MILPITAS UNIFIED SCHOOL DISTRICT

VALUATION OF RETIREE HEALTH BENEFITS

REPORT OF GASB 45 VALUATION
AS OF JULY 1, 2016

Prepared by: North Bay Pensions LLC
May 8, 2017

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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 Milpitas Unified 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. 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.

5-8-17

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Summary of Results

Key Results	**July 1, 2016**	**July 1, 2014**
Present Value of All Future Benefits (Exhibit 1)	$ 22,100,688	$ 12,218,470
Actuarial Accrued Liability (Past Service Liability) (Exhibit 1)	$ 18,123,252	$ 9,917,595
GASB 45 Operating Expense for 2016-17 and 2014-15		
Normal Cost	506,635	294,417
Amortization of Past Service Liability at 4% interest	1,143,076	566,214
(Exhibits 2, 3)	$ 1,649,711	$ 860,631
Balance Sheet Liability as of June 30, 2016 and June 30, 2014 (Exhibit 3)	$ 3,802,895	$ 3,292,673
Benefits expected to be paid in the 2016-17 or 2014-15 year (Exhibit 3)	$ 677,150	$ 709,831

Background

The District maintains a program which pays part 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, 2016, the District has accumulated $0 in an irrevocable 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 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 operating expense under GASB 45 will be for the 2016-2017 fiscal year.

Present Value of Future Benefits

The Actuarial Present Value of Total Projected Benefits (APVTPB) for all current and former employees, as of July 1, 2016, is **$22,100,688**. 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 $22,100,688 is the sum of these amounts:

Future benefits of current employees	
Certificated employees	$ 12,689,329
Classified employees	4,956,857
Management employees	1,410,579
Subtotal	$ 19,056,765
Future benefits of current retirees	
Certificated employees	$ 938,790
Classified employees	1,417,306
Management employees	687,827
Subtotal	$ 3,043,923
Total present value of all future benefits	$ 22,100,688

This APVTPB of $22,100,688 can be compared to the $12,218,470 amount that was calculated in the July 1, 2014 valuation. We would have expected the APVTPB to decrease from $12,218,470 to about $12,031,000 by 2016, as employees continue working toward retirement and retirees continue receiving benefits. The difference between the 2014 figure of $12,218,470 and this year's $22,100,688 is due to

• Expected decrease from 2014	$ (187,243)
• New mortality assumption	797
• New trend assumption	(307,550)
• Recognition of subsidized premiums	10,555,004
• Miscellaneous experience (gains)/losses	(178,790)
Total of all changes	$ 9,882,218

The changes in the assumptions are explained in more detail below, under "Actuarial Assumptions". The experience gain of $178,790 is mainly from medical premiums less than expected.

The recognition of subsidized premiums requires more explanation, provided below.

These figures are 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.

Subsidized Premiums

The Actuarial Standards Board promulgates professional standards for actuaries, called "Actuarial Standards of Practice". One such standard, ASOP 6, requires that actuarial valuations dated after March 2015 must incorporate age-specific claims costs, which recognize that the true cost of health care increases with age. This is a significant change from prior practice, in which we only valued health care premiums.

The theory behind the change is the well-known fact that the actual cost of health care increases as people get older. Insurance companies know this, of course. When an insurance company (like Kaiser or Anthem Blue Cross) calculates a single monthly premium which applies to all employees, that single amount is a blended figure which combines the lower cost of health care for younger workers and the higher cost of health care for older workers. In a certain sense, the younger employees are subsidizing the cost of health care for the older employees.

GASB 45 requires us to use these age-specific rates when we evaluate the cost of an employer's post-retirement health care plan. However, there used to be an exemption from this rule in the case of a health plan where the premium amounts are determined based on the pooled experience of a large group of employers (like SCCSIG), and the actual demographics of a specific employer have little or no effect on the actual premium amount. In that type of plan, called a "community rated plan", GASB 45 allows us to use only the forecasted premium amounts. This usually results in lower annual operating expense. We have been making use of this exemption for the District, because the SCCSIG medical plans meet the "community rated" definition.

The change to ASOP 6 effectively eliminates the exemption described above, starting in April 2015. This means that, beginning with this July 1 2016 valuation, we will need to calculate the liabilities of your post-retirement benefit plan using age-specific claims costs. Another way of saying the same thing is that we will need to include the value of subsidized premiums in our GASB 45 computations. As noted above, the value of subsidized premiums as of July 1, 2016 is approximately $10,555,000:

Value of promised benefits to retired employees	$ 11,545,186
Value of future subsidized premiums	10,555,502
Total value of all GASB 45 benefits	$ 22,100,688

Although the accounting rules require us to include the value of subsidized premiums in the GASB 45 calculations, we must keep in mind that **these are not a cash obligation** of the District. The District is already funding these "subsidized premiums" through the medical premiums being paid for currently-working employees, so no additional cash funding is needed or required.

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: once for your active employees, in the medical premiums you are paying, and again in the GASB 45 expense. Fortunately, GASB 45 permits you to make a simple adjustment to the medical premium costs you accrue for your employees. As shown in Exhibit 3, **for the 2016-17 year you may reduce your accrual of medical premiums by $394,769**.

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**.

As of July 1, 2016, the Actuarial Accrued Liability is $18,123,252. This figure is divided among employees and retirees in this way:

Employees still working	$ 15,079,329
Retired former employees	3,043,923
Actuarial Accrued Liability	$ 18,123,252

The Normal Cost in the 2016-2017 year is $506,635. One way to think of the APVTPB is like this:

Portion "earned" in prior years (AAL)	$ 18,123,252
Portion being "earned" this year (Normal Cost)	506,635
Portion to be "earned" in future years	3,470,801
APVTPB	$ 22,100,688

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 **$1,649,711**. A detailed derivation of this amount is shown in Exhibit 2 of this report.

At the end of each fiscal year, the District will carry a balance sheet liability, called the "**Net OPEB Obligation or Asset**", which represents the cumulative amount of Annual

OPEB Costs for all past years that haven't yet been funded. The District has informed me that the Net OPEB Obligation at June 30, 2016 is $3,802,895.

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 probabilities of death for classified employees and retirees have been changed from the 2010 CalPERS mortality table to the 2014 CalPERS mortality table. This change had almost no effect on the cost of the benefits.

The assumed future increases in dental and vision premiums have been changed from 5% per year to 4% per year, to better reflect anticipated increases. This change reduced the total value of projected benefits by $307,550.

Future Change: GASB 75

A new accounting 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. There are two main differences between the old rules (GASB 45) and the new rules (GASB 75). Under the new rules, the District will need to record a liability on its balance sheet each year equal to the excess of the Actuarial Accrued Liability over the accumulated assets. This replaces the current requirement to show a liability equal to the Net OPEB Obligation. As of July 1, 2016, the Net OPEB Obligation is $3,802,895, while the excess of the AAL over the assets is $18,123,252. 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.

The second main impact of the new rules is that each year's accruals will not be determinable until after the <u>end</u> of each fiscal year. This means that we won't know what the District's 2017-18 expense accrual will be until after July 1, 2018.

Exhibit 1 - Actuarial Values as of July 1, 2016

The Actuarial Present Value of Total Projected Benefits as of July 1, 2016 of all future benefits from the program, for all current and former employees, is as follows:

	Actuarial Present Value	Actuarial Accrued Liability	Number of Persons
Current employees	$ 19,056,765	$ 15,079,329	398
Retired former employees	3,043,923	3,043,923	65
Totals	$ 22,100,688	$ 18,123,252	463

In addition to these 398 employees, there are 545 employees who are not eligible for this program because they were hired after June 30, 2007, or will be over age 64 when they first qualify for benefits.

Averages as of July 1, 2016

Active Employees

Number	398 employees
Average Age	49.7 years
Average Service	16.7 years

Retired Former Employees

Number	65 persons
Average Age	62.3 years

Source of Information

A census of all eligible District employees and retirees as of July 1, 2016 was provided to me by the District.

Exhibit 2 - Annual OPEB Cost

In the Entry Age Normal method, the cost of each individual's OPEB benefits is amortized on a straight-line basis over his/her working career. For each employee, a "normal cost" is computed, the amount which, if accumulated during each year of employment, will at retirement be sufficient to fund the expected benefits for that individual. The sum of all the individual normal costs for all employees is called the Normal Cost. The accumulated value of all normal costs attributed to prior years, including the full value of benefits for all currently retired employees, is called the Actuarial Accrued Liability. The Unfunded Actuarial Accrued Liability is amortized over a period of future years. The ARC is the sum of the Normal Cost and the amortization of the Unfunded Actuarial Accrued Liability.

The Annual OPEB Cost for the 2016-2017 year is computed in this way:

1.	Normal Cost for the 2016-17 fiscal year	$ 506,635
2.	Actuarial Accrued Liability at July 1, 2016	18,123,252
3.	Value of Assets	0
4.	Unfunded Actuarial Accrued Liability: 2. minus 3.	18,123,252
5.	Level-dollar amortization of 4. over 22 years	1,254,118
6.	Annual Required Contribution (ARC): 1. plus 5.	1,760,753
7.	Net OPEB Obligation at beginning of year	3,802,895
8.	One year's interest on 7.	152,116
9.	ARC adjustment: amortization of 7. over 22 years	(263,158)
10.	**Annual OPEB Cost: 6. plus 8. plus 9.**	**$ 1,649,711**

Exhibit 3 - Five-Year Projection of Costs

Shown below are estimates of the way in which Annual OPEB Cost might be expected to increase over the next five years. In this illustration, it is assumed that the Normal Cost will increase 4% per year, that all actuarial assumptions will remain unchanged, and that the District will continue to fund the plan on a pay-as-you-go basis.

Fiscal Year:	2016-17	2017-18	2018-19	2019-20	2020-21
ARC					
Normal cost	$ 506,635	$ 526,900	$ 547,976	$ 569,895	$ 592,691
Amortization	1,254,118	1,301,709	1,352,574	1,406,630	1,467,230
Total ARC	1,760,753	1,828,609	1,900,550	1,976,525	2,059,921
Plus interest	152,116	175,227	198,272	220,958	244,578
Less ARC adjustment	(263,158)	(312,259)	(364,739)	(420,584)	(483,012)
Annual OPEB Cost	**$1,649,711**	**$1,691,577**	**$1,734,083**	**$1,776,899**	**$1,821,487**
Funding by the District					
Benefits paid	$ 677,150	$ 702,144	$ 730,165	$ 744,564	$ 755,356
Subsidized premiums	394,769	413,318	436,766	441,834	461,581
Additional funding	0	0	0	0	0
Total Funding	**$ 1,071,919**	**$ 1,115,462**	**$ 1,166,931**	**$ 1,186,398**	**$ 1,216,937**
Increase in net OPEB Obligation	577,792	576,115	567,152	590,501	604,550
Net OPEB Obligation at beginning of year	$ 3,802,895	$ 4,380,687	$ 4,956,802	$ 5,523,954	$ 6,114,455
Net OPEB Obligation at end of year	**$ 4,380,687**	**$ 4,956,802**	**$ 5,523,954**	**$ 6,114,455**	**$ 6,719,005**

How to read this chart:

- Annual OPEB Cost: Each year's operating expense.
- Total Funding: Amount the District will contribute each year, equal to the amounts paid to retired employees, plus subsidized premiums.
- Net OPEB Obligation at end of year: The amount on the District's balance sheet at the end of each year, as an unpaid liability.

Exhibit 4 - Summary of Benefit Provisions

1. **Eligibility:** Employees who retire after age 55 with at least 12 years of service are entitled to benefits. Employees hired after June 30, 2007 are not entitled to any benefits from this plan.

There are three different employee groups for which benefits are provided:

2. **Management:** The plan pays the full monthly premium for a District-sponsored medical plan for the retiree, until the retiree reaches age 65. If the retiree has at least 15 years of service, then coverage will be either employee-plus-one medical, or employee-only medical-plus-dental. With at least 20 years of service, coverage will be employee-plus-one for both medical and dental. If at least 25 years of service, coverage will be family coverage for medical, dental and vision benefits. All payments cease when the retiree reaches age 65. The amount of the monthly District-paid medical premium is not to exceed the district cap at the time of retirement. Employees hired during the 2006-07 fiscal year are only eligible for employee-only medical coverage, and only if they have at least 25 years of service. Employees who retire after age 55 with at least 25 years of service are covered by group term life insurance of $30,000. The current district cap is $820.87.

3. **Certificated:** Retired certificated employees are entitled to the same benefits as retired management employees, except that retired certificated employees do not receive vision or group term life insurance coverage, and benefits are pro-rated if the employee worked less than full-time (8 hours per day).

4. **Classified (CSEA):** Classified employees who retire are entitled to the same benefits as retired certificated employees.

5. For 2016 and 2017, the total uncapped monthly premiums are:

	2016	2017
Kaiser High employee only	$ 677.82	644.95
Kaiser High employee plus spouse	1,355.64	1,289.89
Kaiser High family coverage	1,918.23	1,825.20
Anthem Blue Cross High employee only	930.68	908.24
Anthem Blue Cross High employee plus spouse	1,861.35	1,816.48
Anthem Blue Cross High family coverage	2,633.82	2,570.33
Anthem Blue Cross PPO employee only	782.93	864.01
Anthem Blue Cross PPO employee plus spouse	1,644.15	1,814.42
Anthem Blue Cross PPO family coverage	2,348.78	2,592.03
Delta Dental, certificated and classified	149.13	149.13
Delta Dental, management	156.33	156.33
Vision Service Plan	26.29	26.29
Life Insurance	10.20	10.20

Exhibit 5 - 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% per year. This represents what the District expects to earn on its investments over the long term (20 to 60 years), and incorporates an assumption of long-term inflation of 3% per year.

Medical Cost Increases (Trend): Medical premiums for retired employees are assumed to increase as follows:

2018	5.8 %
2019 and later	5.5 %

Dental and vision premiums are assumed to increase 4% per year. This was changed from 5% in the prior valuation.

Mortality: Mortality rates are taken from the 2014 CalPERS OPEB Assumptions Model (for classified employees) and from the 2015 valuation of STRS (for certificated employees). The rates for classified employees have been changed from the 2010 CalPERS table to the 2014 CalPERS table.

Actuarial Methods: The Normal Cost and Actuarial Accrued Liability are determined using the Entry Age Normal method, with the normal cost for each employee computed as a level dollar amount. The Actuarial Value of Assets is the fair value of assets. The Unfunded Actuarial Accrued Liability is being amortized as a level dollar amount over the 30-year period beginning July 1, 2008.

Coverage Elections: 100% of eligible employees are assumed to elect coverage upon retirement, and to remain covered under District plans until age 65. Eligible future retirees are assumed to choose medical plans in this manner: 80% are assumed to choose the Kaiser High plan, 10% are assumed to choose Anthem Blue Cross High plan, and 10% are assumed to choose the Anthem Blue Cross PPO. Employees who qualify for coverage of family members are assumed to be married to a spouse the same age.

Retirement: Retirement rates are taken from the 2014 CalPERS OPEB Assumptions Model (for classified employees) and from the most recent 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 %	8.0 %
Age 58	2.7 %	2.7 %	14.0 %
Age 61	6.3 %	6.3 %	43.0 %
Age 64	10.8 %	10.8 %	30.0 %
STRS Females			
Age 55	4.5 %	4.5 %	9.0 %
Age 58	4.1 %	4.1 %	16.0 %
Age 61	9.0 %	9.0 %	40.0 %
Age 64	13.5 %	13.5 %	32.0 %

Turnover (withdrawal): Likelihood of termination within the next year is taken from the 2014 CalPERS OPEB Assumptions Model (for classified employees) and from the most recent 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	3.90 %		
Age 30	3.60 %	2.00 %	1.10 %
Age 40	3.00 %	2.00 %	1.10 %
Age 50	3.00 %	2.00 %	1.10 %
STRS Females			
Age 20	5.50 %		
Age 30	5.30 %	2.30 %	1.00 %
Age 40	3.80 %	1.60 %	0.90 %
Age 50	2.50 %	1.30 %	0.90 %

District Cap: The District benefit cap is assumed to remain unchanged at $820.87 per month in all future years.