Las Gallinas Valley Sanitary District
OPEB Plan

Actuarial Valuation as of December 31, 2016
For Purposes of Actuarial Funding
And GASB 75 ADC

March 2, 2018

NICOLAY CONSULTING

Nicolay Consulting Group

NICOLAY CONSULTING

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March 2, 2018

Ms. Susan M. McGuire, CPA, SHRM-SCP, SPHR
Administrative Services Manager
Las Gallinas Valley Sanitary District
300 Smith Ranch Road
San Rafael, CA 94903

Re: Las Gallinas Valley Sanitary District GASB 75 Report for FY Ended June 30, 2018

Dear Susan:

Las Gallinas Valley Sanitary District ("The District") has retained Nicolay Consulting Group to complete this valuation of the District's postemployment medical program (the "Plan") as of June 30, 2017 measurement compliant under Actuarial Standards of Practice for funding and Governmental Accounting Standards Board (GASB) Statement 75 for actuarial methods.

The purpose of this valuation is to determine the value of the expected postretirement benefits for current and future retirees and the Actuarial Accrued Liability (i.e., Total OPEB Liability under GASB 75) and Actuarially Determined Contribution for the plan year ending June 30, 2018. The amounts reported herein are not necessarily appropriate for use for a different fiscal year or plan year without adjustment.

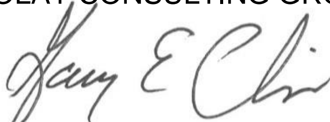
Based on the foregoing, the cost results and actuarial exhibits presented in this report were determined on a consistent and objective basis in accordance with applicable Actuarial Standards of Practice and generally accepted actuarial procedures. We believe they fully and fairly disclose the actuarial position of the Plan based on the plan provisions, employee and plan cost data submitted.

The actuarial calculations were completed under the supervision of Gary Cline and Eddie Lee. Both Mr. Cline and Mr. Lee are members of the American Academy of Actuaries whom meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion. To the best of our knowledge, the information supplied in the actuarial valuation is complete and accurate. In our opinion, assumptions as approved by the plan sponsor are reasonably related to the experience of and expectations for the Plan.

We would be pleased to answer any questions on the material contained in this report or to provide explanation or further detail as may be appropriate.

Respectfully submitted,

NICOLAY CONSULTING GROUP



Gary E. Cline, ASA, MAAA, FCA, EA
Vice President & Chief Operating Officer

Eddie Lee, ASA, MAAA, FCA, EA
Senior Actuary

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Section I Management Summary

A) Highlights

Summary of Key Valuation Results

	2017-18
Funded Status for Plan year beginning July 1:	
Present Value of Future Benefits:	
Active	$2,077,550
Retiree	1,416,569
Total	$3,494,119
Actuarial Accrued Liability	
Active	$1,311,993
Retiree	1,416,569
Total	$2,728,562
Market Value of Assets	1,011,581
Funded Status	$1,716,981
Funded Status as a percentage of the AAL	37%
Actuarially Determined Contribution for PY beginning July 1:	
Actuarially determined contributions[1] (Exhibit 4)	$213,168
Estimated Trust Contribution	$71,693
Estimated Annual Retiree Premium	108,040
Active Implicit Subsidy	33,436
Total Contribution	$213,168
Demographic data for Plan year beginning July 1[2]:	
Number of active members	20
Number of retired members and beneficiaries	19
Total	39
Covered Payroll for prior Plan year	$2,252,470
Key assumptions as of July 1:	
Discount rate	6.73%
Initial Trend Rate	
Pre-65	7.7%
Post-65	5.5%
Ultimate Rate	5.0%
Year Ultimate Rate is Reached	2030

(1) *Includes payments to trust and amounts paid directly by the plan sponsor*

(2) *Census data as of December 31, 2017 is used in the measurement of the AAL as of July 1, 2017. See Section III for additional details on the demographic data.*

B) Gap Analysis

The Actuarial Accrued Liability (AAL) has decreased ($181,655) from $2,910,217 as of July 1, 2016 to $2,728,562 as of July 1, 2017. A breakdown of the sources of this change in liability is shown below:

Liability Experience	Amount	Percentage
Expected Benefits Earned, Benefit Payments and Interest	$279	10%
Actual Demographic and Other Experience	($3)	(0%)
Total Liability Experience	$276	10%

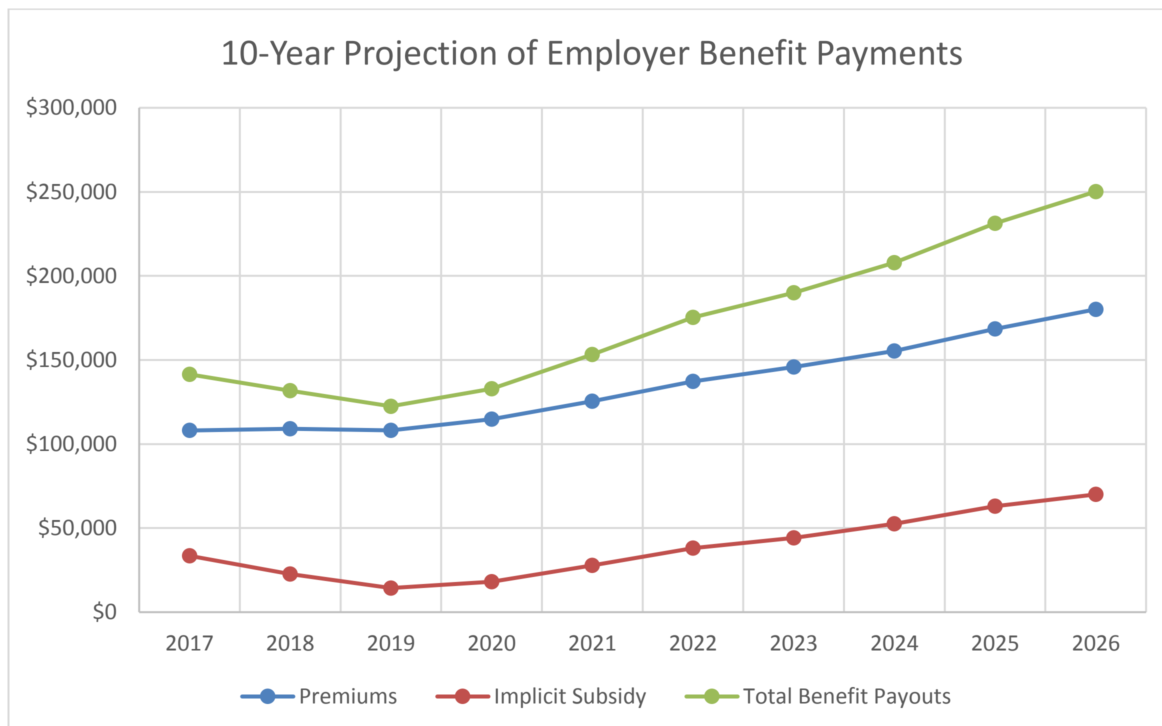
Changes in Assumptions	Amount	Percentage
Revised Health Care Cost Assumed Trend Rates	$175	6%
Coverage of Surviving Spouses	62	2%
Revised CalPERS Assumed Retirement Rates	20	1%
Blended Implicit Subsidy	7	0%
Revised Spouse Implicit Subsidy Assumptions	(65)	2%
Revised CalPERS Assumed Mortality Rates	(256)	(9%)
Actual 2017 Premium Rates	(401)	(14%)
Total Changes in Assumptions	($458)	(16%)

Total Change in AAL	
Liability Experience	$276
Changes in Assumptions	($458)
Total	($181)

*Amounts are in Thousands.

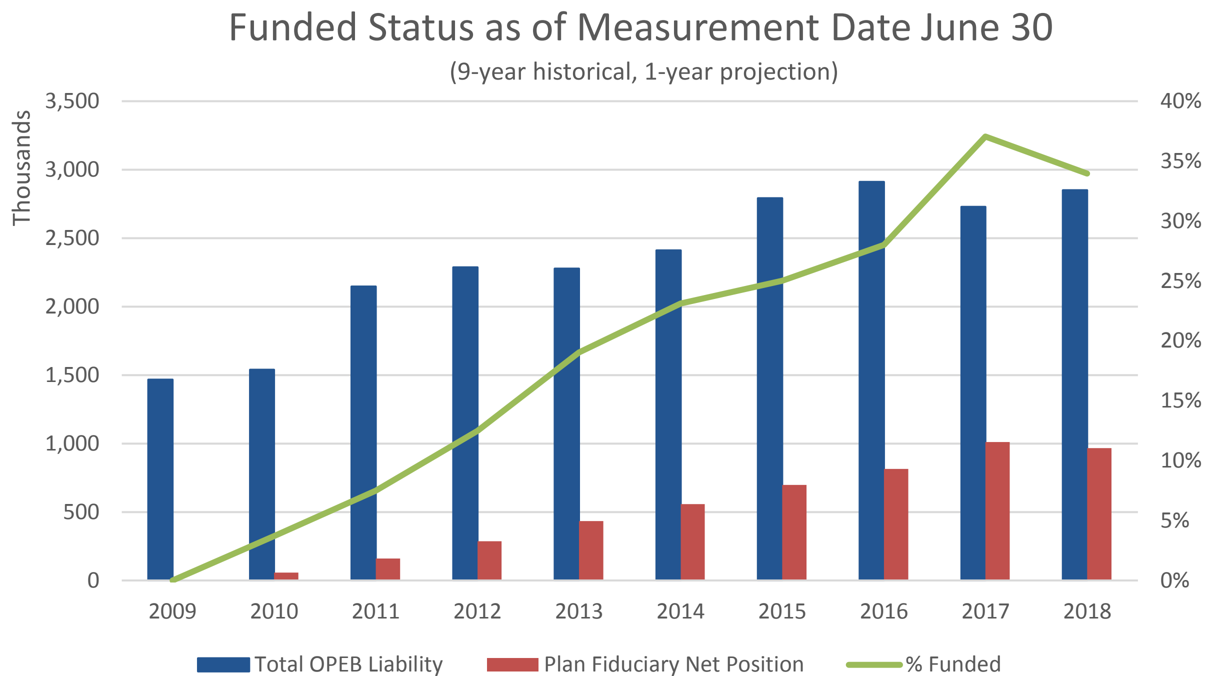
C) 10-Year Projection of Employer Benefit Payments

Fiscal Year Beginning 7/1	Premiums	Implicit Subsidy	Total
2017	$108,040	$33,436	$141,476
2018	$109,141	$22,680	$131,821
2019	$108,119	$14,348	$122,467
2020	$114,867	$18,045	$132,912
2021	$125,440	$27,741	$153,181
2022	$137,194	$38,073	$175,267
2023	$145,749	$44,131	$189,880
2024	$155,411	$52,501	$207,912
2025	$168,385	$62,966	$231,351
2026	$180,124	$70,020	$250,144



D) Funding Progress

Below is an illustration of the funded status of the Plan for the past 9 years, and a projection of the next year's funded status looking forward:



Note:

1) Total OPEB Liability for GASB 75 is an interchangeable term with Actuarial Accrued Liability for funding.
2) Total OPEB Liability shown above on/after 2017 was based on Entry Age Normal Funding Method under GASB 75.
3) Prior to 2017, Total OPEB Liability shown were based on Projected Unit Credit Funding Method under GASB 45.

A) Derivation of Significant Actuarial Assumptions (Exhibit 1)

Long-term Expected Rate of Return – As of June 30, 2017, the long-term expected rates of return for each major investment class in the Plan's portfolio are as follows:

Investment Class	Target Allocation	Long-Term Expected Real Rate of Return[1]
Equity	43.00%	5.45%
Fixed Income	49.00%	1.87%
REITs	8.00%	5.06%
Cash	0.00%	0.00%

[1]JPMorgan arithmetic Long Term Capital Market assumptions and expected inflation of 2.25%.

The above table shows the target asset allocation in the CERBT Strategy 2 investment policy.

Discount rate – The discount rate is based on a blend of (a) the long-term expected rate of return on assets for benefits covered by plan assets and a yield or index for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or better for benefits not covered by plan assets.

Above are the arithmetic long-term expected real rates of return by asset class for the next 10 years as provided in a report by JP Morgan. For years thereafter, returns were based on historical average index real returns over the last 30 years assuming a similar equity/fixed investment mix and a 2.25% inflation rate. Investment expenses were assumed to be 10 basis points per year. These returns were matched with cash flows for benefits covered by plan assets and the Bond Buyer 20-Bond General Obligation index was matched with cash flows not covered by plan assets to measure the reasonableness of the choice in discount rate.

	June 30, 2016	June 30, 2017
Discount Rate	6.73%	6.73%
Bond Buyer 20-Bond GO Index	2.58%	3.58%

B) Sensitivity Analysis (Exhibit 2)

Sensitivity of the Actuarial Accrued Liability to changes in the Discount Rate – The following presents what The District Actuarial Accrued Liability would be if it were calculated using a discount rate that is 1% point lower (5.73%) or 1% point higher (7.73%) than the current rate.

Sensitivity of the Actuarial Accrued Liability to changes in the Trend Rate – The following presents The District Actuarial Accrued Liability if it were calculated using a trend table that is 1% point lower or 1% point higher than the current rate.

Actuarial Accrued Liability as of 07/01/2017 Valuation Date: $2,728,562

Sensitivity Analysis:

	AAL/TOL	$ Change	%Change
Discount Rate			
+1%	$2,436,006	($292,556)	(11%)
Base	$2,728,562	0	0
-1%	$3,081,401	$352,839	13%
Trend Rate			
+1%	$3,061,615	$333,053	12%
Base	$2,728,562	0	0
-1%	$2,439,377	($289,185)	(11%)

C) Explicit and Implicit Liabilities (Exhibit 3)

	Explicit	Implicit	Total
Present Value of Future Benefits			
Actives	$1,532,686	$544,864	$2,077,550
Retirees	1,250,076	166,494	1,416,569
Total	$2,782,762	$711,358	$3,494,119
Actuarial Accrued Liability			
Actives	$955,896	$356,097	$1,311,993
Retirees	1,250,076	166,493	1,416,569
Total	$2,205,972	$522,590	$2,728,562
Normal Cost (boy)	$68,862	$22,736	$91,598

D) Schedule of Actuarially Determined Contributions (Exhibit 4)

Plan Year	2017 - 2018	2018 - 2019	2019 - 2020
		Projected[1]	Projected[1]
Actuarial Accrued Liability	$2,728,562	$2,863,797	$3,029,904
Actuarial Value of Assets[2]	1,011,581	1,153,726	1,253,322
Unfunded Actuarial Accrued Liability	$1,716,981	$1,710,071	$1,776,582
Amortization Period[3]	22	21	20
Normal Cost (eoy)	$97,761	$109,558	$122,778
Amortization of UAAL[4]	115,407	118,667	127,557
Actuarially Determined Contribution	$213,168	$228,225	$250,335
Discount Rate	6.73%	6.73%	6.73%
Expected Return on Assets	6.73%	6.73%	6.73%
Normal Cost Growth Rate	n/a	5.00%	5.00%

[1] Projections assume that the District funds the Actuarially Determined Contribution (ADC), the Fund earns 6.73% per year, the discount rate remains 6.73% and the Normal Cost component of the ADC increases by 5.0% per year throughout the two-year period. We assumed mid-year benefit withdrawals from the Trust.

[2] Asset Smoothing: GASB 75 calculates the unfunded liability using market value of assets. However, equity risk can result in significant asset volatility, which translates to a volatile unfunded liability. To mitigate this volatility, the District can adopt an asset smoothing method, which recognizes gain/loss for any one year systematically over the smoothing period. Common smoothing periods are 3-5 years in length.

[3] Amortization Method: GASB 75 amortizes asset gain/loss over 5 years, liability experience gain/loss and assumption change gain/loss over a variable period of roughly 5-10 years, and immediately recognizes plan amendment gain/loss and your initial unfunded. Under the GASB 45 methodology, the District was amortizing all of these items over a closed 30 year period. The District should consider whether the old GASB 45 methodology is still appropriate as it may lead to a significant under or over funding when the amortization periods for the ADC calculation are not the same as the amortizations for GASB 75.

[4] Amortization of UAAL Method: Under GASB 45 methodology, excess assets are amortized in the same way that UAAL is amortized, which may result in the presence of an ADC even when the plan would be expected to be fully funded at the end of the year without a contribution.

E) Schedule of Contributions[1] (Exhibit 5)

	Plan Year 2016 - 2017
Actuarially Determined Contribution[2]	219,673
Covered-employee payroll[3]	2,252,470
Contributions as a percentage of covered-employee payroll[3]	13%
Contributions to the Trust	$134,180
Pay-go Payments by Employer Unreimbursed by the Trust	94,678
Active Implicit Rate Subsidy Transferred to OPEB	59,093
Total OPEB Contributions[1]	$287,951

[1] ADC and Contributions are for the measurement period July 1, 2016 to June 30, 2017.

[2] Employers setting a discount rate based on the assumption that assets will be sufficient to cover all future benefit payments under the plan are assumed to annually make contributions equal to the actuarially determined contribution. Annual contributions made that are substantially less than the ADC would require additional support for use of a discount rate equal to the long-term expected return on trust assets. The ADC is based on the actuarial valuation as of the July 1, 2015 report

[3] Covered-Employee Payroll represented above is based on cover-employee payroll provided by the employer. GASB 75 defines covered-employee payroll as the total payroll of employees that are provided OPEBs through the OPEB plan. Accordingly, if OPEB covered-employee payroll shown above is different than total earnings for covered-employees, the employer should display in the disclosure footnotes the payroll based on total earnings for the covered group and recalculate the required payroll-related ratios.

A) Summary of Demographic Information

The participant data used in the valuation was provided by The District as of December 31, 2016. It is assumed that this data is representative of the population as of December 31, 2016. While the participant data was checked for reasonableness, the data was not audited, and the valuation results presented in this report are dependent upon the accuracy of the participant data provided. The table below presents a summary of the basic participant information for the active and retired participants covered under the terms of the Plan.

	Total
Actives	
Total Counts	20
Average Age	43
Average Service	8
Retirees	
Counts	
Under age 65*	6
Age 65 and over	13
Total Counts	19
Average Age	71
Total Participants	39
Covered Dependents of Retirees	
Counts	
Spouses / Domestic Partners	4
Children	0
Total	4
Grand Total	43

*Includes 3 retirees who receive PEMCHA only

B) Distribution of Participants by Age and Service

Distribution of Service Groups by Age Groups

Age Group	Retired* Participants	Active Participant – Years of Service						
		0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25+	Total
< 25	0	1	0	0	0	0	0	1
25 - 29	0	2	0	0	0	0	0	2
30 - 34	0	1	0	0	0	0	0	1
35 - 39	0	2	0	1	0	0	0	3
40 - 44	0	3	0	0	0	0	0	3
45 - 49	0	2	0	1	0	0	0	3
50 - 54	0	0	1	0	0	2	1	4
55 - 59	1	1	1	1	0	0	0	3
60 - 64	5	0	0	0	0	0	0	0
65 - 69	2	0	0	0	0	0	0	0
> 70	11	0	0	0	0	0	0	0
Total	19	12	2	3	0	2	1	20

* Retired participants include retirees, disabled participants, and surviving family members. Does not include covered dependents.

Section IV Plan Provision Summary

A) Plan Description

Current Plan for Existing Employees:

The District provides lifetime postretirement medical coverage to employees who retire from the District at age 50 or older with at least 5 years of continuous PERS covered service.

Coverage may be extended to the spouse and dependents depending on the coverage in effect at retirement, and subject to applicable caps. Spousal coverage is only available if they were married to the retiree at the time of retirement from the District and if the retiree chose a dual retirement payout from PERS at the time of retirement.

The amount of medical retirement coverage is divided into four groups:

Group 1 Retired prior to January 1, 2003. Their benefit is based on a monthly cap which is increased by 6% each year. The monthly cap is $734.79 as of January 1, 2017 and may be used to cover the retiree and their spouse. If the monthly premium for the retiree is less than $734.79, any overage will be paid to them if they have a qualifying spouse on their plan.

Group 2 employees were hired prior to January 1, 2003 and not retired as of that date. They receive the One Party rate which was $707 as of January 1, 2017. This rate is set by the California Department of Personnel Administration. This benefit is only available for the retiree so that if their individual cost falls below the $707, they only receive a benefit for the actual cost.

Group 3 employees were hired after January 1, 2003. They are part of the states' statutory plan per Government Code Section 22893. They can receive coverage for themselves and their dependents, up to a cap set annually by the California Department of Personnel Administration. The maximum amount of coverage is 100% for the retiree and 90% for dependents. Retirees have to work for the District for five years and have at least 10 years of PERS service to reach the minimum benefit of 50% coverage. The percentage of employer contribution increases 5% each year until 20 years of PERS service is reached with 100% coverage for the retiree and 90% for dependents. As of January 1, 2017 the contribution amounts are $707 for an individual, $1,349 for two party coverage and $1,727 for family coverage. If a retiree has between five and less than ten years of service, they receive the contractual minimum monthly payment of $128 for 2017.

Group 4 employees were hired after July 1, 2014. They can receive coverage for themselves up to a cap set annually by the California Department of Personnel Administration. The maximum amount of coverage is 100% for the retiree only. Retirees have to work for the District for 10 years and retire from the District to receive the minimum benefit of 50% coverage. The percentage of employer contribution increases 5% each

year until 20 years of District service is reached with 100% coverage for the retiree. As of January 1, 2017 the contribution amounts are $707 for an individual. If a retiree has between five and less than ten years of service, they receive the contractual minimum monthly payment of $128 for 2017.

For all retirees the contractual minimum monthly payment, which is determined each year by CalPERS, is remitted directly to CalPERS. For 2017 it is $128. This payment is included in the overall cap of coverage for each group. So if they are a Group 1 retiree, for 2017 the District remits $128 to CalPERS and pays a maximum of $606.79 to the retiree.

Pre-Medicare Premiums

2017 Plan	EE	EE+SP	EE+Fam
Anthem HMO Select	783.46	1,566.92	2,037.00
Anthem HMO Traditional	990.05	1,980.10	2,574.13
Blue Shield Access+	1,024.85	2,049.70	2,664.61
Kaiser	733.39	1,466.78	1,906.81
PERSCare	932.39	1,864.78	2,424.21
PERS Choice	830.30	1,660.60	2,158.78
PERS Select	736.27	1,472.54	1,914.30
UnitedHealthcare	1,062.26	2,124.52	2,761.88

Medicare Premiums

2017 Plan	EE	EE+SP
Kaiser	300.48	600.96
PERS Choice	389.76	779.52
PERS Select	353.63	707.26
PERSCare	353.63	707.26
UnitedHealthcare	324.21	648.42

PEMHCA Minimum

2017
128.00

Section V Actuarial Assumption, Methods, & Considerations

A) Actuarial Assumptions

Discount Rate: 6.73%, based on CERBT investment allocation Strategy 2

Health Care Trend

Year Beginning	Increase in Premium Rates Pre-65	Post-65
2018	8.00%	5.50%
2019	7.75%	5.25%
2020	7.50%	5.00%
2021	7.25%	5.00%
2022	7.00%	5.00%
2023	6.75%	5.00%
2024	6.50%	5.00%
2025	6.25%	5.00%
2026	6.00%	5.00%
2027	5.75%	5.00%
2028	5.50%	5.00%
2029	5.25%	5.00%
2030 and later	5.00%	5.00%

Plan Distribution for Calculating Baseline Cost

Plan	Pre-Medicare	Post-Medicare
Blue Shield	5%	15%
Kaiser	77%	62%
PERSCare	5%	0%
PERS Choice	14%	3%
Total[1]	100%	100%

[1]May not add to 100% because of rounding.

Amortization Methodology: We used straight-line amortization. For assumption changes and experience gains/losses, we assumed Average Future Working Lifetime, averages over all actives and retirees (retirees are assumed to have no future working years). For asset gains and losses, we assumed 5 years.

Baseline Cost: Pre-Medicare: $9,074 per year
Post-Medicare: $3,800 per year

Inflation: We assumed 2.25% annual inflation.

Payroll increases: 3.25% annual increases.

Administrative Expenses: We assumed that there are no administrative fees other than those included in the premium rates.

Net Investment Return: 6.73%, based on CERBT investment allocation Strategy 2

A) Actuarial Assumptions (continued)

Percent Married	We assumed that all current actives with their spouses will cover their spouses at retirement, and that all current actives not covering spouses will continue not covering spouses at retirement.
Health Plan Participation	We assumed that 100% of eligible participants will participate.
Medicare Coverage	We assumed that all future retirees will be eligible for Medicare when they reach age 65.
Disability	Because of the anticipated low incidence of disability retirements we did not value disability.
Mortality*	The mortality rates used in this valuation are those used in the most recent CalPERS valuations.

Pre-Retirement: CalPERS 2014 Mortality pre-retirement

Post-Retirement: CalPERS 2014 Mortality post-retirement

Sample Mortality Rates				
	Active Employees		Retired Employees	
Age	Male	Female	Male	Female
55	0.23%	0.14%	0.60%	0.42%
60	0.31%	0.18%	0.71%	0.44%
65	0.40%	0.26%	0.83%	0.59%
70	0.52%	0.37%	1.31%	0.99%
75	0.71%	0.53%	2.21%	1.72%
80	0.99%	0.81%	3.90%	2.90%
85	0.00%	0.00%	6.97%	5.24%
90	0.00%	0.00%	12.97%	9.89%

** Source: NCG has not performed an experience study to select these assumptions. NCG has not observed materially consistent gains or consistent losses associated with these assumptions*

A) Actuarial Assumptions (continued)

Retirement*

We used the Public Agency Miscellaneous retirement rates that were produced from the 2014 experience study performed by CalPERS. 2.7% @ 55 for actives hired before January 1, 2013, and 2% @ 62 for actives hired on or after January 1, 2013.

2.7% @ 55 (for actives hired before January 1, 2013)

	Years of Service				
Age	5	10	15	20	25
50	0.4%	0.9%	1.4%	3.5%	5.5%
55	7.6%	10.1%	12.5%	16.5%	20.5%
60	6.9%	9.3%	11.6%	15.4%	19.2%
65	13.4%	17.4%	21.5%	27.0%	32.6%
70	14.1%	18.3%	22.6%	28.3%	34.1%
75	100.0%	100.0%	100.0%	100.0%	100.0%

2% @ 62 (for actives hired on or after January 1, 2013)

	Years of Service				
Age	5	10	15	20	25
50	0.0%	0.0%	0.0%	0.0%	0.0%
55	4.4%	5.6%	6.8%	8.0%	9.2%
60	6.2%	7.8%	9.5%	11.2%	12.9%
65	12.9%	16.4%	19.9%	23.4%	26.9%
70	12.5%	16.0%	19.4%	22.8%	26.2%
75	100.0%	100.0%	100.0%	100.0%	100.0%

Withdrawal*

We selected withdrawal rates that were used in the most recent CalPERS Public Agency Miscellaneous valuations.

	Years of Service				
Age	0	5	10	15	20
25	16.7%	8.7%	7.5%	0.0%	0.0%
30	16.1%	7.9%	6.7%	5.8%	0.0%
35	15.4%	7.1%	5.9%	5.0%	4.5%
40	14.7%	6.3%	5.1%	4.2%	3.7%
45	14.0%	5.5%	4.3%	3.5%	2.9%
50	13.3%	1.2%	0.7%	0.3%	0.2%

** Source: NCG has not performed an experience study to select these assumptions. NCG has not observed materially consistent gains or consistent losses associated with these assumptions*

B) Actuarial Methods

Actuarial Cost Method	Entry Age Normal An actuarial cost method under which the Actuarial Present Value of the Projected Benefits of each individual included in the valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age(s). The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost.
Financial and Census Data	The District provided the participant data, financial information and plan descriptions used in this valuation. The actuary has checked the data for reasonableness, but has not independently audited the data. The actuary has no reason to believe the data is not complete and accurate, and knows of no further information that is essential to the preparation of the actuarial valuation.
Plan Fiduciary Net Position	Market value of assets as of the measurement date
Measurement Date	June 30, 2017
Valuation Date	January 1, 2017. Results have been rolled forward (an actuarial adjustment) to June 30, 2017.
Funding Policy	The District intends to contribute the full ADC to the CERBT each year.

C) Actuarial Considerations

Health Care Reform

Health care delivery is going through an evolution due to enactment of Health Care Reform. The Patient Protection and Affordable Care Act (PPACA), was signed March 23, 2010, with further changes enacted by the Health Care and Education Affordability Reconciliation Act (HCEARA), signed March 30, 2010. This valuation uses various assumptions that may have been modified based on considerations under PPACA. This section discusses particular legislative changes that were reflected in our assumptions. We have not identified any other specific provision of PPACA that would be expected to have a significant impact on the measured obligation. As additional guidance on the Act continues to be issued, we'll continue to monitor impacts.

Individual Mandate

Under PPACA, individuals (whether actively employed or otherwise) must be covered by health insurance or else pay a penalty tax to the government. While it is not anticipated that the Act will result in universal coverage, it is expected to increase the overall portion of the population with coverage. We believe this will result in an increased demand on health care providers, resulting in higher trend for medical services for non-Medicare eligible retirees. (Medicare costs are constrained by Medicare payment mechanisms already in place, plus additional reforms added by PPACA and HCEARA.) While we believe that the mandate may result in somewhat higher participation overall, this issue would have a marginal impact since we assume 100% participation upon retirement.

Employer Mandate

Health Care Reform includes various provisions mandating employer coverage for active employees, with penalties for non-compliance. Those provisions do not directly apply to the postemployment coverage included in this valuation.

C) Actuarial Considerations (continued)

Medicare Advantage Plans	Effective January 1, 2011, the Law provides for reductions to the amounts that would be provided to Medicare Advantage plans starting in 2011. We considered the effect of these reductions in federal payments to Medicare Advantage plans when setting our trend assumption.
Expansion of Child Coverage to Age 26	Health Care Reform mandates that coverage be offered to any child, dependent or not, through age 26, consistent with coverage for any other dependent. We assume that this change has been reflected in current premium rates. While this plan covers dependents, we do not currently assume non-spouse dependent coverage other than for firefighters. We believe the impact this assumption has on the valuation is immaterial due to the lack of retirees that have had or are expected to have non-spouse dependents for any significant amount of time during retirement.
Elimination of Annual or Lifetime Maximums	Health Care Reform provides that annual or lifetime maximums have to be eliminated for all "essential services." We assume that current premium rates already reflect the elimination of any historic maximums.
Cadillac Tax (High Cost Plan Excise Tax)	The PPACA legislation added a new High-Cost Plan Excise Tax (also known as the "Cadillac Tax") starting in calendar year 2020. For valuation purposes, we assumed that the value of the tax will be passed back to the plan in higher premium rates.

- The tax is 40% of the excess of (a) the cost of coverage over (b) the limit. We modeled the cost of the tax by calculating (a) using the working rates projected with trend. We calculated (b) starting with the statutory limits ($10,200 single and $27,500 family), adjusted for the following:
  - Limits will increase from 2018 to 2019 by 4.25% (CPI plus 1%);
  - Limits will increase after 2019 by 3.25% (CPI); and
  - For retirees over age 55 and not on Medicare, the limit is increased by an additional dollar amount of $1,650 for single coverage and $3,450 for family coverage.
- Based on the above assumptions, we estimate that the tax will apply as early as 2020 for some of the District's pre-Medicare plans. In addition, we estimate that the tax will not apply for the District's post-Medicare plans.

Section VI Glossary

A) Key Terms

Term	Definition
Actuarially Determined Contribution	The annual contribution amount required to fund the plan based on an actuarial funding method. The intent of a funding method is to ensure enough assets would be set aside during the working careers of participants in a plan in order to fully pay all future benefits after participants retire.
Present Value of Future Benefits (PVFB)	The value, as of the valuation date, of the projected benefits payable to all members for their accrued service and their expected future service, discounted to reflect the time value (present value) of money and adjusted for the probabilities of retirement, withdrawal, death and disability
Actuarial Accrued Liability (AAL)	The portion of the actuarial present value of projected benefit payments that is attributed to past period of member service in conformity with the actuarial funding method. The actuarial accrued liability is the liability of the plan sponsor and represents how much assets should be set aside as of the current valuation date.
Normal Cost or Service Cost	The portion of the Present Value of Future Benefits attributed to employee service during the current fiscal year by the actuarial cost method. These terms are used interchangeably.
Unfunded Actuarial Accrued Liability	The amount of the actuarial accrued liability that has not yet been funded
Covered Payroll	Annual compensation paid (or expected to be paid) to active employees covered by an OPEB plan, in aggregate.
Other Postemployment Benefits (OPEB)	Retiree health care benefits and post-employment benefits provided separately from a pension plan (excluding termination offers and benefits).
Actuarial Value of Assets	Usually set equal to the market value of assets as of the valuation date. Sometimes, however, asset smoothing methods are used to reduce the impact of short term market volatility. In these cases the actuarial value of assets can be more or less than the market value. Often a corridor of up to 20% is used to cap how much the actuarial value of assets is more or less than the market value.
Implicit Subsidy	This phenomena arises when actives claims are mixed with pre-Medicare retiree claims to develop a single flat premium that both groups pay for medical coverage. The flat premium does not recognize that retirees generally have higher costs than active employees, thus active employees are subsidizing the retirees.