EVERGREEN SCHOOL DISTRICT

VALUATION OF RETIREE HEALTH BENEFITS

REPORT OF GASB 45 VALUATION
AS OF JULY 1, 2016

Prepared by: North Bay Pensions LLC
December 7, 2016

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Actuarial Certification

This report presents the determination of benefit obligations under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45) as of July 1, 2016 for the retiree health and welfare benefits provided by the Evergreen School District. I was retained by the District to perform these calculations.

GASB Statement 45, "Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions", was issued to provide standards for governmental employers to record expense for Other Postemployment Benefits (OPEB). OPEB includes postretirement health and welfare benefits, hence GASB 45 is the appropriate Standard to follow when recording the District's OPEB obligations.

The information contained in this report was based on participant census information 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 45.

Actuarial computations under GASB 45 are for purposes of fulfilling employer accounting requirements. The calculations reported herein have been made on a basis consistent with my understanding of GASB 45. 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, including Actuarial Standards of Practice. 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.

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Summary of Results

Background

The District pays part of monthly medical insurance premiums until age 65 on behalf of retired former employees. As of July 1, 2016, the District has accumulated $0 in a secure trust toward the cost of future benefits.

In June 2004, the Governmental Accounting Standards Board (**GASB**) released Statement No. 45, "Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions". This statement, often referred to as GASB 45, requires governmental entities to (1) record annual expense for their **OPEB** (Other Postemployment Benefits) and (2) disclose certain information in their year-end financial statements.

The District has requested this actuarial valuation to determine what its OPEB obligations under the program are, and what the fiscal impact of GASB 45 will be for the 2016-2017 fiscal year. A supplemental report will be issued in 2017 to provide the annual expense for 2017-2018 under GASB 75.

Actuarial Present Value of Total Projected Benefits

The Actuarial Present Value of Total Projected Benefits (**APVTPB**) for all current and former employees, as of July 1, 2016, is **$51,050,332**. 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 $51,050,332 is the sum of these amounts:

Present Value of District-Paid Premiums	
Employees	$ 32,605,053
Retirees	1,780,200
Subtotal	$ 34,385,253
Present Value of Subsidized Premiums	
Employees	$ 15,639,964
Retirees	1,025,115
Subtotal	$ 16,665,079
Total Present Value of All Future Benefits	
Employees	$ 48,245,017
Retirees	2,805,315
APVTPB	**$ 51,050,332**

This APVTPB of $51,050,332 can be compared to the $77,637,926 amount that was calculated in the July 1, 2014 valuation. We would have expected this figure to have increased to approximately $80.5 million by July 1, 2016, as employees approach retirement age. The decrease from $77,637,926 to $51,050,332 is from:

• Expected increase from 2014	$ 2,863,767
• Medical premiums in 2016 lower than expected	(5,610,720)
• Reduction of monthly benefit cap from $1,517.00 to $1,471.20	(1,174,490)
• Change in trend assumption from 5.12% to 5.00%	(1,259,369)
• Change in assumed mortality rates	650,155
• Change in assumed turnover and retirement rates	(19,203,801)
• Miscellaneous experience gains/losses	(2,853,136)
Total of all changes	$ (26,587,594)

The changes in the assumed trend, mortality, turnover and retirement assumptions are described below under "Actuarial Assumptions". The gains and losses (an experience gain of $2,853,136 as shown above) are mainly from demographic causes (retirements, turnover and life expectancy), and also from a correction of an error in the 2014 valuation of classified employees. The Blue Shield and Kaiser medical premiums are lower in 2016 than we anticipated in 2014, resulting in a gain of $5,610,720. The monthly cap for certificated and management retirees has been reduced from $1,517.00 to $1,471.20, which caused a reduction in the APVTPB of $1,174,490.

The portion of the APVTPB for each of the employee groups is:

Classified	$ 894,330
Certificated	45,436,569
Management and Board Members	4,719,433
	$ 51,050,332

Additional details are shown in Exhibit 1 of this report.

The present value of medical insurance premiums that are expected to be paid by the District in the current and future years is $34,385,253. This figure was computed using a discount rate of 4.00%, which is the long-term rate of earnings that the District expects to earn on its investments.

The present value of subsidized premiums is $16,665,079. This can be compared with the $28,230,066 that was shown in the 2014 report. The subsidy comes from the established fact that actual medical costs increase as a person grows older, even after adjusting for annual inflation. When Blue Shield or Kaiser develops a premium amount for the District, that premium amount is a blended average of lower rates for younger employees and higher rates for older employees and retirees. In calculating the cost of all the District's obligations for purposes of GASB 45 accounting, the accountants require that we reflect the "true cost" of medical benefits (i.e. what the insurance companies are expecting to pay out in actual claims), not just the blended premium amounts provided to us by the insurance companies.

All these figures have been computed by (1) estimating the OPEB benefits that will be paid to each current and former employee and their beneficiaries, 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 the discount rate of 4.00% per year.

Actuarial Accrued Liability

Under the accounting rules, a portion of each employee's benefits is attributed to each year of employment. The portion of the APVTPB which is due to past years of employment is called the Actuarial Accrued Liability (**AAL**). The AAL can be thought of as the part of the APVTPB which was "earned" in prior years. The portion of the APVTPB which is being "earned" in the current year is called the **Normal Cost**. Each year, the Annual Required Contribution (**ARC**) is equal to the Normal Cost plus an amortization of the AAL.

As of July 1, 2016, the Actuarial Accrued Liability is $33,224,885. This figure is divided among the different employee groups in this way:

Classified	$ 641,191
Certificated	29,295,818
Management and Board Members	3,287,876
Actuarial Accrued Liability	$ 33,224,885

The Normal Cost in the 2016-2017 year is $1,726,082. One way to think of the APVTPB is like this:

Portion "earned" in prior years (AAL)	$ 33,224,885
Portion being "earned" this year (Normal Cost)	1,726,082
Portion to be "earned" in future years	16,099,365
APVTPB	$ 51,050,332

Annual OPEB Cost Under GASB 45

The Annual Required Contribution (ARC) is equal to the Normal Cost plus a 30-year amortization of the Unfunded Actuarial Accrued Liability (UAAL).

The Annual OPEB Cost, the actual amount to be accrued each year under GASB 45 as an annual operating expense, is calculated as the sum of (1) the ARC, (2) one year's interest on prior years' ARC's that haven't been funded yet, and (3) an adjustment to prevent double-counting of the amortization of the UAAL.

The Annual OPEB Cost for the 2016-2017 fiscal year is **$3,421,596**. A detailed derivation of this amount is shown in Exhibit 2 of this report. Exhibit 3 provides *estimates* of the Annual OPEB Cost for the next four years after that.

At the end of each fiscal year, the District will carry a balance sheet liability, called the "**Net OPEB Obligation**", which represents the cumulative amount of Annual OPEB Costs for all past years that haven't yet been funded. Exhibit 4 shows that the Net OPEB Obligation at June 30, 2016 is $20,672,620. Exhibit 3 shows that, if the total benefit payments to retired employees in the 2016-2017 fiscal year are $883,174, then the Net OPEB Obligation at June 30, 2017 is expected to be $22,741,552 ($20,672,620 plus $3,421,596 minus $1,352,664).

One consequence of including the value of the subsidized premiums in your GASB 45 operating expense is that there is a potential for double-counting the amount of the subsidized premiums. In other words, unless you make an adjustment, you will be accruing the amount of those subsidized premiums *twice* in each fiscal year. Fortunately, GASB 45 permits you to make a simple adjustment to the medical premium costs you accrue for your current employees. As shown in Exhibit 3, for the 2016-17 year you may reduce your accrual of medical premiums by $469,490.

Actuarial Assumptions

The calculations of the program's obligations involve various estimates of future events. These estimates are called "actuarial assumptions". The assumptions are described in detail in Exhibit 5 of this report. The calculated results are highly dependent on the assumptions selected.

The assumed rates of turnover (leaving employment before retirement age) and retirement have been changed. The former turnover assumption, which we have been using for the last ten years, was:

Year of Employment	Rate of Termination
0 – 1 years	10.2 %
2 – 6 years	5.1 %
7 – 12 years	3.7 %
13 – 14 years	1.7 %
15 – 19 years	0.9 %
20 or more years	0.0 %

The former retirement assumption was that all employees were assumed to retire at age 60, or upon first eligibility if earlier. The new turnover and retirement assumptions have been taken from the 2014 CalPERS OPEB Assumptions Model; sample rates are shown in Exhibit 5. Taken together, the new turnover and retirement rates predict that fewer employees will reach retirement age in the future, which significantly lowers the cost of benefits. These changes have decreased the APVTPB by $19,203,801.

The assumed rates of future increases in medical premiums have been changed effective July 1, 2016 from 5.12% per year to 5.00% per year. The effect of this change was to decrease the APVTPB by $1,259,369.

The assumed probabilities of living and dying have been changed from the RP-2000 Mortality Table, projected to future years on a generational basis with Scale BB, to rates from the 2014 CalPERS OPEB Assumptions Model. The new assumption reflects slightly higher life expectancies, and increased the APVTPB by $650,155.

Future Change: GASB 75

A new standard, GASB 75, will replace GASB 45 beginning July 1, 2017. It appears that annual operating expense will be approximately the same magnitude under the new rules as under the existing GASB 45 rules. The one big change is that the District will need to record a liability on its balance sheet each year equal to the excess of the AAL over the accumulated assets. This replaces the current requirement to show a liability equal to the Net OPEB Asset. As of July 1, 2016, the Net OPEB Obligation is ($20,672,620, while the excess of the AAL over the assets is $33,224,885. So the new rules will have a significant impact on your balance sheet. The disclosure of the unfunded AAL will first be reported on the District's June 30, 2018 financial statements.

Exhibit 1 - Actuarial Values as of July 1, 2016

The actuarial present value as of July 1, 2016 of all future benefits from the program, also known as the **Actuarial Present Value of Total Projected Benefits (APVTPB)**, for all current and former employees, is as follows:

	Classified	Certificated	Management	Total
District-Paid Premiums				
Current employees	$ 190,765	$ 29,597,133	$ 2,817,155	$ 32,605,053
Retirees	8,711	1,313,536	457,953	1,780,200
Subtotal	$ 199,476	$ 30,910,669	$ 3,275,108	$ 34,385,253
Subsidized Premiums				
Current employees	$ 681,425	$ 13,638,278	$ 1,320,261	$ 15,639,964
Retirees	13,429	887,622	124,064	1,025,115
Subtotal	$ 694,854	$ 14,525,900	$ 1,444,325	$ 16,665,079
All Benefits				
Current employees	$ 872,190	$ 43,235,411	$ 4,137,416	$ 48,245,017
Retirees	22,140	2,201,158	582,017	2,805,315
Total (APVTPB)	**$ 894,330**	**$ 45,436,569**	**$ 4,719,433**	**$ 51,050,332**

Number of Employees Covered

	Classified	Certificated	Management	Total
Current employees	234	534	58	826
Average Age	52.5	46.2	50.3	48.3
Average Service	13.3	15.0	15.7	14.6
Retired Employees	2	43	9	54
Average Age	63.5	62.9	64.9	63.3

The category "Management" includes two former Board members who are retired and receiving benefits, and five current Board members who may become eligible for benefits upon retirement. There were also 29 Classified (CSEA) employees, not included in the numbers above, who work less than 62.5% full-time and are not expected to qualify for benefits.

Source of Information

A census of all eligible District employees and retirees as of September 2016 was provided to me by the District. I assumed that this was representative of a census at July 1 2016.

The portion of the APVTPB which is attributed to past years of employment is called the **Actuarial Accrued Liability** (**AAL**).

The **Actuarial Value of Assets** (**AVA**) is the total amount of assets that have been segregated for purposes of paying these benefits, and which cannot be used by the District for any other purpose. For accounting purposes, this segregation is accomplished by setting assets in an irrevocable trust, rather than merely allocating funds to an account of the District's balance sheet. As of July 1, 2016, the District has no funds in an irrevocable trust.

The **Unfunded Actuarial Accrued Liability** (**UAAL**) is the excess, if any, of the AAL over the AVA.

As of July 1, 2016, these amounts are:

	Classified	**Certificated**	**Management**	**Total**
District-Paid Premiums				
Current employees	$ 147,189	$ 18,516,134	$ 1,838,654	$ 20,501,977
Retirees	8,711	1,313,536	457,953	1,780,200
Subtotal	$ 155,900	$ 19,829,670	$ 2,296,607	$ 22,282,177
Subsidized Premiums				
Current employees	$ 471,862	$ 8,578,526	$ 867,205	$ 9,917,593
Retirees	13,429	887,622	124,064	1,025,115
Subtotal	$ 485,291	$ 9,466,148	$ 991,269	$ 10,942,708
All Benefits				
Current employees	$ 619,051	$ 27,094,660	$ 2,705,859	$ 30,419,570
Retirees	22,140	2,201,158	582,017	2,805,315
Total (AAL)	**$ 641,191**	**$ 29,295,818**	**$ 3,287,876**	**$ 33,224,885**
Actuarial Value of Assets (AVA)	**$ 0**	**$ 0**	**$ 0**	**$ 0**
Unfunded Actuarial Accrued Liability	**$ 641,191**	**$ 29,295,818**	**$ 3,287,876**	**$ 33,224,885**

Exhibit 2 - Annual OPEB Cost

The **Annual Required Contribution** (ARC) is the sum of the Normal Cost and the amortization of the Unfunded Actuarial Accrued Liability (UAAL). For the 2017 fiscal year, the ARC is computed like this:

Actuarial Accrued Liability	$ 33,224,885
Actuarial Value of Assets	0
Unfunded Actuarial Accrued Liability (UAAL)	$ 33,224,885
Years Remaining in Amortization Period	22
Amortization of UAAL	$ 2,299,141
Normal Cost	1,726,082
Annual Required Contribution (ARC)	$ 4,025,223

Annual OPEB Cost, which is the actual amount to be accrued each year under GASB 45 as an annual operating expense, is equal to the sum of (1) the ARC, plus (2) adjustments to reflect ARC's from prior years that have not yet been funded. For the 2017 fiscal year, these amounts are:

ARC	$ 4,025,223
Interest adjustment	826,905
Amortization adjustment	(1,430,532)
Annual OPEB Cost	$ 3,421,596

Exhibit 3 - Five-Year Projection of Costs

Shown below is an estimate of the way in which the Annual OPEB Cost might be expected to increase over the next five years. In this illustration, it is assumed that the District will continue funding on a pay-as-you-go basis, that the Normal Cost will increase 5% per year, and that all actuarial assumptions will remain unchanged. **The new accounting standard, GASB 75, has not been reflected in these estimates.**

Fiscal Year:	2016-17	2017-18	2018-19	2019-20	2020-21
Years of Amortization Remaining	22	21	20	19	18
ARC					
Normal cost	$ 1,726,082	$ 1,803,756	$ 1,884,925	$ 1,969,747	$ 2,058,386
Amortization	2,299,141	2,487,740	2,709,678	2,980,800	3,274,456
Total ARC	4,025,223	4,291,496	4,594,603	4,950,547	5,332,842
Plus interest	826,905	909,662	1,002,827	1,112,431	1,221,841
Less ARC adjustment	(1,430,532)	(1,621,039)	(1,844,789)	(2,117,465)	(2,412,989)
Annual OPEB Cost	**$ 3,421,596**	**$ 3,580,119**	**$ 3,752,641**	**$ 3,945,513**	**$ 4,141,694**
Funding by the District					
Pay-as-you-go amount	$ 883,174	$ 875,006	$ 811,703	$ 1,017,563	$ 1,198,329
Subsidized premiums	469,490	375,985	200,839	192,702	155,221
Total paid each year	**$ 1,352,664**	**$ 1,250,991**	**$ 1,012,542**	**$ 1,210,265**	**$ 1,353,550**
Additional funding *	2,068,932	2,329,128	2,740,099	2,735,248	2,788,144
Net OPEB Obligation at beginning of year	$20,672,620	$22,741,552	$25,070,680	$27,810,779	$30,546,027
Net OPEB Obligation at end of year	$22,741,552	$25,070,680	$27,810,779	$30,546,027	$33,334,171

* Additional funding (in excess of current funding levels) which would be needed if the District wants to fully fund its ARC each year.

Exhibit 4 - Net OPEB Obligation

In the vocabulary of GASB 45, the "Net OPEB Obligation" is the balance sheet liability/asset that the District should report at the end of each fiscal year. The Net OPEB Obligation is the cumulative sum of all operating expenses that have been accrued under GASB 45, minus the sum of all contributions made (and benefits paid) by the District since the adoption of GASB 45.

The Net OPEB Obligation as of June 30, 2016 is developed in this way:

1.	Net OPEB Obligation as of June 30, 2014	$ 14,165,773
2.	Annual OPEB Cost for the 2014-15 year	4,795,787
3.	Benefits paid during the 2014-15 year	940,089
4.	Subsidized premiums during the 2014-15 year	858,748
5.	Net OPEB Obligation at June 30, 2015: 1. plus 2. minus 3. minus 4.	$ 17,162,723
6.	Annual OPEB Cost for the 2015-16 year	5,043,180
7.	Benefits paid during the 2015-16 year	762,562
8.	Subsidized premiums during the 2015-16 year	770,721
9.	Net OPEB Obligation at June 30, 2016: 5. plus 6. minus 7. minus 8.	$ 20,672,620

Exhibit 5 - Summary of Plan Provisions

There are three different employee groups for which post-retirement benefits are provided.

1. **Management:** Management employees who retire after age 55 with at least 15 years of service are entitled to benefits. The plan pays the full monthly premium for a District-sponsored medical plan for the employee and spouse, until the retiree reaches age 65 (or if hired after June 30, 2010, for 5 years if less). If the retiree dies before the full benefit period, benefits will continue to be paid for the surviving spouse for the balance of the benefit period. For a retiree not qualified for post-retirement benefits but who was a member of the California State Teacher's Retirement System upon retirement, the retiree may enroll in a District-sponsored plan but must pay the full premium for coverage, per AB528 passed in 1985. Employees who retire after June 30, 2014 are not paid more than $1,471.20 per month; the retiree pays the balance (if any) of medical premiums.

2. **Certificated (ETA):** Certificated employees who retire after age 55 with at least 15 years of service are entitled to the same benefits as management employees (see above).

3. **Classified (CSEA):** Classified employees who retire after age 58 with at least 15 years of service are entitled to benefits. The District pays $300 per month toward the cost of a District-sponsored medical plan if the retiring employee chooses to be covered by that plan. If the individual was not working full-time but worked at least 62.5% during the three years before retirement, the $300 amount is pro-rated accordingly. If the individual did not work at least 62.5% over the last three years of employment, no benefits are payable. The monthly benefit is paid until the individual reaches age 65.

4. **Medical Premiums for the 2016-2017 Year are as follows:**

	Employee Only	Two-Party
Active Employees		
Blue Shield (composite premium)	$ 1,745.41	
Kaiser (composite premium)	$ 1,311.66	
Retired Employees Under Age 65		
Blue Shield	$ 1,001.40	$ 2,002.81
Kaiser	$ 638.49	$ 1,276.97

5. **Changes:** The monthly benefit cap for certificated and management employees has been decreased from $1,517.00 to $1,471.20.

Exhibit 6 - Summary of Actuarial Assumptions

Actuarial Assumptions: The following assumptions as of July 1, 2016 were selected by the District in accordance with the requirements of GASB 45. In my opinion, these assumptions are reasonable and appropriate for purposes of determining OPEB costs under GASB 45.

Discount rate: 4.00% per year.

Medical Cost Increases (Trend): Medical premiums are assumed to increase 5% per year after 2016. In the 2014 valuation, the assumption was 5.12% per year.

Mortality: Rates are taken from the 2014 CalPERS OPEB Assumptions Model. Sample rates are:

	Non-Annuitants		Annuitants	
	Males	Females	Males	Females
Age 20	.031 %	.020 %	.025 %	.017 %
Age 30	.049 %	.025 %	.039 %	.028 %
Age 40	.075 %	.050 %	.110 %	.091 %
Age 50	.155 %	.100 %	.501 %	.466 %
Age 60	.308 %	.182 %	.710 %	.436 %

In the 2014 valuation, the RP-2000 Mortality Table, projected to future years on a generational basis with Scale BB, was used.

Retirement: Retirement rates are taken from the 2014 CalPERS OPEB Assumptions Model for "School Employees 2.0% at 55". Sample rates are:

	10 Years Service	20 Years Service	30 Years Service
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 %

In the 2014 valuation, eligible employees were assumed to retire at age 60, or earliest

Turnover (withdrawal): Likelihood of termination within the next year is taken from the 2014 CalPERS OPEB Assumptions Model for school employees. Sample rates are:

	5 Years Service	10 Years Service	15 Years Service
Age 20	9.46 %		
Age 30	7.90 %	6.68 %	5.81 %
Age 40	6.32 %	5.07 %	4.24 %
Age 50	1.16 %	0.71 %	0.32 %

In the 2014 valuation, these turnover rates were used:

Year of Employment	Rate of Termination
0 – 1 years	10.2 %
2 – 6 years	5.1 %
7 – 12 years	3.7 %
13 – 14 years	1.7 %
15 – 19 years	0.9 %
20 or more years	0.0 %

Coverage Elections: Retired employees have a 50% likelihood of choosing coverage under Blue Shield, and a 50% likelihood of choosing coverage under Kaiser. Retiring classified employees have a 50% likelihood of choosing coverage under a District-sponsored plan.

Work Hours: Classified employees are assumed to continue working at their current FTE schedule until retirement.

Marital Status: Employees are assumed to have the same marital status at retirement that they have at July 1, 2016.

Funding Method: The Projected Unit Credit funding method, with a closed 30-year level dollar amortization of the Unfunded Actuarial Accrued Liability beginning July 1, 2008.

Current Year Claims Cost: The per person annual "true cost" of medical coverage for the 2016-17 fiscal year has been developed from the monthly insurance premiums, the demographics of the employee population and industry norms. The baseline annual "true cost" amounts used in this valuation were:

	Blue Shield	**Kaiser**
Age 55	$ 13,159	$ 10,349
Age 58	14,591	11,475
Age 61	15,652	12,310
Age 64	16,343	12,853