Las Gallinas Valley Sanitary District
OPEB Plan

Governmental Accounting Standards Board
(GASB) Statement 75
Actuarial Valuation Date: December 31, 2016
Measurement Date: June 30, 2018
Fiscal Year End: June 30, 2019

June 27, 2019

Nicolay Consulting

Nicolay Consulting Group

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June 27, 2019

Robert Ruiz
Director of Accounting
Las Gallinas Valley Sanitary
District 300 Smith Ranch Rd
San Rafael, CA 94903

Re: Las Gallinas Valley Sanitary District GASB 75 Report for FYE June 30, 2019

Dear Mr. Ruiz,

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, 2018 measurement date compliant under Governmental Accounting Standards Board (GASB) Statement 75.

The purpose of this valuation is to determine the value of the expected postretirement benefits for current and future retirees and the Net OPEB Liability and OPEB Benefit Cost for the fiscal year ending June 30, 2019. The amounts reported herein are not necessarily appropriate for use for a different fiscal 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, ASA, MAAA, FCA, Enrolled Actuary. A member of the American Academy of Actuaries whom meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. 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

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

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Section I Management Summary

A) Highlights

Summary of Key Valuation Results

	2018	2017
Disclosure elements as of measurement period ending June 30:		
Present Value of Future Benefits:		
Active	$2,217,370	$2,077,550
Retiree	1,365,745	1,416,569
Total	$3,583,115	$3,494,119
Actuarial Accrued Liability or Total OPEB Liability (TOL)		
Active	$1,498,052	$1,311,993
Retiree	1,365,745	1,416,569
Total	$2,863,797	$2,728,562
Plan Fiduciary Net Position (i.e Fair Value of Assets)	1,191,718	1,011,581
Net OPEB Liability (NOL)	$1,672,079	$1,716,981
Plan Fiduciary Net Position as a percentage of the TOL	42%	37%
Aggregate OPEB Expense (Exhibit 4)	$160,511	$169,423
Covered Payroll	$3,687,903	$2,252,470
Schedule of contributions for measurement period ending June 30:		
Actuarially determined contributions (Exhibit 7)	$213,168	$219,673
Actual contributions[1]	250,954	287,951
Contribution deficiency/(excess)	($37,786)	($68,278)
Employer's Share of Benefit Payments	$132,720	$153,771
Demographic data for measurement period ending June 30 [2]:		
Number of active members	20	0
Number of retired members and beneficiaries	19	0
Inactive Participants with deferred benefits	0	0
Total Participants	39	0
Key assumptions as of the Measurement Date:		
Discount rate	6.73%	6.73%
Initial Trend Rate		
Pre-65	8.00%	8.00%
Post-65	5.50%	5.50%
Ultimate Rate	5.00%	5.00%
Year Ultimate Rate is Reached	2030	2030
CalPERS Minimum	4.00%	4.00%

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

(2) *Census data as of December 31, 2016 is used in the measurement of the TOL as of June 30, 2018. See Section III for additional details on the demographic data.*

B) Gap Analysis

The Total OPEB Liability has increased $135,235 from $2,728,562 as of June 30, 2017 to $2,863,797 as of June 30, 2018. This increase is primarily due to expected benefits earned and interest on the total OPEB libility, offset by the expected benefit payments during the year.

Interim Valuation

This report presents liabilities as of the measurement date that are based on an interim valuation.

GASB 75 allows plan sponsors to perform valuations biennially, meaning the results for a valuation can be rolled forward to up to two GASB 75 measurement dates. The valuation date can precede a GASB 75 measurement date as long as the results would not be materially different had an updated census been collected as of the measurement date. Therefore, if the District has had a significant shift in participant demographics between the valuation date and a GASB 75 measurement date, an updated census must be collected and a full valuation performed.

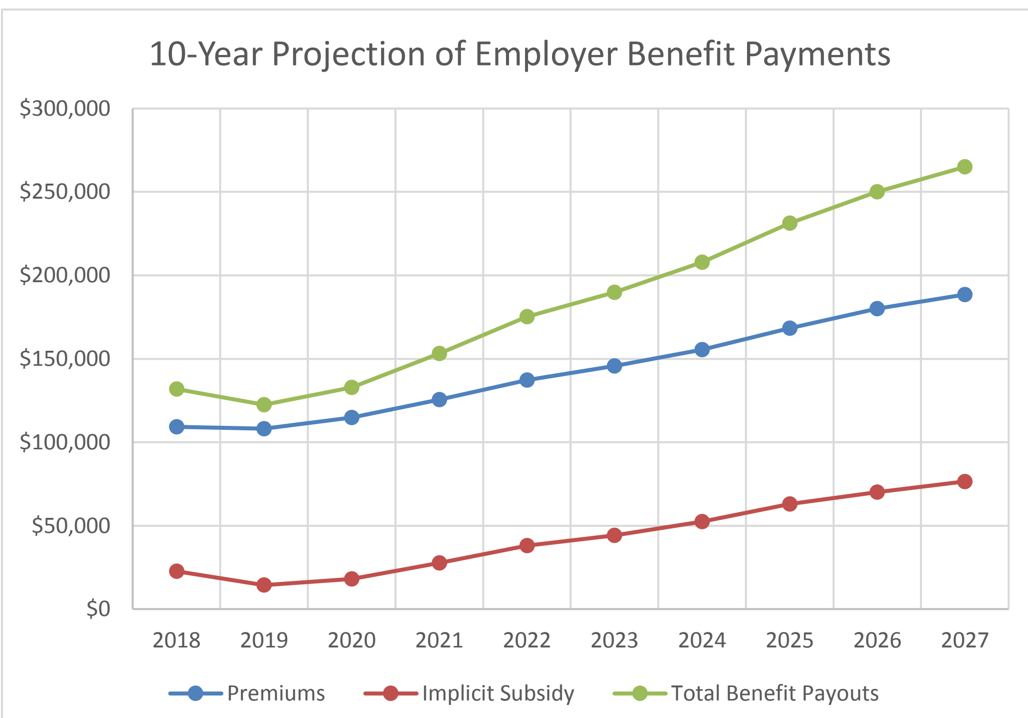
When a full valuation is performed the inputs to the valuation (participant census, plan provisions, assets, and actuarial assumptions and methods) are reviewed and updated.

When an interim valuation is performed, both the census data and the assumptions and methods do not need to be updated. What does need to be updated in an interim valuation are assets, plan provision changes materially impacting the results, and the discount rate to the extent that it is based on a yield or index rate for a 20-year, tax exempt general obligation municipal bonds with an average rating of AA/Aa or higher.

C) 10-Year Projection of Employer's Benefit Payments

In this table we show the projected pay-as-you-go costs (employer's share of premiums), the implicit subsidy, and total expected benefit payments. The implicit subsidy reflects the shortfall of premiums versus the true cost of coverage. The shortfall exists because claims for active employees are combined with claims of retirees (who generally are older and cost more) to develop a single flat premium paid by both groups.

Plan Year Beginning 7/1	Employer's Share of Premiums	Implicit Subsidy	Total
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	$189,879
2024	$155,411	$52,501	$207,912
2025	$168,385	$62,966	$231,350
2026	$180,124	$70,020	$250,144
2027	$188,502	$76,488	$264,990

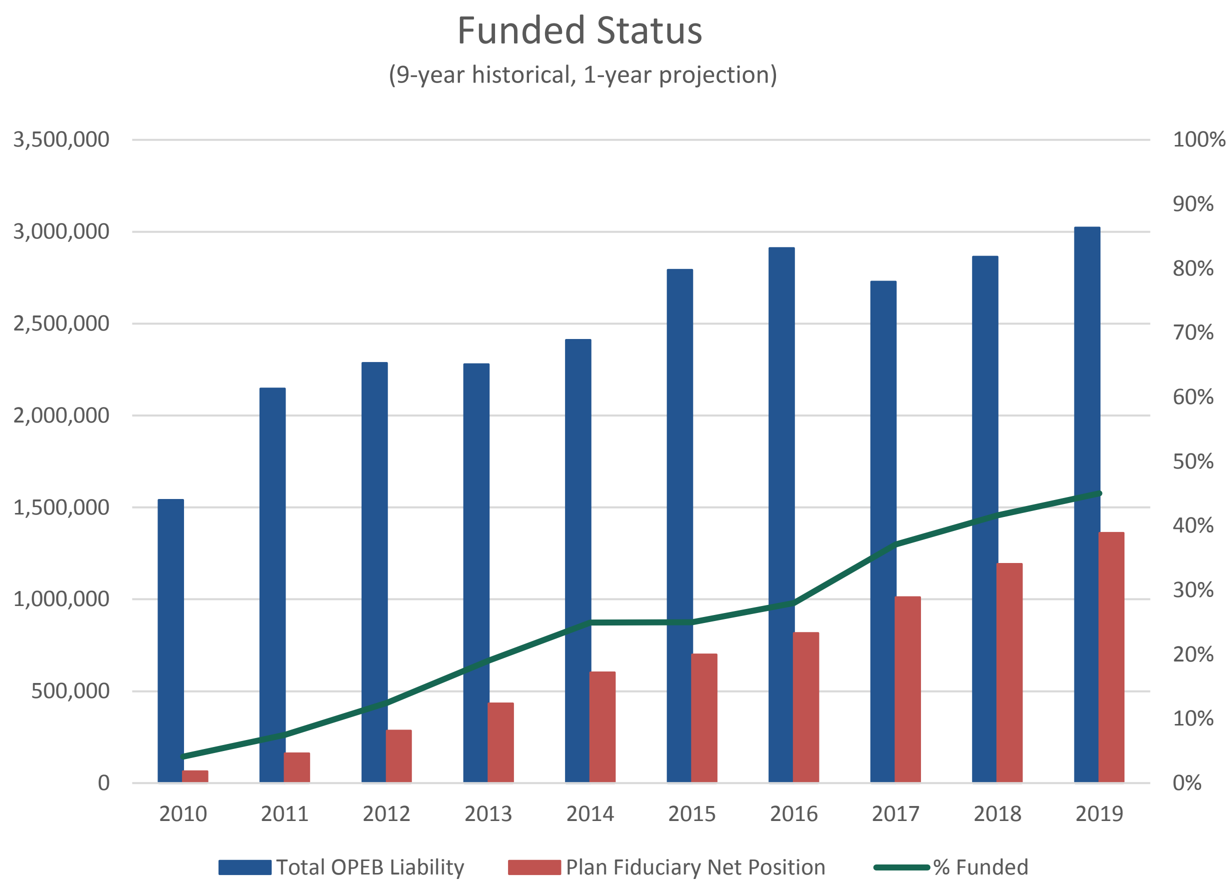


D) Breakdown of Explicit and Implicit Liabilities

	Explicit	Implicit	Total
Present Value of Future Benefits			
Actives	$1,635,836	$581,534	$2,217,370
Retirees	1,222,589	143,156	1,365,745
Total	$2,858,425	$724,690	$3,583,115
Actuarial Accrued Liability			
Actives	$1,093,724	$404,328	$1,498,052
Retirees	1,222,589	143,156	1,365,745
Total	$2,316,313	$547,484	$2,863,797
Normal Cost	$72,305	$23,873	$96,178

E) 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 looking forward:



Section II GASB 75 Exhibits

A) Schedule of Changes in Net OPEB Liability (Exhibit 1)

	2018	2017
Total OPEB Liability		
Service cost	$91,597	$77,776
Interest	185,403	196,002
Change of benefit terms	0	0
Differences between expected and actual experience	(9,045)	156,326
Changes of assumptions	0	(457,988)
Benefit payments[1]	(132,720)	(153,771)
Net change in Total OPEB Liability	$135,235	($181,655)
Total OPEB Liability – beginning (a)	$2,728,562	$2,910,217
Total OPEB Liability – ending (b)	$2,863,797	$2,728,562
Plan Fiduciary Net Position		
Contributions – employer	$250,954	$287,951
Contributions – employee	0	0
Net investment income	62,465	53,990
Benefit payments[1]	(132,720)	(153,771)
Administrative expense	(562)	(463)
Other	0	0
Net change in Plan Fiduciary Net Position	$180,137	$198,079
Plan Fiduciary Net Position – beginning (c)	$1,011,581	$813,502
Plan Fiduciary Net Position – ending (d)	$1,191,718	$1,011,581
Net OPEB Liability - beginning (a) – (c)	$1,716,981	$2,096,715
Net OPEB Liability – ending (b) – (d)	$1,672,079	$1,716,981
Plan Fiduciary Net Position as a percentage of the TOL	42%	37%
Covered employee payroll[2]	$3,687,903	$2,252,470
NOL as percentage of covered employee payroll[2]	45%	76%

[1] including refunds of employee contributions
[2] Covered payroll not available

Section II GASB 75 Exhibits

B) Summary of Changes in Net OPEB Liability (Exhibit 2)

	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a)-(b)
Measurement as of June 30, 2017:	$2,728,562	$1,011,581	$1,716,981
Recognized Changes Resulting from:			
▪ Service cost	91,597	-	91,597
▪ Interest	185,403	-	185,403
▪ Diff. between expected and actual experience	(9,045)	-	(9,045)
▪ Changes of assumptions	-	-	-
▪ Net investment income	-	62,465	(62,465)
▪ Benefit payments[(1)]	(132,720)	(132,720)	-
▪ Contributions – employer	-	250,954	(250,954)
▪ Contributions – employee	-	-	-
▪ Administrative expense	-	(562)	562
▪ Change of benefit terms	-	-	-
Net Changes	$135,235	$180,137	($44,902)
Measurement as of June 30, 2018:	$2,863,797	$1,191,718	$1,672,079

[1] including refunds of employee contributions

C) Derivation of Significant Actuarial Assumptions

Long-term Expected Rate of Return – As of June 30, 2018, 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 2.26%.

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 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 2.26% 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, 2018	June 30, 2017
Discount Rate	6.73%	6.73%
Bond Buyer 20-Bond GO Index	3.87%	3.58%

D) Sensitivity Analysis (Exhibit 3)

Sensitivity of the Net OPEB Liability to changes in the discount rate – The following presents the District's Net OPEB Liability 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 Net OPEB Liability to changes in the Trend rate – The following presents the District's Net OPEB Liability if it were calculated using a trend table that has rates that are 1% point lower or 1% point higher than the current set of rates:

Net OPEB Liability as of the June 30, 2018 measurement date: $1,672,079

Sensitivity Analysis:

	NOL/(A)	$ Change	%Change
Discount Rate			
+1%	$1,365,009	($307,070)	(18%)
Base	$1,672,079	-	-
-1%	$2,042,424	$370,345	22%
Trend Rate			
+1%	$2,021,625	$349,546	21%
Base	$1,672,079	-	-
-1%	$1,368,566	($303,513)	(18%)

E) Schedule of OPEB Expense (Exhibit 4)

Measurement Period Ending:	June 30, 2018	June 30, 2017
Components of OPEB Expense:		
Service Cost	$91,597	$77,776
Interest on the Total OPEB Liability (Exhibit 5)	185,403	196,002
Projected Earnings on OPEB Plan Investments (Exhibit 6)	(71,974)	(59,176)
Employee Contributions	0	0
Administrative Expense	562	463
Changes on Benefit Terms	0	0
Recognition of Deferred Resources Due to:		
▪ Changes of Assumptions	(67,720)	(67,720)
▪ Differences between Expected and Actual Experience	21,778	23,115
▪ Differences Between Projected Actual Earnings on Assets	865	(1,037)
Aggregate OPEB Expense	$160,511	$169,423

F) Interest on the Total OPEB Liability (Exhibit 5)

	Amount for Period a	Portion of Period b	Interest Rate c	Interest on the Total OPEB Liability a*b*c
Beginning Total OPEB Liability	$2,728,562	100%	6.73%	$183,632
Service Cost	$91,597	100%	6.73%	6,164
Benefit payments*	($132,720)	50%	6.73%	(4,393)
Total Interest on the TOL				$185,403

* including refunds of employee contribution

G) Earnings on Plan Fiduciary Net Position (Exhibit 6)

Total Projected Earnings	Amount for Period a	Portion of Period b	Projected Rate of Return c	Projected Earnings a*b*c
Beginning Plan Fiduciary Net Position	$1,011,581	100%	6.73%	$68,079
Employer Contributions	$250,954	50%	6.73%	8,307
Employee Contributions	$0	50%	6.73%	0
Benefits payments*	($132,720)	50%	6.73%	(4,393)
Administrative Expense and Other	($562)	50%	6.73%	(19)
Total Projected Earnings				$71,974

* including refunds of employee contribution

Comparison of Projected and Actual Earnings On Investments	
Total Projected Earnings	$71,974
Actual Net Investment Income	62,465
Difference Between Projected and Actual Earnings on Assets	$9,509

H) Schedule of Contributions[1] (Exhibit 7)

Measurement Period Ending:	June 30, 2018	June 30, 2017
Actuarially Determined Contribution[2]	$213,168	$219,673
Contributions to the Trust	$118,234	$134,180
Pay-go Payments by Employer Unreimbursed by the Trust	99,284	94,678
Active Implicit Rate Subsidy Transferred to OPEB	33,436	59,093
Total OPEB Contributions[1]	$250,954	$287,951
Covered-employee payroll[3]	$3,687,903	$2,252,470
Contributions as a percentage of covered-employee payroll[3]	7%	13%

[1] ADC and Contributions are for the measurement period July 1, 2017 to June 30, 2018.

[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.

[3] Covered-Employee Payroll represented above is based on covered-employee payroll provided by the employer. GASB 75 defines covered-employee payroll as the total payroll of employees that are provided benefits 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.

Section II GASB 75 Exhibits

I) Deferred Inflows/Outflows of Resources (Exhibit 8)

	Deferred Outflows of Resources	Deferred Inflows of Resources
Unrecognized Deferred Resources due to:		
▪ Differences between expected and actual experience	$110,096	$7,708
▪ Changes in assumptions	0	322,548
▪ Net difference between projected and actual earnings	4,495	0
Contribution to OPEB plan after measurement date[1]	0	0
Total	$114,591	$330,256

[1] To be determined as of the fiscal year ending 2019

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

Fiscal Year Ended June 30	Recognized Deferred Outflows/(Inflows) of Resources
2020	($45,077)
2021	(45,077)
2022	(45,078)
2023	(44,041)
2024	(35,369)
Thereafter	(1,023)
Total Deferred Resources:	($215,665)

J) Schedule of Deferred Inflows/Outflows of Resources (Exhibit 9)

Fiscal Year Established	Initial Amount	Initial Year	Years Left	Amount Recognized In FY 2019	Balances as of 06/30/19 of Deferred Outflows	Balances as of 06/30/19 of Deferred Inflows
Difference Between Expected and Actual Plan Experience						
2018	$156,326	6.8	4.8	$23,115	$110,096	$0
2019	(9,045)	6.8	5.8	(1,337)	0	($7,708)
Total	$147,281			$21,778	$110,096	($7,708)
Change in Assumptions						
2018	($457,988)	6.8	4.8	($67,720)	$0	($322,548)
2019	0	6.8	5.8	0	0	0
Total	($457,988)			($67,720)	$0	($322,548)
Net Difference Between Projected and Actual Earnings On Investments						
2018	($5,186)	5.0	3.0	($1,037)	$0	($3,112)
2019	9,509	5.0	4.0	1,902	7,607	0
Total	$4,323			$865	$7,607	($3,112)
Totals:				($45,077)	$117,631	($333,368)

K) Reconciliation of the Net Position (Exhibit 10)

Measurement as of:	June 30, 2018	June 30, 2017
Total OPEB Liability (TOL)	$2,863,797	$2,728,562
Plan Fiduciary Net Position (PFNP)	1,191,718	1,011,581
Net OPEB Liability (NOL)	$1,672,079	$1,716,981
Deferred Inflows of resources (CR):		
▪ Differences between expected and actual experience	7,708	0
▪ Changes in assumptions	322,548	390,268
▪ Net difference between projected and actual earnings	0	4,149
Deferred Outflows of resources (DR):		
▪ Differences between expected and actual experience	110,096	133,211
▪ Changes in assumptions	0	0
▪ Net difference between projected and actual earnings	4,495	0
▪ Est. contributions post measurement date[1]	0	0
Net Position	$1,887,744	$1,978,187

[1] Actual post-measurement date contributions should be reported in the financial disclosures

Reconciliation of Net Position	
Net Position at June 30, 2017[1]	$1,978,187
Aggregate OPEB Expense	160,511
Total OPEB Contributions	(250,954)
Net Position at June 30, 2018[1]	$1,887,744

[1] Does not reflect post-measurement date contributions

Our GASB 75 reports do not include post-measurement contributions. However they should be included as a deferred outflow in the employer's financial statements.

Section III Data

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 June 30, 2018. While the participant data was checked for reasonableness, the data was not audited. 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.

Actives	
Counts	
▪ Total	20
Averages	
▪ Age	43.2
▪ Service	7.3
Retirees	
Counts	
▪ Under age 65	13
▪ Age 65 and over	6
▪ Total	19
Averages	
▪ Age	71.4
▪ Age at Retirement	59.4
▪ Service at Retirement	15.5
Inactive Participants with deferred benefits	0
Total Participants	39
Covered Dependents of Retirees	
Counts	
▪ Spouses / Domestic Partners	4
▪ Children	0
▪ Total	4
Total Participants and Dependents	43

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.

A) Plan Description (continued)

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

Plan Provision Changes

There have been no plan amendments since the last measurement date.

Section V Actuarial Assumption, Methods, & Considerations

A) Actuarial Assumptions

Discount Rate: 6.73%, based on the CERBT Strategy 2 investment policy.

Net Investment Return: 6.73%, based on the CERBT Strategy 2 investment policy.

Inflation: We assumed 2.26% annual inflation.

Payroll increases: 3.25% annual increases.

Administrative Expenses: We assumed that the administrative expense were $562 for the measurement period ending June 30, 2018.

Pre-Excise Tax Health Care Trend

Year Beginning	Increase in Premium Rates Pre-65	Post-65
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%

Section V Actuarial Assumption, Methods, & Considerations

A) Actuarial Assumptions (continued)

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.

Average Per Capita Claims Cost (Baseline Cost): Pre-Medicare: $9,074 per year
Post-Medicare: $3,800 per year

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.

Morbidity Factors: CalPERS 2013 study

Population for Curving: CalPERS 2013 study

Age-Weighted Claims Costs1

Age	Claim
50	$9,167
55	$11,295
60	$13,164
65	$2,954
70	$3,447
75	$3,954
80	$4,350
85	$4,449

A) Actuarial Assumptions (continued)

Mortality* The mortality rates used in this valuation are those in the 2014 experience study.

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%

Disability* Because of the anticipated low incidence of disability retirements, we did not value disability.

Percent Married We assumed anyone covering a spouse would continue to cover in retirement, and that male spouses were on average 3 years older than female spouses

Participation We assumed 100% of retirees will participate upon retirement.

* *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 2014 CalPERS Public Agency Miscellaneous experience study.

	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*

Assumption Changes

There have been no assumption changes since the last measurement date.

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.
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.
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, 2018
Valuation Date	December 31, 2016. Results have been rolled forward (an actuarial adjustment) to June 30, 2018.
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 has increased 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.) The penalty tax was eliminated effective January 1, 2019 and this has effectively eliminated the individual mandate. The CBO estimates the impact this will have in 2019 is a decrease of enrollees of 2% of all insureds (18% of enrollees in the individual market) and expects this to grow to 5% (28%) by 2027.

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 2022. 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 2028 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

Annual OPEB Expense	The amount recognized by an employer in each accounting period for contributions to a defined benefit OPEB plan on the modified accrual basis of accounting.
Deferred outflows and inflows of resources related to OPEB	Deferred outflows of resources and deferred inflows of resources related to OPEB arising from certain changes in the collective net OPEB liability or collective total OPEB liability
Covered Payroll	Annual compensation paid (or expected to be paid) to active employees covered by an OPEB plan, in aggregate.
Net OPEB Liability (NOL)	The liability of employers and non-employer contributing entities to plan members for benefits provided through a defined benefit OPEB plan that is administered through a trust that meets the criteria of the GASB Statements.
Normal Cost or Service Cost	The portion of the Total Present Value of Future Benefits attributed to employee service during the current fiscal year by the actuarial cost method. These terms are used interchangeably.
Other Postemployment Benefits (OPEB)	Retiree health care benefits and post-employment benefits provided separately from a pension plan (excluding termination offers and benefits).
Plan Fiduciary Net Position (FNP)	Set equal to the market value of assets as of the measurement date.
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.
Total OPEB Liability (TOL)	The portion of the actuarial present value of projected benefit payments that is attributed to past period of member service in conformity with the GASB Statements. The total OPEB liability is the liability of employers and non-employer contributing entities to plan members for benefits provided through a defined benefit OPEB plan that is not administered through a trust that meets the criteria of the GASB Statements.