

Manchester Employees' Contributory Retirement System

GASB Statement Nos. 74 and 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions
December 31, 2021





April 18, 2022

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, 2021 actuarial valuation unless otherwise noted. Please refer to this 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 sponsors.

Respectfully submitted,
Gabriel, Roeder, Smith & Company



Heidi G. Barry, ASA, FCA, MAAA



Kevin T. Noelke, ASA, MAAA, FCA

HGB/KTN:sc



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.



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SECTION A

EXECUTIVE SUMMARY

Executive Summary as of December 31, 2021

Actuarial Valuation Date	December 31, 2021
Measurement Date of the Net OPEB Liability	December 31, 2021
Employer's Fiscal Year Ending Date (Reporting Date)	June 30, 2022

Membership

Number of	
- Retirees and Beneficiaries	422
- Inactive, Nonretired Members	122
- Active Members	1,070
- Total	1,614
Covered Payroll [^]	\$ 55,323,580

Net OPEB Liability

Total OPEB Liability	\$ 37,693,363
Plan Fiduciary Net Position	20,127,378
Net OPEB Liability	\$ 17,565,985
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability	53.40 %
Net OPEB Liability as a Percentage of Covered Payroll	31.75 %

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*	1.84 %
Last year ending December 31 in the 2022 to 2121 projection period for which projected benefit payments are fully funded	2121

Total OPEB Expense \$ 1,867,367

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	\$ 1,113,632	\$ 150,005
Changes in assumptions	3,092,175	0
Net difference between projected and actual earnings on OPEB plan investments	316,232	1,767,373
Total	\$ 4,522,039	\$ 1,917,378

[^] Based on valuation payroll as of December 31, 2021.

*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 31, 2021, 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, 2021.

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, 2021 and a measurement date of December 31, 2021.

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 1.84% (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

Fiscal Year Ended December 31, 2021

A. Expense

1. Service Cost	\$	800,532
2. Interest on the Total OPEB Liability		2,355,738
3. Current-Period Benefit Changes		0
4. Employee Contributions (made negative for addition here)		(710,291)
5. Projected Earnings on Plan Investments (made negative for addition here)		(1,196,817)
6. OPEB Plan Administrative Expense		48,968
7. Other Changes in Plan Fiduciary Net Position		0
8. Recognition of Outflow (Inflow) of Resources due to Liabilities		1,044,818
9. Recognition of Outflow (Inflow) of Resources due to Assets		(475,581)
10. Total OPEB Expense	\$	1,867,367

Statement of Outflows and Inflows Arising from Current Reporting Period Fiscal Year Ended December 31, 2021

A. Outflows (Inflows) of Resources due to Liabilities

1. Difference between expected and actual experience of the Total OPEB Liability (gains) or losses	\$	776,644
2. Assumption Changes (gains) or losses	\$	0
3. Recognition period for Liabilities: Average of the expected remaining service lives of all employees {in years}		6.6874
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	\$	116,135
5. Outflow (Inflow) of Resources to be recognized in the current OPEB expense for assumption changes	\$	0
6. Outflow (Inflow) of Resources to be recognized in the current OPEB expense due to Liabilities	\$	116,135
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	\$	660,509
8. Deferred Outflow (Inflow) of Resources to be recognized in future OPEB expenses for assumption changes	\$	0
9. Deferred Outflow (Inflow) of Resources to be recognized in future OPEB expenses due to Liabilities	\$	660,509

B. Outflows (Inflows) of Resources due to Assets

1. Net difference between projected and actual earnings on OPEB plan investments (gains) or losses	\$	(888,466)
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	\$	(177,693)
4. Deferred Outflow (Inflow) of Resources to be recognized in future OPEB expenses due to Assets	\$	(710,773)

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

Fiscal Year Ended December 31, 2021

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	\$ 43,451	\$ 208,136
2. Assumption changes	836,682	0	836,682
3. Net difference between projected and actual earnings on OPEB plan investments	316,234	791,815	(475,581)
4. Total	\$ 1,404,503	\$ 835,266	\$ 569,237

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	\$ 1,113,632	\$ 150,005	\$ 963,627
2. Assumption changes	3,092,175	0	3,092,175
3. Net difference between projected and actual earnings on OPEB plan investments	316,232	1,767,373	(1,451,141)
4. Total	\$ 4,522,039	\$ 1,917,378	\$ 2,604,661

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	\$ 756,447
2024	416,525
2025	368,249
2026	482,341
2027	501,265
Thereafter	79,834
Total	\$ 2,604,661

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 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

Fiscal Year Ended December 31, 2021

(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	\$ (20,127)	\$ (38,643)	1.9200
2019	871,321	7.2683	119,880	391,801	3.2683
2020	108,038	6.9381	15,572	61,322	3.9381
2021	(158,010)	6.7747	(23,324)	(111,362)	4.7747
2022	776,644	6.6874	116,135	660,509	5.6874
Total			\$ 208,136	\$ 963,627	
Deferred Outflow (Inflow) due to Assumption Changes					
2018	\$ 2,188,276	6.9200	\$ 316,225	\$ 607,151	1.9200
2019	-	7.2683	-	-	3.2683
2020	-	6.9381	-	-	3.9381
2021	3,525,938	6.7747	520,457	2,485,024	4.7747
2022	-	6.6874	-	-	5.6874
Total			\$ 836,682	\$ 3,092,175	
Deferred Outflow (Inflow) due to Differences Between Projected and Actual Earnings on Plan Investments					
2018	\$ (936,056)	5.0000	\$ (187,212)	-	0.0000
2019	1,581,168	5.0000	316,234	316,232	1.0000
2020	(1,120,662)	5.0000	(224,132)	(448,266)	2.0000
2021	(1,013,890)	5.0000	(202,778)	(608,334)	3.0000
2022	(888,466)	5.0000	(177,693)	(710,773)	4.0000
Total			\$ (475,581)	\$ (1,451,141)	

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 10,660 years. Additionally, the total plan membership (active employees and inactive employees) was 1,594. 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 6.6874 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, 2021

Assets

Cash and Deposits	\$	9,037,679
Receivables		
Accounts Receivable - Sale of Investments	\$	405,254
Accrued Interest and Other Dividends		0
Additional Contribution Account		683,068
Property, Plant, Equipment		14,844
Total Receivables	\$	<u>1,103,166</u>
Investments	\$	299,293,256
Total Assets	\$	<u>309,434,101</u>

Liabilities

Payables		
Accounts Payable and Accrued Expenses	\$	156,293
Payable for Investments Purchased		-
Benefits Payable		1,887,202
Total Liabilities	\$	<u>2,043,495</u>

Assets Held for Pensions	\$	<u>287,263,228</u>
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Net Position Restricted for OPEB	\$	<u>20,127,378</u>
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Schedule of Proportionate Employer Share for Year Ended December 31, 2021

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	Changes of Assum.	Changes in Proportion and Differences Between Employer Cont. and Share of Cont.	Total Deferred Outflows of Resources
\$ 5,434,427	Airport	9.82%	8.83%	\$ 1,724,980	\$ 109,359	\$ 303,652	\$ 360,059	\$ 773,070
495,731	Parking Control	0.90%	1.03%	158,094	10,023	27,829	35,705	73,557
2,460,998	Environmental Protection	4.45%	4.77%	781,686	49,557	137,602	158,326	345,485
9,236,811	School District	16.70%	16.22%	2,933,519	185,977	516,393	51,159	753,529
5,267,910	Water Works	9.52%	9.96%	1,672,282	106,018	294,375	314,390	714,783
32,427,703	General Fund City Departments	58.61%	59.19%	10,295,424	652,698	1,812,324	37,894	2,502,916
\$ 55,323,580	Total for All Employers	100.00%	100.00%	\$ 17,565,985	\$ 1,113,632	\$ 3,092,175	\$ 957,533	\$ 5,163,340



Schedule of Proportionate Employer Share for Year Ended December 31, 2021 (Concluded)

Deferred Inflows of Resources					OPEB Expense			
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 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	
\$ 14,730	\$ 142,502	\$ -	\$ 62,499	\$ 219,731	\$ 183,375	\$ -	\$ 183,375	
1,350	13,060	-	\$ 18,671	33,081	16,806	-	16,806	
6,675	64,576	-	\$ 19,650	90,901	83,098	-	83,098	
25,051	242,341	-	\$ 396,299	663,691	311,850	-	311,850	
14,280	138,149	-	\$ 38,052	190,481	177,773	-	177,773	
87,919	850,513	-	\$ 422,362	1,360,794	1,094,465	-	1,094,465	
\$ 150,005	\$ 1,451,141	\$ -	\$ 957,533	\$ 2,558,679	\$ 1,867,367	\$ -	\$ 1,867,367	

* 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.



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

Fiscal Year Ended December 31, 2021

A. Total OPEB liability	
1. Service cost	\$ 800,532
2. Interest on the total OPEB liability	2,355,738
3. Changes of benefit terms	0
4. Difference between expected and actual experience of the total OPEB liability	776,644
5. Changes of assumptions	0
6. Benefit payments, including refunds of employee contributions	(1,478,210)
7. Net change in total OPEB liability	<u>2,454,704</u>
8. Total OPEB liability – beginning	<u>35,238,659</u>
9. Total OPEB liability – ending	<u><u>\$ 37,693,363</u></u>
B. Plan fiduciary net position	
1. Contributions – employer	\$ 1,439,820
2. Contributions – nonemployer contributing entities	0
3. Contributions – employee	710,291
4. Net investment income	2,085,283
5. Benefit payments, including refunds of employee contributions	(1,478,210)
6. OPEB plan administrative expense	(48,968)
7. Other	0
8. Net change in plan fiduciary net position	<u>2,708,216</u>
9. Plan fiduciary net position – beginning*	<u>17,419,162</u>
10. Plan fiduciary net position – ending	<u><u>\$ 20,127,378</u></u>
C. Net OPEB liability	<u><u>\$ 17,565,985</u></u>
D. Plan fiduciary net position as a percentage of the total OPEB liability	53.40 %
E. Covered-employee payroll	\$ 55,323,580
F. Net OPEB liability as a percentage of covered-employee payroll	31.75 %

* 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)

Fiscal year ending June 30,	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Total OPEB liability										
Service cost	\$ 800,532	\$ 750,882	\$ 722,950	\$ 667,057						
Interest on the total OPEB liability	2,355,738	2,103,564	1,993,098	1,834,405						
Changes of benefit terms	0	0	0	0						
Difference between expected and actual experience	776,644	(158,010)	108,038	871,321						
Changes of assumptions	0	3,525,938	0	0						
Benefit payments, including refunds of employee contributions	(1,478,210)	(1,318,384)	(1,201,543)	(1,065,835)						
Net change in total OPEB liability	2,454,704	4,903,990	1,622,543	2,306,948						
Total OPEB liability - beginning	35,238,659	30,334,669	28,712,126	26,405,178						
Total OPEB liability - ending (a)	\$ 37,693,363	\$ 35,238,659	\$ 30,334,669	\$ 28,712,126						
Plan fiduciary net position										
Employer contributions	\$ 1,439,820	\$ 1,252,923	\$ 1,075,844	\$ 856,677						
Nonemployer contributing entities contributions	0	0	0	0						
Employee contributions	710,291	702,739	682,470	674,011						
OPEB plan net investment income	2,085,283	2,074,039	2,002,516	(688,995)						
Benefit payments, including refunds of employee contributions	(1,478,210)	(1,318,384)	(1,201,543)	(1,065,835)						
OPEB plan administrative expense	(48,968)	(58,908)	(47,490)	(37,111)						
Other	0	(128)	(2,239)	(3,484)						
Net change in plan fiduciary net position	2,708,216	2,652,281	2,509,558	(264,737)						
Plan fiduciary net position - beginning	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)	\$ 20,127,378	\$ 17,419,162	\$ 14,772,702	\$ 12,268,459						
Net OPEB liability - ending (a) - (b)	\$ 17,565,985	\$ 17,819,497	\$ 15,561,967	\$ 16,443,667						
Plan fiduciary net position as a percentage of total OPEB liability	53.40 %	49.43 %	48.70 %	42.73 %						
Covered-employee payroll	\$ 55,323,580	\$ 54,254,463	\$ 52,895,992	\$ 51,787,265						
Net OPEB liability as a percentage of covered-employee payroll	31.75 %	32.84 %	29.42 %	31.75 %						
Notes to Schedule:	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)

Plan Year Ending 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 %

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

Schedule of Contributions Multiyear

(Ultimately 10 Years Will Be Displayed)

<u>Plan 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 %

* 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, 2019 and December 31, 2020
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 Fiscal Year 2021 Contribution Rate:

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll, Closed
Remaining Amortization Period	20 years
Asset Valuation Method	5-Year smoothed market; 20% corridor
Wage Inflation	2.75%
Salary Increases	3.75% to 7.43%, including inflation
Investment Rate of Return	7.00% (net of investment expenses)
Retirement Age	Age and Experience-based table of rates that are specific to the type of eligibility condition.
Mortality	RP-2014 Mortality Table projected to 2026 for males and females using projection scale MP-2017.
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.
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Methods and Assumptions Used to Determine Fiscal Year 2022 Contribution Rate:

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll, Closed
Remaining Amortization Period	19 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	There were changes to assumptions including many demographic assumptions, assumed rates of investment return, wage inflation, and price inflation, and administrative expenses following the 3-year experience
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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	422
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	122
Active Plan Members	<u>1,070</u>
Total Plan Members	1,614

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)	\$ 42,784,700	\$ 37,693,363	\$ 33,470,966
Net Position Restricted for OPEB	20,127,378	20,127,378	20,127,378
Net OPEB Liability	\$ 22,657,322	\$ 17,565,985	\$ 13,343,588

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. 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 Used for the Valuation

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
	2021	2020	2019	2018	2017	
1) Nominal rate of return#	9.7 %	8.6 %	5.6 %	3.4 %	7.4 %	6.9 %
2) Increase in CPI	7.0 %	1.4 %	2.3 %	1.9 %	2.1 %	2.9 %
3) Average Salary Increase (ASI)	3.7 %	5.5 %	4.2 %	(0.1)%	1.2 %	2.9 %
4) Real Return						
- Total: CPI (1) - (2)						4.0 %
- Total: ASI (1) - (3)						4.0 %
- Assumption	4.25 %	4.25 %	4.25 %	4.25 %	4.25 %	4.3 %

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 Tables 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 Tables projected to 2039 using projection scale MP-2019.

Pre-retirement mortality is modeled using the Pub-2010 General Employee Tables 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

December 31, 2021

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 indicated to have been furloughed or had another absence, their prior year's salary was used to estimate their current annualized salary.

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 1.84%; 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 2022 to 2071

Year	Projected Payroll for Current Employees	Projected Contributions from Current Employees	Projected Service Cost and Expense Contributions	Projected UAL Contributions	Projected Total Contributions
2021	\$ 55,323,580				
2022	57,793,659	\$ 722,421	\$ 138,514	\$ 1,393,008	\$ 2,253,943
2023	53,499,080	668,739	107,390	1,427,833	2,203,962
2024	50,155,530	626,944	91,334	1,463,529	2,181,807
2025	47,433,745	592,922	74,797	1,500,117	2,167,837
2026	44,988,977	562,362	63,268	1,537,620	2,163,250
2027	42,552,760	531,909	53,007	1,576,061	2,160,977
2028	40,341,259	504,266	45,338	1,615,462	2,165,066
2029	38,193,518	477,419	38,983	1,655,849	2,172,251
2030	36,112,514	451,406	32,386	1,697,245	2,181,038
2031	34,080,231	426,003	27,392	1,739,676	2,193,071
2032	32,227,281	402,841	23,316	1,783,168	2,209,325
2033	30,424,020	380,300	19,290	1,827,747	2,227,338
2034	28,765,426	359,568	16,143	1,873,441	2,249,152
2035	27,150,015	339,375	12,412	1,920,277	2,272,064
2036	25,574,216	319,678	10,187	1,968,284	2,298,149
2037	24,108,864	301,361	7,219	2,017,491	2,326,071
2038	22,693,361	283,667	4,361	2,067,928	2,355,956
2039	21,385,603	267,320	2,909	2,119,627	2,389,856
2040	20,067,364	250,842	5	0	250,847
2041	18,852,737	235,659	0	0	235,659
2042	17,658,846	220,736	0	0	220,736
2043	16,561,515	207,019	0	0	207,019
2044	15,463,023	193,288	0	0	193,288
2045	14,378,102	179,726	0	0	179,726
2046	13,371,524	167,144	0	0	167,144
2047	12,334,233	154,178	0	0	154,178
2048	11,364,902	142,061	0	0	142,061
2049	10,343,901	129,299	0	0	129,299
2050	9,399,235	117,490	0	0	117,490
2051	8,423,616	105,295	0	0	105,295
2052	7,559,931	94,499	0	0	94,499
2053	6,682,672	83,533	0	0	83,533
2054	5,859,581	73,245	0	0	73,245
2055	5,094,946	63,687	0	0	63,687
2056	4,363,959	54,549	0	0	54,549
2057	3,694,212	46,178	0	0	46,178
2058	3,090,799	38,635	0	0	38,635
2059	2,551,837	31,898	0	0	31,898
2060	2,039,861	25,498	0	0	25,498
2061	1,616,128	20,202	0	0	20,202
2062	1,271,782	15,897	0	0	15,897
2063	968,642	12,108	0	0	12,108
2064	748,812	9,360	0	0	9,360
2065	559,353	6,992	0	0	6,992
2066	414,832	5,185	0	0	5,185
2067	296,340	3,704	0	0	3,704
2068	220,034	2,750	0	0	2,750
2069	151,201	1,890	0	0	1,890
2070	106,264	1,328	0	0	1,328
2071	75,492	944	0	0	944



Single Discount Rate Development

Projection of Contributions Ending December 31 for 2072 to 2121

Year	Projected Payroll for Current Employees	Projected Contributions from Current Employees	Projected Service Cost and Expense Contributions	Projected UAL Contributions	Projected Total Contributions
2072	\$ 51,853	\$ 648	\$ 0	\$ 0	648
2073	37,425	468	0	0	468
2074	24,860	311	0	0	311
2075	18,016	225	0	0	225
2076	11,778	147	0	0	147
2077	8,719	109	0	0	109
2078	5,757	72	0	0	72
2079	3,316	41	0	0	41
2080	1,635	20	0	0	20
2081	939	12	0	0	12
2082	408	5	0	0	5
2083	101	1	0	0	1
2084	0	0	0	0	0
2085	0	0	0	0	0
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



Single Discount Rate Development Projection of Plan Net Position Ending December 31 for 2022 to 2071

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)
2022	\$ 20,127,378	\$ 2,253,943	\$ 1,164,295	\$ 0	\$ 1,394,773	\$ 22,611,799
2023	22,611,799	2,203,962	1,321,026	0	1,555,609	25,050,344
2024	25,050,344	2,181,807	1,475,149	0	1,714,359	27,471,361
2025	27,471,361	2,167,837	1,640,743	0	1,871,816	29,870,271
2026	29,870,271	2,163,250	1,815,995	0	2,027,772	32,245,298
2027	32,245,298	2,160,977	1,994,506	0	2,182,084	34,593,853
2028	34,593,853	2,165,066	2,170,125	0	2,334,917	36,923,711
2029	36,923,711	2,172,251	2,351,921	0	2,486,386	39,230,427
2030	39,230,427	2,181,038	2,529,262	0	2,636,493	41,518,696
2031	41,518,696	2,193,071	2,711,689	0	2,785,294	43,785,372
2032	43,785,372	2,209,325	2,890,517	0	2,932,898	46,037,078
2033	46,037,078	2,227,338	3,061,236	0	3,079,818	48,282,997
2034	48,282,997	2,249,152	3,229,640	0	3,226,551	50,529,060
2035	50,529,060	2,272,064	3,391,321	0	3,373,553	52,783,356
2036	52,783,356	2,298,149	3,546,514	0	3,521,432	55,056,423
2037	55,056,423	2,326,071	3,700,261	0	3,670,687	57,352,921
2038	57,352,921	2,355,956	3,851,626	0	3,821,668	59,678,918
2039	59,678,918	2,389,856	3,988,631	0	3,975,249	62,055,392
2040	62,055,392	250,847	4,119,339	0	4,060,309	62,247,209
2041	62,247,209	235,659	4,246,951	0	4,068,516	62,304,433
2042	62,304,433	220,736	4,364,111	0	4,067,994	62,229,051
2043	62,229,051	207,019	4,473,436	0	4,058,821	62,021,455
2044	62,021,455	193,288	4,573,303	0	4,041,036	61,682,476
2045	61,682,476	179,726	4,658,775	0	4,014,868	61,218,295
2046	61,218,295	167,144	4,731,560	0	3,980,701	60,634,579
2047	60,634,579	154,178	4,796,204	0	3,938,724	59,931,277
2048	59,931,277	142,061	4,852,096	0	3,888,993	59,110,235
2049	59,110,235	129,299	4,899,424	0	3,831,578	58,171,688
2050	58,171,688	117,490	4,929,340	0	3,766,841	57,126,679
2051	57,126,679	105,295	4,947,970	0	3,695,279	55,979,284
2052	55,979,284	94,499	4,951,788	0	3,617,345	54,739,340
2053	54,739,340	83,533	4,946,601	0	3,533,457	53,409,728
2054	53,409,728	73,245	4,936,591	0	3,443,699	51,990,081
2055	51,990,081	63,687	4,909,695	0	3,348,448	50,492,520
2056	50,492,520	54,549	4,866,910	0	3,248,480	48,928,640
2057	48,928,640	46,178	4,810,601	0	3,144,510	47,308,727
2058	47,308,727	38,635	4,743,199	0	3,037,153	45,641,315
2059	45,641,315	31,898	4,667,039	0	2,926,907	43,933,082
2060	43,933,082	25,498	4,579,974	0	2,814,279	42,192,886
2061	42,192,886	20,202	4,480,649	0	2,699,938	40,432,376
2062	40,432,376	15,897	4,373,357	0	2,584,522	38,659,439
2063	38,659,439	12,108	4,259,863	0	2,468,491	36,880,175
2064	36,880,175	9,360	4,139,857	0	2,352,284	35,101,962
2065	35,101,962	6,992	4,016,447	0	2,236,273	33,328,780
2066	33,328,780	5,185	3,889,820	0	2,120,727	31,564,873
2067	31,564,873	3,704	3,760,391	0	2,005,911	29,814,097
2068	29,814,097	2,750	3,628,845	0	1,892,069	28,080,072
2069	28,080,072	1,890	3,495,604	0	1,779,417	26,365,776
2070	26,365,776	1,328	3,360,353	0	1,668,174	24,674,925
2071	24,674,925	944	3,223,394	0	1,558,576	23,011,050



Single Discount Rate Development Projection of Plan Net Position Ending December 31 for 2072 to 2121

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)
2072	23,011,050	648	3,084,557	0	1,450,863	21,378,005
2073	21,378,005	468	2,943,840	0	1,345,299	19,779,932
2074	19,779,932	311	2,801,210	0	1,242,159	18,221,191
2075	18,221,191	225	2,656,634	0	1,141,740	16,706,522
2076	16,706,522	147	2,510,323	0	1,044,355	15,240,701
2077	15,240,701	109	2,362,499	0	950,319	13,828,630
2078	13,828,630	72	2,213,587	0	859,946	12,475,062
2079	12,475,062	41	2,064,024	0	773,545	11,184,623
2080	11,184,623	20	1,914,310	0	691,410	9,961,744
2081	9,961,744	12	1,765,146	0	613,817	8,810,426
2082	8,810,426	5	1,617,410	0	541,008	7,734,029
2083	7,734,029	1	1,471,958	0	473,180	6,735,252
2084	6,735,252	0	1,329,697	0	410,485	5,816,040
2085	5,816,040	0	1,191,625	0	353,022	4,977,437
2086	4,977,437	0	1,058,771	0	300,827	4,219,492
2087	4,219,492	0	932,141	0	253,870	3,541,221
2088	3,541,221	0	812,674	0	212,053	2,940,599
2089	2,940,599	0	701,201	0	175,211	2,414,609
2090	2,414,609	0	598,371	0	143,121	1,959,360
2091	1,959,360	0	504,645	0	115,503	1,570,218
2092	1,570,218	0	420,317	0	92,036	1,241,937
2093	1,241,937	0	345,487	0	72,361	968,811
2094	968,811	0	280,048	0	56,097	744,861
2095	744,861	0	223,694	0	42,852	564,019
2096	564,019	0	175,935	0	32,230	420,315
2097	420,315	0	136,135	0	23,852	308,031
2098	308,031	0	103,553	0	17,354	221,832
2099	221,832	0	77,370	0	12,405	156,867
2100	156,867	0	56,732	0	8,705	108,840
2101	108,840	0	40,791	0	5,993	74,042
2102	74,042	0	28,735	0	4,044	49,351
2103	49,351	0	19,817	0	2,673	32,207
2104	32,207	0	13,369	0	1,730	20,569
2105	20,569	0	8,816	0	1,096	12,848
2106	12,848	0	5,680	0	679	7,847
2107	7,847	0	3,573	0	411	4,685
2108	4,685	0	2,194	0	243	2,734
2109	2,734	0	1,315	0	141	1,560
2110	1,560	0	769	0	80	871
2111	871	0	439	0	44	476
2112	476	0	245	0	24	255
2113	255	0	134	0	13	134
2114	134	0	72	0	7	69
2115	69	0	38	0	3	35
2116	35	0	19	0	2	17
2117	17	0	10	0	1	8
2118	8	0	5	0	0	3
2119	3	0	2	0	0	1
2120	1	0	1	0	0	1
2121	1	0	1	0	0	0



Single Discount Rate Development

Present Values of Projected Benefits

Ending December 31 for 2022 to 2071

Year	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Projected Benefit Payments	Unfunded Portion of Projected Benefit Payments	Present Value of Funded Benefit Payments using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf)	Present Value of All Benefit Payments using Single Discount Rate (SDR)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v ^{((a)-.5)}	(g)=(e)*vf ^{((a)-.5)}	(h)=(c)/(1+SDR) ^{((a)-.5)}
2022	\$ 20,127,378	\$ 1,164,295	\$ 1,164,295	\$ 0	\$ 1,126,884	\$ 0	\$ 1,126,884
2023	22,611,799	1,321,026	1,321,026	0	1,197,732	0	1,197,732
2024	25,050,344	1,475,149	1,475,149	0	1,252,899	0	1,252,899
2025	27,471,361	1,640,743	1,640,743	0	1,305,428	0	1,305,428
2026	29,870,271	1,815,995	1,815,995	0	1,353,503	0	1,353,503
2027	32,245,298	1,994,506	1,994,506	0	1,392,553	0	1,392,553
2028	34,593,853	2,170,125	2,170,125	0	1,419,363	0	1,419,363
2029	36,923,711	2,351,921	2,351,921	0	1,440,999	0	1,440,999
2030	39,230,427	2,529,262	2,529,262	0	1,451,666	0	1,451,666
2031	41,518,696	2,711,689	2,711,689	0	1,457,958	0	1,457,958
2032	43,785,372	2,890,517	2,890,517	0	1,455,837	0	1,455,837
2033	46,037,078	3,061,236	3,061,236	0	1,444,329	0	1,444,329
2034	48,282,997	3,229,640	3,229,640	0	1,427,433	0	1,427,433
2035	50,529,060	3,391,321	3,391,321	0	1,404,115	0	1,404,115
2036	52,783,356	3,546,514	3,546,514	0	1,375,521	0	1,375,521
2037	55,056,423	3,700,261	3,700,261	0	1,344,405	0	1,344,405
2038	57,352,921	3,851,626	3,851,626	0	1,310,914	0	1,310,914
2039	59,678,918	3,988,631	3,988,631	0	1,271,704	0	1,271,704
2040	62,055,392	4,119,339	4,119,339	0	1,230,330	0	1,230,330
2041	62,247,209	4,246,951	4,246,951	0	1,188,238	0	1,188,238
2042	62,304,433	4,364,111	4,364,111	0	1,143,811	0	1,143,811
2043	62,229,051	4,473,436	4,473,436	0	1,098,327	0	1,098,327
2044	62,021,455	4,573,303	4,573,303	0	1,051,847	0	1,051,847
2045	61,682,476	4,658,775	4,658,775	0	1,003,752	0	1,003,752
2046	61,218,295	4,731,560	4,731,560	0	954,973	0	954,973
2047	60,634,579	4,796,204	4,796,204	0	906,811	0	906,811
2048	59,931,277	4,852,096	4,852,096	0	859,371	0	859,371
2049	59,110,235	4,899,424	4,899,424	0	812,883	0	812,883
2050	58,171,688	4,929,340	4,929,340	0	766,133	0	766,133
2051	57,126,679	4,947,970	4,947,970	0	720,401	0	720,401
2052	55,979,284	4,951,788	4,951,788	0	675,370	0	675,370
2053	54,739,340	4,946,601	4,946,601	0	632,002	0	632,002
2054	53,409,728	4,936,591	4,936,591	0	590,841	0	590,841
2055	51,990,081	4,909,695	4,909,695	0	550,466	0	550,466
2056	50,492,520	4,866,910	4,866,910	0	511,165	0	511,165
2057	48,928,640	4,810,601	4,810,601	0	473,303	0	473,303
2058	47,308,727	4,743,199	4,743,199	0	437,163	0	437,163
2059	45,641,315	4,667,039	4,667,039	0	402,945	0	402,945
2060	43,933,082	4,579,974	4,579,974	0	370,424	0	370,424
2061	42,192,886	4,480,649	4,480,649	0	339,476	0	339,476
2062	40,432,376	4,373,357	4,373,357	0	310,396	0	310,396
2063	38,659,439	4,259,863	4,259,863	0	283,223	0	283,223
2064	36,880,175	4,139,857	4,139,857	0	257,840	0	257,840
2065	35,101,962	4,016,447	4,016,447	0	234,336	0	234,336
2066	33,328,780	3,889,820	3,889,820	0	212,598	0	212,598
2067	31,564,873	3,760,391	3,760,391	0	192,528	0	192,528
2068	29,814,097	3,628,845	3,628,845	0	174,045	0	174,045
2069	28,080,072	3,495,604	3,495,604	0	157,054	0	157,054
2070	26,365,776	3,360,353	3,360,353	0	141,430	0	141,430
2071	24,674,925	3,223,394	3,223,394	0	127,088	0	127,088



Single Discount Rate Development

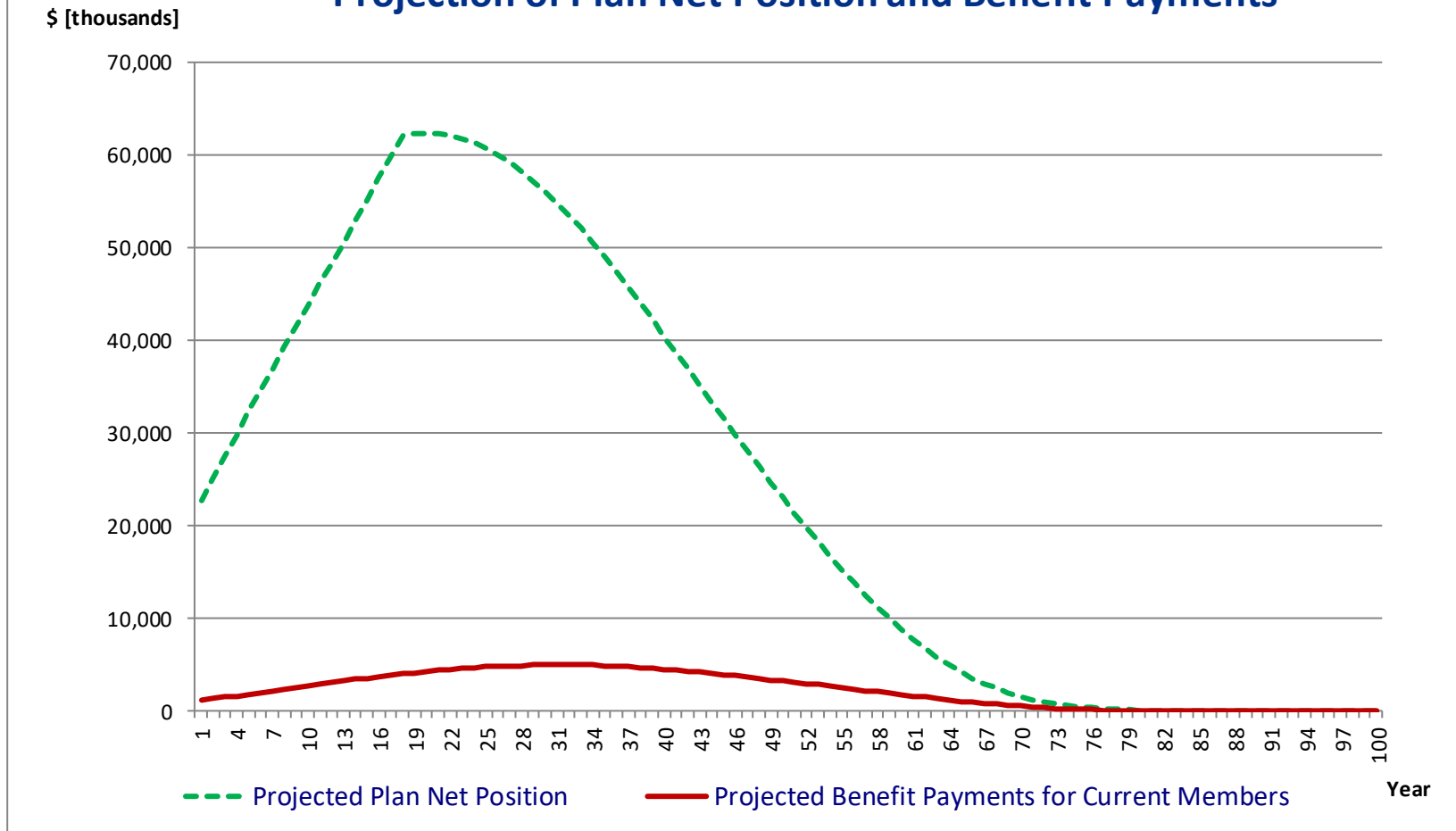
Present Values of Projected Benefits

Ending December 31 for 2072 to 2121

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}
2072	\$ 23,011,050	\$ 3,084,557	\$ 3,084,557	\$ 0	\$ 113,924	\$ 0	\$ 113,924
2073	21,378,005	2,943,840	2,943,840	0	101,852	0	101,852
2074	19,779,932	2,801,210	2,801,210	0	90,789	0	90,789
2075	18,221,191	2,656,634	2,656,634	0	80,658	0	80,658
2076	16,706,522	2,510,323	2,510,323	0	71,397	0	71,397
2077	15,240,701	2,362,499	2,362,499	0	62,944	0	62,944
2078	13,828,630	2,213,587	2,213,587	0	55,247	0	55,247
2079	12,475,062	2,064,024	2,064,024	0	48,257	0	48,257
2080	11,184,623	1,914,310	1,914,310	0	41,927	0	41,927
2081	9,961,744	1,765,146	1,765,146	0	36,215	0	36,215
2082	8,810,426	1,617,410	1,617,410	0	31,086	0	31,086
2083	7,734,029	1,471,958	1,471,958	0	26,502	0	26,502
2084	6,735,252	1,329,697	1,329,697	0	22,426	0	22,426
2085	5,816,040	1,191,625	1,191,625	0	18,827	0	18,827
2086	4,977,437	1,058,771	1,058,771	0	15,670	0	15,670
2087	4,219,492	932,141	932,141	0	12,924	0	12,924
2088	3,541,221	812,674	812,674	0	10,555	0	10,555
2089	2,940,599	701,201	701,201	0	8,531	0	8,531
2090	2,414,609	598,371	598,371	0	6,820	0	6,820
2091	1,959,360	504,645	504,645	0	5,388	0	5,388
2092	1,570,218	420,317	420,317	0	4,204	0	4,204
2093	1,241,937	345,487	345,487	0	3,237	0	3,237
2094	968,811	280,048	280,048	0	2,458	0	2,458
2095	744,861	223,694	223,694	0	1,839	0	1,839
2096	564,019	175,935	175,935	0	1,355	0	1,355
2097	420,315	136,135	136,135	0	982	0	982
2098	308,031	103,553	103,553	0	700	0	700
2099	221,832	77,370	77,370	0	490	0	490
2100	156,867	56,732	56,732	0	336	0	336
2101	108,840	40,791	40,791	0	227	0	227
2102	74,042	28,735	28,735	0	150	0	150
2103	49,351	19,817	19,817	0	97	0	97
2104	32,207	13,369	13,369	0	61	0	61
2105	20,569	8,816	8,816	0	38	0	38
2106	12,848	5,680	5,680	0	23	0	23
2107	7,847	3,573	3,573	0	13	0	13
2108	4,685	2,194	2,194	0	8	0	8
2109	2,734	1,315	1,315	0	4	0	4
2110	1,560	769	769	0	2	0	2
2111	871	439	439	0	1	0	1
2112	476	245	245	0	1	0	1
2113	255	134	134	0	0	0	0
2114	134	72	72	0	0	0	0
2115	69	38	38	0	0	0	0
2116	35	19	19	0	0	0	0
2117	17	10	10	0	0	0	0
2118	8	5	5	0	0	0	0
2119	3	2	2	0	0	0	0
2120	1	1	1	0	0	0	0
2121	1	1	1	0	0	0	0
Totals	\$				\$ 44,121,978	\$ 0	\$ 44,121,978



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.