)</u>	<u>Covered Payroll*</u>	<u>Actual Contribution as a % of Covered Payroll</u>
2018	\$ 715,870	\$ 715,870	\$ 0	\$ 53,364,536	1.34 %
2019	856,677	856,677	0	51,787,265	1.65 %
2020	1,075,844	1,075,844	0	52,895,992	2.03 %
2021	1,252,923	1,252,923	0	54,254,463	2.31 %
2022	1,439,820	1,439,820	0	55,323,580	2.60 %
2023	1,615,726	1,615,726	0	56,969,297	2.84 %
2024	1,770,966	1,770,966	0	62,181,204	2.85 %

* Based on valuation payroll as of plan year ending December 31.

Employer contributions based on percent of payroll. Employer pays ADC percentage.



Notes to Schedule of Contributions

Valuation Date: December 31, 2021 and December 31, 2022
Notes Actuarially determined contribution rates are calculated as of December 31 for the contribution period starting 6 months later. Actual contributions reported during the plan year are therefore based on two consecutive ADCs.

Methods and Assumptions Used to Determine the Fiscal Year Ending June 30, 2023 Contribution Rate:

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll, Closed
Remaining Amortization Period	18 years
Asset Valuation Method	5-Year smoothed market; 20% corridor
Wage Inflation	2.50%
Salary Increases	3.25% to 5.96%, including inflation
Investment Rate of Return	6.75% (net of investment expenses)
Retirement Age	Age and Experience-based table of rates that are specific to the type of eligibility condition.
Mortality	Pub-2010 Mortality Table projected to 2039 for males and females using projection scale MP-2019.
Expense Load	None.
Increases	Annual health subsidy amounts are assumed to increase by 4% annually.
Health Care Trend Rates	Not applicable, given that the benefits are fixed stipends.
Aging Factors	Not applicable, given that the benefits are fixed stipends.

Other Information:

Notes None.

Methods and Assumptions Used to Determine the Fiscal Year Ending June 30, 2024 Contribution Rate:

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll, Closed
Remaining Amortization Period	17 years
Asset Valuation Method	5-Year smoothed market; 20% corridor
Wage Inflation	2.50%
Salary Increases	3.25% to 5.96%, including inflation
Investment Rate of Return	6.75% (net of investment expenses)
Retirement Age	Age and Experience-based table of rates that are specific to the type of eligibility condition.
Mortality	Pub-2010 Mortality Table projected to 2039 for males and females using projection scale MP-2019.
Expense Load	None.
Increases	Annual health subsidy amounts are assumed to increase by 4% annually.
Health Care Trend Rates	Not applicable, given that the benefits are fixed stipends.
Aging Factors	Not applicable, given that the benefits are fixed stipends.

Other Information:

Notes None.



SECTION D

NOTES TO FINANCIAL STATEMENTS

Auditor's Note – This information is intended to assist in preparation of the financial statements of the Manchester Employees' Contributory Retirement System. Financial statements are the responsibility of management, subject to the auditor's review. Please let us know if the auditor recommends any changes.

Single Discount Rate

A Single Discount Rate of 6.75% 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 6.75%. 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 Population Statistics

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	459
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	126
Active Plan Members	<u>1,119</u>
Total Plan Members	1,704

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 6.75%, 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 5.75%	Current Single Discount Rate Assumption 6.75%	1% Increase 7.75%
Total OPEB Liability (TOL)	\$ 39,399,630	\$ 34,864,381	\$ 31,090,578
Net Position Restricted for OPEB	21,370,459	21,370,459	21,370,459
Net OPEB Liability	\$ 18,029,171	\$ 13,493,922	\$ 9,720,119

SECTION E

SUMMARY OF BENEFITS

Summary of Health Subsidy Benefits

Current and future retired members who are in receipt of an annuity benefit may elect to participate in a monthly health insurance subsidy. Spouses, dependents, and/or beneficiaries are not eligible for any subsidy. The full amount of the monthly health insurance subsidy is \$200 as of January 1, 2006 and increases by 4% annually beginning January 1, 2007, subject to a maximum of the plan's monthly premium. The full \$200 is prorated based on the member's service at retirement, as shown in the schedule below. Members who were already retired as of March 2006 are entitled to 50% of the subsidy available to members retired after March 2006. Active members must contribute 1.25% of pay. Member contributions for the health subsidy are non-refundable.

Service at Retirement	% of Full Subsidy Payable	
	Active on or after March 1, 2006	Terminated Vested or Retired on March 1, 2006
Less than 10 years	25.0%	12.5%
10 years or more, but less than 15 years	50.0%	25.0%
15 years or more, but less than 20 years	75.0%	37.5%
20 years or more	100.0%	50.0%

SECTION F

ACTUARIAL COST METHOD AND ACTUARIAL ASSUMPTIONS

Actuarial Cost Method

Normal cost and the allocation of benefit values between service rendered before and after the valuation date was determined using the *individual entry-age actuarial cost method*. GASB Statement Nos. 74 and 75 require the use of this method having the following characteristics:

- 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;
- Each annual normal cost is a constant percentage of the member's year-by-year projected covered pay; and
- The use of Market Value of Assets for the Net Position Restricted for OPEB.

Actuarial Assumptions

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

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

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

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

Actual experience of the System will not coincide exactly with assumed experience, regardless of the accuracy of the assumptions, or the skill of the actuary and the precision of the many calculations made. Each valuation provides a complete recalculation of assumed future experience and takes into account all past differences between assumed and actual experience. The result is a continual series of adjustments (usually small) to the computed contribution rate.

From time to time it becomes appropriate to modify one or more of the assumptions, to reflect experience trends (but not random year-to-year fluctuations). The Board has established a policy of performing an Experience Study every 3-5 years to evaluate/modify valuation assumptions. Assumptions used in this report are based on the January 1, 2017 – December 31, 2019 experience study of the MECRS and were adopted by the Board. These assumptions were first used in the December 31, 2020 actuarial valuation. We believe the assumptions are reasonable individually and in the aggregate.

Valuation Assumptions

The rate of investment return was 6.75% per year, compounded annually (net of investment expenses). This assumption is used to make money payable at one point in time equal in value to a different amount of money payable at another point in time. The assumed real rate of return (the net return in excess of the wage inflation rate) is 4.25%. Experience over the last 5 years has been as follows:

	Year Ended December 31					5-Year Average
	2023	2022	2021	2020	2019	
1) Nominal rate of return#	7.00 %	4.00 %	9.70 %	8.60 %	5.60 %	6.96 %
2) Increase in CPI	3.35 %	6.45 %	7.04 %	1.36 %	2.29 %	4.07 %
3) Average Salary Increase (ASI)	3.20 %	4.14 %	3.69 %	5.49 %	4.24 %	4.15 %
4) Real Return						
- Total: CPI (1) - (2)						2.89 %
- Total: ASI (1) - (3)						2.81 %
- Assumption	4.25 %	4.25 %	4.25 %	4.25 %	4.25 %	4.25 %

The nominal rate of return was computed using the approximate formula: $i = I$ divided by $\frac{1}{2}(A+B-I)$, where I is realized investment income net of expenses, A is the beginning of year asset funding value and B is the end of year funding asset value.

The rate of assumed price inflation was 2.00% per year. This results in a real rate of return over price inflation of 4.75%.

These economic assumptions were updated for the December 31, 2020 valuation.

Valuation Assumptions (Continued)

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 benefit amounts will be based.

Years of Service	Salary Increase Assumptions for an Individual Member		
	Merit & Seniority	Base (Economic)	Increase Next Year
1	3.46%	2.50%	5.96%
2	4.43%	2.50%	6.93%
3	4.22%	2.50%	6.72%
4	3.70%	2.50%	6.20%
5	3.38%	2.50%	5.88%
6	2.93%	2.50%	5.43%
7	2.55%	2.50%	5.05%
8	2.26%	2.50%	4.76%
9	2.06%	2.50%	4.56%
10	1.85%	2.50%	4.35%
15	1.08%	2.50%	3.58%
20	0.77%	2.50%	3.27%
25	0.75%	2.50%	3.25%
30	0.75%	2.50%	3.25%
35	0.75%	2.50%	3.25%
40	0.75%	2.50%	3.25%

If the number of active members remains constant, then the total active member payroll will increase 2.50% annually, the base portion of the individual salary increase assumptions. This increasing payroll was recognized in amortizing unfunded actuarial accrued liabilities.

Rates of salary increase were updated for the December 31, 2020 valuation.

Valuation Assumptions (Continued)

The rates of retirement used to measure the probability of eligible members retiring during the next year were updated for the December 31, 2020 valuation and are as follows:

Active Members Retiring Next Year Under Normal Retirement			Active Members Retiring Next Year Under Early Retirement			
Ages	% Retiring		Ages	% Retiring		
	Male	Female		Age and Service		Rule of 80
				Male	Female	
60	12%	8%	50			10%
61	11%	15%	51			4%
62	22%	19%	52			7%
63	18%	10%	53			5%
64	18%	10%	54			5%
65	24%	19%	55	5%	10%	5%
66	38%	27%	56	5%	15%	4%
67	15%	19%	57	5%	8%	8%
68	39%	15%	58	5%	7%	8%
69	15%	22%	59	5%	7%	10%
70	27%	25%				
71	50%	19%				
72	42%	19%				
73	50%	19%				
74	50%	19%				
75	100%	19%				
76	100%	19%				
77	100%	19%				
78	100%	19%				
79	100%	19%				
80	100%	100%				

A member was assumed to be eligible for normal retirement after attaining age 60 regardless of service. A member was assumed to be eligible for early retirement after attaining age 55 with at least 20 years of service or if the sum of age and service is at least 80.

Valuation Assumptions (Continued)

The post-retirement healthy mortality table was the Pub-2010 General Healthy Retiree Table projected to 2039 using projection scale MP-2019.

Sample Attained Ages	Single Life Retirement Values					
	Present Value of \$1 Monthly for Life		Percent Dying Next Year		Future Life Expectancy (Years)	
	Male	Female	Male	Female	Male	Female
50	\$158.10	\$162.48	0.2552%	0.1899%	34.83	37.64
55	150.84	156.27	0.3655%	0.2572%	30.30	33.01
60	141.83	148.25	0.5441%	0.3494%	25.91	28.46
65	130.71	137.94	0.7880%	0.5138%	21.66	23.99
70	117.05	125.04	1.2298%	0.8314%	17.58	19.67
75	101.05	109.55	2.0765%	1.4535%	13.77	15.59
80	83.40	91.89	3.6906%	2.6437%	10.36	11.86

This assumption is used to measure the probabilities of members dying after retirement. The projection to 2039 is the margin for mortality improvement.

Post-retirement disabled mortality table is the Pub-2010 General Disabled Retiree Table projected to 2039 using projection scale MP-2019.

Pre-retirement mortality is modeled using the Pub-2010 General Employee Table projected to 2039 using projection scale MP-2019.

These tables were updated for the December 31, 2020 valuation in accordance with an experience study for the System of the 3-year period ended December 31, 2019.

Valuation Assumptions (Concluded)

Rates of separation from active membership are 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. These rates were updated for the December 31, 2020 valuation.

Sample Ages	Years of Service	% of Active Members Separating within Next Year	
		Male	Female
	0-1	24.00%	36.00%
	1-2	18.00%	26.00%
	2-3	13.00%	22.00%
	3-4	7.00%	14.00%
	4-5	7.00%	14.00%
	5-6	n/a	11.00%
30	5 & Up (Men)		
	6 & Up (Women)	4.00%	6.89%
35		2.96%	5.79%
40		2.33%	5.01%
45		2.00%	4.42%
50		1.87%	3.84%

Rates of disability are divided two-thirds toward duty and one-third toward non-duty disability and are as follows:

Sample Ages	% of Active Members Becoming Disabled within Next Year	
	Male	Female
20	0.003%	0.003%
25	0.003%	0.003%
30	0.003%	0.003%
35	0.013%	0.013%
40	0.051%	0.051%
45	0.105%	0.105%
50	0.173%	0.173%
55	0.256%	0.256%
60	0.382%	0.382%

Miscellaneous and Technical Assumptions

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 exact fractional service on the date the decrement is assumed to occur.
Decrement Relativity:	Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.
Decrement Operation:	Disability and withdrawal decrements do not operate after member reaches retirement eligibility.
Benefit Service:	Exact fractional service as of the valuation date is used to determine the amount of benefit payable.
Incidence of Contributions:	Contributions are assumed to be received continuously throughout the year based upon the actual payroll payable at the time contributions are made.
Subsidy COLA Assumption:	The only increases in subsidy benefits valued are the 4% annual increases called for in the plan provisions.
Utilization:	55% of current actives and 25% of current terminated vested members were assumed to elect to receive the post-retirement health subsidy upon retirement. Current retirees were assumed not to alter their initial election after retirement.
Data Processing:	The Retirement System provides data in Excel format. GRS reviews the data for reasonableness and completeness. Questions are sent to the System. Data is then modified based on the answers provided. For new members with less than one year of earnings, reported pay is annualized based on reported service.
Data Adjustments:	For members who have no salary provided, their prior year's salary was used.

SECTION G

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 6.75%; the municipal bond rate is 3.77%; and the resulting Single Discount Rate is 6.75%.

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. 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.

This analysis was performed without regard to any implicit rate subsidy that might exist. An analysis of how the implicit rate subsidy (if any) affects this calculation was outside the scope of this engagement.

Single Discount Rate Development

Projection of Contributions Ending December 31 for 2024 to 2073

Year	Projected Payroll for Current Employees	Projected Contributions from Current Employees	Projected Service Cost and Expense Contributions	Projected UAL Contributions	Projected Total Contributions
2023	\$ 62,181,204				
2024	65,053,453	\$ 461,069	\$ 435,248	\$ 1,161,296	\$ 2,057,613
2025	59,607,844	402,086	379,569	1,190,328	1,971,983
2026	55,748,651	366,471	345,949	1,220,086	1,932,506
2027	52,487,037	336,306	317,474	1,250,588	1,904,368
2028	49,688,642	312,584	295,080	1,281,853	1,889,517
2029	47,164,113	291,681	275,347	1,313,899	1,880,928
2030	44,803,289	271,981	256,750	1,346,747	1,875,478
2031	42,610,343	255,374	241,073	1,380,416	1,876,863
2032	40,506,598	239,492	226,080	1,414,926	1,880,498
2033	38,454,161	224,821	212,232	1,450,299	1,887,352
2034	36,564,918	211,760	199,902	1,486,557	1,898,218
2035	34,692,695	199,181	188,026	1,523,721	1,910,928
2036	32,881,088	186,757	176,298	1,561,814	1,924,868
2037	31,242,942	176,081	166,221	1,600,859	1,943,161
2038	29,639,209	165,406	156,144	1,640,880	1,962,430
2039	28,121,660	155,735	147,014	1,681,902	1,984,651
2040	26,580,146	145,533	137,382	0	282,915
2041	25,153,971	136,114	128,491	0	264,605
2042	23,793,575	127,498	120,357	0	247,855
2043	22,492,735	119,370	112,685	0	232,055
2044	21,175,518	111,248	105,019	0	216,267
2045	19,850,226	103,064	97,292	0	200,356
2046	18,600,715	95,506	90,158	0	185,664
2047	17,319,297	88,385	83,436	0	171,821
2048	16,106,505	81,492	76,929	0	158,421
2049	14,823,619	74,505	70,333	0	144,838
2050	13,611,515	67,933	64,129	0	132,062
2051	12,354,068	61,286	57,855	0	119,141
2052	11,220,926	55,371	52,270	0	107,641
2053	10,056,430	49,436	46,667	0	96,103
2054	8,930,349	43,713	41,264	0	84,977
2055	7,871,277	38,240	36,099	0	74,339
2056	6,862,196	33,367	31,498	0	64,865
2057	5,913,435	28,669	27,063	0	55,732
2058	5,056,531	24,563	23,187	0	47,750
2059	4,278,981	20,766	19,603	0	40,369
2060	3,537,262	17,297	16,328	0	33,625
2061	2,906,065	14,230	13,433	0	27,663
2062	2,382,525	11,709	11,053	0	22,762
2063	1,886,018	9,271	8,752	0	18,023
2064	1,511,533	7,391	6,977	0	14,368
2065	1,183,532	5,807	5,482	0	11,289
2066	904,127	4,428	4,180	0	8,608
2067	677,428	3,315	3,130	0	6,445
2068	519,712	2,538	2,395	0	4,933
2069	374,444	1,807	1,706	0	3,513
2070	272,298	1,313	1,239	0	2,552
2071	198,159	956	903	0	1,859
2072	143,655	686	648	0	1,334
2073	104,279	468	442	0	910



Single Discount Rate Development

Projection of Contributions Ending December 31 for 2074 to 2123

Year	Projected Payroll for Current Employees	Projected Contributions from Current Employees	Projected Service Cost and Expense Contributions	Projected UAL Contributions	Projected Total Contributions
2074	\$ 73,364	\$ 344	\$ 324	\$ 0	\$ 668
2075	51,333	235	222	0	457
2076	34,514	161	153	0	314
2077	23,746	98	92	0	190
2078	15,499	63	60	0	123
2079	9,951	41	38	0	79
2080	5,835	28	27	0	55
2081	3,453	14	13	0	27
2082	2,526	10	10	0	20
2083	1,564	6	6	0	12
2084	839	4	3	0	7
2085	139	1	0	0	1
2086	0	0	0	0	0
2087	0	0	0	0	0
2088	0	0	0	0	0
2089	0	0	0	0	0
2090	0	0	0	0	0
2091	0	0	0	0	0
2092	0	0	0	0	0
2093	0	0	0	0	0
2094	0	0	0	0	0
2095	0	0	0	0	0
2096	0	0	0	0	0
2097	0	0	0	0	0
2098	0	0	0	0	0
2099	0	0	0	0	0
2100	0	0	0	0	0
2101	0	0	0	0	0
2102	0	0	0	0	0
2103	0	0	0	0	0
2104	0	0	0	0	0
2105	0	0	0	0	0
2106	0	0	0	0	0
2107	0	0	0	0	0
2108	0	0	0	0	0
2109	0	0	0	0	0
2110	0	0	0	0	0
2111	0	0	0	0	0
2112	0	0	0	0	0
2113	0	0	0	0	0
2114	0	0	0	0	0
2115	0	0	0	0	0
2116	0	0	0	0	0
2117	0	0	0	0	0
2118	0	0	0	0	0
2119	0	0	0	0	0
2120	0	0	0	0	0
2121	0	0	0	0	0
2122	0	0	0	0	0
2123	0	0	0	0	0



Single Discount Rate Development Projection of Plan Net Position Ending December 31 for 2024 to 2073

Year	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings at 6.75%	Projected Ending Plan Net Position
	(a)	(b)	(c)	(d)	(e)	(f)=(a)+(b)-(c)-(d)+(e)
2024	\$ 21,370,459	\$ 2,057,613	\$ 1,177,379	\$ 0	\$ 1,471,729	\$ 23,722,422
2025	23,722,422	1,971,983	1,324,250	0	1,622,768	25,992,922
2026	25,992,922	1,932,506	1,478,686	0	1,769,589	28,216,331
2027	28,216,331	1,904,368	1,635,090	0	1,913,542	30,399,151
2028	30,399,151	1,889,517	1,785,855	0	2,055,384	32,558,197
2029	32,558,197	1,880,928	1,943,429	0	2,195,603	34,691,299
2030	34,691,299	1,875,478	2,095,994	0	2,334,342	36,805,125
2031	36,805,125	1,876,863	2,254,487	0	2,471,809	38,899,309
2032	38,899,309	1,880,498	2,410,495	0	2,608,108	40,977,421
2033	40,977,421	1,887,352	2,557,960	0	2,743,712	43,050,526
2034	43,050,526	1,898,218	2,711,051	0	2,878,925	45,116,618
2035	45,116,618	1,910,928	2,861,084	0	3,013,828	47,180,289
2036	47,180,289	1,924,868	2,999,781	0	3,148,984	49,254,360
2037	49,254,360	1,943,161	3,135,973	0	3,285,069	51,346,617
2038	51,346,617	1,962,430	3,273,711	0	3,422,364	53,457,700
2039	53,457,700	1,984,651	3,401,316	0	3,561,363	55,602,397
2040	55,602,397	282,915	3,521,433	0	3,645,647	56,009,526
2041	56,009,526	264,605	3,640,632	0	3,668,563	56,302,062
2042	56,302,062	247,855	3,751,257	0	3,684,080	56,482,741
2043	56,482,741	232,055	3,856,342	0	3,692,263	56,550,717
2044	56,550,717	216,267	3,954,795	0	3,693,058	56,505,247
2045	56,505,247	200,356	4,045,017	0	3,686,466	56,347,052
2046	56,347,052	185,664	4,122,411	0	3,672,730	56,083,035
2047	56,083,035	171,821	4,192,530	0	3,652,122	55,714,448
2048	55,714,448	158,421	4,255,382	0	3,624,711	55,242,197
2049	55,242,197	144,838	4,314,599	0	3,590,417	54,662,853
2050	54,662,853	132,062	4,359,689	0	3,549,390	53,984,616
2051	53,984,616	119,141	4,396,549	0	3,501,956	53,209,164
2052	53,209,164	107,641	4,420,653	0	3,448,431	52,344,584
2053	52,344,584	96,103	4,439,797	0	3,389,053	51,389,943
2054	51,389,943	84,977	4,456,907	0	3,323,678	50,341,691
2055	50,341,691	74,339	4,458,449	0	3,252,516	49,210,097
2056	49,210,097	64,865	4,448,349	0	3,176,155	48,002,768
2057	48,002,768	55,732	4,430,557	0	3,094,947	46,722,891
2058	46,722,891	47,750	4,397,899	0	3,009,375	45,382,117
2059	45,382,117	40,369	4,355,634	0	2,920,031	43,986,884
2060	43,986,884	33,625	4,307,031	0	2,827,242	42,540,720
2061	42,540,720	27,663	4,246,542	0	2,731,436	41,053,278
2062	41,053,278	22,762	4,177,051	0	2,633,178	39,532,167
2063	39,532,167	18,023	4,103,149	0	2,532,799	37,979,840
2064	37,979,840	14,368	4,021,777	0	2,430,598	36,403,027
2065	36,403,027	11,289	3,933,277	0	2,326,999	34,808,038
2066	34,808,038	8,608	3,837,493	0	2,222,428	33,201,581
2067	33,201,581	6,445	3,736,290	0	2,117,280	31,589,016
2068	31,589,016	4,933	3,631,245	0	2,011,869	29,974,573
2069	29,974,573	3,513	3,522,979	0	1,906,441	28,361,549
2070	28,361,549	2,552	3,410,740	0	1,801,256	26,754,617
2071	26,754,617	1,859	3,294,975	0	1,696,609	25,158,110
2072	25,158,110	1,334	3,175,814	0	1,592,783	23,576,414
2073	23,576,414	910	3,053,332	0	1,490,071	22,014,062



Single Discount Rate Development Projection of Plan Net Position Ending December 31 for 2074 to 2123

Year	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings at 6.75%	Projected Ending Plan Net Position
	(a)	(b)	(c)	(d)	(e)	(f)=(a)+(b)-(c)-(d)+(e)
2074	\$ 22,014,062	\$ 668	\$ 2,927,663	\$ 0	\$ 1,388,776	\$ 20,475,844
2075	20,475,844	457	2,798,803	0	1,289,217	18,966,716
2076	18,966,716	314	2,666,894	0	1,191,726	17,491,861
2077	17,491,861	190	2,532,157	0	1,096,642	16,056,537
2078	16,056,537	123	2,394,914	0	1,004,312	14,666,058
2079	14,666,058	79	2,255,623	0	915,077	13,325,592
2080	13,325,592	55	2,114,781	0	829,271	12,040,136
2081	12,040,136	27	1,972,957	0	747,210	10,814,416
2082	10,814,416	20	1,830,886	0	669,190	9,652,740
2083	9,652,740	12	1,689,377	0	595,475	8,558,850
2084	8,558,850	7	1,549,285	0	526,288	7,535,860
2085	7,535,860	1	1,411,500	0	461,810	6,586,172
2086	6,586,172	0	1,276,961	0	402,173	5,711,384
2087	5,711,384	0	1,146,668	0	347,450	4,912,167
2088	4,912,167	0	1,021,575	0	297,656	4,188,247
2089	4,188,247	0	902,568	0	252,742	3,538,421
2090	3,538,421	0	790,402	0	212,603	2,960,622
2091	2,960,622	0	685,702	0	177,077	2,451,998
2092	2,451,998	0	588,976	0	145,957	2,008,979
2093	2,008,979	0	500,584	0	118,987	1,627,382
2094	1,627,382	0	420,727	0	95,881	1,302,535
2095	1,302,535	0	349,457	0	76,320	1,029,398
2096	1,029,398	0	286,659	0	59,968	802,706
2097	802,706	0	232,060	0	46,479	617,125
2098	617,125	0	185,253	0	35,506	467,378
2099	467,378	0	145,712	0	26,710	348,376
2100	348,376	0	112,814	0	19,770	255,331
2101	255,331	0	85,882	0	14,384	183,833
2102	183,833	0	64,216	0	10,277	129,894
2103	129,894	0	47,109	0	7,204	89,989
2104	89,989	0	33,870	0	4,950	61,069
2105	61,069	0	23,840	0	3,331	40,560
2106	40,560	0	16,411	0	2,193	26,342
2107	26,342	0	11,036	0	1,412	16,718
2108	16,718	0	7,244	0	888	10,361
2109	10,361	0	4,638	0	545	6,269
2110	6,269	0	2,894	0	327	3,702
2111	3,702	0	1,759	0	191	2,134
2112	2,134	0	1,042	0	109	1,202
2113	1,202	0	601	0	61	662
2114	662	0	338	0	33	357
2115	357	0	186	0	18	189
2116	189	0	100	0	9	98
2117	98	0	53	0	5	50
2118	50	0	28	0	2	25
2119	25	0	14	0	1	12
2120	12	0	7	0	1	6
2121	6	0	3	0	0	2
2122	2	0	2	0	0	1
2123	1	0	1	0	0	0



Single Discount Rate Development

Present Values of Projected Benefits

Ending December 31 for 2024 to 2073

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)-.5}	(g)=(e)*vf ^{(a)-.5}	(h)=(c)/(1+SDR) ^{(a)-.5}
2024	\$ 21,370,459	\$ 1,177,379	\$ 1,177,379	\$ 0	\$ 1,139,547	\$ 0	\$ 1,139,547
2025	23,722,422	1,324,250	1,324,250	0	1,200,655	0	1,200,655
2026	25,992,922	1,478,686	1,478,686	0	1,255,903	0	1,255,903
2027	28,216,331	1,635,090	1,635,090	0	1,300,931	0	1,300,931
2028	30,399,151	1,785,855	1,785,855	0	1,331,039	0	1,331,039
2029	32,558,197	1,943,429	1,943,429	0	1,356,892	0	1,356,892
2030	34,691,299	2,095,994	2,095,994	0	1,370,878	0	1,370,878
2031	36,805,125	2,254,487	2,254,487	0	1,381,302	0	1,381,302
2032	38,899,309	2,410,495	2,410,495	0	1,383,500	0	1,383,500
2033	40,977,421	2,557,960	2,557,960	0	1,375,304	0	1,375,304
2034	43,050,526	2,711,051	2,711,051	0	1,365,447	0	1,365,447
2035	45,116,618	2,861,084	2,861,084	0	1,349,895	0	1,349,895
2036	47,180,289	2,999,781	2,999,781	0	1,325,840	0	1,325,840
2037	49,254,360	3,135,973	3,135,973	0	1,298,392	0	1,298,392
2038	51,346,617	3,273,711	3,273,711	0	1,269,714	0	1,269,714
2039	53,457,700	3,401,316	3,401,316	0	1,235,790	0	1,235,790
2040	55,602,397	3,521,433	3,521,433	0	1,198,531	0	1,198,531
2041	56,009,526	3,640,632	3,640,632	0	1,160,750	0	1,160,750
2042	56,302,062	3,751,257	3,751,257	0	1,120,394	0	1,120,394
2043	56,482,741	3,856,342	3,856,342	0	1,078,951	0	1,078,951
2044	56,550,717	3,954,795	3,954,795	0	1,036,531	0	1,036,531
2045	56,505,247	4,045,017	4,045,017	0	993,141	0	993,141
2046	56,347,052	4,122,411	4,122,411	0	948,143	0	948,143
2047	56,083,035	4,192,530	4,192,530	0	903,298	0	903,298
2048	55,714,448	4,255,382	4,255,382	0	858,866	0	858,866
2049	55,242,197	4,314,599	4,314,599	0	815,754	0	815,754
2050	54,662,853	4,359,689	4,359,689	0	772,159	0	772,159
2051	53,984,616	4,396,549	4,396,549	0	729,449	0	729,449
2052	53,209,164	4,420,653	4,420,653	0	687,071	0	687,071
2053	52,344,584	4,439,797	4,439,797	0	646,414	0	646,414
2054	51,389,943	4,456,907	4,456,907	0	607,873	0	607,873
2055	50,341,691	4,458,449	4,458,449	0	569,633	0	569,633
2056	49,210,097	4,448,349	4,448,349	0	532,406	0	532,406
2057	48,002,768	4,430,557	4,430,557	0	496,746	0	496,746
2058	46,722,891	4,397,899	4,397,899	0	461,906	0	461,906
2059	45,382,117	4,355,634	4,355,634	0	428,540	0	428,540
2060	43,986,884	4,307,031	4,307,031	0	396,963	0	396,963
2061	42,540,720	4,246,542	4,246,542	0	366,640	0	366,640
2062	41,053,278	4,177,051	4,177,051	0	337,836	0	337,836
2063	39,532,167	4,103,149	4,103,149	0	310,875	0	310,875
2064	37,979,840	4,021,777	4,021,777	0	285,443	0	285,443
2065	36,403,027	3,933,277	3,933,277	0	261,509	0	261,509
2066	34,808,038	3,837,493	3,837,493	0	239,008	0	239,008
2067	33,201,581	3,736,290	3,736,290	0	217,991	0	217,991
2068	31,589,016	3,631,245	3,631,245	0	198,465	0	198,465
2069	29,974,573	3,522,979	3,522,979	0	180,373	0	180,373
2070	28,361,549	3,410,740	3,410,740	0	163,584	0	163,584
2071	26,754,617	3,294,975	3,294,975	0	148,040	0	148,040
2072	25,158,110	3,175,814	3,175,814	0	133,663	0	133,663
2073	23,576,414	3,053,332	3,053,332	0	120,383	0	120,383



Single Discount Rate Development

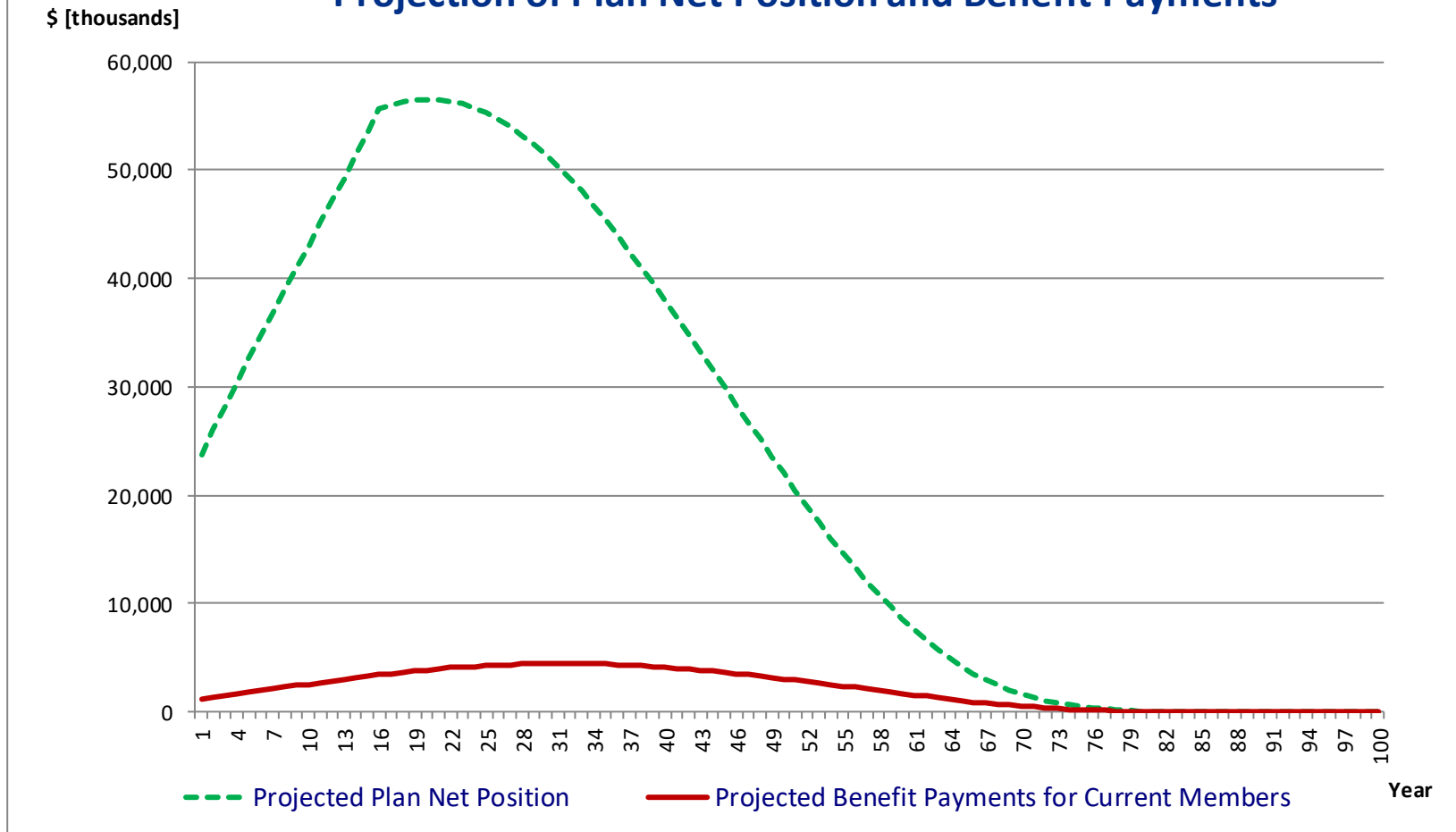
Present Values of Projected Benefits

Ending December 31 for 2074 to 2123

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)	
2074	\$ 22,014,062	\$ 2,927,663	\$ 2,927,663	\$ 0	\$ 108,129	\$ 0	\$ 108,129	
2075	20,475,844	2,798,803	2,798,803	0	96,834	0	96,834	
2076	18,966,716	2,666,894	2,666,894	0	86,435	0	86,435	
2077	17,491,861	2,532,157	2,532,157	0	76,879	0	76,879	
2078	16,056,537	2,394,914	2,394,914	0	68,115	0	68,115	
2079	14,666,058	2,255,623	2,255,623	0	60,096	0	60,096	
2080	13,325,592	2,114,781	2,114,781	0	52,781	0	52,781	
2081	12,040,136	1,972,957	1,972,957	0	46,128	0	46,128	
2082	10,814,416	1,830,886	1,830,886	0	40,100	0	40,100	
2083	9,652,740	1,689,377	1,689,377	0	34,661	0	34,661	
2084	8,558,850	1,549,285	1,549,285	0	29,777	0	29,777	
2085	7,535,860	1,411,500	1,411,500	0	25,413	0	25,413	
2086	6,586,172	1,276,961	1,276,961	0	21,537	0	21,537	
2087	5,711,384	1,146,668	1,146,668	0	18,117	0	18,117	
2088	4,912,167	1,021,575	1,021,575	0	15,120	0	15,120	
2089	4,188,247	902,568	902,568	0	12,514	0	12,514	
2090	3,538,421	790,402	790,402	0	10,266	0	10,266	
2091	2,960,622	685,702	685,702	0	8,343	0	8,343	
2092	2,451,998	588,976	588,976	0	6,713	0	6,713	
2093	2,008,979	500,584	500,584	0	5,345	0	5,345	
2094	1,627,382	420,727	420,727	0	4,208	0	4,208	
2095	1,302,535	349,457	349,457	0	3,274	0	3,274	
2096	1,029,398	286,659	286,659	0	2,516	0	2,516	
2097	802,706	232,060	232,060	0	1,908	0	1,908	
2098	617,125	185,253	185,253	0	1,427	0	1,427	
2099	467,378	145,712	145,712	0	1,051	0	1,051	
2100	348,376	112,814	112,814	0	762	0	762	
2101	255,331	85,882	85,882	0	544	0	544	
2102	183,833	64,216	64,216	0	381	0	381	
2103	129,894	47,109	47,109	0	262	0	262	
2104	89,989	33,870	33,870	0	176	0	176	
2105	61,069	23,840	23,840	0	116	0	116	
2106	40,560	16,411	16,411	0	75	0	75	
2107	26,342	11,036	11,036	0	47	0	47	
2108	16,718	7,244	7,244	0	29	0	29	
2109	10,361	4,638	4,638	0	17	0	17	
2110	6,269	2,894	2,894	0	10	0	10	
2111	3,702	1,759	1,759	0	6	0	6	
2112	2,134	1,042	1,042	0	3	0	3	
2113	1,202	601	601	0	2	0	2	
2114	662	338	338	0	1	0	1	
2115	357	186	186	0	0	0	0	
2116	189	100	100	0	0	0	0	
2117	98	53	53	0	0	0	0	
2118	50	28	28	0	0	0	0	
2119	25	14	14	0	0	0	0	
2120	12	7	7	0	0	0	0	
2121	6	3	3	0	0	0	0	
2122	2	2	2	0	0	0	0	
2123	1	1	1	0	0	0	0	
Totals	\$	41,188,478	\$	0	\$	0	\$	41,188,478



Projection of Plan Net Position and Benefit Payments



SECTION H

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	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: <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 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.

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 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 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.