# METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO OTHER POSTEMPLOYMENT BENEFITS PROGRAM

# PRELIMINARY GASB 75 DISCLOSURE INFORMATION FOR THE FISCAL YEAR ENDING DECEMBER 31, 2022

GASB 74/GASB 75 DISCLOSURE INFORMATION FOR THE FISCAL YEAR ENDING DECEMBER 31, 2021

Valuation Date: December 31, 2021 Measurement Date: December 31, 2021 Fiscal Year End Date: December 31, 2022





April 11, 2022

To the Members of the Board of Commissioners of the Metropolitan Water Reclamation District of Greater Chicago Trustee and Fiduciary for the MWRD Retiree Health Care Trust 100 East Erie Street Chicago, IL 60611

Re: Metropolitan Water Reclamation District – FYE December 31, 2021 GASB 74 Disclosures and Preliminary FYE December 31, 2022 GASB 75 Disclosures.

Dear Members of the Board:

Metropolitan Water Reclamation District of Chicago (MWRD) retained Foster & Foster Consulting Actuaries Inc. to provide all necessary schedules required to comply with the Governmental Accounting Standards Board No. 74 ("GASB 74") and No. 75 ("GASB 75") for the Retiree Health Care Benefit Plan ("the Plan"). The GASB 74 and 75 results are applicable for MWRD's fiscal years ending December 31, 2021 and December 31, 2022, respectively. The schedules related to GASB 74 can be found in Appendix 1. The Crossover Test supporting the single discount rate calculation can be found in Appendix 2.

Actuarial calculations under GASB 74 and 75 are for purposes of fulfilling MWRD's financial accounting requirements. The calculations contained herein have been made on a basis consistent with our understanding of GASB 74 and 75.

The valuation has been conducted in accordance with all applicable federal laws and regulations, as well as generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board; specifically No. 6 for Measuring Retiree Group Benefit Obligations, No. 23 for Data Quality, No. 27 for Selection of Economic Assumptions for Measuring Pension Obligations, and No. 35 for Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations. GASB 74 and 75 requires that each significant assumption reflect the client's best estimate of the Plan's future experience solely with respect to that assumption. In our opinion, the assumptions and methods used in this valuation, as adopted by the District, represent reasonable expectations of anticipated plan experience under GASB 74 and 75.

In performing the analysis, we used third-party software to model (calculate) the underlying liabilities and costs. These results are reviewed in the aggregate and for individual sample lives. The output from the software is either used directly or input into internally developed models to generate the costs. All internally developed models are reviewed as part of the process. As a result of this review, we believe that the models have produced reasonable results. We do not believe there are any material inconsistencies among assumptions or unreasonable output produced due to the aggregation of assumptions.

In conducting the valuation, we have relied on personnel and plan design information supplied by the District personnel, and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. Because of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

The total OPEB liability is determined by an actuarial valuation of benefits every two years. In interim years, disclosures may be developed based on results of the most recent actuarial valuation. The total OPEB Liability and certain sensitivity information shown in this report are based on the most recent actuarial valuation performed as of December 31, 2021. The next actuarial valuation will be conducted as of December 31, 2023. It is our opinion that the assumptions used for this purpose are internally consistent, reasonable, and comply with the requirements under GASB 74 and 75.

This report shows detailed summaries of the financial results of the valuation and membership data used in preparing this valuation. The actuaries prepared supporting schedules that are to be included in the Actuarial and Statistical Sections of the MWRD Comprehensive Annual Financial Report. The actuary prepared the trend data schedules to be included in the Financial Sections of the MWRD Retiree Health Care Trust Comprehensive Annual Financial Report. The schedules include:

- OPEB Expense and Net OPEB Liability
- Supplements to Notes to the Financial Statements:
  - o Schedule of Changes in the Net OPEB Liability
  - Schedule of Net OPEB Liability Sensitivities
- Schedule of Deferred Inflows of Resources and Deferred Outflows of Resources Related to OPEB
- Schedule of Changes in the Total OPEB Liability and Related Ratios
- Schedule of Contributions
- Schedule of Components of OPEB Expense and Related Amortization Schedules
- Reconciliation of Changes in Unfunded Liability
- Summary of Membership Data
- Schedule of Active Member Valuation Data

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to factors such 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 (such as the end of an amortization period); and changes in plan provisions or applicable law. Retiree group benefits models necessarily rely on the use of approximations and estimates and are sensitive to changes in these approximations and estimates. Small variations in these approximations and estimates may lead to significant changes in actuarial measurements. Due to the limited scope of this report an analysis of the potential range of such future measurements has not been performed.

This report was prepared for the internal use of Metropolitan Water Reclamation District in connection with our actuarial valuation of the Plan for the purpose noted above and not for reliance by any other person. Foster & Foster Consulting Actuaries, Inc. disclaims any contractual or other responsibility or duty of care to others based upon the services or deliverables provided in connection with this report.

This report does not purport to comply with any other purposes not stated herein. Significantly different results from what is presented in this report may be needed for other purposes.

This document was not intended or written to be used, and it cannot be used, for the purpose of avoiding U.S. federal, state, or local tax penalties. This includes penalties that may apply if the transaction that is the subject of this document is found to lack economic substance or fails to satisfy any other similar rule of law.

Foster & Foster does not provide legal, investment or accounting advice. Thus, the information in this report is not intended to supersede or supplant the advice or the interpretations of the District or its affiliated legal, investing or accounting partners.

The undersigned actuaries are familiar with the immediate and long-term aspects of OPEB valuations, are members of the Society of Actuaries and the American Academy of Actuaries and meet the "Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States" related to postretirement medical and life insurance plans. All the sections of this report are considered an integral part of the actuarial opinions.

To our knowledge, the individuals involved in this engagement have no relationship that may impair, or appear to impair, the objectivity of our work.

If there are any questions, concerns, or comments about any of the items contained in this report, please contact either Jason or Colleen at 630 620-0200.

Respectfully submitted,

Foster & Foster, Inc.

By:

Jason L. Franken, FSA, EA, MAAA

Jason S. From

Collein M. Atchison

Bv:

Colleen M. Atchison, FSA, MAAA

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#### SECTION 1 – EXECUTIVE SUMMARY

The results presented in this report have been prepared in accordance with the Government Accounting Standards Board Statement 75 (GASB 75) for the Metropolitan Water Reclamation District's Other Postemployment Benefits (OPEB) Program, based on the actuarial valuation performed as of December 31, 2021. For purposes of this valuation, Medical and Prescription Drug Insurance OPEBs were taken into consideration.

The results of this valuation are based on a Measurement Date of December 31, 2021 and are applicable to the fiscal year ending December 31, 2022. The following table shows the key components of the District's OPEB valuation for fiscal year 2022 under GASB 75.

Measurement Date:	 12/31/2021
Total OPEB Liability as of the Measurement Date Plan Fiduciary Net Position as of the Measurement Date	\$ 337,646,669 311,163,146
District's Net OPEB Liability as of the Measurement Date	\$ 26,483,523
OPEB Expense/(Revenue) for the Fiscal Year ending December 31, 2022	\$ (6,229,035)
Covered Payroll	\$ 180,199,404
District's Net OPEB Liability as a percentage of Covered Payroll	14.70%
Census Information as of December 31, 2021:	
Active Participants	1,727
Retirees, Beneficiaries, and Disabled Members	1,959
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	31
Covered Spouses	 924
Total Participants	4,641

### **SECTION 1 – Executive Summary**

### District Funding Policy:

There is currently no legal requirement for the District to partially or fully fund the OPEB Plan. It is our understanding that the Board of Commissioners adopted an advance funding policy (last amended October 2, 2014) with a goal of fully funding the Plan over a period of 12 years. The funding amount is currently targeted at \$5 million in addition to the Actuarially Determined Contribution in each of the ten years 2017 through 2026, with no further advance funding contributions required after 2026. The Trust is expected to begin paying retiree claims and premiums beginning in 2027, with a goal of maintaining a funded level of 100% for all future years.

#### Changes since the Prior Valuation

- The census data reflects changes in status for the twenty-four-month (24) period since December 31, 2019.
- The annual per capita claims costs have been updated. The premium rates have also been updated to use the rates effective for fiscal year 2022.
- Aging factors applied to health care costs have been updated to age- and gender-based factors developed in a study performed by Dale Yamamoto for the Society of Actuaries. Previously, claims costs were aged at a flat 4% before the age of 65, 3% from ages 65 to 75, 2% from ages to 75 to 85, and 0% thereafter.
- Trend rates have been reset to use an initial rate of 7.50% in fiscal year 2022, grading down to 4.00% in fiscal year 2075, in accordance with the Getzen model developed based on recent health care costs studies. Medicare Advantage (MAPD) costs are expected to increase at 3.5% per year.
- The percent of the population assumed to elect PPO coverage (as opposed to HMO coverage) in retirement was lowered from 78% to 76% based on actual retiree enrollment as of the valuation date.
- The participation rate was lowered from 90% to 80% based on experience of the plan over the last 5 years.

### **SECTION 1 – Executive Summary**

The balance of this report presents additional details of the actuarial valuation and the general operation of the Fund. The undersigned would be pleased to meet with the Board of Trustees to discuss the report and any pending questions concerning its contents.

Respectfully submitted,

FOSTER & FOSTER, INC.

Jason L. Franken, FSA, MAAA

By: \_\_\_\_\_ Colleen M. Atchison, FSA, MAAA

# SECTION 2 – NOTES TO THE FINANCIAL STATEMENTS (For the Year Ended December 31, 2021)

#### SUMMARY OF SIGNIFICANT ACCOUNTING POLICES

Postemployment Benefits Other Than Pensions (OPEB):

For purposes of measuring the net OPEB Liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the District's Retiree Health Care Plan (Plan) and additions to/ deductions from the Plan's fiduciary net position have been determined on the same basis as they are reported by the Plan. For this purpose, the Plan recognizes benefit payments when due and payable in accordance with the benefit terms. Investments are reported at fair value, except for money market investments and participating interest-earning investment contracts that have a maturity at the time of purchase of one year or less, which are reported at cost.

#### GENERAL INFORMATION ABOUT THE OPEB PLAN

### Plan Description:

The Metropolitan Water Reclamation District of Chicago Retiree Health Care Benefit Plan (Plan) is a single employer defined benefit postemployment health care plan that covers eligible retired employees of the District. The Plan, which is administered by the District, allows employees who retire and meet retirement eligibility requirements under the District's retirement plan to continue health coverage as a participant in the District's plan.

Employees Covered by Benefit Terms. At December 31, 2021, the following employees were covered by the benefit terms:

Inactive Plan Members Currently Receiving Benefits	1,552
Beneficiaries of Deceased Plan Members Currently Receiving Benefits	407
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	31
Active Plan Members	1,727
	3,717

### Benefits Provided:

The benefits provided are the same as those provided for active employees. Spouses and dependents of eligible retirees are also eligible for medical coverage in accordance with the plan. All full-time employees of the District with at least ten actual years of service are eligible to receive postemployment benefits. Coverage for retirees and their eligible spouse is provided for life. Coverage for dependent children is provided in accordance with the eligibility provisions of the District-sponsored health plan. The Trust was established to advance fund benefits provided under the Plan.

### SECTION 2 - Notes to Financial Statements

### Eligibility for Insurance Coverage:

Employees must have at least ten actual years of service with the District, and coverage does not commence until the member starts receiving payments from the District's Retirement Fund. District Commissioners must have at least six years of service as a Commissioner of the District. Eligibility is based on the employee's hire date as follows: age 50 for those hired on or before June 13, 1997, age 55 for those hired between June 13, 1997 and January 1, 2011 and age 62 for those hired on or after January 1, 2011.

#### Health Care Insurance:

Retirees who meet the age and service requirements above are eligible for medical and prescription drug benefits payable for life.

#### Contributions:

The Metropolitan Water Reclamation District's Retiree Health Care Plan (Plan) is a single employer defined benefit postemployment health care plan that covers eligible retired employees of the District. The Plan, which is administered by the District, allows employees who retire and meet certain eligibility requirements to continue medical and prescription drug coverage as a participant in the District's plan. Spouses and dependents of eligible retirees are also eligible for medical and prescription drug coverage in accordance with the plan. All full-time employees of the District who meet the age and service requirements are eligible to receive postemployment health care benefits. Lifetime coverage for retirees and their eligible spouses is provided. Coverage for dependent children is also provided in accordance with the eligibility provisions of the District-sponsored health plan. The Trust was established to advance fund benefits provided under the Plan.

Under the terms of the Plan, the Retired plan members and beneficiaries currently receiving benefits are required to contribute specified amounts monthly toward the cost of health insurance premiums.

The retiree contribution rates are set based on prior year claims incurred and become effective January 1st each year. The retiree contribution rate utilized is based on the contribution rate policy established by the Board of Commissioners. This policy calls for a 2.5% increase in the contribution rate on January 1st of each year until the contribution rate reaches 50.0% in 2021. The retiree contribution rate for 2021 and after is 50.0%.

In future years, contributions are assumed to increase at the same rate as claims expenditures.

### SECTION 2 – Notes to Financial Statements

### Investment Policy:

The following was the Board's adopted asset allocation policy as of December 31, 2020. No such allocations were provided as of December 31, 2021.

Asset Class	Target Allocation
Broad Fixed Income	20.0%
Core Plus Fixed Income	15.0%
Large Cap Core Equity	17.5%
Large Cap Growth Equity	7.5%
Mid Cap Core Equity	10.0%
Small Cap Core Equity	10.0%
Global Low Volatility	5.0%
Non US Large Cap Core Equity	15.0%
Total	100%

#### Concentrations:

The Plan did not hold investments in any one organization that represent 5 percent or more of the Fund's Fiduciary Net Position.

### Rate of Return:

For the year ended December 31, 2021 the annual money-weighted rate of return on investments, net of investment expense, was 13.1 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts invested.

#### Receivables:

If the OPEB plan reported receivables from long-term contracts with the District for contributions, the OPEB plan should disclose information required by paragraph 34c of this Statement.

#### Allocated Insurance Contracts:

If the OPEB plan had allocated insurance contracts that are excluded from OPEB plan assets, the OPEB plan should disclose information required by paragraph 34d of this Statement.

#### SECTION 2 – NOTES TO FINANCIAL STATEMENTS

(For the Year Ended December 31, 2022)

#### **NET OPEB LIABILITY**

The measurement date is December 31, 2021.

The measurement period for the OPEB expense is January 1, 2021 to December 31, 2021.

The reporting period is January 1, 2022 through December 31, 2022.

The District's Net OPEB Liability was measured as of December 31, 2021.

Actuarial Assumptions:

The Net OPEB Liability was determined by an actuarial valuation as of December 31, 2021, using the following actuarial assumptions:

Inflation Rate	2.50%
Salary Increase Rate(s)	Varies by Service
Discount Rate	6.50%
Initial Trend Rate	7.50%
Ultimate Trend Rate	4.00%
Years to Ultimate	53
Investment Rate of Return	6.50%

For all employees, mortality rates were based on the RP-2000 combined health mortality tables with fully generational mortality improvements using scale AA, with rates for female members increased by a factor of 1.04.

### The Long-Term Expected Rate of Return:

The Long-Term Expected Rate of Return on OPEB Plan investments is determined using a building-block method in which best-estimate rates of expected future real rates of return (expected returns, net of investment expenses and inflation) are developed for each major asset class. These ranges are combined to produce the Long-Term Expected Rate of Return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the target asset allocation as of December 31, 2020 (no such allocations or rates were provided as of December 31, 2021) are summarized in the following table:

		Long Term Expected
Asset Class	Target Allocation	Real Rate of Return
Broad Fixed Income	20.0%	1.70%
Core Plus Fixed Income	15.0%	2.10%
Large Cap Core Equity	17.5%	6.90%
Large Cap Growth Equity	7.5%	6.80%
Mid Cap Core Equity	10.0%	7.20%
Small Cap Core Equity	10.0%	7.70%
Global Low Volatility	5.0%	6.50%
Non US Large Cap Core Equity	15.0%	7.30%
Total	100%	

The Long-Term Expected Rate of Return calculated using the method described above exceeds 6.50% (assuming 2.50% inflation).

#### Discount Rate:

The projection of cash flows used to determine the Discount Rate assumed that current Plan Member and District contributions will be made at the current contribution rate (i.e. funding policy). The expected rate of return on trust investments is 6.50%. It is our understanding that the District has adopted a funding policy as of October 2, 2014 with the intention of fully funding the plan by 2026 and maintaining 100% funding thereafter. The District has shown that they are following the funding policy completely and will continue to do so. Therefore, the expected return on investments was used to discount projected benefit payments for all future benefit payments, and the single equivalent rate was 6.50%.

#### CHANGE IN NET OPEB LIABILITY

	Increase (Decrease)					
	Total OPEB			Plan Fiduciary		Net OPEB
		Liability	Net Position			Liability
		(a)		(b)		(a)-(b)
Reporting Period Ending December 31, 2021	\$	318,117,960	\$	270,205,465	\$	47,912,495
Changes for the Year:						
Service Cost		5,104,413		-		5,104,413
Interest		20,700,322		-		20,700,322
Differences Between Expected and Actual						
Experience		(15,706,502)		-		(15,706,502)
Changes of Assumptions		19,094,366		-		19,094,366
Changes of Benefit Terms		-		-		-
Contributions - Employer Trust		-		5,000,000		(5,000,000)
Contributions - Pay-As-You-Go		-		9,663,890		(9,663,890)
Net Investment Income		-		35,999,320		(35,999,320)
<b>Explicit Gross Benefit Payments</b>		(9,663,890)		(9,663,890)		-
Administrative Expense		-		(41,639)		41,639
Net Changes		19,528,709		40,957,681		(21,428,972)
Reporting Period Ending December 31, 2022	\$	337,646,669	\$	311,163,146	\$	26,483,523

Differences between expected and actual experience. Reflects the impact of changes to the census data from the prior valuation to the valuation as of December 31, 2021.

Changes of Assumptions. Reflected under changes of assumptions are updated health care costs and premiums, updated health care cost aging rates, reset health care cost trend rates using the Getzen model, as well as updated participation rates (including the rate at which retirees are assumed to elect PPO coverage).

### SECTION 2 – Notes to Financial Statements

Sensitivity of the Net OPEB Liability to changes in the Discount Rate:

The following presents the Net OPEB Liability of the District, as well as what the District's Net OPEB Liability would be if it were calculated using a discount rate that is one percentage-point lower or one percentage-point higher than the current discount rate:

		Current Discount				
	19	% Decrease		Rate		1% Increase
		5.50%		6.50%		7.50%
Net OPEB Liability (asset)	\$	72,995,771	\$	26,483,523	\$	(11,840,529)

Sensitivity of the Total OPEB Liability to changes in the Healthcare Cost Trend Rates:

The following presents the Net OPEB Liability of the District, as well as what the District's Net OPEB Liability would be if it were calculated using healthcare cost trend rates that are one percentage-point lower or one percentage-point higher than the current healthcare cost trend rates:

		Healthcare Cost	
	1% Decrease	Trend Rates	1% Increase
	3.00% - 6.50%	4.00% - 7.50%	5.00% - 8.50%
Net OPEB Liability (asset)	\$ (14,998,776)	\$ 26,483,523	\$ 76,491,044

OPEB Plan Fiduciary Net Position:

Detailed information about the OPEB Plan's Fiduciary Net Position is available in a separately issued Plan financial report.

#### SECTION 3 – GASB 75 DISCLOSURE SCHEDULES

# FINAL OPEB EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO OPEB

(For the Year Ended December 31, 2021)

For the year ended December 31, 2021, the District will recognize OPEB Expense/(Revenue) of \$(1,788,150).

On December 31, 2021, the District reported Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB from the following sources:

	Deferred Outflows of Resources		Def	erred Inflows of Resources
	of Resources			Resources
Differences between Expected and Actual Experience	\$	4,870,425	\$	-
Changes of Assumptions		-		26,636,035
Net Difference Between Projected and Actual Earnings				
on OPEB Plan Investments		-		23,103,366
Employer Contributions Made Subsequent to the				
Measurement Date		14,663,890		-
Total	\$	19,534,315	\$	49,739,401

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB will be recognized in OPEB Expense as follows:

31:

2022	\$ (11,179,923)
2023	\$ (8,276,710)
2024	\$ (13,214,603)
2025	\$ (7,844,618)
2026	\$ (4,353,122)
Thereafter	\$ -

#### **Notes to Schedule:**

Employer Contributions Made Subsequent to the Measurement Date are actual employer contributions for this fiscal year ending December 31, 2021.

# PRELIMINARY OPEB EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO OPEB

(For the Year Ended December 31, 2022)

For the year ended December 31, 2022, the District will recognize OPEB Expense/(Revenue) of \$(6,229,035).

On December 31, 2022, the District reported Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB from the following sources:

	erred Outflows of Resources	rred Inflows of Resources
Differences between Expected and Actual Experience	\$ 3,896,340	\$ 13,462,716
Changes of Assumptions	16,366,602	21,308,828
Net Difference Between Projected and Actual Earnings		
on OPEB Plan Investments	-	30,896,421
Employer Contributions Made Subsequent to the		
Measurement Date	TBD	
Total	 TBD	\$ 65,667,965

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB will be recognized in OPEB Expense as follows:

Year ended December 31:	
2023	\$ (11,447,693)
2024	\$ (16,385,586)
2025	\$ (11,015,601)
2026	\$ (7,524,105)
2027	\$ 483,981
Thereafter	\$ 483,981

# SCHEDULE OF CHANGES IN THE DISTRICT'S TOTAL OPEB LIABILITY AND RELATED RATIOS

Reporting Period Ending Measurement Date		12/31/2022 12/31/2021		12/31/2021 12/31/2020		12/31/2020 12/31/2019
Total OPEB Liability Service Cost	\$	5,104,413	\$	4,861,346	\$	5 540 205
Interest	Ф	20,700,322	Ф	19,763,742	Ф	5,540,295
Changes of benefit terms		20,700,322		19,703,742		20,851,553
		-		-		-
Differences between Expected and Actual		(15.70(.502)				6 919 <b>5</b> 06
Experience		(15,706,502)		-		6,818,596
Changes of assumptions		19,094,366		(11 220 024)		(37,290,450)
Benefit Payments		(9,663,890)		(11,229,934)		(12,700,092)
Net Change in Total OPEB Liability		19,528,709		13,395,154		(16,780,098)
Total OPEB Liability - Beginning	_	318,117,960	_	304,722,806		321,502,904
Total OPEB Liability - Ending (a)	\$	337,646,669	\$	318,117,960	\$	304,722,806
Plan Fiduciary Net Position						
Employer Trust Contribution	\$	5,000,000	\$	5,000,000	\$	5,000,000
Pay-as-you-go Contributions		9,663,890		11,229,934		12,700,092
Net Investment Income		35,999,320		32,732,090		39,251,295
Benefit Payments		(9,663,890)		(11,229,934)		(12,700,092)
Administrative Expense		(41,639)		(41,295)		(53,880)
Net Change in Plan Fiduciary Net Position		40,957,681		37,690,795		44,197,415
Plan Fiduciary Net Position - Beginning		270,205,465		232,514,670		188,317,255
Plan Fiduciary Net Position - Ending (b)	\$	311,163,146	\$	270,205,465	\$	232,514,670
3						
District's Net OPEB Liability - Ending (a) - (b)	\$	26,483,523	\$	47,912,495	\$	72,208,136
Plan Fiduciary Net Position as a percentage of the						
Total OPEB Liability		92.16%		84.94%		76.30%
Total Of LB Liability		72.1070		04.2470		70.5070
Covered Payroll	\$	180,199,404	\$	191,261,828	\$	182,154,122
District's Net OPEB Liability as a percentage of						
Covered Payroll		14.70%		25.05%		39.64%

#### **Notes to Schedule:**

*Differences between expected and actual experience*. Reflects the impact of changes to the census data from the prior valuation to the valuation as of December 31, 2021.

Changes of Assumptions. Reflected under changes of assumptions are updated health care costs and premiums, updated health care cost aging rates, reset health care cost trend rates using the Getzen model, as well as updated participation rates (including the rate at which retirees are assumed to elect PPO coverage).

*Discount Rate*. The Single Discount Rate used to calculate the District's Net OPEB Liability has been 6.50% since implementation of GASB 75.

# SCHEDULE OF DISTRICT CONTRIBUTIONS Last 10 Fiscal Years

	12/31/2021	12/31/2020	12/31/2019	12/31/2018	12/31/2017	12/31/2016	12/31/2015	12/31/2014	12/31/2013	12/31/2012
Actuarially Determined Contribution	6,298,571	8,640,607	9,585,874	11,506,823	11,506,823	12,471,893	12,471,893	13,211,937	13,211,937	27,263,684
Contributions in relation to the Actuarially Determined Contributions	14,663,890	16,229,934	17,700,092	17,570,679	18,430,657	19,916,860	18,316,713	33,716,523	33,834,831	35,426,215
Contribution Deficiency (Excess)	\$ (8,365,319)	\$ (7,589,327)	\$ (8,114,218)	\$ (6,063,856)	\$ (6,923,834)	\$ (7,444,967)	\$ (5,844,820)	\$ (20,504,586)	\$ (20,622,894)	\$ (8,162,531)
Covered Payroll	\$ 180,199,404	\$ 191,261,828	\$ 182,154,122	\$ 192,661,666	\$ 184,807,353	\$ 183,120,020	\$ 176,756,776	\$ 169,909,275	\$ 164,005,092	\$ 158,995,000
Contributions as a percentage of Covered										
Payroll	8.14%	8.49%	9.72%	9.12%	9.97%	10.88%	10.36%	19.84%	20.63%	22.28%

### **Notes to Schedule:**

For the fiscal year ending December 31, 2021, the Contributions in relation to the Actuarially Determined Contributions is final and was provided by the District.

Actuarially Determined Contribution rates shown above are calculated as of December 31 for the plan/fiscal year in which contributions are reported.

Contributions in relation to the Actuarially Determined Contributions include Pay-As-You-Go Benefit amounts plus an additional cash contribution to the trust.

Methods and assumptions used to determine contribution rates are the same as those found in Section 7 of this report.



### FINAL COMPONENTS OF OPEB EXPENSE

(For the Year Ended December 31, 2021)

	Net OPEB Liability	Deferred Inflows	Deferred Outflows	OPEB Expense
Beginning balance	\$ 72,208,136	\$ 59,249,606	\$ 36,888,121	\$ -
Employer Contributions made after December 31, 2020	-	-	14,663,890	-
Total OPEB Liability Factors:				
Service Cost	4,861,346	-	-	4,861,346
Interest	19,763,742	-	-	19,763,742
Changes in Benefit Terms	-	-	-	-
Differences Between Expected and Actual Experience				
with Regard to Economic or Demographic Assumptions	-	-	-	-
Current Year Amortization of Experience Difference	-	-	(974,085)	974,085
Change in Assumptions About Future Economic or				
Demographic Factors or Other Inputs	-	-	-	-
Current Year Amortization of Change in Assumptions		(5,327,207)	-	(5,327,207)
Benefit Payments	(11,229,934)			
Net change	\$ 13,395,154	\$ (5,327,207)	\$ 13,689,805	\$ 20,271,966
Plan Fiduciary Net Position:				
Contributions - Employer Trust	\$ 5,000,000	\$ -	\$ (5,000,000)	\$ -
Contributions - Pay-As-You-Go	11,229,934	-	(11,229,934)	-
Projected Net Investment Income	15,274,611	-	-	(15,274,611)
Difference Between Projected and Actual Earnings on				
OPEB Plan Investments	17,457,479	17,457,479	-	-
Current Year Amortization	-	(11,764,692)	(4,937,892)	(6,826,800)
Benefit Payments	(11,229,934)	-	-	-
Administrative Expenses	(41,295)			41,295
Net change	37,690,795	5,692,787	(21,167,826)	(22,060,116)
Ending Balance	\$ 47,912,495	\$ 59,615,186	\$ 29,410,100	\$ (1,788,150)

### PRELIMINARY COMPONENTS OF OPEB EXPENSE

(For the Year Ended December 31, 2022)

	Net OPEB Liability	Deferred Inflows	Deferred Outflows	OPEB Expense
Beginning balance	\$	\$ 59,615,186	\$ 29,410,100	\$ -
Employer Contributions made after December 31, 2021	-	-	TBD	-
Total OPEB Liability Factors:				
Service Cost	5,104,413	-	-	5,104,413
Interest	20,700,322	-	-	20,700,322
Changes in Benefit Terms	-	-	-	-
Differences Between Expected and Actual Experience				
with Regard to Economic or Demographic Assumptions	(15,706,502)	15,706,502	-	-
Current Year Amortization of Experience Difference	-	(2,243,786)	(974,085)	(1,269,701)
Change in Assumptions About Future Economic or				
Demographic Factors or Other Inputs	19,094,366	-	19,094,366	-
Current Year Amortization of Change in Assumptions		(5,327,207)	(2,727,764)	(2,599,443)
Benefit Payments	(9,663,890)	<u> </u>	<u>-</u>	
Net change	\$ 19,528,709	\$ 8,135,509	\$ 15,392,517	\$ 21,935,591
Plan Fiduciary Net Position:				
Contributions - Employer Trust	\$ 5,000,000	\$ -	\$ (5,000,000)	\$ -
Contributions - Pay-As-You-Go	9,663,890	-	(9,663,890)	-
Projected Net Investment Income	17,724,502	-	-	(17,724,502)
Difference Between Projected and Actual Earnings on				
OPEB Plan Investments	18,274,818	18,274,818	-	-
Current Year Amortization	-	(15,419,655)	(4,937,892)	(10,481,763)
Benefit Payments	(9,663,890)	-	-	-
Administrative Expenses	(41,639)	-	-	41,639
Net change	 40,957,681	2,855,163	(19,601,782)	(28,164,626)
Ending Balance	\$ 26,483,523	\$ 70,605,858	TBD	\$ (6,229,035)

### **Notes to Schedule:**

Employer Contributions made after December 31, 2021 but made on or before December 31, 2022 need to be added.

### AMORTIZATION SCHEDULE - DUE TO RECOGNITION OF THE EFFECTS OF ASSUMPTION CHANGES

Increase (Decrease) in OPEB Expense Arising from the Recognition of the Effects of Changes of Assumptions

Measurement Year	Assumption Changes	Recognition Period (Years)	2022	2023	2024	2025	2026	2027	2028	2029	2030
2017	\$ -	7	\$ -	\$ -	\$ -	\$ -	\$ - \$	- \$	- \$	- \$	_
2018	-	7	-	-	-	-	-	_	-	-	-
2019	(37,290,450)	7	(5,327,207)	(5,327,207)	(5,327,207)	(5,327,207)	(5,327,207)	-	-	-	-
2020	-	7	-	-	-	-	-	-	-	-	-
2021	19,094,366	7	2,727,764	2,727,767	2,727,767	2,727,767	2,727,767	2,727,767	2,727,767	-	-
Net Increase (E	Decrease) in OPEB Expe	ense	\$ (2,599,443)	\$ (2,599,440)	\$ (2,599,440)	\$ (2,599,440)	\$ (2,599,440) \$	2,727,767 \$	2,727,767 \$	- \$	

### AMORTIZATION SCHEDULE - DUE TO DIFFERENCES BETWEEN EXPECTED AND ACTUAL EXPERIENCE

Increase (Decrease) in OPEB Expense Arising from the Recognition of the Effects of Differences between Expected and Actual Experience

	Differences Between										
Measurement	Expected and Actual	Recognition									
Year	Experience	Period (Years)	2022	2023	2024	2025	2026	2027	2028	2029 2	030
2017	\$ -	7	\$ - 5	- \$	- 5	- \$	- \$	- \$	- \$	- \$	-
2018	-	7	-	-	-	-	-	-	-	-	-
2019	6,818,596	7	974,085	974,085	974,085	974,085	974,085	-	-	-	-
2020	-	7	-	-	-	-	-	-	-	-	-
2021	(15,706,502)	7	(2,243,786)	(2,243,786)	(2,243,786)	(2,243,786)	(2,243,786)	(2,243,786)	(2,243,786)	-	-
Net Increase (D	ecrease) in OPEB Expe	ense	\$ (1,269,701) \$	\$ (1,269,701) \$	(1,269,701)	(1,269,701) \$	\$ (1,269,701) \$	(2,243,786) \$	(2,243,786) \$	- \$	-

# AMORTIZATION SCHEDULE – DUE TO DIFFERENCES BETWEEN PROJECTED AND ACTUAL EARNINGS ON OPEB PLAN INVESTMENTS

Increase (Decrease) in OPEB Expense Arising from the Recognition of the of Differences Between Projected and Actual Earnings on OPEB
Plan Investments

Measurement	Proj Ear	erences Between ected and Actual rnings on OPEB	Recognition	2022	2022	2024	2025	2027	2027	2020	2020	2020
Year	PI	an Investments	Period (Years)	2022	2023	2024	2025	2026	2027	2028	2029	2030
2017	\$	(14,516,060)	5	\$ (2,903,212) \$		-	\$ - \$	- \$	- \$	- \$	- \$	-
2018		24,689,461	5	4,937,892	4,937,893	-	-	-	-	-	-	-
2019		(26,849,925)	5	(5,369,985)	(5,369,985)	(5,369,985)	-	-	-	-	-	-
2020		(17,457,479)	5	(3,491,496)	(3,491,496)	(3,491,496)	(3,491,496)	-	-	-	-	-
2021		(18,274,818)	5	(3,654,962)	(3,654,964)	(3,654,964)	(3,654,964)	(3,654,964)	-	-	-	-
Net Increase (D	ecrea	se) in OPEB Expe	ense	\$(10,481,763) \$	(7,578,552)	\$(12,516,445)	\$ (7,146,460) \$	\$ (3,654,964) \$	- \$	- \$	- \$	-

# SECTION 5 – Reconciliation of Unfunded Actuarial Accrued Liability

### SECTION 5 – RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY

(1)	Unfunded Actuarial Accrued Liability as of December 31, 2020	\$ 47,912,495
(2)	Expected Normal Cost as of December 31, 2020	5,104,413
(3)	Expected Administrative Expenses for Fiscal 2021	0
(4)	Interest on (1) and (2) and (3)	3,446,099
(5)	Actual Sponsor Contributions to the System during the period of December 31, 2020 through December 31, 2021	14,663,890
(6)	Interest on (5)	 469,074
(7)	Expected Unfunded Accrued Liability as of December 31, 2021 (1)+(2)+(3)+(4)-(5)-(6)	\$ 41,330,043
(8)	Unfunded Accrued Liability as of December 31, 2021	 26,483,523
(9)	Change in UAAL due to Actuarial (Gain)/Loss, (8)-(7)	\$ (14,846,520)

# SECTION 5 – Reconciliation of Unfunded Actuarial Accrued Liability

Changes since the Prior Valuation & Impact on Unfunded Actuarial Accrued Liability:

1.	Changes in Census Data	\$ (15,706,502)
2.	Claims Costs and Premiums significantly lower than expected	(30,756,117)
3.	Update to Yamamoto Aging	20,050,569
4.	Update to Getzen Trend Rates with 3.5% Trend for Medicare	35,352,281
5.	Updated enrollment assumption to align with actual retiree elections	(152,885)
6.	Updated participation assumption	(5,399,482)
7.	Investment Return (greater)/lower than expected	 (18,234,384)
	Total Change in UAAL	\$ (14,846,520)

- 1. The census data reflects changes in the census information for the twenty-four (24) month period since December 31, 2019.
- 2. Medical claims costs and premiums were both lower than expected. The impact of lower costs is magnified, as the liability is the net result of total costs, offset by retiree contributions. Additionally, the explicit subsidy is lower due to lower premiums, further decreasing the liability.
- 3. Updated Yamamoto Aging factors were implemented to better reflect how medical costs change with age. This assumption change results in an increase the Total OPEB Liability.
- 4. The updated trend rate assumption lengthens the number of years between intial and ultimate trend rates to 53 years based on the Getzen model. Costs are initially expected to increase at a rate of 7.5% in fiscal year 2022. The expected increase is lowered each year until an ultimate rate of 4% is reached in fiscal year 2075. Medicare premiums are assumed to increase by 3.5% annually.
- 5. 76% of retirees are assumed to elect PPO coverage based on current enrollment. Previously, 78% were assumed to elect PPO coverage.
- 6. The participation assumption was lowered from 90% to 80% based on experience over the last five years.

### SECTION 6 - Funding Progress—Solvency Test

### SECTION 6 - FUNDING PROGRESS—SOLVENCY TEST

The funding progress exhibit below demonstrates the Trust's solvency over time. In a short-term solvency test, assets available for benefits are compared to:

- 1. Member contributions on deposit;
- 2. The actuarial accrued liability for future benefits payable to persons who have retired or terminated; and
- 3. The actuarial accrued liability for future projected benefits payable to current active members.

Generally, if a system has been using level contribution rate financing, the portion fully funded in each category listed above will increase over time.

in \$000s						Portion o	of Accrued Liab	oility
		Actuarial Accr	ued Liability			Covered	by Valuation A	ssets
		Terminated,		_			Terminated,	
Valuation	Member	Retirees, and	Active		Valuation	Member	Retirees, and	Active
Date	Contributions	Beneficiaries	Members	Total	Assets	Contributions	Beneficiaries	Members
12/31/2021	0	294,447	43,200	337,647	311,163	100%	100%	39%
12/31/2020	0	250,926	67,192	318,118	270,205	100%	100%	29%
12/31/2019	0	246,494	58,229	304,723	232,515	100%	94%	0%
12/31/2018	0	243,477	78,026	321,503	188,317	100%	77%	0%
12/31/2017	0	240,800	67,947	308,747	195,200	100%	81%	0%

# SECTION 7 - Per Capita Claims Costs and Contribution Amounts

### SECTION 7 – PER CAPITA CLAIMS COSTS AND CONTRIBUTION AMOUNTS

2022 Per Capita Annual Claims Costs Per Participant

		PPO	Plans			HMO	Plans	
	Enro	lled in	Not En	rolled in	Enrol	lled in	Not Enrolled in	
	Med	dicare	Med	dicare	Med	icare	Med	icare
Age	Male	Female	Male	Female	Male	Female	Male	Female
40-44	\$7,315	\$11,020	\$7,315	\$11,020	\$ 5,055	\$7,864	\$ 5,055	\$7,864
45-49	9,236	12,137	9,236	12,137	6,421	8,637	6,421	8,637
50-54	12,163	14,230	12,163	14,230	8,442	10,160	8,442	10,160
55-59	15,815	16,472	15,815	16,472	11,201	11,745	11,201	11,745
60-64	20,284	19,523	20,284	19,523	14,675	13,981	14,675	13,981
65-69	-	-	25,528	24,106	-	-	18,989	17,277
70-74	-	-	31,220	29,931	-	-	24,146	21,485
75+	_	-	34,826	34,211	-	-	27,710	24,581

### 2022 Annual Premium Amounts Per Participant (Retiree Portion) <sup>1</sup>

	 PPO	Plan	S		НМО	Plans	S	
	Enrolled in Medicare		Not Enrolled in Medicare		Enrolled in Medicare		Not Enrolled in Medicare	
Retiree								
Pre-65	\$ 7,363	\$	7,363	\$	5,009	\$	5,009	
Post-65	1,260		7,363		1,260		5,009	
Spouse								
Pre-65	\$ 7,363	\$	7,363	\$	4,368	\$	4,368	
Post-65	1,260		7,363		1,260		4,368	

 $<sup>^{1}</sup>$  The contributions shown above reflect the increase in the retiree contribution percentage from 2011 (at 25%) to 2021 (50.0%) at 2.5% per year.

### SECTION 8 – MEMBER STATISTICS

### STATISTICAL DATA

	12/31/2021	12/31/2019
Number of Active Participants		
Eligible for Retiree Health Benefits	458	543
Not Yet Eligible for Retiree Health benefits	1,269	1,274
Total	1,727	1,817
Average Current Age	49.7	49.9
Average Age at Employment	37.0	37.0
Average Past Service	12.7	12.9
Covered Payroll at the Valuation Date	\$ 180,199,404	\$ 182,154,122
Average Salary	104,342	100,250
Number of Inactives Receiving Benefits	1.550	1.544
Retirees and Disabled Members	1,552	1,544
Surviving Spouses	407	434
Dependent Spouses	924	926
Total	2,883	2,904
Average Current Age of Retirees, Beneficiaries and Disabled Members	74.4	74.1
Average Current Age of Dependent Spouses	69.6	69.4
Average Current Age of All Inactives in Receipt	72.8	72.6
Number of Terminated Vested	31	37
Average Age of Terminated Vested	51.4	54.0

### AGE AND SERVICE DISTRIBUTION

TO	IAL
PAST S	ERVICE

AGE	0	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<25	3	5	1	0	0	0	0	0	0	0	9
25 - 29	13	33	5	0	0	0	0	0	0	0	51
30 - 34	19	61	33	6	0	0	0	0	0	0	119
35 - 39	13	49	64	42	8	0	0	0	0	0	176
40 - 44	15	64	57	49	41	11	0	0	0	0	237
45 - 49	6	48	54	50	39	51	5	0	0	0	253
50 - 54	12	27	52	41	35	82	23	8	0	0	280
55 - 59	4	35	46	43	35	69	35	12	2	0	281
60 - 64	2	23	35	37	34	46	14	13	2	1	207
65+	1	7	14	14	16	37	14	4	4	3	114
Total	88	352	361	282	208	296	91	37	8	4	1,727

### SCHEDULE OF RETIREES AND BENEFICIARIES ADDED TO/FROM ROLLS

					Health Care		
	Beginning of	Number	Number		Annual	Average	% Change in
Fiscal	Year	Added to	Removed from	End of Year	Benefit	Annual	Average
Year	Balance	Rolls	Rolls	Balance	Amounts	Benefit	Benefit
2007	1,850	150	127	1,873	\$12,333,865	\$6,585	-
2009	1,873	183	156	1,900	\$14,591,543	\$7,680	16.6%
2011	1,900	221	144	1,977	\$15,020,374	\$7,598	-1.1%
2013	1,977	118	131	1,964	\$13,834,831	\$7,044	-7.3%
$2015^{-1}$	1,964	217	178	2,003	\$13,316,713	\$6,648	-5.6%
2017	2,003	172	191	1,984	\$13,430,657	\$6,769	1.8%
2019	1,984	177	146	2,015	\$12,700,092	\$6,303	-6.9%
2021	2,015	180	205	1,990	\$9,663,890	\$4,856	-23.0%

### BREAKDOWN OF BENEFIT PLAN ENROLLMENT

(RETIREES, BENEFICIARIES, COVERED SPOUSES AND TERMINATED VESTED)

Enrollee Group	PPO	<u>HMO</u>	<u>Total</u>
Benefit Recipient	1,526	464	1,990
Spouse	<u>676</u>	<u>248</u>	924
Grand Total	2,202	712	2,914

<sup>&</sup>lt;sup>1</sup> Prior rolls adjusted to include vested terminated members excluded in the previous valuation.

### SECTION 9 – ACTUARIAL ASSUMPTIONS AND FUNDING METHODS

### **ACTUARIAL ASSUMPTIONS**

<u>Valuation Date</u> December 31, 2021.

GASB 75 Measurement Date December 31, 2021.

Fiscal Year End December 31, 2022.

Mortality Rate RP-2000 Combined Healthy Mortality Table

with Generational Mortality Improvements (Scale AA), with female rates adjusted by a

factor of 1.04.

End of Year Discount Rate 6.50% per year, based on investment rate of

return, compounded annually, net of investment

related expenses.

Beginning of Year Discount Rate 6.50% per year, based on investment rate of

return, compounded annually, net of investment

related expenses.

Retirement Rates See table below:

Age	Retirement Rate
50 - 59	7%
60	20%
61 - 64	10%
65	15%
66	18%
67	25%
68	15%
69	30%
70	35%
71 - 74	20%
75	100%

Retirement – Vested Participant

Assumed to retire at first eligibility for commencement of pension benefits.

# SECTION 9 – Actuarial Assumptions and Funding Methods

### **Termination Rates**

Service	Male Rate	Female Rate
0	5.00%	7.75%
1	3.50%	6.75%
2	3.50%	5.75%
3	2.60%	4.75%
4	2.24%	4.52%
5	2.15%	4.49%
6	1.75%	4.19%
7	1.70%	3.94%
8	1.65%	3.74%
9	1.55%	3.54%
10	1.55%	3.34%
11	1.55%	3.14%
12	1.45%	2.94%
13	1.40%	2.85%
14	1.35%	2.52%
15	1.20%	2.52%
16+	1.00%	2.52%

**Disability Rates** 

None assumed.

### Salary Increase

	Salary Increase
Service	Rate
0	7.00%
1	6.50%
2	5.75%
3	5.50%
4	5.25%
5	6.00%
6	5.00%
7	4.75%
8	4.50%
9	4.25%
10	5.00%
11 - 14	4.00%
15	5.00%
16 - 19	4.00%
20	5.00%
21+	3.50%

Payroll Growth

3.00% per year.

<u>Inflation</u>

2.50% per year.

Administrative Expenses

No additional expenses added to Normal Cost.

### SECTION 9 – Actuarial Assumptions and Funding Methods

Marital Status

100% assumed married, with male spouses 3 years older than female spouses.

**Health Care Participation** 

80% participation assumed (previously 90%), with 76% electing spouse coverage.

Future retirees are assumed to elect medical plans in the same proportion as the 2019 elections for current enrollees. The current enrollments are 24% with HMO and 76% with PPO.

Medicare Participation

100% of members are assumed to enroll in Medicare if eligible and hired on or after April 1, 1986. It is assumed that 93% of members will enroll in Medicare if hired before April 1, 1986.

Health Care Inflation

Initial rate of 7.50% in fiscal 2022, grading down to the ultimate trend rate of 4.00% in fiscal 2075.

Fiscal Year	Rate
2022	7.50%
2023	7.25%
2024	7.00%
2025	6.75%
2026	6.50%
2027	6.25%
2028	6.00%
2029	5.75%
2030	5.50%
2031-2052	5.25%
2053-2060	5.00%
2061-2067	4.75%
2068-2071	4.50%
2072-2074	4.25%
2075+	4.00%

The above rates reflect recent healthcare trend rate surveys, blended with the long-term rates from the Getzen model published by the Society of Actuaries.

Medicare Advantage Cost Increases

3.50% per year

### SECTION 9 – Actuarial Assumptions and Funding Methods

Medical Aging (Morbidity) Factors

Developed based on a study performed by Dale Yamamoto for the Society of Actuaries. Used to measure the annual increases in per capita claim costs for each age and relative cost by gender. See the SOA report titled "Health Care Costs – From Birth to Death" for more details.

**Health Claims** 

(Medicare and Non-Medicare)

Developed using a 50/50 blend of i) the 2021 medical and prescription claims and enrollment experience; and ii) 2022 age-adjusted premium rates.

**Funding Method** 

Entry Age Cost Method (level percentage of pay).

# SECTION 9 - Actuarial Assumptions and Funding Methods

#### DISCUSSION OF CENSUS DATA AND ASSUMPTIONS

- 1. Census Data We received December 31, 2021 census data from District personnel. The data was substantially similar to data used in the previous year's valuation. No material modifications were made to the data.
- 2. Medical/Rx Cost and Enrollment Data District personnel provided claims and enrollment experience for medical and prescription plan cost information for calendar year 2021.
- 3. Actuarial Assumptions and Methods
  - a. Demographic Assumptions
    - i. Mortality rates are those used in the corresponding pension valuation developed during a 2018 Experience Study. Mortality rates are deemed reasonable and reflect mortality improvements. They are a best estimate given limited plan experience. We will continue to monitor the impact of mortality.
    - ii. Retirement rates, termination and disability rates are deemed reasonable and will continue to be monitored to ensure they capture plan experience.
    - iii. The participation rate was lowered from 90% to 80%. The spousal coverage election percentage is the same as in the previous valuation. Rates are deemed reasonable and will continue to be monitored.
    - iv. Assumed enrollment was updated to reflect actual retiree enrollment as of December 31, 2021. 76% of future retirees are assumed to elect PPO coverage. The remaining 24% are assumed to elect HMO coverage.
  - b. Other Assumptions
    - i. Health care inflation rates were updated to reflect recent healthcare trend rate surveys, blended with the long-term rates from the Getzen model published by the Society of Actuaries.
    - ii. The interest rate (i.e. investment return) remains at 6.50% at the request of the District and Board personnel. This rate is supported by the Crossover Test as shown in the Appendix.
  - c. Funding Method The valuation results were calculated using the Entry Age cost method (level percentage of pay). This method is required under GASB 74/75.

#### SECTION 10 – SUMMARY OF PLAN PROVISIONS

Credited Service

Total completed years of employment with

the District.

Eligibility for Insurance Coverage

At least 10 years of service with the District. Coverage does not commence until the member starts receiving payments from the District's Retirement Fund. Earliest eligibility is based on the member's hire date as follows:

Hired on or before June 13, 1997: Age 50 Hired after June 13, 1997 and before

January 1, 2011: Age 55

Hired on or after January 1, 2011: Age 62

Health Care Insurance

Retirees who meet the age and service requirements above are eligible for medical and prescription drug benefits payable for life.

**Health Contributions** 

Retiree

Retirees pay a portion of the premium each year based on the i) adjusted premium developed based on actual claims experience and ii) the contribution rate policy established by the Board of Commissioners. The policy calls for a 2.5% increase in the contribution rate on January 1<sup>st</sup> or each year until the contribution rate reaches 50%, projected to be in 2021. The contribution rate for 2021 is 50%.

District

Remaining amount necessary for payment of claims.

# APPENDIX 1 – GASB 74 DISCLOSURES FOR PLAN YEAR 2021

# STATEMENT OF FIDUCIARY NET POSITION

(For the Year Ended December 31, 2021)

<u>ASSETS</u>	MARKET VALUE
Cash and Short-Term Investments	-
Receivables:	
Accrued Interest	73,752
Total Receivables	73,752
Investments:	
Fixed Income Mutual Funds	86,355,436
Equity Mutual Funds	215,231,633
Balanced Mutual Funds	-
Money Market Funds	9,516,075
Total Investments	311,103,144
Total Assets	311,176,896
LIABILITIES	
Payables:	
Deposit Payable	13,750
Total Liabilities	13,750
NET POSITION RESTRICTED FOR POSTEMPLOYMENT	
BENEFITS OTHER THAN PENSIONS	311,163,146

#### STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

(For the Year Ended December 31, 2021)

**ADDITIONS** 

Contributions:

Employer Contributions 14,663,890

Total Contributions 14,663,890

Investment Income:

Net Appreciation (Depreciation) in Fair Value of Investments30,605,436Interest & Dividends5,448,884Less Investment Expense(55,000)

Net Investment Income 35,999,320

Total Additions 50,663,210

**DEDUCTIONS** 

Distributions to Members:

Retiree Health Care Benefits 9,663,890

Total Distributions 9,663,890

Administrative Expense 41,639

Total Deductions 9,705,529

Net Increase in Net Position 40,957,681

NET POSITION RESTRICTED FOR POSTEMPLOYMENT

BENEFITS OTHER THAN PENSIONS

Beginning of the Year 270,205,465

End of the Year 311,163,146

#### NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended December 31, 2021)

#### GENERAL INFORMATION ABOUT THE OPEB PLAN

#### Plan Description:

The Metropolitan Water Reclamation District of Chicago Retiree Health Care Benefit Plan (Plan) is a single employer defined benefit postemployment health care plan that covers eligible retired employees of the District. The Plan, which is administered by the District, allows employees who retire and meet retirement eligibility requirements under the District's retirement plan to continue health coverage as a participant in the District's plan.

Employees Covered by Benefit Terms. At December 31, 2021, the following employees were covered by the benefit terms:

Inactive Plan Members Currently Receiving Benefits	1,552
Beneficiaries of Deceased Plan Members Currently Receiving Benefits	407
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	31
Active Plan Members	1,727
	3,717

# Benefits Provided:

The benefits provided are the same as those provided for active employees. Spouses and dependents of eligible retirees are also eligible for medical coverage in accordance with the plan. All full-time employees of the District with at least ten actual years of service are eligible to receive postemployment benefits. Coverage for retirees and their eligible spouse is provided for life. Coverage for dependent children is provided in accordance with the eligibility provisions of the District-sponsored health plan. The Trust was established to advance fund benefits provided under the Plan.

### Eligibility for Insurance Coverage:

Employees must have at least ten actual years of service with the District, and coverage does not commence until the member starts receiving payments from the District's Retirement Fund. District Commissioners must have at least six years of service as a Commissioner of the District. Eligibility is based on the employee's hire date as follows: age 50 for those hired on or before June 13, 1997, age 55 for those hired between June 13, 1997 and January 1, 2011 and age 62 for those hired on or after January 1, 2011.

#### Health Care Insurance:

Retirees who meet the age and service requirements above are eligible for medical and prescription drug benefits payable for life.

#### Contributions:

The Metropolitan Water Reclamation District's Retiree Health Care Plan (Plan) is a single employer defined benefit postemployment health care plan that covers eligible retired employees of the District. The Plan, which is administered by the District, allows employees who retire and meet certain eligibility requirements to continue medical and prescription drug coverage as a participant in the District's plan. Spouses and dependents of eligible retirees are also eligible for medical and prescription drug coverage in accordance with the plan. All full-time employees of the District who meet the age and service requirements are eligible to receive postemployment health care benefits. Lifetime coverage for retirees and their eligible spouses is provided. Coverage for dependent children is also provided in accordance with the eligibility provisions of the District-sponsored health plan. The Trust was established to advance fund benefits provided under the Plan.

Under the terms of the Plan, the Retired plan members and beneficiaries currently receiving benefits are required to contribute specified amounts monthly toward the cost of health insurance premiums.

The retiree contribution rates are set based on prior year claims incurred and become effective January 1st each year. The retiree contribution rate utilized is based on the contribution rate policy established by the Board of Commissioners. This policy calls for a 2.5% increase in the contribution rate on January 1st of each year until the contribution rate reaches 50% in 2021. The retiree contribution rate for 2021 and after is 50.0%.

In future years, contributions are assumed to increase at the same rate as claims expenditures.

#### *Investment Policy:*

The following was the Board's adopted asset allocation policy as of December 31, 2020. No such allocations were provided as of December 31, 2021.

Target Allocation
20.0%
15.0%
17.5%
7.5%
10.0%
10.0%
5.0%
15.0%
100%

# APPENDIX 1- GASB 74 Disclosure for Plan Year 2021

#### Concentrations:

The Plan did not hold investments in any one organization that represent 5 percent or more of the Fund's Fiduciary Net Position.

# Rate of Return:

For the year ended December 31, 2021 the annual money-weighted rate of return on investments, net of investment expense, was 13.1 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts invested.

#### Receivables:

If the OPEB plan reported receivables from long-term contracts with the District for contributions, the OPEB plan should disclose information required by paragraph 34c of this Statement.

#### Allocated Insurance Contracts:

If the OPEB plan had allocated insurance contracts that are excluded from OPEB plan assets, the OPEB plan should disclose information required by paragraph 34d of this Statement.

#### NET OPEB LIABILITY OF THE DISTRICT

The measurement date for GASB 74 reporting is December 31, 2021.

The reporting period is January 1, 2021 through December 31, 2021.

The District's Net OPEB Liability was measured as of December 31, 2021.

The Total OPEB Liability used to calculate the Net OPEB Liability was determined as of that date.

The components of the Net OPEB Liability of the District on December 31, 2021 were as follows:

Total OPEB Liability	\$ 337,646,669
Plan Fiduciary Net Position	311,163,146
District's Net OPEB Liability	\$ 26,483,523

Plan Fiduciary Net Position as a percentage of the Total OPEB Liability 92.16%

# Actuarial Assumptions:

The Total OPEB Liability was determined by an actuarial valuation as of December 31, 2021 using the following actuarial assumptions:

Inflation Rate	2.50%
Salary Increase Rate(s)	Varies by Service
Discount Rate	6.50%
Initial Trend Rate	7.50%
Ultimate Trend Rate	4.00%
Years to Ultimate	53
Investment Rate of Return	6.50%

For all employees, mortality rates were based on the RP-2000 combined health mortality tables with fully generational mortality improvements using scale AA, with rates for female participants adjusted by a factor of 1.04.

### *The Long-Term Expected Rate of Return:*

The Long-Term Expected Rate of Return on OPEB Plan investments is determined using a building-block method in which best-estimate rates of expected future real rates of return (expected returns, net of investment expenses and inflation) are developed for each major asset class. These ranges are combined to produce the Long-Term Expected Rate of Return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the target asset allocation as of December 31, 2020 (no such allocations or rates were provided as of December 31, 2021) are summarized in the following table:

		Long Term Expected
Asset Class	Target Allocation	Real Rate of Return
Broad Fixed Income	20.0%	1.70%
Core Plus Fixed Income	15.0%	2.10%
Large Cap Core Equity	17.5%	6.90%
Large Cap Growth Equity	7.5%	6.80%
Mid Cap Core Equity	10.0%	7.20%
Small Cap Core Equity	10.0%	7.70%
Global Low Volatility	5.0%	6.50%
Non US Large Cap Core Equity	15.0%	7.30%
Total	100%	

The Long-Term Expected Rate of Return calculated using the method described above exceeds 6.50% (assuming 2.50% inflation).

#### Discount Rate:

The projection of cash flows used to determine the Discount Rate assumed that current Plan Member and District contributions will be made at the current contribution rate (i.e. funding policy). The expected rate of return on trust investments is 6.50%. It is our understanding that the District has adopted a funding policy as of October 2, 2014 with the intention of fully funding the plan by 2026 and maintaining 100% funding thereafter. The District has shown that they are following the funding policy completely and will continue to do so. Therefore, the expected return on investments was used to discount projected benefit payments for all future benefit payments, and the single equivalent rate was 6.50%.

# APPENDIX 1- GASB 74 Disclosure for Plan Year 2021

Sensitivity of the Net OPEB Liability to changes in the Discount Rate as of December 31, 2021:

The following presents the Net OPEB Liability of the District, as well as what the District's Net OPEB Liability would be if it were calculated using a discount rate that is one percentage-point lower or one percentage-point higher than the current discount rate:

		Current Discount				
	1% Decrease	Rate	1% Increase			
	5.50%	6.50%	7.50%			
Net OPEB Liability (asset)	\$ 72,995,771	\$ 26,483,523	\$ (11,840,529)			

Sensitivity of the Net OPEB Liability to changes in the Healthcare Cost Trend Rates as of December 31, 2021:

The following presents the Net OPEB Liability of the District, as well as what the District's Net OPEB Liability would be if it were calculated using healthcare cost trend rates that are one percentage-point lower or one percentage-point higher than the current healthcare cost trend rates:

		Healthcare Cost			
	1% Decrease	Trend Rates	1% Increase		
	3.00% - 6.50%	4.00% - 7.50%	5.00% - 8.50%		
Net OPEB Liability (asset)	\$ (14,998,776)	\$ 26,483,523	\$ 76,491,044		

*OPEB Plan Fiduciary Net Position:* 

Detailed information about the OPEB Plan's Fiduciary Net Position is available in a separately issued Plan financial report.

# SCHEDULE OF CHANGES IN THE DISTRICT'S NET OPEB LIABILITY AND RELATED RATIOS

Reporting Period Ending		12/31/2021	12/31/2020			12/31/2019
Total OPEB Liability						
Service Cost	\$	5,104,413	\$	4,861,346	\$	5,540,295
Interest		20,700,322		19,763,742		20,851,553
Changes of benefit terms		-		-		-
Differences between Expected and Actual						
Experience		(15,706,502)		-		6,818,596
Changes of assumptions		19,094,366		-		(37,290,450)
Benefit Payments		(9,663,890)		(11,229,934)		(12,700,092)
Net Change in Total OPEB Liability		19,528,709		13,395,154		(16,780,098)
Total OPEB Liability - Beginning		318,117,960		304,722,806		321,502,904
Total OPEB Liability - Ending (a)	\$	337,646,669	\$	318,117,960	\$	304,722,806
Plan Fiduciary Net Position						
Employer Trust Contribution	\$	5,000,000	\$	5,000,000	\$	5,000,000
Pay-as-you-go Contributions	•	9,663,890	•	11,229,934	•	12,700,092
Net Investment Income		35,999,320		32,732,090		39,251,295
Benefit Payments		(9,663,890)		(11,229,934)		(12,700,092)
Administrative Expense		(41,639)		(41,295)		(53,880)
Net Change in Plan Fiduciary Net Position		40,957,681		37,690,795		44,197,415
Plan Fiduciary Net Position - Beginning		270,205,465		232,514,670		188,317,255
Plan Fiduciary Net Position - Ending (b)	\$	311,163,146	\$	270,205,465	\$	232,514,670
•		,				
District's Net OPEB Liability - Ending (a) - (b)	\$	26,483,523	\$	47,912,495	\$	72,208,136
Plan Fiduciary Net Position as a percentage of the						
Total OPEB Liability		92.16%		84.94%		76.30%
a 15 #		100 100 101		101 241 020		100 151 100
Covered Payroll	\$	180,199,404	\$	191,261,828	\$	182,154,122
District's Net OPEB Liability as a percentage of						
Covered Payroll		14.70%		25.05%		39.64%

# **Notes to Schedule:**

*Discount Rate.* The Single Discount Rate used to calculate the District's Net OPEB Liability has been 6.50% since implementation of GASB 75.

# SCHEDULE OF DISTRICT CONTRIBUTIONS Last 10 Fiscal Years

	12/31/2021	12/31/2020	12/31/2019	12/31/2018	12/31/2017	12/31/2016	12/31/2015	12/31/2014	12/31/2013	12/31/2012
Actuarially Determined Contribution Contributions in relation to the Actuarially	6,298,571	8,640,607	9,585,874	11,506,823	11,506,823	12,471,893	12,471,893	13,211,937	13,211,937	27,263,684
Determined Contributions	14,663,890	16,229,934	17,700,092	17,570,679	18,430,657	19,916,860	18,316,713	33,716,523	33,834,831	35,426,215
Contribution Deficiency (Excess)	\$ (8,365,319)	\$ (7,589,327)	\$ (8,114,218)	\$ (6,063,856)	\$ (6,923,834)	\$ (7,444,967)	\$ (5,844,820)	\$ (20,504,586)	\$ (20,622,894)	\$ (8,162,531)
Covered Payroll	\$ 180,199,404	\$ 191,261,828	\$ 182,154,122	\$ 192,661,666	\$ 184,807,353	\$ 183,120,020	\$ 176,756,776	\$ 169,909,275	\$ 164,005,092	\$ 158,995,000
Contributions as a percentage of Covered Payroll	8.14%	8.49%	9.72%	9.12%	9.97%	10.88%	10.36%	19.84%	20.63%	22.28%

### **Notes to Schedule:**

For the fiscal year ending December 31, 2021, the Contributions in relation to the Actuarially Determined Contributions is final and was provided by the District.

Actuarially Determined Contribution rates shown above are calculated as of December 31 for the plan/fiscal year in which contributions are reported.

Contributions in relation to the Actuarially Determined Contributions include Pay-As-You-Go Benefit amounts plus an additional cash contribution to the trust.

Methods and assumptions used to determine contribution rates are the same as those found in Section 7 of this report.

# APPENDIX 2 – GASB 74 & 75 CROSSOVER TEST

# Metropolitan Water Reclimation District of Chicago Post Retirement Health Care Plan - GASB Statement 74&75 Crossover Projection

#### 50 Year Projection of the Health Care Plan's Fiduciary Net Position

Based on the December 31, 2021 Measurement Date. 6.50% Asset Return

	Projected Beginning			Projected		Projected Ending
	Fiduciary Net	Projected Total	Projected Benefit	Administrative	Projected Investment	Fiduciary Net
Year	Position	Contributions	Payments	Expense	Earnings	Position
2022	311,163,146	17,201,775	12,201,775	42,680	20,386,717	336,507,183
2023	336,507,183	18,320,923	13,320,923	42,729	22,034,078	363,498,533
2024	363,498,533	19,544,756	14,544,756	42,754	23,788,515	392,244,294
2025	392,244,294	20,678,978	15,678,978	42,783	25,656,989	422,858,500
2026	422,858,500	22,165,799	17,165,799	42,817	27,646,911	455,462,594
2027	455,462,594	23,649,866	18,649,866	42,836	29,766,176	490,185,934
2028	490,185,934	0	20,133,287	42,862	31,206,361	501,216,146
2029	501,216,146	0	21,709,973	42,873	31,872,082	511,335,382
2030	511,335,382	0	23,396,752	42,881	32,475,012	520,370,761
2031	520,370,761	0	24,885,569	42,896	33,013,924	528,456,220
2032	528,456,220	0	26,534,992	42,850	33,485,874	535,364,252
2033	535,364,252	0	28,156,762	42,787	33,882,191	541,046,894
2034	541,046,894	0	29,398,158	42,682	34,211,221	545,817,275
2035	545,817,275	0	30,943,051	42,519	34,471,092	549,302,797
2036	549,302,797	0	32,377,734	42,283	34,651,031	551,533,811
2037	551,533,811	0	33,649,530	42,021	34,754,722	552,596,982
2038	552,596,982	0	34,825,067	41,693	34,785,634	552,515,856
2039	552,515,856	0	35,556,583	41,322	34,756,599	551,674,550
2040	551,674,550	0	36,556,397	40,906	34,669,433	549,746,680
2041	549,746,680	0	37,208,512	40,444	34,522,943	547,020,666
2042	547,020,666	0	37,541,536	39,933	34,334,946	543,774,143
2043	543,774,143	0	38,111,406	39,387	34,105,418	539,728,768
2044	539,728,768	0	38,005,508	38,804	33,845,930	535,530,385
2045	535,530,385	0	37,742,241	38,168	33,581,612	531,331,588
2046	531,331,588	0	37,346,994	37,509	33,321,557	527,268,642
2047	527,268,642	0	36,647,323	36,810	33,080,227	523,664,737
2048	523,664,737	0	35,755,575	36,087	32,874,979	520,748,054
2049	520,748,054	0	34,587,591	35,306	32,723,379	518,848,537
2050	518,848,537	0	33,361,245	34,517	32,639,793	518,092,567
2051	518,092,567	0	31,707,784	33,687	32,644,419	518,995,515
2052	518,995,515	0	30,228,572	32,831	32,751,213	521,485,325
2053	521,485,325	0	28,706,280	31,952	32,962,554	525,709,647
2054	525,709,647	0	26,898,400	31,008	33,295,921	532,076,161
2055	532,076,161	0	24,865,214	30,100	33,775,853	540,956,699
2056	540,956,699	0	22,621,092	29,149	34,426,053	552,732,510
2057	552,732,510	0	20,868,515	28,197	35,248,470	567,084,268
2058	567,084,268	0	18,883,728	27,202	36,245,872	584,419,210

# APPENDIX 2 – GASB 74 & 75 Crossover Test

	Projected Beginning			Projected		Projected Ending
	Fiduciary Net	Projected Total	Projected Benefit	Administrative	Projected Investment	Fiduciary Net
Year	Position	Contributions	Payments	Expense	Earnings	Position
2059	584,419,210	0	17,219,733	26,208	37,426,756	604,600,024
2060	604,600,024	0	15,401,785	25,242	38,797,623	627,970,620
2061	627,970,620	0	13,687,332	24,235	40,372,464	654,631,518
2062	654,631,518	0	12,072,383	23,211	42,157,942	684,693,865
2063	684,693,865	0	10,544,239	22,222	44,161,691	718,289,096
2064	718,289,096	0	9,302,210	21,195	46,385,781	755,351,471
2065	755,351,471	0	7,976,881	20,183	48,837,941	796,192,348
2066	796,192,348	0	7,033,520	19,188	51,523,290	840,662,930
2067	840,662,930	0	6,265,996	18,187	54,438,854	888,817,601
2068	888,817,601	0	5,595,628	17,124	57,590,730	940,795,578
2069	940,795,578	0	4,953,504	16,143	60,990,199	996,816,130
2070	996,816,130	0	4,436,808	15,133	64,648,360	1,057,012,549
2071	1,057,012,549	0	3,985,446	14,155	68,575,829	1,121,588,777
2072	1,121,588,777	0	3,588,245	13,118	72,786,226	1,190,773,641
2073	1,190,773,641	0	3,233,073	12,182	77,294,816	1,264,823,202
2074	1,264,823,202	0	2,917,138	11,225	82,118,336	1,344,013,175