METROPOLITAN WATER RECLAMATION DISTRICT OF CHICAGO
OTHER POSTEMPLOYMENT BENEFITS PROGRAM

ACTUARIAL VALUATION
AS OF DECEMBER 31, 2017

INCLUDING:

GASB 45 DISCLOSURES FOR THE
PLAN/FISCAL YEAR ENDING
DECEMBER 31, 2017

GASB 74 DISCLOSURES FOR THE
PLAN/FISCAL YEAR ENDING
DECEMBER 31, 2017

FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

May 10, 2018

To the Members of the Board of Commissioners
of the Metropolitan Water Reclamation District of Greater Chicago
100 East Erie Street
Chicago, IL 60611

Re: Metropolitan Water Reclamation District – December 31, 2017 OPEB Valuation Report

Dear Members of the Board:

We are pleased to present to this report of the annual actuarial valuation of the Metropolitan Water Reclamation District's Other Postemployment Benefits (OPEB) Program, pursuant to our engagement letter with Metropolitan Water Reclamation District of Chicago dated August 20, 2015.

Metropolitan Water Reclamation District of Chicago (MWRD) retained Foster & Foster Consulting Actuaries Inc. to perform an actuarial valuation of its Retiree Health Care Benefit Plan ("the Plan") as of December 31, 2017. The purpose of this report is to present the December 31, 2017 actuarial valuation results for the Plan. The results are applicable for MWRD's fiscal year ending December 31, 2017. Successive valuations will be performed every two years. This valuation was performed to determine annual expenses associated with providing OPEB benefits, the current funded status of the Plan, and to provide all necessary schedules required to comply with the Governmental Accounting Standards Board No. 45. The District is required to adopt GASB 74 for the Fiscal Year 2017. The schedules related to the Governmental Accounting Standards Board No. 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 45 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 45 and GASB 74.

The valuation has been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflects all applicable federal laws and regulations. GASB 45/74 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 45/74.

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 included in the Actuarial and Statistical Sections of the MWRD Comprehensive Annual Financial Report (CAFR). The actuary prepared the trend data schedules to be included in the Financial Sections of the MWRD CAFR (GASB 45) and the MWRD Retiree Health Care Trust CAFR (GASB 74). These schedules include:

- Annual OPEB Cost and Net OPEB Obligation
- Supplements to the Notes to the Financial Statements:
    - Funding Status and Progress (provided, but no longer a required schedule)
    - Schedule of Sponsor Contributions
    - Schedule of Changes in the Net OPEB Liability and Related Ratios
- Reconciliation of Change in Unfunded Liability
- Summary of Membership Data
- Schedule of Active Member Valuation Data
- Schedule of Retirees and Beneficiaries Added to and Removed from the Rolls

In conducting the valuation, we have relied on personnel information, plan design information, and unaudited plan assets and benefit payments supplied by the District, and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. The census data and plan asset information was collected as of December 31, 2017 for active members, retirees, survivors and dependents. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result 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 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. 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.

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 Aimee at 630 620-0200.

Respectfully submitted,

Foster & Foster, Inc.

By: Jason L. Franken

Jason L. Franken, FSA, EA, MAAA

By: Aimee M. Strickland

Aimee M. Strickland, FSA, EA, MAAA

By: Matt Plachta

Matt Plachta, ASA, MAAA

Enclosures/aw

Table of Contents

SECTION 1 - INTRODUCTION
EXECUTIVE SUMMARY

The regular annual actuarial valuation of the Metropolitan Water Reclamation District Other Postemployment Benefits (OPEB) Program, performed as of December 31, 2017, has been completed and the results are presented in this Report. For purposes of this valuation, Medical and Prescription Drug OPEBs were taken into consideration. The results of this valuation are applicable to the plan/fiscal year ending December 31, 2017.

The following table shows the components of the District's Net OPEB Obligation:

Valuation Date **Applicable for Fiscal Year Ending**	**12/31/2015** **12/31/2016**	**12/31/2017** **12/31/2017**
Annual Required Contribution	$ 12,472,000	$ 11,506,823
As a Percent of Covered Payroll	N/A	6.2%
Interest on Net OPEB Obligation	$ 2,053,000	$ 1,169,545
Adjustment to Annual Required Contribution	(1,616,000)	(926,522)
Annual OPEB Cost (Expense)	$ 12,909,000	$ 11,749,846
Net Retiree Benefit Payments	$ (14,917,000)	$ (13,430,657)
Employer Additional Cash Contribution	(5,000,000)	(5,000,000)
Actual Net Contributions Made	$ (19,917,000)	$ (18,430,657)
Increase (Decrease) in Net OPEB Obligation	$ (7,008,000)	$ (6,680,811)
Net OPEB Obligation - Beginning of Year (as reported)	25,001,000	17,993,000
Estimated Net OPEB Obligation – End of Year	$ 17,993,000	$ 11,312,189

Prior Results are from the District's fiscal year 2016 year end financial statements

SECTION 1 –Introduction

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 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 following changes have been made since the prior valuation:

- The census data reflects changes in status for the two-year period since December 31, 2015.
- Calculations were modified to capture the impact of moving to the Medicare Advantage plan (MAPD) for post-65 eligible Medicare retirees.
- The annual per capita claims costs have been updated to reflect recent claims experience, along with changes to the health plan for retirees.
- The premium rates have been updated to use the rates effective for 2018.
- The trend rate assumption has been updated to use an initial trend rate of 8.0% in fiscal year 2018, grading down 0.75% per year until reaching an ultimate trend rate of 4.5%.
- The discount rate was decreased from 6.75% to 6.50%.

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 Commissioners in order to discuss the Report and any pending questions concerning its contents.

Respectfully submitted,

FOSTER & FOSTER, INC.

By:Jason L. Franken

Jason L. Franken, FSA, MAAA

By:Aimee M. Strickland

Aimee M. Strickland, FSA, MAAA

GLOSSARY OF ACTUARIAL TERMS

Actuarial Present Value is the amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:

1. adjusted for the probable financial effect of certain intervening events
2. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and
3. discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Actuarial Cost Method is a procedure for determining the Present Value of plan benefits and expenses and for developing an actuarially equivalent allocation of such value to time periods, usually in the form of a Normal Cost and an Actuarial Liability. The Actuarial Cost Method is the method used to determine required contributions under the Plan. The use of this method involves the systematic funding of the Normal Cost (described below) and the Unfunded Accrued (Past Service) Liability.

Total Annual Payroll is the annual rate of pay for the fiscal year prior to the valuation date of all covered members.

Present Value of Benefits is the single sum value on the valuation date of all future benefits to be paid to current Members, Retirees, Beneficiaries, Disability Retirees and Vested Terminations.

Normal (Current Year's) Cost is the portion of the Actuarial Present Value of plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.

Actuarial Accrued Liability is the portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of plan benefits and expenses which is not provided for by future Normal Costs.

Unfunded Actuarial Accrued Liability (UAAL) is a liability which arises when a plan is initially established or improved and such establishment or improvement is applicable to all years of past service. Under the Entry Age Normal Actuarial Cost Method, there is also a new UAAL created each year equal to the actuarial gain or loss for that year.

Annual Required Contribution (ARC) represents the level of employer contribution effort that would be required on a sustained, ongoing basis to:

1. fund the Normal Cost (cost associated with new services received) each year and
2. amortize the total unfunded actuarial liabilities (or funding excess) attributed to past services over a maximum of thirty years.

The ARC is used for accrual accounting purposes, not for funding purposes. It is a basis for the allocation of the employer's projected cost of providing Other Post Employment Benefits (OPEB) over periods that approximate the periods in which the employer receives services from the covered employees. Accordingly, the ARC is used as the foundation on which the measurement of the employer's Annual OPEB Cost is based.

Annual OPEB Cost is equal to the ARC with two required adjustments that, together, are designed to keep accounting and actuarial valuations in sync going forward when an employer has contributed less or more than the ARC in past years. For an employer with no Net OPEB Obligation, the Annual OPEB Cost is equal to the ARC.

Net OPEB Obligation (or asset) is a liability (or asset) recognized in an employer's government-wide statement of net assets, and in the financial statements of proprietary or fiduciary funds, that is essentially the cumulative difference between the Annual OPEB Cost determined in accordance with the requirements of Statement 45 and the amounts actually contributed in relation to the ARC.

SECTION 2 - NOTES TO THE FINANCIAL STATEMENTS

This actuarial valuation involves estimates of the value of reported amounts and assumptions about the probability of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to constant revision as actual experience is compared with past expectations and new estimates are made about the future. The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, presents multi-year trend information that shows whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial liabilities for benefits.

Calculations are based upon the types of benefits provided under the terms of the substantive plan at the time of the valuation and on the pattern of sharing of costs between the employer and plan members to that point. Calculations reflect a long-term prospective, so methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets.

For the Actuarial Valuation, the Entry Age actuarial cost method (level percentage of pay) was used. Select Actuarial Assumptions are listed in the table below:

Valuation Interest Rate 6.50%

Health Care Inflation 8.0% in Fiscal 2018, decreasing 0.75% each year to Fiscal 2022, then decreasing 0.5% to the ultimate rate of 4.5% in Fiscal 2023. Rates below:

Fiscal Year	Rate
2018	8.00%
2019	7.25%
2020	6.50%
2021	5.75%
2022	5.00%
2023+	4.50%

Payroll Growth Assumption 3.60% per year.

Inflation Assumption 3.00% per year

Salary Scale Assumption Varies by years of service. See Section 8 for more details.

Amortization of UAAL Level Percentage of Payroll (Open Amortization over 30 Years)

Employee and District Contribution Information

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 coverage. All full-time employees of the District are eligible to receive postemployment health care benefits. Lifetime coverage for retirees and their spouses and dependents is provided. 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 July 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 or each year until the contribution rate reaches 50.0%, projected to be in 2021. The contribution rate for 2018 will be 42.5%.

Effective September 1, 2016, any Medicare-eligible retiree will be covered under the fully-insured Medicare Advantage Prescription Drug Program (MAPD). These Medicare eligible retirees will pay the portion of the MAPD premium based on the contribution rate percentages described above, however, there will no longer be an implicit subsidy valued for this group.

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

SECTION 2 – NOTES TO FINANCIAL STATEMENTS

Valuation Date	12/31/2015	12/31/2017
Applicable for Fiscal Year Ending	12/31/2016	12/31/2017
Annual Required Contribution	$ 12,472,000	$ 11,506,823
Interest on Net OPEB Obligation	2,053,000	1,169,545
Adjustment to Annual Required Contribution	(1,616,000)	(926,522)
Annual OPEB Cost/(Expense)	$ 12,909,000	$ 11,749,846
Net Retiree Benefit Payments	$ (14,917,000)	$ (13,430,657)
Employer Additional Cash Contribution	(5,000,000)	(5,000,000)
Estimated Net Contributions Made	(19,917,000)	(18,430,657)
Anticipated Increase/(Decrease) in Net OPEB Obligation	$ (7,008,000)	$ (6,680,811)
Net OPEB Obligation - Beginning of Year	25,001,000	17,993,000
Final Net OPEB Obligation - End of Year	$ 17,993,000	$ 11,312,189

Funded Status as of Valuation Date:	**12/31/2015**	**12/31/2017**
Actuarial Accrued Liability (AAL)	$ 286,646,272	$ 308,747,257
Actuarial Value of Assets (AVA)	149,328,924	195,199,800
Unfunded Actuarial Accrued Liability (UAAL)	$ 137,317,348	$ 113,547,457
Funded Ratio	52.1%	63.2%
Covered Payroll	$ 176,756,776	$ 184,807,353
Ratio of UAAL to Covered Payroll	77.7%	61.4%

Prior Results are from the District's fiscal year 2016 year end financial statements

Notes (continued)

Schedule of Employer Contributions

Year Ending	Annual Req. Contribution	Actual Contributions	Percentage Contributed
12/31/2017	11,506,823	18,430,657	160%
12/31/2016	12,472,000	19,916,860	160%
12/31/2015	12,472,000	18,316,713	147%
12/31/2014	13,212,000	33,716,523	255%
12/31/2013	13,212,000	33,835,000	256%
12/31/2012	27,264,000	35,426,000	130%
12/31/2011	27,264,000	18,020,000	66%
12/31/2010	39,847,000	15,517,000	39%
12/31/2009	39,847,000	14,592,000	37%
12/31/2008	44,739,000	35,819,000	80%
12/31/2007	44,739,000	37,334,000	83%

Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
12/31/2017	195,199,800	308,747,257	113,547,457	63.2%	184,807,353	61.4%
12/31/2016	164,844,450	298,858,319	134,013,869	55.2%	183,120,020	73.2%
12/31/2015	149,328,924	286,646,272	137,317,348	52.1%	176,756,776	77.7%
12/31/2014	146,374,627	269,970,348	123,595,721	54.2%	169,909,000	72.7%
12/31/2013	120,883,000	260,364,000	139,481,000	46.4%	164,005,000	85.0%
12/31/2012	86,102,000	408,049,000	321,947,000	21.1%	158,995,000	202.5%
12/31/2011	54,996,000	394,676,000	339,680,000	13.9%	162,853,000	208.6%
12/31/2010	52,153,000	555,679,000	503,526,000	9.4%	172,273,000	292.3%
12/31/2009	47,891,000	526,476,000	478,585,000	9.1%	170,392,000	280.9%
12/31/2008	47,797,000	487,820,000	440,023,000	9.8%	167,865,000	262.1%
12/31/2007	25,025,000	442,683,000	417,658,000	5.7%	158,832,000	263.0%

SECTION 3 - DEVELOPMENT OF ANNUAL OPEB EXPENSE

Valuation Date		12/31/2017
Applicable for Fiscal Year Ending		12/31/2017
Unfunded Actuarial Accrued Liability		
Actuarial Accrued Liability	$	308,747,257
Actuarial Value of Assets		195,199,800
Unfunded Actuarial Accrued Liability	$	113,547,457
Amortization Amount		
Amortization Period		30
Amortization Method		Open
Discount Rate		6.50%
Payroll Growth Rate		3.60%
Total Amortization Amount	$	5,490,097
Development of Annual Required Contribution (ARC)		
Normal Cost at Beginning of Fiscal Year	$	5,314,432
Interest on Normal Cost		345,438
Normal Cost Component	$	5,659,870
Amortization Amount at Beginning of Fiscal Year	$	5,490,097
Amortization Interest		356,856
Amortization Component	$	5,846,953
Annual Required Contribution	$	11,506,823
As of Percent of Covered Payroll		6.2%
Development of Annual OPEB Cost		
Annual Required Contribution	$	11,506,823
Net OPEB Obligation, Beginning of Year	$	17,993,000
Discount Rate		6.50%
Interest on Net OPEB Obligation	$	1,169,545
Adjustment to Annual Required Contribution	$	(926,522)
Annual OPEB Cost	$	11,749,846

SECTION 4 - RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY

(1)	Expected Unfunded Actuarial Accrued Liability as of December 31, 2016	$134,013,869
(2)	Expected Normal Cost developed as of December 31, 2016	4,848,493
(3)	Expected Administrative Expenses for Fiscal 2017	0
(4)	Interest on (1) and (2) and (3)	9,391,423
(5)	Actual Sponsor Contributions to the System during the period of December 31, 2016 through December 31, 2017	18,430,657
(6)	Interest on (5)	611,878
(7)	Expected Unfunded Accrued Liability as of December 31, 2017 (1)+(2)+(3)+(4)-(5)-(6)	$129,211,250
(8)	Unfunded Accrued Liability as of December 31, 2017	113,547,457
(9)	Change to UAAL due to Actuarial (Gain)/Loss (8)-(7)	($15,663,793)

SECTION 4 – Reconciliation of Unfunded Actuarial Accrued Liability

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

1.	Changes in Census Data	$	(10,629,906)
2.	Impact of MAPD Plan Change		(10,075,053)
3.	Claims Costs and Premiums lower than expected		(5,587,659)
4.	Updated Trend Rate assumption		15,434,274
5.	Discount Rate lowered from 6.75% to 6.50%		9,275,119
6.	Investment Return (greater)/lower than expected		(14,080,568)
	Total Change in UAAL	$	(15,663,793)

1. The census data reflects changes in the census information the twenty-four month (24) period since December 31, 2015. The decrease in UAAL over expected can be attributed to a small decrease in the non-vested inactive population. Additionally, while the active population headcounts stayed relatively the same, there were approximately 220 new hires during the 24-month period "replacing" those who left due to retirement, termination, etc. As a result, the average service decreased over expected, which also translates to a lower liability.

2. The MAPD plan change reduced costs for the District both explicitly and implicitly. The subsidized Medicare premium is now about 18% lower than 2 years ago. Also, the new Medicare plan does not generate an implicit rate subsidy. For current and future post-65 members electing Medicare part B, there is no implicit rate subsidy.

3. Medical claims and premiums were lower than expected across the board. Lower than expected claims decreases the net implict subsidy, but lower premiums increases the subsidy. The majority of this gain, however, is due to the lower explicit subsidy since both the district and the retiree have to pay less in premiums than we would have expected.

4. The update to the trend rate assumption did not change the trending schedule per se. Instead, the trend schedule reflects a shift of the entire schedule back two years, such that the initial year fiscal year 2018 trend is 8%. Had the prior schedule continued, the initial trend would have been 6.0%. The ultimate rate remains 4.5%.

5. The discount rate has been lowered from 6.75% to 6.5%, as directed by the District.

SECTION 5 – TRUST FUND

Metropolitan Water Reclamation District

	Fiscal Year Ending	**12/31/2017**	**12/31/2016**	**12/31/2015**
(1)	Asset Balance as of January 1	$ 164,844,450	$ 149,328,924	$ 146,374,627
(2)	Contributions During the Year [1]			
	Employer	$ 18,430,657	$ 19,916,860	$ 18,316,713
	Retirees	-	-	-
	Medicare Part D Susidies	-	-	-
	Total	$ 18,430,657	$ 19,916,860	$ 18,316,713
(3)	Payments During the Year			
	Retiree Healthcare Benefits	$ 13,430,657	$ 14,916,860	$ 13,316,713
	Administrative Expenses	36,900	32,254	35,674
	Total	$ 13,467,557	$ 14,949,114	$ 13,352,387
(4)	Investment Return			
	Asset Earnings	$ 25,434,000	$ 10,589,780	$ (1,968,029)
	Investment Expenses	(41,750)	(42,000)	(42,000)
	Total	$ 25,392,250	$ 10,547,780	$ (2,010,029)
(5)	Asset Balance as of December 31	$ 195,199,800	$ 164,844,450	$ 149,328,924
(6)	Rate of Investment Return (net of administrative expenses)	15.1%	6.9%	-1.4%

[1] Employer contributions include an amount to fully offset 100% of the employer's portion of the benefit payments (i.e. Total Contributions less Retiree Healthcare Benefits equals the advance funding policy contribution amount for the fiscal year).

SECTION 6 - PER CAPITA CLAIMS COSTS AND CONTRIBUTION AMOUNTS

2018 Per Capita Annual Claims Costs Per Participant

	PPO Plans		HMO Plans	
Age	Enrolled in Medicare	Not Enrolled in Medicare	Enrolled in Medicare	Not Enrolled in Medicare
40	$ 6,988	$ 6,988	$ 5,107	$ 5,107
45	8,502	8,502	6,213	6,213
50	10,345	10,345	7,558	7,558
55	12,586	12,586	9,195	9,195
60	15,313	15,313	11,188	11,188
65	-	18,631	-	13,611
70	-	21,599	-	15,780
75	-	25,038	-	18,293
80	-	27,644	-	20,197
85+	-	30,521	-	22,299

2018 Annual Premium Amounts Per Participant (Retiree Portion) [1]

	PPO Plans		HMO Plans	
	Enrolled in Medicare	Not Enrolled in Medicare	Enrolled in Medicare	Not Enrolled in Medicare
Retiree				
Pre-65	$ 5,314	$ 5,314	$ 3,484	$ 3,484
Post-65	1,556	5,314	1,556	3,484
Spouse				
Pre-65	$ 5,314	$ 5,314	$ 3,038	$ 3,038
Post-65	1,556	5,314	1,556	3,038

[1] The contributions shown above reflect the increase in the retiree contribution percentage from 2011 (at 25%) to 2018 (42.5%) at 2.5% per year.

SECTION 7 - MEMBER STATISTICS

SUMMARY OF MEMBERSHIP DATA

	As of 12/31/2017	As of 12/31/2015
Number of Active Participants		
Eligible for Retiree Health Benefits	590	555
Not Yet Eligible for Retiree Health Benefits	1,245	1,281
Total	1,835	1,836
Average Current Age of Actives	50.0	50.2
Average Age at Employment	36.3	36.1
Average Past Service	13.7	14.2
Covered Payroll	$ 184,807,353	$ 176,756,776
Average Salary	100,712	96,273
Number of Inactives Enrolled in Health Care		
Retirees	1,505	1,504
Survivors	438	458
Dependent Spouses	854	813
Total	2,797	2,775
Average Current Age of Inactives	72.7	72.8
Number of Terminated Vested	41	41
Average Current Age of Terminated Vesteds	51.4	51.6

SCHEDULE OF ACTIVE MEMBER VALUATION DATA

AGE AND SERVICE DISTRIBUTION

TOTAL
PAST SERVICE

AGE	0	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
20 - 24	0	8	0	0	0	0	0	0	0	0	8
25 - 29	9	39	6	1	0	0	0	0	0	0	55
30 - 34	11	66	32	14	0	0	0	0	0	0	123
35 - 39	9	55	37	63	12	0	0	0	0	0	176
40 - 44	5	51	40	62	34	11	0	0	0	0	203
45 - 49	5	50	35	52	68	49	20	2	0	0	281
50 - 54	7	42	38	52	55	44	74	11	0	0	323
55 - 59	6	35	26	68	53	47	81	28	1	0	345
60 - 64	3	19	25	36	52	28	42	9	2	1	217
65+	0	4	4	19	30	18	17	8	2	2	104
Total	55	369	243	367	304	197	234	58	5	3	1,835

SCHEDULE OF RETIREES AND BENEFICIARIES ADDED TO/FROM ROLLS

Fiscal Year	Beginning of Year Balance	Number Added to Rolls	Number Removed from Rolls	End of Year Balance	Health Care Annual Benefit Amounts	Average Annual Benefit	% Change in Average 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%

BREAKDOWN OF BENEFIT PLAN ENROLLMENT

(RETIREES, BENEFICIARIES, COVERED SPOUSES AND TERMINATED VESTED)

Enrollee Group	PPO	HMO	Total
Benefit Recipient	1,567	417	1,984
Spouse	641	213	854
Grand Total	2,208	630	2,838

[1] Prior rolls adjusted to include vested terminated members excluded in the previous valuation.

SECTION 8 - ACTUARIAL ASSUMPTIONS AND FUNDING METHODS

Actuarial Assumptions

Valuation/Measurement Date	December 31, 2017.
Fiscal Year End	December 31.
Actuarial Value of Assets	Market Value.
Mortality Rate	RP-2000 Combined Healthy Mortality Table with Generational Mortality Improvements (Scale AA).
Interest Rate	6.50% per year, compounded annually, net of investment related expenses.
Retirement Rates	See table below:

Age	Retirement Rate
50 – 59	6%
60 – 64	13%
65	15%
66 – 67	19%
68 – 69	20%
70 – 74	25%
75	100%

Retirement – Vested Participant	Assumed to retire at first eligibility for commencement of pension benefits.
Salary Increase	See table below.

Service	Salary Increase Rate
0	7.00%
1	6.25%
2	5.75%
3	5.50%
4	5.25%
5	5.00%
6	4.75%
7	4.50%
8	4.50%
9+	4.25%

Actuarial Assumptions (Continued)

Payroll Growth	3.60% per year.
Inflation	3.00% per year.
Administrative Expenses	No additional expenses added to Normal Cost.
Marital Status	100% assumed married, with male spouses 3 years older than female spouses.
Health Care Participation	90% participation assumed, with 76% electing spouse coverage. Future retirees are assumed to elect medical plans in the same proportion as the 2017 elections for current enrollees. The current enrollments are 36.6% with HMO and 63.4% 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	8.0% in Fiscal 2018, decreasing 0.75% each year to Fiscal 2022, then decreasing 0.5% to the ultimate rate of 4.5% in Fiscal 2023. Rates below:

Fiscal Year	Rate
2018	8.00%
2019	7.25%
2020	6.50%
2021	5.75%
2022	5.00%
2023+	4.50%

Actuarial Assumptions (Continued)

Termination Rates

See table below:

Service	Male Rate	Female Rate
0	4.000%	5.733%
1	3.480%	4.973%
2	3.089%	5.064%
3	2.604%	4.759%
4	2.245%	4.518%
5	1.780%	4.490%
6	1.561%	4.193%
7	1.500%	3.945%
8	1.500%	3.646%
9	1.500%	2.342%
10	1.502%	2.054%
11	1.391%	1.946%
12	1.343%	1.898%
13	1.244%	1.859%
14	1.189%	1.772%
15	1.111%	1.772%
16	0.985%	1.772%
17+	0.500%	1.772%

Disability Rates

None assumed.

Medical Aging Factors

4% per year prior to age 65;
3% per year between ages 65 and 75;
2% per year between ages 75 and 85;
0% per year thereafter.

Health Claims
(Medicare and Non-Medicare)

Developed using a 50/50 blend of i) the 2017 medical and prescription claims and enrollment experience; and ii) 2018 age-adjusted premium rates.

Funding Method

Entry Age Cost Method (level percentage of pay)

SECTION 8 - Actuarial Assumptions and Funding Methods

DISCUSSION OF CENSUS DATA AND ASSUMPTIONS`

1. Census Data – We received December 31, 2017 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 years 2015, 2016 and 2017.

3. Actuarial Assumptions and Methods –
   a. Demographic Assumptions
      i. 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 and termination rates are the same as the prior valuation, matching those used by the pension plan. They are deemed reasonable and will continue to be monitored to ensure they capture plan experience.
      iii. The participation rate and spousal coverage election percentage are the same as the previous valuation. They are deemed reasonable and will continue to be monitored.
   b. Other Assumptions
      i. The trend rate schedule has been updated. The initial health care inflation rate is the 8.0%. The ultimate rate is still 4.5%, but has been delayed until 2023. These rates are based on recent healthcare trend rate surveys.
      ii. The interest rate (i.e. investment return) was decreased from 6.75% to 6.50% at the request of the District and Board personnel. Since the plan is funded, this assumption represents the expected return on the assets in the trust, as permitted under GASB 45.

c. Funding Method -The valuation results were calculated using the Entry Age cost method (level percentage of pay). This method is one of six permitted methods under the current GASB 45/45 standards.

d. Excise Tax – The effect of any potential impact due to the 40% excise tax on high cost plans has been ignored for this valuation due to the significant uncertainty surrounding the application of the requirements under the Patient Protection and Affordable Care Act signed into law on March 23, 2010.

e. Amortization Methodology – The payroll growth assumption remains unchanged at 3.60%. The unfunded actuarial accrued liability is amortized on an open 30-year (level percentage of payroll) amortization basis, which is permitted under the current GASB 45 standard. The maximum amortization period allowed by GASB is 30 years.

SECTION 9 - SUMMARY OF PLAN PROVISIONS

<u>Credited Service</u>	Total completed years of employment with the District.
<u>Eligibility for Insurance Coverage</u>	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 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
<u>Health Care Insurance</u>	Retirees and their dependents who meet the age and service requirements above are eligible for medical and prescription drug benefits payable for life.
<u>Health Contributions</u>	
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 1st or each year until the contribution rate reaches 50.0%, projected to be in 2021. The contribution rate for 2018 is 42.5%.
District	Remaining amount necessary for payment of claims.

APPENDIX 1 – GASB 74 DISCLOSURES FOR PLAN YEAR 2017

STATEMENT OF FIDUCIARY NET POSITION
December 31, 2017

<u>ASSETS</u>	MARKET VALUE
Cash and Short-Term Investments	0
Receivables:	
Accrued Interest	72,707
Total Receivable	72,707
Investments:	
Fixed Income Mutual Funds	62,804,603
Equity Mutual Funds	97,893,327
Balanced Mutual Funds	17,449,113
Money Market Funds	16,993,800
Total Investments	195,140,843
Total Assets	195,213,550
<u>LIABILITIES</u>	
Payables:	
Deposit Payable	13,750
Total Liabilities	13,750
NET POSITION RESTRICTED FOR POSTEMPLOYMENT BENEFITS OTHER THAN PENSIONS	195,199,800

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2017
Market Value Basis

ADDITIONS		
Contributions:		
Employer Contributions	18,430,657	
Total Contributions		18,430,657
Investment Income:		
Net Increase in Fair Value of Investments	21,208,737	
Interest & Dividends	4,225,263	
Less Investment Expense[1]	(41,750)	
Net Investment Income		25,392,250
Total Additions		43,822,907
DEDUCTIONS		
Distributions to Members:		
Health Insurance Benefits	13,430,657	
Total Distributions		13,430,657
Administrative Expense		36,900
Total Deductions		13,467,557
Net Increase in Net Position		30,355,350
NET POSITION RESTRICTED FOR POSTEMPLOYMENT BENEFITS OTHER THAN PENSIONS		
Beginning of the Year		164,844,450
End of the Year		195,199,800

NOTES TO THE FINANCIAL STATEMENTS
(For the Year Ended December 31, 2017)

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, 2017, the following employees were covered by the benefit terms:

Inactive Plan Members Currently Receiving Benefits	1505
Beneficiaries of Deceased Plan Members Currently Receiving Benefits	438
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	41
Active Plan Members	1835
	3819

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. All full-time employees of the District are eligible to receive postemployment benefits. Coverage for retirees and their spouse and dependents is provided for life. The Trust was established to advance fund benefits provided under the Plan.

Eligibility for Insurance Coverage:

Employees must have at least ten years of service with the District, and coverage does not commence until the member starts receiving payments from the District's Retirement Fund. Eligibility is based on the employee's hire date as follows: age 50 for those hired before June 13, 1997, age 55 for those hired between June 13, 1997 and January 1, 2011 and age 63 for those hired after January 1, 2011.

Health Care Insurance:

Retirees and their dependents 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 coverage. All full-time employees of the District are eligible to receive postemployment health care benefits. Lifetime coverage for retirees and their spouses and dependents is provided. 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 July 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 or each year until the contribution rate reaches 50.0%, projected to be in 2021. The contribution rate for 2018 will be 42.5%.

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

Investment Policy:

The following was the Board's adopted asset allocation policy as of December 31, 2017.

Asset Class	Target Allocation
Broad Fixed Income	22.50%
Core Plus Fixed Income	17.50%
Large-Cap Core Equity	9.00%
Large-Cap Value Equity	9.00%
Large-Cap Growth Equity	9.00%
Mid-Cap Core Equity	4.00%
Small-Cap Core Equity	4.00%
Non-US Large-Cap Core Equity	15.00%
Global Tactical Asset Allocation	10.00%
Total	100.00%

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, 2017 the annual money-weighted rate of return on investments, net of investment expense, was 15.06 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 SPONSOR

The measurement date for GASB 74 reporting is December 31, 2017.
The reporting period is January 1, 2016 through December 31, 2017.

The Sponsor's Net OPEB Liability was measured as of December 31, 2017.
The Total OPEB Liability used to calculate the Net OPEB Liability was determined as of that date.

Note - The Total OPEB Liability was "rolled-back" from December 31, 2017 at 6.50%, thus producing no experience or assumption gain or loss for the period ending December 31, 2017.

The components of the Net OPEB Liability of the Sponsor on December 31, 2017 were as follows:

Total OPEB Liability	$ 308,747,257
Plan Fiduciary Net Position	(195,199,800)
Sponsor's Net OPEB Liability	$ 113,547,457
Plan Fiduciary Net Position as a percentage of the Total OPEB Liability	63.22%

Actuarial Assumptions:

The Total OPEB Liability was determined by an actuarial valuation as of December 31, 2017 using the following actuarial assumptions:

Inflation	3.00%
Salary Increases	See Section 8
Discount Rate	6.50%
Investment Rate of Return	6.50%
Healthcare cost trend rates	4.50% - 8.00%

For all employees, mortality rates were based on the RP-200 combined health mortality tables with fully generational mortality improvements using scale AA.

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, 2017 are summarized in the following table:

Asset Class	Target Allocation	Long Term Expected Real Rate of Return
Broad Fixed Income	22.50%	1.10%
Core Plus Fixed Income	17.50%	1.50%
Large-Cap Core Equity	9.00%	5.30%
Large-Cap Value Equity	9.00%	5.30%
Large-Cap Growth Equity	9.00%	5.20%
Mid-Cap Core Equity	4.00%	5.70%
Small-Cap Core Equity	4.00%	6.20%
Non-US Large-Cap Core Equity	15.00%	5.40%
Global Tactical Asset Allocation	10.00%	2.50%
Total	100.00%	

The Long-Term Expected Rate of Return calculated using the method described above was 6.5% (assuming 3% inflation).

Discount Rate:

The projection of cash flows used to determine the Discount Rate assumed that current Plan Member and Sponsor 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 Sponsor 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 sponsor 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%.

Sensitivity of the Net OPEB Liability to changes in the Discount Rate as of December 31, 2017:

The following presents the Net OPEB Liability of the Sponsor, as well as what the Sponsor'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:

	1% Decrease 5.50%	Current Discount Rate 6.50%	1% Increase 7.50%
Net OPEB Liability (asset)	$ 156,326,537	$ 113,547,457	$ 79,182,282

Sensitivity of the Net OPEB Liability to changes in the Healthcare Cost Trend Rates as of December 31, 2017:

The following presents the Net OPEB Liability of the Sponsor, as well as what the Sponsor'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:

	1% Decrease 3.50% - 7.00%	Healthcare Cost Trend Rates 4.50% - 8.00%	1% Increase 5.50% - 9.00%
Net OPEB Liability (asset)	$ 74,829,194	$ 113,547,457	$ 161,870,445

SCHEDULE OF CHANGES IN THE SPONSOR'S NET OPEB LIABILITY AND RELATED RATIOS
Last 10 Fiscal Years

	12/31/2017
Total OPEB Liability	
Service Cost	5,097,776
Interest	19,260,038
Changes of benefit terms	-
Differences between Expected and Actual Experience	-
Changes of assumptions	-
Benefit Payments	(13,430,657)
Net Change in Total OPEB Liability	10,927,157
Total OPEB Liability - Beginning	297,820,100
Total OPEB Liability - Ending (a)	$ 308,747,257
Plan Fiduciary Net Position	
Employer Trust Contribution	5,000,000
Pay-as-you-go Contributions	13,430,657
Net Investment Income	25,392,250
Benefit Payments	(13,430,657)
Administrative Expense	(36,900)
Net Change in Plan Fiduciary Net Position	30,355,350
Plan Fiduciary Net Position - Beginning	164,844,450
Plan Fiduciary Net Position - Ending (b)	$ 195,199,800
Sponsor's Net OPEB Liability - Ending (a) - (b)	$ 113,547,457
Plan Fiduciary Net Position as a percentage of the Total OPEB Liability	63.22%
Covered Employee Payroll	$ 184,807,353
Sponsor's Net OPEB Liability as a percentage of Covered Employee Payroll	61.44%

SCHEDULE OF SPONSOR CONTRIBUTIONS
Last 10 Fiscal Years

	12/31/2017	12/31/2016	12/31/2015	12/31/2014	12/31/2013	12/31/2012	12/31/2011	12/31/2010	12/31/2009	12/31/2008
Actuarially Determined Contribution	$ 11,506,823	$ 12,471,893	$ 12,471,893	$ 13,211,937	$ 13,211,937	$ 27,263,684	$ 27,263,684	$ 39,847,021	$ 39,847,021	$ 44,739,006
Contributions in relation to the Actuarially Determined Contributions*	18,430,657	19,916,860	18,316,713	33,716,523	33,834,831	35,426,215	18,020,374	15,516,965	14,591,543	35,819,281
Contribution Deficiency (Excess)	$ (6,923,834)	$ (7,444,967)	$ (5,844,820)	$ (20,504,586)	$ (20,622,894)	$ (8,162,531)	$ 9,243,310	$ 24,330,056	$ 25,255,478	$ 8,919,725
Covered Employee Payroll	$ 184,807,353	$ 183,120,020	$ 176,756,776	$ 169,909,275	$ 164,005,092	$ 158,995,000	$ 162,853,163	$ 172,273,000	$ 170,392,445	$ 167,865,000
Contributions as a percentage of Covered Employee Payroll	9.97%	10.88%	10.36%	19.84%	20.63%	22.28%	11.07%	9.01%	8.56%	21.34%

** Includes Pay-As-You-Go Benefit amounts plus the cash contributions to the trust*

Notes to Schedule

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

Methods and assumptions used to determine contribution rates are the same as those found in Section 8 of this reort.

APPENDIX 2 – GASB 74 CROSSOVER TEST

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

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

Based on the December 31, 2017 Measurement Date. 6.50% Asset Return

Year	Projected Beginning Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expense	Projected Investment Earnings	Projected Ending Fiduciary Net Position
2018	195,199,800	18,987,558	13,987,558	38,007	12,849,252	213,011,045
2019	213,011,045	20,027,641	15,027,641	38,069	14,006,981	231,979,956
2020	231,979,956	21,024,568	16,024,568	38,136	15,239,958	252,181,778
2021	252,181,778	22,354,894	17,354,894	38,172	16,553,075	273,696,681
2022	273,696,681	23,606,016	18,606,016	38,186	17,951,543	296,610,038
2023	296,610,038	24,895,099	19,895,099	38,195	19,440,911	321,012,753
2024	321,012,753	26,045,971	21,045,971	38,171	21,027,088	347,001,671
2025	347,001,671	27,190,109	22,190,109	38,141	22,716,369	374,679,899
2026	374,679,899	28,254,571	23,254,571	38,075	24,515,456	404,157,280
2027	404,157,280	4,194,534	24,289,951	37,981	25,615,888	409,639,769
2028	409,639,769	3,992,619	25,357,644	37,870	25,930,991	414,167,865
2029	414,167,865	3,792,713	26,382,185	37,696	26,185,528	417,726,226
2030	417,726,226	3,605,145	27,204,483	37,488	26,384,008	420,473,408
2031	420,473,408	3,416,159	28,170,172	37,246	26,525,056	422,207,205
2032	422,207,205	3,231,889	29,040,584	36,956	26,603,485	422,965,038
2033	422,965,038	3,052,392	29,735,112	36,602	26,624,349	422,870,064
2034	422,870,064	2,878,200	30,639,335	36,221	26,583,140	421,655,848
2035	421,655,848	2,708,479	31,306,980	35,797	26,477,015	419,498,566
2036	419,498,566	2,546,415	31,915,421	35,329	26,311,766	416,405,997
2037	416,405,997	2,382,432	32,621,244	34,816	26,082,497	412,214,865
2038	412,214,865	2,227,177	32,921,076	34,255	25,795,301	407,282,012
2039	407,282,012	2,078,355	33,369,118	33,660	25,455,287	401,412,876
2040	401,412,876	1,930,498	33,535,718	33,030	25,063,594	394,838,220
2041	394,838,220	1,789,160	33,367,701	32,381	24,637,129	387,864,427
2042	387,864,427	1,649,507	33,443,070	31,681	24,176,867	380,216,050
2043	380,216,050	1,511,421	33,046,460	30,962	23,688,148	372,338,198
2044	372,338,198	1,384,554	32,525,810	30,224	23,188,910	364,355,627
2045	364,355,627	1,262,259	31,841,004	29,489	22,688,348	356,435,741
2046	356,435,741	1,142,040	30,921,995	28,701	22,199,542	348,826,627
2047	348,826,627	1,028,339	29,904,597	27,917	21,734,345	341,656,797
2048	341,656,797	920,952	28,769,162	27,101	21,301,744	335,083,229
2049	335,083,229	822,771	27,721,737	26,294	20,905,339	329,063,308
2050	329,063,308	725,660	26,395,085	25,457	20,554,031	323,922,458
2051	323,922,458	634,486	25,169,062	24,612	20,256,786	319,620,055
2052	319,620,055	549,669	24,029,788	23,739	20,011,428	316,127,626
2053	316,127,626	464,957	22,750,469	22,932	19,823,271	313,642,452

APPENDIX 2– GASB 74 Crossover Test

Year	Projected Beginning Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expense	Projected Investment Earnings	Projected Ending Fiduciary Net Position
2054	313,642,452	390,295	21,301,223	22,079	19,706,437	312,415,882
2055	312,415,882	322,406	20,040,480	21,204	19,665,506	312,342,110
2056	312,342,110	265,657	18,921,934	20,410	19,695,245	313,360,669
2057	313,360,669	214,541	17,790,470	19,548	19,796,590	315,561,781
2058	315,561,781	171,501	16,780,234	18,726	19,971,123	318,905,446
2059	318,905,446	137,758	15,862,622	17,892	20,217,214	323,379,904
2060	323,379,904	106,293	15,041,988	17,077	20,533,729	328,960,860
2061	328,960,860	81,054	14,254,665	16,287	20,921,284	335,692,246
2062	335,692,246	61,943	13,514,363	15,494	21,382,289	343,606,620
2063	343,606,620	48,538	12,805,957	14,734	21,919,335	352,753,803
2064	352,753,803	35,077	12,175,868	13,979	22,533,967	363,133,000
2065	363,133,000	26,696	11,622,608	13,232	23,226,348	374,750,204
2066	374,750,204	21,387	11,111,150	12,496	23,997,940	387,645,886