METROPOLITAN WATER RECLAMATION DISTRICT OF CHICAGO
OTHER POSTEMPLOYMENT BENEFITS PROGRAM

ACTUARIAL VALUATION
AS OF DECEMBER 31, 2015

CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR ENDING
DECEMBER 31, 2015

FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

May 3, 2016

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, 2015 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, 2015. The purpose of this report is to present the December 31, 2015 actuarial valuation results for the Plan. The results are applicable for MWRD's fiscal year ending December 31, 2015. 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. 43.

Actuarial calculations under GASB 43 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 43.

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 43 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 43.

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 Section of the MWRD CAFR. These schedules include:

- Supplements to the Notes to the Financial Statements:
    - Annual OPEB Cost and Net OPEB Obligation
    - Funding Status and Progress
    - Schedule of Employer Contributions
- 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 2015 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 of 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, ASA, MAAA

Enclosures

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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, 2015, 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, 2015.

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

Valuation Date	**12/31/2015**
Applicable for Fiscal Year Ending	**12/31/2015**
Annual Required Contribution	$ 12,471,893
As a Percent of Covered Payroll	7.1%
Interest on Net OPEB Obligation	$ 2,052,608
Adjustment to Annual Required Contribution	(1,615,731)
Annual OPEB Cost (Expense)	$ 12,908,770
Net Retiree Benefit Payments	$ (13,316,713)
Employer Additional Cash Contribution	(5,000,000)
Actual Net Contributions Made	$ (18,316,713)
Increase (Decrease) in Net OPEB Obligation	$ (5,407,943)
Net OPEB Obligation - Beginning of Year (as reported)	$ 30,409,000
Adjustment to Net OPEB Obligation - Beg. of Year	-
Estimated Net OPEB Obligation – End of Year	$ 25,001,057

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 Trustees 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 twelve years 2015 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, 2013.
- 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 2016.
- The trend rate assumption has been updated.
- The retirement and termination rates have been updated to bring them in line with the assumptions used for the pension plan.
- The active plan election assumptions have been updated to reflect the current enrollments in each of the PPO and HMO plans.
- The investment return assumption has been lowered from 7.00% to 6.75%.
- The funding method has been changed from Projected Unit Credit to Entry Age Normal (level percentage of pay). A salary scale has been added to mirror the pension plan rates.
- The eligibility requirements for retirement have been updated to bring them in line with the pension plan requirements.
- A termination benefit was added for actives who have earned 10 years of service, but are not eligible to immediately retire. Additionally, 41 “terminated vested” participants were identified as having terminated prior to the valuation date, with 10 years of service.

SECTION 1 –Introduction

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

Respectfully submitted,

FOSTER & FOSTER, INC.

By:________________________________
Jason L. Franken, FSA, MAAA

By:________________________________
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 43 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	6.75%
Health Care Inflation	
Pre-Medicare	8.0% in Fiscal 2016, decreasing 0.75% each year to Fiscal 2020, then decreasing 0.5% to the ultimate rate of 4.5% in Fiscal 2021.
Post-Medicare	8.0% in Fiscal 2016, decreasing 0.75% each year to Fiscal 2020, then decreasing 0.5% to the ultimate rate of 4.5% in Fiscal 2021.
Payroll Growth Assumption	3.60% per year.
Inflation Assumption	3.00% per year
Salary Scale Assumption	Varies by years of service.
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 2016 will be 37.5%.

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
Applicable for Fiscal Year Ending	12/31/2015
Annual Required Contribution	$ 12,471,893
Interest on Net OPEB Obligation	2,052,608
Adjustment to Annual Required Contribution	(1,615,731)
Annual OPEB Cost/(Expense)	$ 12,908,770
Net Retiree Benefit Payments	$ (13,316,713)
Employer Additional Cash Contribution	(5,000,000)
Estimated Net Contributions Made	(18,316,713)
Anticipated Increase/(Decrease) in Net OPEB Obligation	$ (5,407,943)
Net OPEB Obligation - Beginning of Year	30,409,000
Adjustment to NOO - Beginning of Year	0
Final Net OPEB Obligation - End of Year	$ 25,001,057
Funded Status as of Valuation Date:	**12/31/2015**
Actuarial Accrued Liability (AAL)	$ 286,646,272
Actuarial Value of Assets (AVA)	149,328,924
Unfunded Actuarial Accrued Liability (UAAL)	$ 137,317,348
Funded Ratio	52.1%
Covered Payroll	$ 176,756,776
Ratio of UAAL to Covered Payroll	77.7%

Notes (continued)

Schedule of Employer Contributions

Year Ending	Annual Req. Contribution	Actual Contributions	Percentage Contributed
12/31/2015	12,471,893	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)
12/31/2015	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		12/31/2015
Applicable for Fiscal Year Ending		12/31/2015
Unfunded Actuarial Accrued Liability		
Actuarial Accrued Liability	$	286,646,272
Actuarial Value of Assets		149,328,924
Unfunded Actuarial Accrued Liability	$	137,317,348
Amortization Amount		
Amortization Period		30
Amortization Method		Open
Discount Rate		6.75%
Payroll Growth Rate		3.60%
Total Amortization Amount	$	6,834,779
Development of Annual Required Contribution (ARC)		
Normal Cost at Beginning of Fiscal Year	$	4,848,493
Interest on Normal Cost		327,273
Normal Cost Component	$	5,175,766
Amortization Amount at Beginning of Fiscal Year	$	6,834,779
Amortization Interest		461,348
Amortization Component	$	7,296,127
Annual Required Contribution	$	12,471,893
As of Percent of Covered Payroll		7.1%
Development of Annual OPEB Cost		
Annual Required Contribution	$	12,471,893
Net OPEB Obligation, Beginning of Year	$	30,409,000
Discount Rate		6.75%
Interest on Net OPEB Obligation	$	2,052,608
Adjustment to Annual Required Contribution	$	(1,615,731)
Annual OPEB Cost	$	12,908,770

SECTION 4 - RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY

(1)	Expected Unfunded Actuarial Accrued Liability as of December 31, 2014	$119,978,545
(2)	Expected Normal Cost developed as of December 31, 2014	5,205,000
(3)	Expected Administrative Expenses for Fiscal 2015	0
(4)	Interest on (1) and (2) and (3)	8,762,848
(5)	Actual Sponsor Contributions to the System during the period of December 31, 2014 through December 31, 2015	18,316,713
(6)	Interest on (5)	630,242
(7)	Expected Unfunded Accrued Liability as of December 31, 2015 (1)+(2)+(3)+(4)-(5)-(6)	$114,999,438
(8)	Unfunded Accrued Liability as of December 31, 2015	137,317,348
(9)	Change to UAAL due to Actuarial (Gain)/Loss (8)-(7)	$22,317,910

SECTION 4 – Reconciliation of Unfunded Actuarial Accrued Liability

Increase/(Decrease) in Unfunded Accrued Liability due to:

Changes in Census Data [1]	$34,904,550
Net Claims Costs lower than expected [2]	(19,624,733)
Updated Trend Rate assumption	1,907,381
Retirement and Termination Rates updated to use pension plan assumptions	(11,988,093)
Active Plan Election Assumption updated based on enrollment data [3]	1,616,159
Investment Return lower than expected	16,334,345
Discount Rate lowered by 25 basis points (from 7% to 6.75%)	9,417,514
Change from Projected Unit Credit to Entry Age cost method	(1,549,844)
Updates to Active Retirement Eligibility Definition [4]	(350,787)
Addition of Terminated Vested Benefit for Actives [5]	3,255,977
Addition of Terminated Vested Benefit for 41 Inactives [5]	3,722,218
Update Salary Scale Assumption (for EAN cost method) [6]	(15,326,778)
Total Change in UAAL	$22,317,909

[1] The census data reflects changes in census for the two-year period from 12/31/13 to 12/31/15. The increase in the Unfunded Liability due to census changes is primarily a result of updated retiree flags for Medicare vs. Non-Medicare status. As of 12/31/13, there were 374 retirees with an "unknown" status, 171 with "No Medicare", and 1,419 retirees with "Medicare". The retirees with "unknown" were assumed to elect Medicare 93% of the time. As of 12/31/15, only 10 retirees have "unknown" status; and 430 now are "No Medicare" and 1,522 have "Medicare".

[2] The per capita claims assumptions were updated to reflect recent claims experience, updated premium rates, and upates to the plan design. Aproximately $4.8 million of the decrease is attributable to the changes in the plan design.

[3] The active plan election assumptions have been updated based on current enrollment data. Previously, 78.6% and 21.4% of active employees were assumed to elect the PPO and HMO, respectively. The current assumption has been updated to assume 62.4% will elect PPO and 37.6% will elect HMO at retirement.

[4] The retirement eligibility definition was updated based on discussions with MWRD personnel to match the pension plan definitions.

[5] According to plan policy, the plan provides that an active employee, with at least 10 years of service, can terminate and still be eligible for health benefits when they commence their pension benefit at retirement. As such, we have reflected the OPEB cost of actives who terminate with a "vested" health benefit. Additionally, we have included 41 inactives who are considered "terminated vested " and eligible for a future health benefit.

[6] The salary scale assumption was updated to bring it in line with the assumption used for the pension plan.

SECTION 5 – TRUST FUND

Metropolitan Water Reclamation District

	Fiscal Year Ending	**12/31/2015**	**12/31/2014**	**12/31/2013**
(1)	Asset Balance as of January 1	$146,374,627	$120,883,435	$86,101,926
(2)	Contributions During the Year [1]			
	Employer	$18,316,713	$33,716,523	$33,834,831
	Retirees	7,406,437	6,773,271	6,217,826
	Medicare Part D Susidies	0	0	0
	Total	$25,723,150	$40,489,794	$40,052,657
(3)	Payments During the Year			
	Retiree Healthcare Benefits	$20,723,150	$20,489,795	$20,052,657
	Administrative Expenses	35,674	40,249	38,530
	Total	$20,758,824	$20,530,044	$20,091,187
(4)	Investment Return			
	Asset Earnings	($1,968,029)	$5,573,457	$14,862,614
	Investment Expenses	(42,000)	(42,015)	(42,575)
	Total	($2,010,029)	$5,531,442	$14,820,039
(5)	Asset Balance as of December 31	$149,328,924	$146,374,627	$120,883,435
(6)	Rate of Investment Return (net of administrative expenses)	-1.4%	4.2%	15.4%

[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

2016 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	$ 6,707	$ 6,707	$ 3,942	$ 3,942
45	8,160	8,160	4,796	4,796
50	9,927	9,927	5,834	5,834
55	12,078	12,078	7,097	7,097
60	14,693	14,693	8,634	8,634
65	3,038	17,877	4,333	10,503
70	3,523	20,724	5,023	12,176
75	4,085	24,025	5,824	14,115
80	4,510	26,526	6,430	15,585
85	4,980	29,287	7,099	17,207
90	4,980	29,287	7,099	17,207
95	4,980	29,287	7,099	17,207

2016 Annual Premium Amounts Per Participant [1]

	PPO Plans		HMO Plans	
	Enrolled in Medicare	Not Enrolled in Medicare	Enrolled in Medicare	Not Enrolled in Medicare
Retiree				
Pre-65	$ 4,508	$ 4,508	$ 2,974	$ 2,974
Post-65	2,161	4,508	2,504	2,974
Spouse				
Pre-65	$ 4,508	$ 4,508	$ 2,600	$ 2,600
Post-65	2,163	4,508	2,505	2,600

[1] The contributions shown above reflect the increase in the retiree contribution percentage from 2011 (at 25%) to 2016 (37.5%) at 2.5% per year.

SECTION 7 - MEMBER STATISTICS

SUMMARY OF MEMBERSHIP DATA

	As of 12/31/2015	As of 12/31/2013
Number of Active Participants		
Eligible for Retiree Health Benefits	555	528
Not Yet Eligible for Retiree Health Benefits	1,281	1,347
Total	1,836	1,875
Average Current Age of Actives	50.2	50.0
Average Age at Employment	36.1	35.9
Average Past Service	14.2	14.1
Covered Payroll	$ 176,756,776	$ 164,005,000
Average Salary	96,273	87,469
Number of Inactives Enrolled in Health Care		
Retirees	1,504	1,480
Survivors	458	484
Dependent Spouses	813	844
Total	2,775	2,808
Average Current Age of Inactives	72.8	72.1
Number of Terminated Vested	41	N/A
Average Current Age of Terminated Vesteds	51.6	N/A

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	1	2	0	0	0	0	0	0	0	0	3
25 - 29	4	42	10	0	0	0	0	0	0	0	56
30 - 34	5	41	51	12	0	0	0	0	0	0	109
35 - 39	5	40	65	39	19	0	0	0	0	0	168
40 - 44	4	44	52	42	59	8	0	0	0	0	209
45 - 49	8	42	47	39	72	37	38	0	0	0	283
50 - 54	5	30	49	42	78	62	75	5	0	0	346
55 - 59	5	30	40	46	77	42	97	12	1	0	350
60 - 64	1	12	37	26	42	32	43	7	1	2	203
65+	1	3	9	18	42	13	17	4	1	1	109
Total	39	286	360	264	389	194	270	28	3	3	1,836

SECTION 7 – Member Statistics

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	$16,159,127	$8,627	-
2009	1,873	183	156	1,900	$18,802,036	$9,896	14.7%
2011	1,900	221	144	1,977	$20,596,842	$10,418	5.3%
2013	1,977	118	131	1,964	$20,052,657	$10,210	-2.0%
2015 [1]	1,964	176	178	1,962	$20,723,150	$10,562	3.4%

BREAKDOWN OF BENEFIT PLAN ENROLLMENT

Enrollee Group	PPO	HMO	Total
Benefit Recipient	1,563	399	1,962
Spouse	621	192	813
Grand Total	2,184	591	2,775

SECTION 8 - ACTUARIAL ASSUMPTIONS AND FUNDING METHODS

Actuarial Assumptions

Valuation/Measurement Date	December 31, 2015.
Fiscal Year End	December 31.
Actuarial Value of Assets	Market Value.
Mortality Rate	RP-2000 Combined Healthy Mortality Table, projected to the valuation date with Scale AA.
Interest Rate	6.75% 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.
Payroll Growth	3.60% per year.
Inflation	3.00% per year.
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%

SECTION 8 - Actuarial Assumptions and Funding Methods

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 2015 elections for current enrollees. The current enrollments are 37.6% with HMO and 62.4% 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	
Pre-Medicare	8.0% in Fiscal 2016, decreasing 0.75% each year to Fiscal 2020, then decreasing 0.5% to the ultimate rate of 4.5% in Fiscal 2021.
Post-Medicare	8.0% in Fiscal 2016, decreasing 0.75% each year to Fiscal 2020, then decreasing 0.5% to the ultimate rate of 4.5% in Fiscal 2021.
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 2015 medical and prescription claims and enrollment experience; and ii) 2016 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, 2015 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 2013, 2014 and 2015.

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 were updated to tie to the most recent pension valuation. 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 higher than the prior schedule would have used, but the ultimate rate of 4.5% is slightly lower. These rates are based on recent healthcare trend rate surveys.

        ii. The interest rate (i.e. investment return) has been lowered from 7% to 6.75% 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 43.

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 43/45 standards. Under the forthcoming GASB 74/75 standards, Entry Age Normal will be required.

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 43 standard. The maximum amortization period allowed by GASB is 30 years.

SECTION 9 - 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 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 and their dependents 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 1st or each year until the contribution rate reaches 50.0%, projected to be in 2021. The contribution rate for 2016 is 37.5%.
District	Remaining amount necessary for payment of claims.