SAN RAFAEL HIGH SCHOOL DISTRICT

VALUATION OF RETIREE HEALTH BENEFITS

REPORT OF GASB 75 ACTUARIAL VALUATION AS OF JULY 1, 2017

Prepared by: North Bay Pensions LLC
August 24, 2018

Contents of This Report

Actuarial Certification

This report presents the determination of benefit obligations under **Statement No. 75 of the Governmental Accounting Standards Board (GASB 75)** as of July 1, 2017 for the retiree health and welfare benefits provided by the San Rafael High School District. I was retained by the District to perform these calculations.

GASB Statement 75, "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions", was issued to provide standards for governmental employers to record expense for **Other Postemployment Benefits (OPEB)**. GASB 75 replaces GASB 45 for the District, effective July 1, 2017.

The information contained in this report was based on a participant census as of July 1, 2017 provided to me by the District. The actuarial assumptions and methods used in this valuation were selected by the District after consultation with me. I believe the assumptions and methods are reasonable and appropriate for purposes of actuarial computations under GASB 75.

Actuarial computations under GASB 75 are for purposes of fulfilling employer accounting requirements. The calculations reported herein have been made on a basis consistent with my understanding of GASB 75. Determinations for purposes other than meeting employer financial accounting requirements may be significantly different from the results reported herein. Due to the limited scope of my assignment, I did not perform an analysis of the potential range of future measurements.

To the best of my knowledge, this report is complete and accurate. This valuation has been conducted in accordance with generally accepted actuarial principles and practices. The undersigned is a Fellow of the Society of Actuaries, a Fellow of the Conference of Consulting Actuaries, and a Member of the American Academy of Actuaries, and meets their continuing education requirements and qualification standards for public statements of actuarial opinion relating to retirement plans. In my opinion, I am qualified to perform this valuation.

8-24-18

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Summary of Results

Background

The District maintains a program which pays part or all of monthly medical insurance premiums on behalf of retired former employees, provided that the employee has satisfied certain requirements. This program is being funded on a pay-as-you-go basis. As of July 1, 2017, the District has accumulated $0 in an irrevocable trust toward the cost of future benefits for retired District employees.

GASB Statement No. 75, "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions", often referred to as **GASB 75**, requires governmental entities to (1) record annual expense for their OPEB and (2) disclose certain information in their year-end financial statements.

The District has requested this actuarial valuation to determine what its OPEB obligations are, and what the fiscal impact of GASB 75 will be for the 2017-2018 fiscal year.

Actuarial Present Value of Projected Benefit Payments

The Actuarial Present Value of Projected Benefit Payments (APVPBP) for all current and former employees, as of July 1, 2017, is **$13,750,231**. This is the amount the District would theoretically need to set aside at this time to fully fund all those future benefits.

The total value of $13,750,231 is the sum of these amounts:

Future benefits of current employees	
Certificated employees	$ 7,662,099
Classified employees	2,693,145
Subtotal	$ 10,355,244
Future benefits of current retirees	
Certificated employees	$ 2,105,605
Classified employees	1,289,382
Subtotal	$ 3,394,987
Total present value of all future benefits	$ 13,750,231

The APVPBP of $13,750,231 may be compared to the Present Value of Benefits of $11,098,093 that was reported in the 2016 valuation report. We would have expected the Present Value of Benefits to increase to approximately $11,387,000 by 2017 as employees continue working and approach retirement age. The difference between the 2016 figure of $11,098,093 and this year's figure of $13,750,231 is due to:

• Expected increase since 2016	$ 289,223
• Change in the discount rate from 3.50% to 3.13%	1,103,109
• New retirement assumption	86,849
• New termination assumption	481,082
• New mortality assumption	841,563
• New trend assumption	(984,535)
• Miscellaneous experience gains and losses	834,847
	$ 2,652,138

The experience loss of $834,847 is the combined result of (1) normal demographic effects (i.e., terminations, deaths and retirements different than expected); and (2) medical premiums in 2017 and 2018 different than were anticipated back in 2016. The changes in the discount rate and other assumptions are explained below under "Actuarial Assumptions".

These figures were computed by (1) estimating the OPEB benefits that will be paid to each current and former employee and their beneficiaries (if applicable), upon the employee's retirement from the District, (2) estimating the likelihood that each payment will be made, taking into consideration the likelihood of remaining employed until retirement age and the likelihood of survival after retirement, and (3) discounting each expected future payment back to the present date at an assumed rate of investment return.

Net OPEB Liability

The **Total OPEB Liability** (TOL) is the portion of the APVPBP which has been "earned" by employees based on past years of service (i.e. benefits allocated to past years of employment).

The **Plan Fiduciary Net Position** (FNP) is equal to the value of assets that have been accumulated in an irrevocable trust for these benefits. Since the District has not accumulated any such funds, the FNP is $0.

The **Net OPEB Liability** or **Asset** (NOL) is the excess of the Total OPEB Liability over the Plan Fiduciary Net Position. At the end of each fiscal year, beginning June 30 2018, the District must show a liability equal to the NOL.

At June 30, 2016 and June 30, 2017, these amounts are:

	June 30, 2016	June 30, 2017
Present value of benefits for employees	$ 5,099,676	$ 5,299,192
Present value of benefits for retirees	3,729,232	3,394,987
Total OPEB Liability	$ 8,828,908	$ 8,694,179

Accumulated assets	$ 0	$ 0
Plan Fiduciary Net Position	$ 0	$ 0
Total OPEB Liability	$ 8,828,908	$ 8,694,179
Plan Fiduciary Net Position	$ 0	$ 0
Net OPEB Liability	$ 8,828,908	$ 8,694,179

OPEB Expense under GASB 75

GASB 75 requires that the annual change in the NOL be recognized as OPEB expense, except for certain specific changes which are to be recognized over different periods of time. Changes in actuarial assumptions, and experience gains and losses, are to be recognized over the average of the expected remaining service lives of all employees. As of June 30, 2017, this average for District employees is 12.5 years. Differences between actual and expected investment earnings (if any) are to be recognized over 5 years. The unrecognized remaining amounts of assumption changes, experience gains/losses and investment earnings differences are called “deferred outflows and inflows of resources relating to OPEB” (see Exhibit 5).

The OPEB Expense for the fiscal year ending June 30, 2018 is **$721,431**. A derivation of this amount is shown in Exhibit 4.

Disclosure Information as of June 30, 2018

Amounts to be disclosed in the footnotes to the District’s audited financial statements as of June 30, 2018 are shown in Exhibits 2 through 6 of this report.

Exhibit 7 shows estimated retiree benefits and OPEB expense for the next nine years after that.

Actuarial Assumptions

All actuarial assumptions are described in detail in Exhibit 9. Changes from the July 1, 2017 valuation are:

- The discount rate has been changed from 3.50% per year to 3.13% per year. This change was made to comply with the new requirements of GASB 75 that the discount rate for an unfunded program should reflect the yield on high-quality 20-year municipal bonds. The District has elected to use the “S&P Municipal Bond 20 Year High Grade Rate Index” for this purpose. That Index was 2.71% at June 30 2016, and 3.13% at June 30 2017. This change in discount rate increased the APVPBP by $1,103,109.

- The assumed rates of retirement, termination and mortality have been changed from the 2011 STRS rates (for all employees) to the 2016 STRS rates (for certificated employees) and the 2014 CalPERS rates (for classified employees). The new rates are the most current rates that CalPERS and Cal STRS have released. This change increased the APVPBP by $1,409,494.

- The rates of increase in future CalPERS premiums have been changed from:
    - a lengthy schedule that varied from 5.5% in 2019 to 6.25% in 2022, then graded down to 4.5% by 2070, to
    - 5% per year after 2018

  Adopting this new simplified assumption reduced the APVPBP by $984,535.

Exhibit 1 - Actuarial Values as of July 1, 2017

The Actuarial Present Value of Projected Benefit Payments (APVPBP) as of July 1, 2017 of all future employer-paid benefits from the program, for all current and former employees, is as follows:

	Actuarial Present Values	**Number of Persons**
Current employees	$ 10,355,244	276
Retired former employees	3,394,987	107
Totals	$ 13,750,231	383

As of June 30, 2017, the District has not accumulated any assets in an irrevocable trust toward this liability.

The Total OPEB Liability (TOL) as of June 30, 2017 is the portion of the APVPBP which has been "earned" to date by current and former employees, based on the years of service already completed:

Current employees	$ 5,299,192
Retired former employees	3,394,987
Totals	$ 8,694,179

Summary of Participating Employees as of July 1, 2017

Active Employees

Number	276 employees
Average Age	47.1 years
Average Service	7.9 years

Retired Former Employees and Surviving Spouses

Number	107 persons
Average Age	75.9 years

Exhibit 2 - Total OPEB Liability

The Net OPEB Liability (NOL) is the excess of the Total OPEB Liability (TOL) over the Plan Fiduciary Net Position (FNP). As of June 30, 2016 and June 30, 2017 these are:

		June 30, 2016	June 30, 2017
	Total OPEB Liability		
1.	Value of benefits for employees	$ 5,099,676	$ 5,299,192
2.	Value of benefits for retirees	3,729,232	3,394,987
3.	Total OPEB Liability	$ 8,828,908	$ 8,694,179
	Plan Fiduciary Net Position		
4.	Fair value of accumulated assets	$ 0	$ 0
5.	Plan Fiduciary Net Position	$ 0	$ 0
6.	Net OPEB Liability: 3. minus 5.	$ 8,828,908	$ 8,694,179

The Total OPEB Liability has changed from June 30, 2016 to June 30, 2017 in this way:

7.	TOL at June 30, 2016	$ 8,828,908
8.	Service cost	537,236
9.	Interest	235,686
10.	Differences between actual and expected experience	0
11.	Assumption changes	(643,637)
12.	Benefit changes	0
13.	Benefits paid to retirees	(264,014)
14.	Net changes	$ (134,729)
15.	TOL at June 30, 2017	$ 8,694,179

Exhibit 3 - Sensitivity of the Total OPEB Liability

The following presents the Total OPEB Liability (TOL) as well as what the TOL would be if it were calculated using a discount rate that is 1-percentage-point higher or lower than the current discount rate, as of June 30, 2017:

	1% Decrease 2.13 %	**Discount Rate 3.13 %**	**1% Increase 4.13 %**
Total OPEB Liability	$ 10,349,370	$ 8,694,179	$ 7,406,754

The following presents the TOL as well as what the TOL would be if it were calculated using healthcare cost trend rates that are 1-percentage-point higher or lower than the current healthcare cost trend rates, as of June 30, 2017:

	1% Decrease 4.0 %	**Trend Rates 5.0 %**	**1% Increase 6.0 %**
Total OPEB Liability	$ 7,424,189	$ 8,694,179	$ 10,337,074

Exhibit 4 - OPEB Expense for the Fiscal Year Ending June 30, 2018

For the year ending June 30, 2018, the District will recognize OPEB expense of **$721,431**, computed as follows:

Service cost	$ 537,236
Interest	235,686
Change in TOL due to changes in benefits	0
Recognition of difference between actual and expected experience	0
Recognition of changes in assumptions	(51,491)
Total	**$ 721,431**

Exhibit 5 - Deferred Outflows and Inflows of Resources

The values of deferred outflows and inflows of resources related to OPEB as of June 30, 2017, **to be reported as of June 30, 2018**, are:

	Deferred Outflows of Resources	**Deferred Inflows of Resources**
Differences between expected and actual experience	$ 0	$ 0
Changes of assumptions	0	592,146
Net difference between projected and actual earnings on OPEB plan investments	0	0
District contributions subsequent to the measurement date	UNKNOWN	0
Total	$ UNKNOWN	$ 592,146

The amounts shown above as UNKNOWN are the total amounts contributed by the District to retirees' benefits during the year ending June 30, 2018.

Amounts reported as deferred outflows and inflows of resources related to OPEB as of June 30 2017, to be reported as of June 30, 2018, will be recognized in OPEB expense as follows:

Year Ended June 30	
2019	$ (51,491)
2020	(51,491)
2021	(51,491)
2022	(51,491)
2023	(51,491)
Thereafter	(334,691)

Exhibit 6 - Schedule of Changes in the Total OPEB Liability

Reporting date	**6/30/2018**
Total OPEB liability	
Service cost	$ 537,236
Interest	235,686
Changes of benefit terms	0
Differences between actual and expected experience	0
Changes of assumptions	(643,637)
Benefits paid to retirees	(264,014)
Net change in Total OPEB liability	(134,729)
Total OPEB liability – beginning	8,828,908
Total OPEB liability - ending	$ 8,694,179
Covered-employee payroll	$ 34,864,850
Total OPEB liability as a percentage of covered-employee payroll	24.94 %

Exhibit 7 - Ten-Year Projection of Costs

Shown below are estimates of (a) the benefits expected to be paid to retirees, and (b) the amounts the District is expected to accrue as GASB 75 OPEB expense, for the next ten years. For these estimates, it is assumed that the service cost will increase 3% per year, that all actuarial assumptions and the size of the workforce will remain unchanged, that the promised benefits will remain the same, that the District will fund the retiree benefits each year, and that there are no significant experience gains or losses.

Fiscal Year Ending:	Employer-Paid Retiree Payments	Projected Implicit Rate Subsidy Payments	GASB 75 OPEB Expense
2018	$ 157,000	$ 47,000	$ 721,431
2019	177,000	44,000	771,000
2020	202,000	54,000	806,000
2021	221,000	76,000	843,000
2022	226,000	91,000	880,000
2023	229,000	90,000	918,000
2024	237,000	91,000	957,000
2025	252,000	97,000	997,000
2026	266,000	116,000	1,039,000
2027	282,000	141,000	1,083,000

Exhibit 8 - Summary of Benefit Provisions

The District contributes toward post-retirement benefits for employees who retire after meeting certain age and service requirements.

Eligibility for benefits: Classified employees are eligible upon retirement under PERS if they elect medical coverage under CalPERS plans. Certificated employees are eligible upon retirement under PERS or STRS if they elect medical coverage under CalPERS plans.

Benefits payable: Retired employees will receive the PEMHCA minimum amount ($108.80 in 2017, $119.70 in 2018). The PEMHCA minimum is being pro rated over the 20 years ending in 2020.

In addition, for a certificated retiree who retired before June 8 2012 after at least age 55 with at least 10 years of District service, the retiree will also receive $276 per month for five years or until age 65, whichever comes first. If the retirement date was after June 8 2012, the monthly amount will be $300 for someone with 10 to 14 years of service; $400 with 15 to 19 years of service; or $608 for 20 or more years of service.

PEMHCA minimum benefits are paid for the life of the retired employee, and cease upon the retiree's death. The surviving spouse may choose to continue medical coverage under CalPERS medical plans, in which case the PEMHCA minimum amount will continue for the remainder of the spouse's life.

No other benefits are paid to retirees besides those described above.

Exhibit 9 - Summary of Actuarial Assumptions

Actuarial Assumptions: The following assumptions as of July 1, 2017 were selected by the District in accordance with the requirements of GASB 75. These assumptions, in my opinion, are reasonable and appropriate for purposes of determining OPEB costs under GASB 75.

20-Year Bond Rate: The District has chosen to use the "S&P Municipal Bond 20 Year High Grade Rate Index" as its 20-year bond rate. That Index was 2.71% at June 30 2016, and 3.13% at June 30 2017.

Discount rate: 2.71% at June 30 2016, and 3.13% at June 30 2017. Since the benefits are not funded, the discount rate is equal to the 20-Year Bond Rate. In the 2016 valuation, the discount rate was 3.5%.

Premium Increases: PEMHCA minimum contributions are assumed to increase 3.5% per year after 2018. CalPERS medical premiums are assumed to increase 5% per year after 2018. In the 2016 valuation, the increases in CalPERS premiums were assumed to grade from 5.5% in 2019 to 4.5% in 2070 and later.

Payroll Growth: Total payroll is assumed to increase 3.0% per year.

Coverage Elections: 100% of eligible certificated employees under age 65, 50% of eligible certificated employees over age 64, and 50% of eligible classified employees, are assumed to elect coverage upon retirement. 50% of retired certificated employees are assumed to continue coverage after age 65. Retirees and employees with current coverage are assumed to continue with the same medical plan. Employees with no medical coverage are assumed to elect Kaiser medical coverage upon retirement.

Mortality: Mortality rates are taken from the 2014 CalPERS OPEB Assumptions Model (for classified employees) and from the 2016 valuation of Cal STRS (for certificated employees). In the 2016 valuation, mortality was taken from the 2011 valuation of Cal STRS.

Funding Method: The Entry Age actuarial cost method has been used, with normal costs calculated as a level percentage of payroll, as required by GASB 75.

Disability: Incidence of disability is considered to be included in the rates above, so no explicit recognition of disability benefits has been included.

Inflation: Long-term inflation is assumed to be 2.75% per year.

Retirement: Retirement rates are taken from the 2014 CalPERS OPEB Assumptions Model (for classified employees) and from the 2016 valuation of Cal STRS (for certificated employees). Sample rates are:

	10 Years Service	20 Years Service	30 Years Service
CalPERS			
Age 55	4.8 %	7.9 %	9.9 %
Age 58	5.0 %	8.3 %	10.3 %
Age 61	9.0 %	14.9 %	18.6 %
Age 64	13.3 %	21.9 %	27.3 %
STRS Males			
Age 55	2.7 %	2.7 %	6.0 %
Age 58	2.7 %	2.7 %	12.0 %
Age 61	7.0 %	7.0 %	50.0 %
Age 64	13.0 %	13.0 %	30.0 %
STRS Females			
Age 55	3.5 %	3.5 %	8.0 %
Age 58	3.5 %	3.5 %	15.0 %
Age 61	9.0 %	9.0 %	50.0 %
Age 64	14.0 %	14.0 %	35.0 %

In the 2016 valuation, retirement rates were taken from the 2011 valuation of Cal STRS.

Turnover (withdrawal): Likelihood of termination within the next year is taken from the 2014 CalPERS OPEB Assumptions Model (for classified employees) and from the 2016 valuation of Cal STRS (for certificated employees). Sample rates are:

	5 Years Service	10 Years Service	15 Years Service
CalPERS			
Age 20	12.04 %		
Age 30	9.82 %	8.01 %	7.69 %
Age 40	7.58 %	5.72 %	5.34 %
Age 50	1.35 %	0.74 %	0.53 %
STRS Males			
Age 20	3.50 %		
Age 30	3.50 %	1.80 %	1.20 %
Age 40	3.50 %	1.80 %	1.20 %
Age 50	3.50 %	1.80 %	1.20 %
STRS Females			
Age 20	3.00 %		
Age 30	3.00 %	1.80 %	1.20 %
Age 40	3.00 %	1.80 %	1.20 %
Age 50	3.00 %	1.80 %	1.20 %

In the 2016 valuation, turnover rates were taken from the 2011 valuation of Cal STRS.

Age-Specific Medical Claims: The estimated per person medical claims (true costs of coverage) during 2017-18 are as follows (rates shown for certain ages only):

Age	
40	$ 7,318
45	8,525
50	9,982
55	11,738
60	14,008
64	16,512

These age-specific rates were developed so as to reproduce in the aggregate the same total premium that would be paid to the carriers for all current employees and all current retirees.