

**Marinwood Community Services District  
OPEB Plan**

**Governmental Accounting Standards Board  
(GASB) Statement 75  
Actuarial Valuation Date: June 30, 2019  
Measurement Date: June 30, 2019  
Fiscal Year End: June 30, 2020**

**July 16, 2020**

July 16, 2020

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Eric Dreikosen  
District Manager  
Marinwood Community Services District  
775 Miller Creek Road  
San Rafael, California 94903

**Re: Marinwood Community Services District GASB 75 Report for FYE June 30, 2020**

Dear Mr. Dreikosen,

Marinwood Community Services 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, 2019 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, 2020. 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. He is 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, ASA, MAAA, FCA, EA  
Vice President & Chief Operating Officer

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## Section I Management Summary

### A) Highlights

#### Summary of Key Valuation Results

	2019	2018
<b>Disclosure elements as of measurement period ending June 30:</b>		
<u>Present Value of Future Benefits:</u>		
Active	\$2,811,310	\$3,503,904
Retiree	2,798,296	2,025,528
Total	\$5,609,606	\$5,529,432
<u>Actuarial Accrued Liability or Total OPEB Liability (TOL)</u>		
Active	\$1,691,654	\$2,477,284
Retiree	2,798,296	2,025,528
Total	\$4,489,950	\$4,502,812
Plan Fiduciary Net Position (i.e. Fair Value of Assets)	171,150	60,810
Net OPEB Liability (NOL)	\$4,318,800	\$4,442,002
Plan Fiduciary Net Position as a percentage of the TOL	4%	1%
Aggregate OPEB Expense (Exhibit 4)	(\$176,042)	(\$96,079)
Covered Payroll	\$1,296,259	N/A
<b>Schedule of contributions for measurement period ending June 30:</b>		
Actuarially determined contributions (Exhibit 7)	\$414,936	\$531,502
Actual contributions <sup>(1)</sup>	311,322	254,225
Contribution deficiency/(excess)	\$103,614	\$277,277
Employer's Share of Benefit Payments	\$211,322	\$194,225
<b>Demographic data for measurement period ending June 30<sup>(2)</sup>:</b>		
Number of active members	17	19
Number of retired members and beneficiaries	17	14
Inactive Participants with deferred benefits	0	0
Total Participants	34	33
<b>Key assumptions as of the Measurement Date:</b>		
Discount rate	6.50%	6.50%
<u>Initial Trend Rate</u>		
Pre-65	6.55%	7.75%
Post-65	4.35%	5.20%
Ultimate Rate	4.25%	4.25%
Year Ultimate Rate is Reached	2030	2033

<sup>(1)</sup> Includes payments to trust and amounts paid directly by the plan sponsor

<sup>(2)</sup> Census data as of June 30, 2019 is used in the measurement of the TOL as of June 30, 2019. See Section III for additional details on the demographic data.

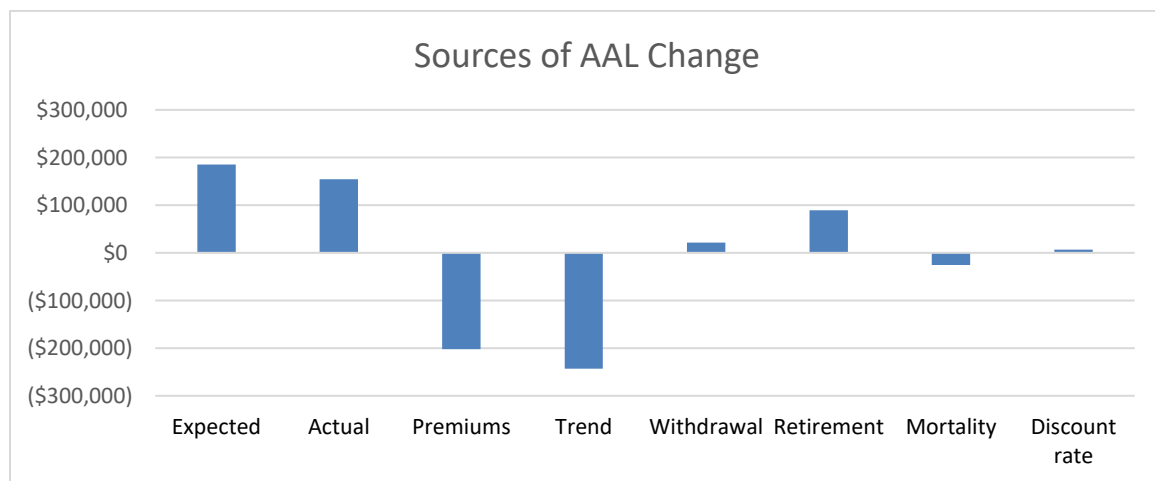
## Section I Management Summary

### B) Gap Analysis

The Total OPEB Liability has decreased \$12,862 from \$4,502,812 as of June 30, 2018 to \$4,489,950 as of June 30, 2019. A breakdown of the sources of this change in liability is shown below (thousands; amounts may not add due to rounding):

Change in TOL	Amount	Percentage
<b>Liability Experience</b>		
Expected Benefits Earned, Benefit Payments and Interest	\$186	4%
Actual Demographic and Other Experience*	<u>\$155</u>	<u>3%</u>
Total Liability Experience	\$341	8%
<b>Changes in Assumptions</b>		
New Premiums	(\$202)	(4%)
Change in Trend	(\$243)	(5%)
Change in Withdrawal	\$22	0%
Change in Retirement	\$89	2%
Change in Mortality	(\$25)	(1%)
New Discount Rate	<u>\$6</u>	<u>0%</u>
Total Assumption Change	(\$353)	(8%)
<b>Changes in Benefit Terms</b>		
Benefit Change	<u>\$0</u>	<u>0%</u>
Total Benefit Change	\$0	0%

Total Change in TOL	Amount	Percentage
Liability Experience	\$341	8%
Changes in Assumptions	(\$353)	(8%)
Amendments	<u>\$0</u>	<u>0%</u>
Total	(\$12)	(0%)

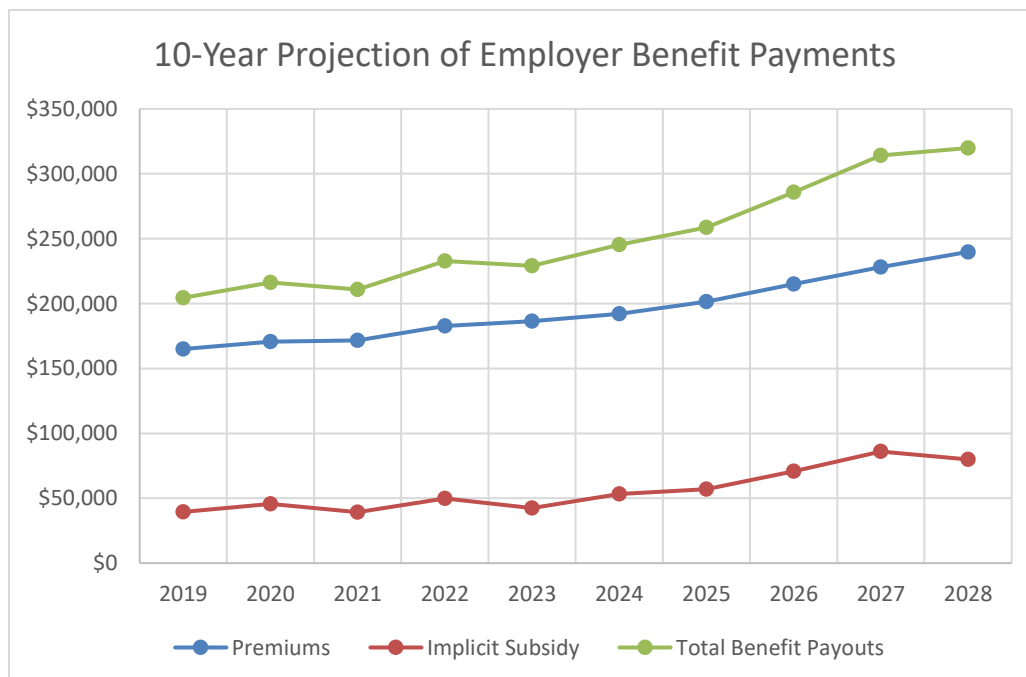


## Section I Management Summary

### 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
2019	\$164,990	\$39,462	\$204,452
2020	\$170,621	\$45,642	\$216,263
2021	\$171,555	\$39,287	\$210,842
2022	\$182,736	\$49,921	\$232,657
2023	\$186,444	\$42,537	\$228,981
2024	\$192,055	\$53,201	\$245,256
2025	\$201,510	\$57,064	\$258,574
2026	\$214,976	\$70,716	\$285,692
2027	\$228,199	\$85,985	\$314,184
2028	\$239,804	\$80,027	\$319,831



## Section I Management Summary

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### D) Breakdown of Explicit and Implicit Liabilities

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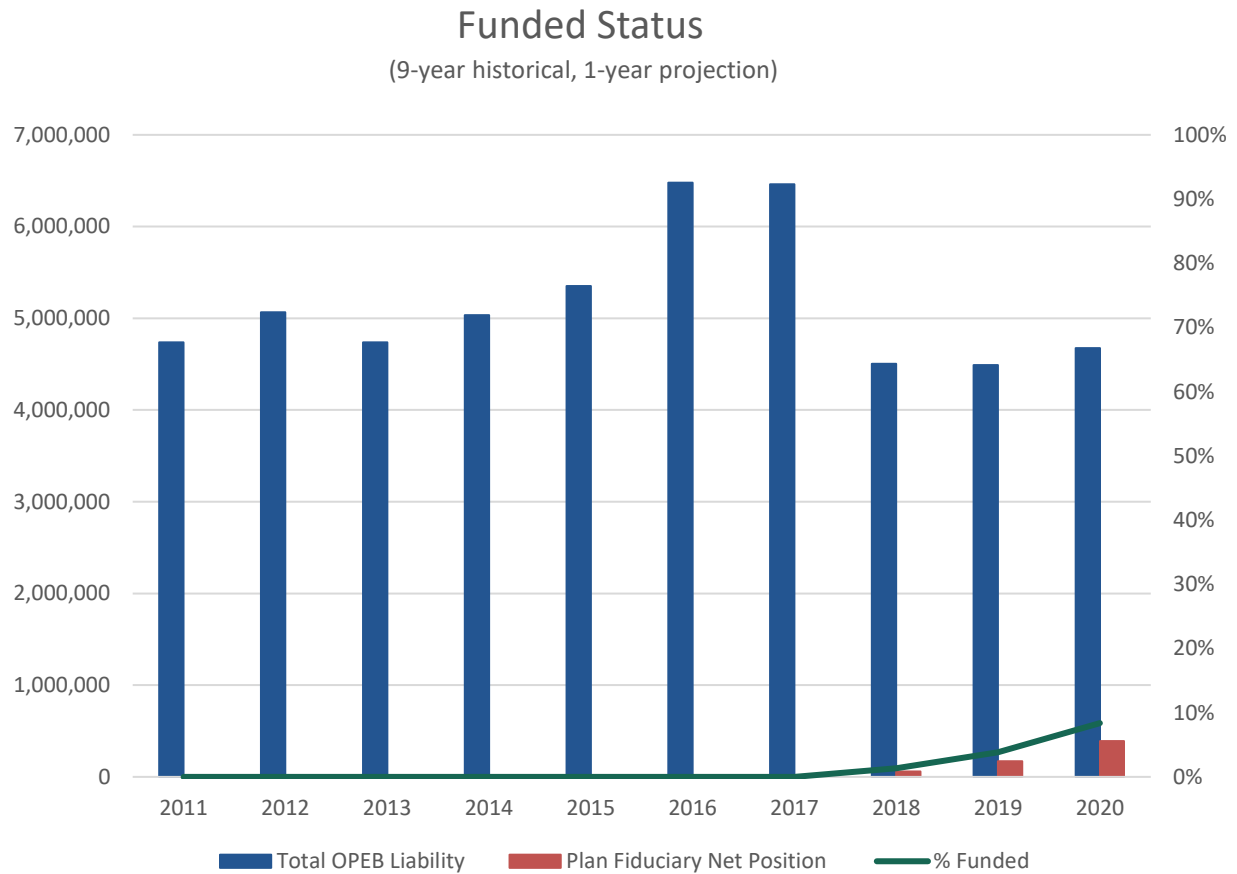
	Explicit	Implicit	Total
<b>Present Value of Future Benefits</b>			
Actives	\$2,165,922	\$645,388	\$2,811,310
Retirees	<u>2,261,286</u>	<u>537,010</u>	<u>2,798,296</u>
Total	\$4,427,208	\$1,182,398	\$5,609,606
<b>Actuarial Accrued Liability</b>			
Actives	\$1,299,491	\$392,163	\$1,691,654
Retirees	<u>2,261,286</u>	<u>537,010</u>	<u>2,798,296</u>
Total	\$3,560,777	\$929,173	\$4,489,950
<b>Normal Cost</b>	\$75,165	\$21,927	\$97,092



## Section I Management Summary

### 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)

	2019	2018
<b><u>Total OPEB Liability</u></b>		
Service cost	\$104,223	\$209,502
Interest	292,697	235,360
Change of benefit terms	0	0
Differences between expected and actual experience	154,672	3,936
Changes of assumptions	(353,132)	(2,212,829)
Benefit payments	<u>(211,322)</u>	<u>(194,225)</u>
<b>Net change in Total OPEB Liability</b>	<b>(\$12,862)</b>	<b>(\$1,958,256)</b>
<b>Total OPEB Liability – beginning (a)</b>	<b>\$4,502,812</b>	<b>\$6,461,068</b>
<b>Total OPEB Liability – ending (b)</b>	<b>\$4,489,950</b>	<b>\$4,502,812</b>
<b><u>Plan Fiduciary Net Position</u></b>		
Contributions – employer	\$311,322	\$254,225
Contributions – employee	0	0
Net investment income	10,363	826
Benefit payments	(211,322)	(194,225)
Administrative expense	(23)	(16)
Other	<u>0</u>	<u>0</u>
<b>Net change in Plan Fiduciary Net Position</b>	<b>\$110,340</b>	<b>\$60,810</b>
<b>Plan Fiduciary Net Position – beginning (c)</b>	<b>\$60,810</b>	<b>\$0</b>
<b>Plan Fiduciary Net Position – ending (d)</b>	<b>\$171,150</b>	<b>\$60,810</b>
<b>Net OPEB Liability - beginning (a) – (c)</b>	<b>\$4,442,002</b>	<b>\$6,461,068</b>
<b>Net OPEB Liability – ending (b) – (d)</b>	<b>\$4,318,800</b>	<b>\$4,442,002</b>
<b>Plan Fiduciary Net Position as a percentage of the TOL</b>	<b>4%</b>	<b>1%</b>
<b>Covered employee payroll</b>	<b>\$1,296,259</b>	<b>N/A</b>
<b>NOL as percentage of covered employee payroll</b>	<b>333%</b>	<b>N/A</b>

## 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)
<b>Measurement as of June 30, 2018:</b>	\$4,502,812	\$60,810	\$4,442,002
Recognized Changes Resulting from:			
▪ Service cost	104,223	-	104,223
▪ Interest	292,697	-	292,697
▪ Diff. between expected and actual experience	154,672	-	154,672
▪ Changes of assumptions	(353,132)	-	(353,132)
▪ Net investment income	-	10,363	(10,363)
▪ Benefit payments	(211,322)	(211,322)	-
▪ Contributions – employer	-	311,322	(311,322)
▪ Contributions – employee	-	-	-
▪ Administrative expense	-	(23)	23
▪ Change of benefit terms	-	-	-
Net Changes	(\$12,862)	\$110,340	(\$123,202)
<b>Measurement as of June 30, 2019:</b>	\$4,489,950	\$171,150	\$4,318,800

## Section II GASB 75 Exhibits

### C) Derivation of Significant Actuarial Assumptions

**Long-term Expected Rate of Return** – As of June 30, 2019, 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 <sup>1</sup>
Equity	43.00%	5.43%
Fixed Income	49.00%	1.65%
REITs	8.00%	5.06%
Cash	0.00%	0.00%

<sup>1</sup>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, 2019	June 30, 2018
Discount Rate	6.50%	6.50%
Bond Buyer 20-Bond GO Index	3.50%	3.87%

## Section II GASB 75 Exhibits

### 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 (5.50%) or 1% point higher (7.50%) 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, 2019 measurement date: \$4,318,800**

#### Sensitivity Analysis:

	NOL(A)	\$ Change	%Change
<b>Discount Rate</b>			
+1%	\$3,811,753	(\$507,047)	(12%)
Base	\$4,318,800	-	-
-1%	\$4,933,393	\$614,593	14%
<b>Trend Rate</b>			
+1%	\$4,848,506	\$529,706	12%
Base	\$4,318,800	-	-
-1%	\$3,888,863	(\$429,937)	(10%)

## Section II GASB 75 Exhibits

### E) Schedule of OPEB Expense (Exhibit 4)

Measurement Period Ending:	June 30, 2019	June 30, 2018
<b>Components of OPEB Expense:</b>		
Service Cost	\$104,223	\$209,502
Interest on the Total OPEB Liability (Exhibit 5)	292,697	235,360
Projected Earnings on OPEB Plan Investments (Exhibit 6)	(7,151)	(1,065)
Employee Contributions	0	0
Administrative Expense	23	16
Changes on Benefit Terms	0	0
Recognition of Deferred Resources Due to:		
▪ Changes of Assumptions	(595,561)	(550,542)
▪ Differences between Expected and Actual Experience	30,321	10,602
▪ Differences Between Projected Actual Earnings on Assets	(594)	48
Aggregate OPEB Expense	<u>(\$176,042)</u>	<u>(\$96,079)</u>

## Section II GASB 75 Exhibits

### 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	\$4,502,812	100%	6.50%	\$292,683
Service Cost	\$104,223	100%	6.50%	6,774
Benefit payments	(\$211,322)	50%	6.50%	<u>(6,760)</u>
Total Interest on the TOL				\$292,697

## Section II GASB 75 Exhibits

### 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	\$60,810	100%	6.50%	\$3,953
Employer Contributions	\$311,322	50%	6.50%	9,959
Employee Contributions	\$0	50%	6.50%	0
Benefits payments	(\$211,322)	50%	6.50%	(6,760)
Administrative Expense and Other	(\$23)	50%	6.50%	(1)
<b>Total Projected Earnings</b>				<b>\$7,151</b>

#### Comparison of Projected and Actual Earnings On Investments

Total Projected Earnings	\$7,151
Actual Net Investment Income	<u>10,363</u>
Difference Between Projected and Actual Earnings on Assets	(\$3,212)



## Section II GASB 75 Exhibits

### H) Schedule of Contributions<sup>1</sup> (Exhibit 7)

Measurement Period Ending:	June 30, 2019	June 30, 2018
Actuarially Determined Contribution <sup>2</sup>	\$414,936	\$531,502
Contributions to the Trust	\$100,000	\$60,000
Pay-go Payments by Employer Unreimbursed by the Trust	164,416	146,663
Active Implicit Rate Subsidy Transferred to OPEB	<u>46,906</u>	<u>47,562</u>
Total OPEB Contributions <sup>1</sup>	\$311,322	\$254,225
Covered-employee payroll <sup>3</sup>	\$1,296,259	N/A
Contributions as a percentage of covered-employee payroll <sup>3</sup>	24%	N/A

<sup>1</sup> ADC and Contributions are for the measurement period July 1, 2018 to June 30, 2019.

<sup>2</sup> 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.

<sup>3</sup> 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	\$193,684	\$0
▪ Changes in assumptions	0	3,595,043
▪ Net difference between projected and actual earnings	0	2,427
Contribution to OPEB plan after measurement date <sup>1</sup>	<u>TBD</u>	<u>TBD</u>
Total	\$193,684	\$3,597,470

<sup>1</sup> To be determined as of the fiscal year ending 2020

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
2021	(\$565,834)
2022	(565,834)
2023	(565,835)
2024	(565,884)
2025	(565,240)
Thereafter	<u>(575,159)</u>
Total Deferred Resources:	(\$3,403,786)

## Section II GASB 75 Exhibits

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

Fiscal Year Established	Initial Amount	Initial Years	Years Left	Amount Recognize In FY 2020	Balances as of 06/30/20 of Deferred	
					Outflows	Inflows
Difference Between Expected and Actual Plan Experience						
2018	\$86,138	8.499	5.499	\$10,139	\$55,721	\$0
2019	3,936	8.499	6.499	463	3,010	0
2020	154,672	7.844	6.844	19,719	134,953	0
Total	\$244,746			\$30,321	\$193,684	\$0
Change in Assumptions						
2018	(\$2,465,364)	8.499	5.499	(\$290,179)	\$0	(\$1,594,827)
2019	(2,212,829)	8.499	6.499	(260,363)	0	(1,692,103)
2020	(353,132)	7.844	6.844	(45,019)	0	(308,113)
Total	(\$5,031,325)			(\$595,561)	\$0	(\$3,595,043)
Net Difference Between Projected and Actual Earnings On Investments						
2018	\$0	5.000	2.000	\$0	\$0	\$0
2019	239	5.000	3.000	48	143	0
2020	(3,212)	5.000	4.000	(642)	0	(2,570)
Total	(\$2,973)			(\$594)	\$0	(\$2,427)
Totals:				(\$565,834)	\$193,684	(\$3,597,470)

## Section II GASB 75 Exhibits

### K) Reconciliation of the Net Position (Exhibit 10)

Measurement as of:	June 30, 2019	June 30, 2018
Total OPEB Liability (TOL)	\$4,489,950	\$4,502,812
Plan Fiduciary Net Position (PFNP)	171,150	60,810
Net OPEB Liability (NOL)	\$4,318,800	\$4,442,002
Deferred Inflows of resources (CR):		
▪ Differences between expected and actual experience	0	0
▪ Changes in assumptions	3,595,043	3,837,472
▪ Net difference between projected and actual earnings	2,427	0
Deferred Outflows of resources (DR):		
▪ Differences between expected and actual experience	193,684	69,333
▪ Changes in assumptions	0	0
▪ Net difference between projected and actual earnings	0	191
▪ Est. contributions post measurement date <sup>1</sup>	TBD	TBD
<b>Net Position</b>	<b>\$7,722,586</b>	<b>\$8,209,950</b>

<sup>1</sup>Actual post-measurement date contributions should be reported in the financial disclosures

#### Reconciliation of Net Position

Net Position at June 30, 2018 <sup>1</sup>	\$8,209,950
Aggregate OPEB Expense	(176,042)
Total OPEB Contributions	(311,322)
Net Position at June 30, 2019 <sup>1</sup>	\$7,722,586

<sup>1</sup> 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 June 30, 2019. 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.

	6/30/2019	6/30/2017
<u>Actives</u>		
Counts		
▪ Total	17	19
Averages		
▪ Age	40.8	42.4
▪ Service	10.5	13.8
<u>Retirees</u>		
Counts		
▪ Under age 65	6	7
▪ Age 65 and over	<u>11</u>	<u>7</u>
▪ Total	17	14
Averages		
▪ Age	68.4	69.9
▪ Age at Retirement	55.9	55.9
▪ Service at Retirement	19.1	17.4
Inactive Participants with deferred benefits	0	0
Total Participants	34	33
<u>Covered Dependents of Retirees</u>		
Counts		
▪ Spouses / Domestic Partners	11	8
▪ Children	<u>0</u>	<u>0</u>
▪ Total	11	8
Total Participants and Dependents	45	41

## Section III Data

### B) Distribution of Participants by Age and Service

**Distribution of Service Groups by Age Groups**

Age Group	Retired* Participants	Active Participant – Years of Service						Total
		0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25+	
< 25	0	0	0	0	0	0	0	0
25 - 29	0	1	0	0	0	0	0	1
30 - 34	0	1	1	0	0	0	0	2
35 - 39	0	2	0	2	1	0	0	5
40 - 44	0	0	0	1	2	0	0	3
45 - 49	0	2	0	0	2	0	1	5
50 - 54	3	0	0	0	0	0	0	0
55 - 59	1	0	0	0	0	1	0	1
60 - 64	2	0	0	0	0	0	0	0
65 - 69	5	0	0	0	0	0	0	0
> 70	6	0	0	0	0	0	0	0
<b>Total</b>	<b>17</b>	<b>6</b>	<b>1</b>	<b>3</b>	<b>5</b>	<b>1</b>	<b>1</b>	<b>17</b>

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

## Section IV Plan Provision Summary

### A) Plan Description

#### Eligibility Requirements and Plan Description

District employees who retire at age 50 or older with 5 or more years of service are eligible for lifetime medical benefits. Benefits are also provided to spouses and surviving spouses of eligible retirees and dependent children of participating retirees. Retirees may enroll in any available CalPERS medical plan. There are no dental, vision or other similar benefits for retirees. Benefits are provided to employees who retire due to disability. Benefits are not provided to employees who terminate prior to eligibility for retirement. Retirees that waive coverage will not be eligible to re-enroll into the plan at any time in the future. A surviving spouse of an employee who has met the minimum age and service eligibility requirements may participate in the plan if they have not remarried. Dependent children must be enrolled at the date of retirement to be eligible for plan benefits.

The District contributes up to 90% of the CalPERS Bay Area “pre-age 65” Kaiser premium rates for the applicable family status, and 80% for fire employees. Retirees pay any premiums exceeding that limit.

The District participates in the CalPERS medical program. We valued each active employee and retiree assuming they will not change their enrollment in future years. The table below contains the 2019 and 2020 calendar year CalPERS premium rates used to develop the 2019/20 medical baseline cost. All rates are Bay Area/Region 1 rates unless stated otherwise.

2019 Plan	<b>Pre-Medicare Premiums</b>			<b>EE</b>	<b>EE+SP</b>	<b>EE+Fam</b>
	Kaiser	\$768.25	\$1,536.50	\$1,997.45		
	PERS Choice	\$866.27	\$1,732.54	\$2,252.30		
	PERS Care	\$1,131.68	\$2,263.36	\$2,942.37		
	Western Health Advantage	\$767.01	\$1,534.02	\$1,994.23		
	<b>Medicare Premiums</b>			<b>EE</b>	<b>EE+SP</b>	
	Kaiser	\$323.74		\$647.48		
	PERS Choice	\$360.41		\$720.82		
	PERS Care	\$394.83		\$789.66		
	2020 Plan	<b>Pre-Medicare Premiums</b>			<b>EE</b>	<b>EE+SP</b>
Kaiser		\$768.49	\$1,536.98	\$1,998.07		
PERS Choice		\$861.18	\$1,722.36	\$2,239.07		
PERS Care		\$1,133.14	\$2,266.28	\$2,946.16		
Western Health Advantage		\$731.96	\$1,463.92	\$1,903.10		
<b>Medicare Premiums</b>			<b>EE</b>	<b>EE+SP</b>		
Kaiser		\$339.43		\$678.86		
PERS Choice		\$351.39		\$702.78		
PERS Care		\$384.78		\$769.56		

#### 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	6.50%, based on the CERBT Strategy 2 investment policy.
Net Investment Return	6.50%, based on the CERBT Strategy 2 investment policy.
Inflation	We assumed 2.26% annual inflation.
Payroll increases	3.25% annual increases.
Administrative Expenses	The administrative expenses were \$23 for the measurement period ending June 30, 2019.

Pre-Excise Tax Health Care Trend	<b>Year</b>	<b>Increase in Premium Rates</b>	
	<b>Beginning</b>	<b>Pre-65</b>	<b>Post-65</b>
	2020	6.55%	4.35%
	2021	6.30%	4.25%
	2022	6.05%	4.25%
	2023	5.80%	4.25%
	2024	5.55%	4.25%
	2025	5.30%	4.25%
	2026	5.05%	4.25%
	2026	4.80%	4.25%
	2028	4.55%	4.25%
	2029	4.30%	4.25%
	2030 and later	4.25%	4.25%



## Section V Actuarial Assumption, Methods, & Considerations

### A) Actuarial Assumptions (continued)

Plan Distribution for Calculating Baseline Cost	<b>Plan</b>	<b>Pre-Medicare</b>	<b>Post-Medicare</b>
	Kaiser	92%	73%
	PERS Care	0%	18%
	PERS Choice	4%	9%
	Western Health Adv.	4%	0%
	<b>Total</b>	100%	100%
Average Per Capita Claims Cost (Baseline Cost)	Pre-Medicare: \$9,326 per year Post-Medicare: \$4,035 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 2017 study		
Population for Curving	CalPERS 2017 study		
Age-Weighted Claims Costs	<b>Age</b>	<b>Premium</b>	
	50	\$9,762	
	55	\$11,809	
	60	\$14,340	
	65	\$4,144	
	70	\$3,654	
	75	\$4,258	
	80	\$4,740	
85	\$4,897		

## Section V Actuarial Assumption, Methods, & Considerations

### A) Actuarial Assumptions (continued)

Mortality\* The mortality rates used in this valuation are those produced in the 2017 CalPERS experience study.

**Pre-Retirement:** CalPERS 2017 Mortality pre-retirement

**Post-Retirement:** CalPERS 2017 Mortality post-retirement

Age	Sample Mortality Rates					
	Non-Safety Active Employees		Safety Active Employees		Retired Employees	
	Male	Female	Male	Female	Male	Female
55	0.17%	0.12%	0.19%	0.14%	0.44%	0.41%
60	0.26%	0.17%	0.27%	0.18%	0.67%	0.48%
65	0.36%	0.23%	0.38%	0.25%	0.93%	0.64%
70	0.62%	0.39%	0.64%	0.41%	1.34%	0.93%
75	1.06%	0.62%	1.08%	0.64%	2.32%	1.63%
80	1.66%	0.94%	1.68%	0.96%	3.98%	3.01%
85	0.00%	0.00%	0.00%	0.00%	7.12%	5.42%
90	0.00%	0.00%	0.00%	0.00%	13.04%	10.09%

Percent Married We assumed that all participants will cover current spouses, if any.

Dependents We assumed that all participants will cover current children, if any, to the age of 26, and that each participant's youngest child is 40 years younger than the participant.

*\*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*

## Section V Actuarial Assumption, Methods, & Considerations

### A) Actuarial Assumptions (continued)

Retirement\*

We used the retirement rates that were produced in the 2017 CalPERS Public Agency Miscellaneous experience study 2% @ 60 for actives hired before January 1, 2013, and 2% @ 62 for actives hired on or after January 1, 2013.

2% @ 60

Age	Years of Service				
	5	10	15	20	25
50	2.0%	2.0%	2.0%	2.0%	2.0%
55	1.9%	2.6%	3.3%	9.2%	13.6%
60	7.0%	7.4%	8.9%	11.3%	13.7%
65	14.0%	17.8%	21.5%	26.4%	32.1%
70	14.0%	17.8%	21.5%	26.4%	32.1%
75	100.0%	100.0%	100.0%	100.0%	100.0%

2% @ 62

Age	Years of Service				
	5	10	15	20	25
50	0.0%	0.0%	0.0%	0.0%	0.0%
55	1.0%	1.9%	2.8%	3.6%	6.1%
60	3.1%	5.1%	7.1%	9.1%	11.1%
65	10.8%	14.1%	17.3%	20.6%	23.9%
70	12.0%	15.6%	19.3%	22.9%	26.5%
75	100.0%	100.0%	100.0%	100.0%	100.0%

Withdrawal\*

We selected withdrawal rates that were produced in the 2017 CalPERS Public Agency Miscellaneous experience study.

Age	Years of Service				
	0	5	10	15	20
25	16.7%	6.3%	4.3%	0.0%	0.0%
30	16.1%	6.2%	4.2%	2.6%	0.0%
35	15.4%	5.7%	4.0%	2.5%	1.8%
40	14.7%	5.2%	3.8%	2.4%	1.8%
45	14.0%	4.8%	3.5%	2.2%	1.7%
50	13.3%	4.4%	2.9%	1.9%	1.3%

\*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

## Section V Actuarial Assumption, Methods, & Considerations

### A) Actuarial Assumptions (continued)

#### Demographic Assumptions used for Safety Personnel:

Retirement\* We used the Public Agency Fire retirement rates that were produced in the 2017 experience study performed by CalPERS 3% @ 50 for actives hired before January 1, 2013, and 2.7% @ 57 for actives hired on or after January 1, 2013.

Age	Years of Service				
	5	10	15	20	25
50	2.0%	2.0%	2.0%	4.0%	13.0%
55	4.3%	4.3%	4.3%	7.0%	17.4%
60	6.5%	6.5%	6.5%	10.2%	21.9%
65	100.0%	100.0%	100.0%	100.0%	100.0%

Age	Years of Service				
	5	10	15	20	25
50	0.7%	0.7%	0.7%	0.7%	1.0%
55	8.2%	8.2%	8.2%	8.2%	12.7%
60	11.4%	11.4%	11.4%	11.4%	17.5%
65	100.0%	100.0%	100.0%	100.0%	100.0%

Age	Rate
25	0.03%
35	0.13%
45	0.42%
55	3.14%
65	6.14%
75	10.98%

We used the Public Agency Fire disability rates that were produced in the 2017 Cal PERS experience study.

Withdrawal\* We used withdrawal rates that were produced in the 2017 CalPERS Public Agency Fire experience study.

Age	Years of Service				
	0	5	10	15	20
Under 50	13.0%	1.5%	0.7%	0.5%	0.4%
Over 50	13.0%	1.5%	0.7%	0.5%	0.4%

#### Assumption Changes

The average per capita claims cost was updated to reflect actual 2019 premiums, the health care cost trend rate was updated to reflect 2018 industry survey data, the mortality, withdrawal, disablement, and retirement tables was updated to reflect the 2017 CalPERS studies. The population for curving and morbidity factors have also been updated to the 2017 CalPERS study. There have been no other assumption changes since the last measurement date.

## Section V Actuarial Assumption, Methods, & Considerations

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### B) Actuarial Methods

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Actuarial Cost Method	<p>Entry Age Normal</p> <p>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.</p>
Amortization Methodology	<p>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.</p>
Financial and Census Data	<p>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.</p>
Plan Fiduciary Net Position	<p>Market value of assets as of the measurement date</p>
Measurement Date	<p>June 30, 2019</p>
Valuation Date	<p>June 30, 2019</p>
Funding Policy	<p>The District intends to contribute benefit payments (explicit and implicit) plus a minimum cash payment of \$60,000 to the trust annually.</p>

## Section V Actuarial Assumption, Methods, & Considerations

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### C) Actuarial Considerations

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#### 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 on a Federal level. The individual mandate still can apply at the state level (e.g. Massachusetts since 2006). California adopted the individual mandate effective January 1, 2020. 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.

## Section V Actuarial Assumption, Methods, & Considerations

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### C) Actuarial Considerations (continued)

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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)	<p>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.</p> <ul style="list-style-type: none"><li>• 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:<ul style="list-style-type: none"><li>○ Limits will increase from 2018 to 2019 by 4.25% (CPI plus 1%);</li><li>○ Limits will increase after 2019 by 3.25% (CPI); and</li><li>○ 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.</li></ul></li><li>• On December 20, 2019 the Secure Act was signed and eliminated the tax effective January 1, 2020.</li></ul>

## Section VI Glossary

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### A) Key Terms

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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.