



CLARITY IN NUMBERS, LLC
Actuaries | Consultants

**GASB 74 and GASB 75 Fiscal 2018 Disclosure
Fiscal 2018 Expense and Estimated Fiscal 2019 Expense**

Western Municipal Water District
Postretirement Medical Plan

September 11, 2018

Prepared by:

Lynne B. Pasi, FSA, EA, MAAA
Consulting Actuary
312.893.5447
lynne.pasi@clarity-llc.com

Dmitriy Sherman, ASA, MAAA
Consulting Actuary
470.539.8512
dmitriy.sherman@clarity-llc.com

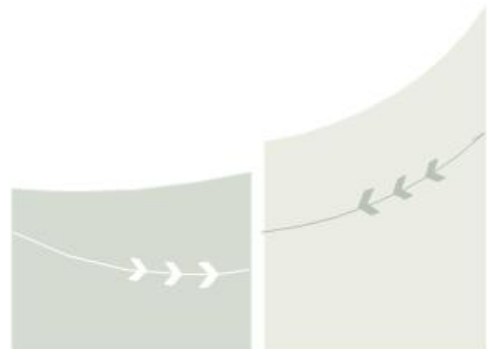




Table of Contents

ACTUARIAL CERTIFICATION	1
SECTION 1 – SUMMARY	2
SECTION 2 – SUMMARY OF DISCLOSURE INFORMATION	3
TABLE 2.1 – RECONCILIATION OF TOTAL OPEB LIABILITY AND FIDUCIARY NET POSITION	3
SECTION 3 – EXPENSE FOR FISCAL 2018	4
TABLE 3.1 – EXPENSE FOR FISCAL 2018	4
SECTION 4 – ESTIMATED EXPENSE FOR FISCAL 2019	5
TABLE 4.1 – ESTIMATED EXPENSE FOR FISCAL 2019	5
TABLE 4.2 – LIABILITY GAIN/LOSS	6
TABLE 4.3 – ASSET GAIN/LOSS	7
TABLE 4.4 – LIABILITY GAIN/LOSS DEFERRED INFLOWS	8
TABLE 4.5 – LIABILITY GAIN/LOSS DEFERRED OUTFLOWS	8
TABLE 4.6 – ASSET GAIN/LOSS DEFERRED INFLOWS	9
TABLE 4.7 – ASSET GAIN/LOSS DEFERRED OUTFLOWS	9
TABLE 4.8 – DEFERRED OUTFLOWS AND INFLOWS PROJECTION	9
SECTION 5 – ASSET SUMMARY	10
SECTION 6 – PLAN PARTICIPANTS	11
SECTION 7 – PLAN PROVISIONS	12
SECTION 8 – ACTUARIAL ASSUMPTIONS AND METHODS	15
SECTION 9 – HEALTH CARE CLAIMS DEVELOPMENT	21
SECTION 10 – REQUIRED SUPPLEMENTARY INFORMATION (RSI)	22
TABLE 10.1 – SCHEDULE OF CHANGES IN NET OPEB LIABILITY AND RELATED RATIOS	22
TABLE 10.2 – CONTRIBUTION INFORMATION AND ADDITIONAL INFORMATION	23





Actuarial Certification

This report documents the results of an actuarial valuation and contains financial reporting information for the fiscal year ending June 30, 2018, the fiscal 2018 OPEB Expense, and the estimated fiscal 2019 OPEB Expense for the Western Municipal Water District Postretirement Medical Plan as set forth in GASB Statement of Accounting Standard No. 74 (“GASB 74”) and No. 75 (“GASB 75”).

The calculations are based on census as of November 1, 2017 and plan information and health care related information as of July 1, 2018 provided by Western Municipal Water District. We reviewed this information for reasonability but did not formally audit the data and do not attest to the accuracy of this information.

Actuarial computations under GASB 74 and GASB 75 are for purposes of fulfilling employer financial accounting requirements. Determinations for purposes other than meeting employer financial accounting requirements may be significantly different from the results reported here (e.g., the report does not address the funding adequacy of benefits related to this Plan). These calculations have been made on a basis consistent with our understanding of GASB 74 and GASB 75. Actuarial assumptions and methods used are described in the “Actuarial Assumptions and Methods” section.

The valuation complies with the generally accepted accounting principles including the Actuarial Standards Board Actuarial Standards of Practices (“ASOPs”) relating to Other Post-Employment Benefits (“OPEBs”).

The American Academy of Actuaries (AAA) maintains Qualification Standards for actuaries issuing Statements of Actuarial Opinion. The standard (effective January 1, 2008) increased its continuing education requirements and expands the applicability of the Qualification Standards to all actuaries issuing Statements of Actuarial Opinion in the United States.

The undersigned have satisfied the basic education, experience, and continuing education requirements and are qualified to issue a Statement of Actuarial Opinion for this project in accordance with the Qualification Standards in the AAA’s Code of Professional Conduct.

Clarity in Numbers, LLC (“Clarity”) has no relationships with Western Municipal Water District or its personnel (other than this project) that would impair our independence in performing these calculations.

We welcome any questions and will provide further explanations on this material as requested.

Clarity in Numbers, LLC



Lynne B. Pasi, FSA, EA, MAAA
Consulting Actuary
September 11, 2018



Dmitriy Sherman, ASA, MAAA
Consulting Actuary
September 11, 2018

Western Municipal Water District
GASB 74 and GASB 75 Fiscal 2018 Disclosure
and Fiscal 2018 Expense



Section 1 – Summary

Summary	Fiscal 2017	Fiscal 2018
Valuation Date	July 1, 2016	November 1, 2017
Measurement Date	June 30, 2017	June 30, 2018
Total OPEB Liability (TOL)		
Actives	\$ 9,275,227	\$ 10,854,440
Inactives Entitled To But Not Yet Receiving Benefit Payments	0	0
Inactives Currently Receiving Benefit Payments	5,966,531	8,080,143
Total	<u>\$ 15,241,758</u>	<u>\$ 18,934,583</u>
Plan Fiduciary Net Position (FNP)	\$ 15,169,561	\$ 16,653,515
Net OPEB Liability (NOL)	\$ 72,197	\$ 2,281,068
Net OPEB Liability 1% Discount Rate Increase	\$ (1,762,331)	\$ 22,471
Net OPEB Liability 1% Discount Rate Decrease	\$ 2,306,601	\$ 5,031,284
Net OPEB Liability 1% Healthcare Trend Rate Increase	\$ 2,846,960	\$ 5,605,535
Net OPEB Liability 1% Healthcare Trend Rate Decrease	\$ (2,136,388)	\$ (373,681)
Present Value of Future Benefits (PVFB)	\$ 20,947,894	\$ 25,885,693
Participant Information		
Actives	134	142
Inactives Entitled To But Not Yet Receiving Benefit Payments	0	0
Inactives Currently Receiving Benefit Payments	64	72
Total	<u>198</u>	<u>214</u>
Benefit Payment Data		
Year Ending Date of Projected Benefit Payments	6/30/2104	6/30/2110
Projected Employer Paid Retiree Premium Payments (Year 1)	\$ 412,643	\$ 508,891
Projected Employer Paid Retiree Premium Payments (Year 2)	\$ 448,351	\$ 560,500
Projected Implicit Rate Subsidy Payments (Year 1)	\$ 530,291	\$ 659,277
Projected Implicit Rate Subsidy Payments (Year 2)	\$ 581,106	\$ 737,981
Weighted Average Assumptions Used to Determine Benefit Obligation		
Discount Rate	7.00%	7.00%
Expected Return on Assets	7.00%	7.00%
Salary Scale	3.00%	3.00%
Health Care Trend Rate		
Current Rate	7.20%	7.50%
Ultimate Rate / Year Reached	4.50% / 2027	4.50% / 2029



Section 2 – Summary of Disclosure Information

The following tables summarize disclosure information for the Postretirement Medical Plan under GASB 74 and GASB 75.

Table 2.1 – Reconciliation of Total OPEB Liability and Fiduciary Net Position

	Fiscal 2017	Fiscal 2018
Valuation Date	July 1, 2016	November 1, 2017
Measurement Date	June 30, 2017	June 30, 2018
Change in Total OPEB Liability (TOL)		
TOL, Beginning of Year	\$ 14,112,607	\$ 15,241,758
Service Cost	666,940	713,625
Interest	970,106	1,049,476
Change in Benefit Terms	0	0
Difference Between Expected and Actual Experience	(88,561)	1,544,082
Retiree Contributions	0	36,511
Benefits Paid	(419,334)	(498,497)
Changes in Assumptions	0	847,628
TOL, End of Year	<u>\$ 15,241,758</u>	<u>\$ 18,934,583</u>
Change In Plan Fiduciary Net Position (FNP)		
FNP, Beginning of Year	\$ 13,402,386	\$ 15,169,561
Net Investment Income	1,489,318	1,265,227
Administrative Expenses	(19,909)	(27,625)
Retiree Contributions	0	36,511
Employer Contributions	717,100	708,338
Benefits Paid	(419,334)	(498,497)
FNP, End of Year	<u>\$ 15,169,561</u>	<u>\$ 16,653,515</u>
Net OPEB Liability (NOL), Beginning of Year	\$ 710,221	\$ 72,197
Net OPEB Liability (NOL), End of Year	\$ 72,197	\$ 2,281,068



Section 3 – Expense for Fiscal 2018

The following summarizes the development of Expense for fiscal 2018 (November 1, 2016 - June 30, 2018).

Table 3.1 – Expense for Fiscal 2018

Service Cost	\$ 713,625
Interest	1,049,476
Expected Return on Assets	(1,069,214)
Amortization of:	
Total OPEB Liability and Assumption (Gain)/Loss	232,792
Fiduciary Net Position (Gain)/Loss	(138,462)
Expense	\$ 788,217
Weighted Average Assumptions to Determine Expense	
Actual Benefit Payments	498,497
Actual Contributions	708,338
Discount Rate	7.00%
Expected Return on Assets	7.00%
Salary Scale	3.00%
Health Care Trend Rate	
Current Rate	7.20%
Ultimate Rate / Year Reached	4.50% / 2027



Section 4 – Estimated Expense for Fiscal 2019

The following summarizes the development of Estimated Expense for fiscal 2019 (November 1, 2017 - June 30, 2019).

Table 4.1 – Estimated Expense for Fiscal 2019

Service Cost	\$ 840,242
Interest	1,302,964
Expected Return on Assets	(1,168,820)
Amortization of:	
Total OPEB Liability and Assumption (Gain)/Loss	232,792
Fiduciary Net Position (Gain)/Loss	(138,462)
Estimated Expense	\$ 1,068,716
Weighted Average Assumptions to Determine Expense	
Expected Benefit Payments	641,612
Expected Contributions	729,432
Discount Rate	7.00%
Expected Return on Assets	7.00%
Salary Scale	3.00%
Health Care Trend Rate	
Current Rate	7.50%
Ultimate Rate / Year Reached	4.50% / 2029



Section 4 – Estimated Expense for Fiscal 2019 (Continued)

The development of the 2018 liability (gain)/loss is as follows.

Table 4.2 – Liability Gain/Loss

Total OPEB Liability (Gain)/Loss	
(1) TOL, June 30, 2017	\$ 15,241,758
(2) Service Cost	713,625
(3) Interest	1,049,476
(4) Net Benefit Payments	(461,986)
(5) Plan Amendments	0
(6) Expected TOL [(1) + (2) + (3) + (4) + (5)], June 30, 2018	\$ 16,542,873
(7) Actual TOL, June 30, 2018, Before Changes	18,086,955
(8) 2018 (Gain)/Loss [(7) - (6)]	\$ 1,544,082
Assumption Change (Gain)/Loss	
(1) TOL, June 30, 2018, Before Changes	\$ 18,086,955
(2) TOL, June 30, 2018, After Changes	18,934,583
(8) 2018 (Gain)/Loss [(2) - (1)]	\$ 847,628
Amortization of Liability (Gain)/Loss	
(1) (Gain)/Loss	\$ 2,391,710
(2) Expected Future Service at Measurement Date	9.90
(3) Amortization of (Gain)/Loss [(1) / (2)]	\$ 241,587



Section 4 – Estimated Expense for Fiscal 2019 (Continued)

The development of the 2018 asset (gain)/loss is as follows.

Table 4.3 – Asset Gain/Loss

Plan Fiduciary Net Position (Gain)/Loss	
(1) FNP, June 30, 2017	\$ 15,169,561
(2) Retiree Contributions	36,511
(3) Employer Contributions	708,338
(4) Net Benefit Payments	(498,497)
(5) Expected Return on Assets	1,069,214
(6) Expected FNP [(1) + (2) + (3) + (4) + (5)], June 30, 2018	\$ 16,485,127
(7) Actual FNP, June 30, 2018, Before Changes	16,653,515
(8) Fiscal 2018 (Gain)/Loss [(6) - (7)]	\$ (168,388)
Amortization of Asset (Gain)/Loss	
(1) (Gain)/Loss	\$ (168,388)
(2) Asset Amortization Period	5.00
(3) Amortization of (Gain)/Loss [(1) / (2)]	\$ (33,678)



→ → →

Section 4 – Estimated Expense for Fiscal 2019 (Continued)

The schedule of liability gain/loss deferred inflows and outflows.

Table 4.4 – Liability Gain/Loss Deferred Inflows

Date Amortization Base Set	Net Amount at June 30, 2018, Prior to Measurement Year 2018 Recognition	Amortization Period at Beginning of Measurement Year 2018	Amount Recognized During Measurement Year 2018	Unrecognized as of June 30, 2018	Amount Recognized During Measurement Year 2019
6/30/2017	\$ 79,766	9.07	\$ 8,795	\$ 70,971	\$ 8,795
Total	\$ 79,766		\$ 8,795	\$ 70,971	\$ 8,795

Table 4.5 – Liability Gain/Loss Deferred Outflows

Date Amortization Base Set	Net Amount at June 30, 2018, Prior to Measurement Year 2018 Recognition	Amortization Period at Beginning of Measurement Year 2018	Amount Recognized During Measurement Year 2018	Unrecognized as of June 30, 2018	Amount Recognized During Measurement Year 2019
6/30/2018	\$ 2,391,710	9.90	\$ 241,587	\$ 2,150,123	\$ 241,587
Total	\$ 2,391,710		\$ 241,587	\$ 2,150,123	\$ 241,587



Section 4 – Estimated Expense for Fiscal 2019 (Continued)

The schedule of asset gain/loss deferred inflows and outflows.

Table 4.6 – Asset Gain/Loss Deferred Inflows

Date Amortization Base Set	Net Amount at June 30, 2018, Prior to Measurement Year 2018 Recognition	Amortization Period at Beginning of Measurement Year 2018	Amount Recognized During Measurement Year 2018	Unrecognized as of June 30, 2018	Amount Recognized During Measurement Year 2019
6/30/2018	\$ 168,388	5.00	\$ 33,678	\$ 134,710	\$ 33,678
6/30/2017	\$ 419,136	4.00	\$ 104,784	\$ 314,352	\$ 104,784
Total	\$ 587,524		\$ 138,462	\$ 449,062	\$ 138,462

Table 4.7 – Asset Gain/Loss Deferred Outflows

Date Amortization Base Set	Net Amount at June 30, 2018, Prior to Measurement Year 2018 Recognition	Amortization Period at Beginning of Measurement Year 2018	Amount Recognized During Measurement Year 2018	Unrecognized as of June 30, 2018	Amount Recognized During Measurement Year 2019
Total	\$ -		\$ -		\$ -

Table 4.8 – Deferred Outflows and Inflows Projection

Amounts reported as deferred outflows of resources and deferred inflows of resources will be recognized in expense as follows:

Year Ended June 30:	
2019	\$ 94,330
2020	\$ 94,330
2021	\$ 94,330
2022	\$ 199,114
2023	\$ 232,792
Thereafter	\$ 915,194



Section 5 – Asset Summary

The following is the asset allocation information as of June 30, 2018:

Asset Class	Current Allocation	Target Allocation ¹	Long-Term Expected Real Rate of Return ¹
Equity	Not Available	59.0%	8.5%
Fixed Income	Not Available	32.0%	3.2%
Real Estate	Not Available	7.0%	6.7%
Other	<u>Not Available</u>	2.0%	5.0%
Total	\$ 16,653,515		

¹ Based on information provided by WMWD.





Section 6 – Plan Participants

A high-level summary of the census data provided by Western Municipal Water District is summarized below.

Participants as of November 1, 2017			
	Number	Average Age	Average Service
Actives	142	45.1	8.4
Inactives Entitled To But Not Yet Receiving Benefit Payments	0	N/A	
Inactives Currently Receiving Benefit Payments	<u>72</u>	68.6	
Total	214		



Section 7 – Plan Provisions

This summary of plan provisions, as of the measurement date, has been prepared for valuation purposes only. It outlines the major plan provisions used to determine the Total OPEB Liability.

Retiree Medical Plan	
Eligibility and Coverage:	<p>Western Municipal Water District is a Member of ACWA Health Benefits Authority. The Health Benefits Authority is a public agency and was formed in 1955 as a vehicle to provide health insurance coverage to ACWA members. The formation and operation of the ACWA HBA are subject to CA Government Code, including the Brown Act. With ACWA HBA's large group buying power and a long track record of claims experience over an extended period of time, ACWA HBA has the ability to negotiate comprehensive plans and economical coverage. ACWA HBA is responsible for the administration of the employee benefit plans currently available to public agency members; health, dental, vision, life, employee assistance and disability program.</p> <p>Eligible participants in the Plan are divided into two groups:</p> <p>Group 1 are classified and non-classified employees hired on or before December 18, 2002, who are at least fifty-five (55) years old at retirement and have completed at least ten (10) years of service. The District provides benefits for the employee and spouse.</p> <p>Group 2 are classified and non-classified employees hired after December 18, 2002, who are at least fifty-five (55) years old at retirement and have completed at least ten (10) years of service. The District provides benefits for the employee only.</p>
Benefit:	Includes Medical and Prescription Drug Coverage. Retirees and spouses (if covered) are eligible to continue coverage for life. If the District does not provide coverage to a spouse, a retiree can elect to cover their spouse but at 100% of their own expense.
Changes since Last Valuation:	None.



Section 7 – Plan Provisions

This summary of plan provisions, as of the measurement date, has been prepared for valuation purposes only. It outlines the major plan provisions used to determine the Total OPEB Liability.

Retiree Medical Plan ^{1,2}				
2018 Monthly Premiums:	PPO 200		Kaiser	
	Pre-Medicare	Post-Medicare	Pre-Medicare	Post-Medicare
Employee only	\$ 887.44	\$ 565.66	\$ 607.82	\$ 190.59
Employee plus Spouse	1,808.87	1,149.22	1,204.96	371.29
Family	2,431.94	1,588.30	1,700.90	867.23
2018 Monthly Premiums:	PPO 500 (Anthem Advantage)		HMO	
	Pre-Medicare	Post-Medicare	Pre-Medicare	Post-Medicare
Employee only	\$ 747.03	\$ 476.73	\$ 789.88	\$ 554.58
Employee plus Spouse	1,521.03	966.93	1,569.85	1,099.32
Family	2,044.41	1,335.75	2,105.63	1,563.04

¹ With the exception of certain grandfathered retirees, the District will not reimburse more than the cost of the least expensive plan option (Kaiser for 2018). Murrietta retirees with employee only and employee + spouse coverage will only be reimbursed up to \$150 per month.

² As of January 1, 2018.



Section 7 – Plan Provisions (continued)

Statement by Western Municipal Water District to ensure accuracy of provisions

The above plan provisions represent an accurate assessment of the Other Post-Employment Benefit Plan (OPEB) benefits, offered by Western Municipal Water District.

KEVIN C. MASCARO

Printed Name

Kevin C. Mascaro

Signature

9-13-18

Date





Section 8 – Actuarial Assumptions and Methods

Actuarial Standards of Practice

Actuarial Standards of Practice No. 6 (“ASOP 6”) provides guidance on measuring retiree group benefits obligations and determining retiree group benefits periodic costs or actuarially determined contributions.

Actuarial Standards of Practice No. 35 (“ASOP 35”) requires that each demographic and other noneconomic assumption should be reasonable individually and in conjunction with one another.

At each measurement date, the actuary should consider whether the selected assumptions continue to be reasonable. If the actuary determines that one or more of the previously selected assumptions are no longer reasonable, the actuary will perform an experience study to determine the best estimate for the Plan’s population.

Actuarial Standards of Practice No. 27 Revised (“ASOP 27”) requires that each economic assumption be reasonable based on the following characteristics: (a) appropriate for the purpose of the measurement; (b) reflects the actuary’s professional judgement; (c) takes into account historical and current economic data that is relevant as of the measurement date; (d) reflects the actuary’s estimate of future experience, observation of the estimates inherent in market data, or a combination thereof; and (e) has no significant bias. Given the uncertain nature of the items for which assumptions are selected, different actuaries will apply different professional judgement and may choose different reasonable assumptions. As a result, a range of reasonable assumptions may develop both for an individual actuary and across actuarial practice.

This section summarizes the economic, demographic and noneconomic actuarial assumptions and the actuarial cost method used to determine plan liabilities and expense.





Section 8 – Actuarial Assumptions and Methods (continued)

Actuarial Methods	
Valuation/Measurement Date:	July 1, 2018
Data Collection Date:	November 1, 2017
Fiscal Year:	July 1, 2017 - June 30, 2018
Insurance Year:	January 1 - December 31
Actuarial Cost Method:	Entry Age Normal (“EAN”) - Under EAN, the Normal Cost (NC) for each participant is calculated as a level percentage of pay that would exactly fund his/her benefits if contributed from his/her entry age in the Plan to his/her assumed retirement age. Normal Cost (“NC”) – The portion of the Present Value which is allocated to the valuation year by the actuarial cost method. Total OPEB Liability (“TOL”) – Present value of the past service liability of the employee’s total Present Value of Benefits.
Asset Valuation Method:	Market Value of Assets.
Actuarial Gains and Losses:	Actuarial gains and losses due to differences between expected and actual experience with regard to economic or demographic factors and due to changes of assumptions about future economic or demographic factors are amortized over a closed period equal to the average of the expected remaining service lives of all employees. Actuarial gains and losses due to the difference between projected and actual earnings on Plan investments are amortized over a closed 5-year period.
Actuarial Valuation Frequency:	An actuarial valuation is prepared biennially with a "roll-forward" valuation in the interim year, provided no significant events have occurred during the interim year warranting a new measurement. Fiscal 2018 valuation was based on a "full" valuation.
Changes Since Last Valuation:	- Census data collection date was changed from July 1 to November 1.



Section 8 – Actuarial Assumptions and Methods (continued)

Actuarial Assumptions		
Discount Rate:	7.00% for determining June 30, 2018 disclosure and estimated fiscal 2019 expense; 7.00% for determining June 30, 2017 liability and fiscal 2018 expense.	
Discount Rate Determination Method:	The projection of cash flows used to determine the discount rate assumed that the contributions will be made at rates equal to the actuarially determined contribution rates. Based on those assumptions, the plan's Fiduciary Net Position was projected to be available to make all projected payments for current active and inactive employees. Therefore, the long-term expected rate of return on the plan investments was applied to all periods of projected benefit payments to determine the Total OPEB Liability.	
Expected Return on Plan Assets:	7.00%. Rationale: This rate was based on the plan sponsor's expectation that Plan assets will earn at least 7.00% on a long-term basis.	
Salary Increases Rate:	3.00% per year based on recommendation from CalPERS OPEB Assumption Model.	
Health Care Trend Rate:¹	Fiscal Year	Trend Rate
	2019	7.50%
	2020	7.20%
	2021	6.90%
	2022	6.60%
	2023	6.30%
	2024	6.00%
	2025	5.70%
	2026	5.40%
	2027	5.10%
	2028	4.80%
2029+	4.50%	
Medicare Eligibility:	All participants are assumed to be eligible for Medicare upon attainment of age 65.	
Full Attribution Age:	Age at which retirement rate is 100%.	

¹ Healthcare trend rates and duration are based on recommendation by Clarity in Numbers, LLC healthcare actuary as well as recommendation from CalPERS OPEB Assumption Model. Ultimate medical trend rate is based on 2.75% long-term inflation, 1.00% real GDP growth and 0.75% medical technology.



Section 8 – Actuarial Assumptions and Methods (continued)

Actuarial Assumptions			
Pre-Retirement Mortality Table:	Same as used for the CalPERS Public Agency Misc. Rates. Sample rates are shown below:		
	Age	Male	Female
	20	0.031%	0.020%
	25	0.040%	0.023%
	30	0.049%	0.025%
	35	0.057%	0.035%
	40	0.075%	0.050%
	45	0.106%	0.071%
	50	0.155%	0.100%
	55	0.228%	0.138%
	60	0.308%	0.182%
Post-Retirement Mortality Table:	Same as used for the CalPERS Public Agency Misc. Rates. Sample rates are shown below:		
	Age	Male	Female
	55	0.599%	0.416%
	60	0.710%	0.436%
	65	0.829%	0.588%
	70	1.305%	0.993%
	75	2.205%	1.722%
	80	3.899%	2.902%
	85	6.969%	5.243%
	90	12.974%	9.887%
	95	22.444%	18.489%
Post-Retirement Disability Mortality Table:	Same as used for the CalPERS Public Agency Misc. Rates. Sample rates are shown below:		
	Age	Male	Female
	50	1.680%	1.158%
	55	1.973%	1.149%
	60	2.289%	1.235%
	65	2.451%	1.607%
	70	2.875%	2.211%
	75	3.990%	3.037%
	80	6.083%	4.725%
	85	9.731%	7.762%
	90	14.804%	12.890%



Section 8 – Actuarial Assumptions and Methods (continued)

Actuarial Assumptions				
Disability Rates:	Disability rates are taken from the CalPERS Public Agency Misc. Rates. Sample rates are as follows:			
	Age	Male	Female	
	20	0.017%	0.010%	
	25	0.017%	0.010%	
	30	0.019%	0.024%	
	35	0.049%	0.081%	
	40	0.122%	0.155%	
	45	0.191%	0.218%	
	50	0.213%	0.229%	
	55	0.221%	0.179%	
	60	0.222%	0.135%	
	65	0.210%	0.118%	
	70	0.180%	0.114%	
Withdrawal Rates:¹	Withdrawal rates are taken from the CalPERS Public Agency Misc. Rates. Sample rates are as follows:			
	Years of Service			
	Age	5	10	15
	20	6.56%	5.30%	4.43%
	30	5.37%	4.03%	3.05%
	35	4.77%	3.39%	0.00%
	40	4.18%	0.00%	0.00%
	45	0.00%	0.00%	0.00%
Retirement Rates:	Retirement rates are taken from the CalPERS Public Agency Misc. 2.5% @ 55 Rates. Sample rates are as follows:			
	Years of Service			
	Age	10	20	30
	55	8.80%	14.20%	24.10%
	58	6.10%	10.40%	19.20%
	61	9.50%	15.30%	25.50%
	64	11.90%	18.70%	29.90%

¹ Terminated Refund withdrawal rates are used for the first 5 years and Terminated Vested rates are used thereafter.



Section 8 – Actuarial Assumptions and Methods (continued)

Actuarial Assumptions						
Annual Medical Per Capita Costs: ¹	HMO		PPO		Kaiser	
	Age	Cost	Age	Cost	Age	Cost
	55	\$ 11,978	55	\$ 13,752	55	\$ 9,198
	60	\$ 14,676	60	\$ 16,850	60	\$ 11,269
	64	\$ 17,559	64	\$ 20,161	64	\$ 13,484
	65	\$ 6,282	65	\$ 6,526	65	\$ 2,120
	70	\$ 6,444	70	\$ 6,694	70	\$ 2,174
	75	\$ 6,877	75	\$ 7,145	75	\$ 2,320
	80	\$ 7,347	80	\$ 7,633	80	\$ 2,479
	85	\$ 7,838	85	\$ 8,143	85	\$ 2,645
	90	\$ 8,198	90	\$ 8,518	90	\$ 2,766
Participation:	<p>For current retirees, actual coverage and District-provided premium data is used. If a full-time employee has waived active medical coverage, they are assumed to participate in the Kaiser medical plan upon retirement. Participants on either PPO plan are assumed to elect the PPO 200 plan upon retirement. Part-time active employees are not eligible.</p> <p>Participation assumption is based on actual experience and anticipated experience.</p>					
Lapse Rate:	None assumed (based on actual experience and anticipated experience).					
Marriage Assumption:	85% of all future eligible retired employees are assumed to be married and expected to elect spousal coverage. Husbands are assumed to be 3 years older than their wives. Actual spouse data used for current retirees.					
ACA Excise Tax:²	Future ACA Excise Tax costs were estimated but assumed to be entirely passed on to the retirees.					
Change Since Last Valuation:	<ul style="list-style-type: none"> - The trend rates table was reset as shown above. - Participation was updated to assume that all PPO plan participants will elect the PPO 200 plan upon retirement. - Annual Medical Per Capita Costs shown above were developed based on updated premium rates and census data. 					

^{1,2} Methodology for developing age-adjusted per capita costs and ACA impact reviewed by Clarity in Numbers, LLC healthcare actuary.



Section 9 – Health Care Claims Development

Health Care Claims Development	
General Description:	Benefits provided are pre-65 and post-65 retiree medical and prescription drug to eligible retirees and their dependents.
Plan Options:	Pre-65 and post-65 retirees and their eligible dependents have a choice among the Blue Cross PPO, Kaiser and Blue Cross HMO plan.
Information Provided for Study:	Fully-insured premium rates for blended active/pre-65 and post-65 populations were provided.
Analysis of Data:	Average ages and average costs were calculated for the groups. The average costs that were calculated reflect the expected cost for the average plan design within the group and also reflect the average age.
Determination of Starting Per Capita Medical Costs:	<p>As represented to us, the same premium rates are charged to the active and pre-65 retiree groups for the medical plan. As such, the premium rates are viewed as composite rates for the combined groups. According to GASB Statement No. 75 (“GASB 75”), when an employer provides benefits to both active employees and retirees through the same plan, the benefits to retirees should be segregated and measured independently for actuarial measurement purposes. The projection of future retiree benefits should be based on claims costs, or age-adjusted premiums approximating claims costs, for retirees, in accordance with actuarial standards issued by the Actuarial Standards Board. The resulting “implicit rate subsidy”, as defined in GASB 75, is the difference between the calculated claims cost and the cost upon which retiree contributions are determined (in this case, the premium rates). Retiree premiums were estimated for the pre-65 retiree group as if they were rated on a stand-alone basis. The premium rates being charged were adjusted to reflect a premium for a pre-65 retiree group only. The results were then disaggregated into age-specific starting costs based on average ages and assumptions on the relationships of costs and increasing age.</p> <p>Medical premium rates for the post-65 retirees were provided and utilized for calculating the costs for this retiree population.</p>



Section 10 – Required Supplementary Information (RSI)

Table 10.1 – Schedule of Changes in Net OPEB Liability and Related Ratios¹

Total OPEB Liability (TOL) Change					
Fiscal Year	2018	2017	2016	2015	2014
Service Cost	\$ 713,625	\$ 666,940			
Interest	1,049,476	970,106			
Experience (Gain)/Loss	1,544,082	(88,561)			
Assumption Changes	847,628	0			
Retiree Contributions	36,511	0			
Benefit Payments	(498,497)	(419,334)			
Net Change in TOL	3,692,825	1,129,151			
TOL Beginning of Year	15,241,758	14,112,607			
TOL End of Year (a)	18,934,583	15,241,758			

Plan Fiduciary Net Position (FNP) Change					
Fiscal Year	2018	2017	2016	2015	2014
Employer Contributions	\$ 708,338	\$ 717,100			
Retiree Contributions	36,511	0			
Net Investment Income	1,265,227	1,489,318			
Benefit Payments	(498,497)	(419,334)			
Other	(27,625)	(19,909)			
Net Change in FNP	1,483,954	1,767,175			
FNP Beginning of Year	15,169,561	13,402,386			
FNP End of Year (b)	16,653,515	15,169,561			

Net OPEB Liability (NOL) Information					
Fiscal Year	2018	2017	2016	2015	2014
NOL (a) - (b)	\$ 2,281,068	\$ 72,197			
FNP as Percent of TOL	87.95%	99.53%			
Covered Payroll	\$ 14,663,027	\$ 14,589,576			
NOL as Percent of Payroll	15.56%	0.49%			

¹ Since it is the second year of implementation, there are only two years available for the required 10-year schedule.



→ → →

Section 10 – Required Supplementary Information (RSI) (continued)

Table 10.2 – Contribution Information and Additional Information¹

Employer Contribution Information					
Fiscal Year	2018	2017	2016	2015	2014
Actuarially Determined Employer Contribution ²	\$ 530,291	\$ 507,895			
Actual Employer Contribution	708,338	717,100			
Contribution Deficiency (Excess)	(178,047)	(209,205)			
Contributions as Percent of Payroll	4.83%	4.92%			

Additional Information					
Fiscal Year	2018	2017	2016	2015	2014
Annual Money-Weighted Rate of Return	8.36%	10.82%			

¹ Since it is the second year of implementation, there are only two years available for the required 10-year schedule.

² Based on expected benefit payments.

