

Demsey, Filliger & Associates

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November 12, 2015

Ms. Midge Hoffman Chief Business Official Ross Valley School District 110 Shaw Drive San Anselmo, CA 94960

Re: Ross Valley School District ("District") GASB 45 Valuation

Dear Ms. Hoffman:

This report sets forth the results of our GASB 45 actuarial valuation of the District's retiree health insurance program as of July 1, 2014.

In June, 2004 the Governmental Accounting Standards Board (GASB) issued accrual accounting standards for retiree healthcare benefits, GASB 43 and GASB 45. GASB 43/45 require public employers such as the District to perform periodic actuarial valuations to measure and disclose their retiree healthcare liabilities for the financial statements of both the employer and the trust, if any, set aside to pre-fund these liabilities. The District must obtain actuarial valuations of its retiree health insurance program under GASB 43/45 not less frequently than once every two years.

To accomplish these objectives the District selected Demsey, Filliger and Associates (DF&A) to perform an actuarial valuation of the retiree health insurance program as of July 1, 2014. This report may be compared with the valuation performed by DF&A as of July 1, 2012, to see how the liabilities have changed since the last valuation. We are available to answer any questions the District may have concerning the report.

#### **Financial Results**

We have determined that the amount of actuarial liability for District-paid retiree benefits is \$1,769,460 as of July 1, 2014. This represents the present value of all benefits expected to be paid by the District for its current and future retirees. If the District were to place this amount in a fund earning interest at the rate of 4.0% per year, and all other actuarial assumptions were exactly met, the fund would have exactly enough to pay all expected benefits.

This includes benefits for 68 retirees and surviving spouses as well as 211 active employees who may become eligible to retire and receive benefits in the future. It excludes employees hired after the valuation date.

When we apportion the \$1,769,460 into past service and future service components under the Projected Unit Credit Cost Method, the past service liability (or "Accrued Liability") component is \$1,561,792 as of July 1, 2014. This represents the present value of all benefits earned to date assuming that an employee earns retiree healthcare benefits ratably over his or her career. The \$1,561,792 is comprised of liabilities of \$121,204 for active employees and \$1,440,588 for retirees. Because the District has not established an irrevocable trust for the pre-funding of retiree healthcare benefits, the Unfunded Accrued Liability (called the UAL, equal to the AL less Assets) is also \$1,561,792.

We have determined that Ross Valley School District's "Annual Required Contributions", or "ARC", for the fiscal year 2014-15, is \$98,513. The \$98,513 is comprised of the present value of benefits accruing in the current year, called the "Service Cost", and a 30-year amortization of the UAL. We estimate that the District paid approximately \$98,088 for the 2014-15 fiscal year in healthcare costs for its retirees, so the difference between the accrual accounting expense (ARC) and pay-as-you-go is an increase of \$425.

There are two adjustments to the ARC that are required in order to determine the District's Annual OPEB Cost (AOC) for the 2014-15 fiscal year. We have calculated these adjustments based on a Net OPEB Obligation of \$385,485 as of June 30, 2014, resulting in an AOC for 2014-15 of \$91,639.

We show these numbers in the table on the next page and in Exhibit II. All amounts are net of expected future retiree contributions, if any.

# Ross Valley School District Annual Liabilities and Expense under GASB 45 Accrual Accounting Standard

#### **Projected Unit Credit Cost Method**

Item	Amounts for Fiscal 2014-15
Descent Value of Entire Descrite (DVED)	
Present Value of Future Benefits (PVFB)	\$220 072
Active	\$328,872
Retired	1,440,588
Total: PVFB	\$1,769,460
Accrued Liability (AL)	
Actives	\$121,204
Retired	1,440,588
Total: AL	\$1,561,792
Assets	(0)
Total: Unfunded AL	\$1,561,792
Annual Required Contributions (ARC)	
Service Cost At Year-End	\$8,194
30-year Amortization of Unfunded AL	90,319
Total: ARC	\$98,513
Adjustments to ARC	
Interest on Net OPEB Obligation*	15,419
Adjustment to ARC*	(22,293)
Total: Annual OPEB Cost (AOC) for 2014-15	\$91,639

<sup>\*</sup>Amounts based on June 30, 2014 Net OPEB Obligation of \$385,485.

The ARC of \$98,513, shown above, should be used for the 2014-15 and 2015-16 fiscal years, but the Annual OPEB Cost for the 2015-16 fiscal year must include an adjustment based on the Net OPEB Obligation as reported in the June 30, 2015 financial statement, which has not yet been determined precisely.

When the District begins preparation of the June 30, 2015 government-wide financial statements, DF&A will provide the District and its auditors with complimentary assistance in preparation of footnotes and required supplemental information for compliance with GASB 45 (and GASB 43, if applicable).

#### **Differences from Prior Valuation**

The most recent prior valuation was completed as of July 1, 2012 by DF&A. The AL (Accrued Liability) as of that date was \$1,460,776 (see page 3 of the prior report), compared to \$1,561,792 as of July 1, 2014. In this section, we provide a reconciliation between the two numbers so that it is possible to trace the AL from one actuarial report to the next.

Several factors have caused the AL to change since 2012. The AL increases with the passage of time as employees accrue more service and get closer to receiving benefits, and decreases as obligations to current retirees are satisfied. There are actuarial gains/losses from one valuation to the next, and changes in actuarial assumptions and methodology for the current valuation. To summarize, the most important changes were as follows:

- 1. There was a gain (a decrease in the AL) of \$31,727 due to increases in healthcare premiums and statutory minimum contributions less than expected.
- 2. We changed to more up-to-date mortality tables. This change caused an increase in the AL of \$117,827.
- 3. We changed the initial healthcare trend rate from 6.0% to 8.0% to better reflect our expectation of claim cost increases over the next several years. This change increased the AL by \$1,500.
- 4. There was a net census loss (an increase in the AL) of \$80,242.

The estimated changes to the AL from July 1, 2012 to July 1, 2014 may be summarized as follows:

Changes to AL	AL
AL as of 7/1/12	\$1,460,776
Passage of time	(66,826)
Premium increases < expected	(31,727)
Change in mortality table	117,827
Change in trend rates	1,500
Census loss	80,242
AL as of 7/1/14	\$1,561,792

#### **Funding Schedules**

There are many ways to approach the pre-funding of retiree healthcare benefits. In the *Financial Results* section, we determined the annual expense for all District-paid benefits. The expense is an orderly methodology, developed by the GASB, to account for retiree healthcare benefits. However, the GASB 45 expense has no direct relation to amounts the District may set aside to pre-fund healthcare benefits.

The table on the next page provides the District with three alternative schedules for <u>funding</u> (as contrasted with <u>expensing</u>) retiree healthcare benefits. The schedules all assume that the retiree fund earns, or is otherwise credited with, 4.0% per annum on its investments, and that contributions and benefits are paid mid-year.

#### The schedules are:

- 1. A level contribution amount for the next 20 years.
- 2. A level percent of the Unfunded Accrued Liability.
- 3. A constant percentage (3%) increase for the next 18 years (a longer period would result in the fund's exhaustion in the early years).

We provide these funding schedules to give the District a sense of the various alternatives available to it to pre-fund its retiree healthcare obligation. The three funding schedules are simply three different examples of how the District may choose to spread its costs.

By comparing the schedules, you can see the effect that early pre-funding has on the total amount the District will eventually have to pay. Because of investment earnings on fund assets, the earlier contributions are made, the less the District will have to pay in the long run. Of course, the advantages of pre-funding will have to be weighed against other uses of the money.

The table on the following page shows the required annual outlay under the pay-as-you-go method and each of the above schedules. The three funding schedules include the "pay-as-you-go" costs; therefore, the amount of pre-funding is the excess over the "pay-as-you-go" amount.

These numbers are computed on a closed group basis, assuming no new entrants, and using unadjusted premiums.

## Ross Valley School District Sample Funding Schedules (Closed Group)

Fiscal Year Beginning	Pay-as-you-go	Level Contribution for 20 years	Level % of Unfunded Liability	Constant Percentage Increase
2014				
	\$98,088	\$127,675	\$312,358	\$108,696
2015	98,115	127,675	266,094	111,957
2016	98,638	127,675	227,221	115,316
2017	98,967	127,675	194,537	118,775
2018	99,022	127,675	167,017	122,338
2019	98,854	127,675	143,807	126,008
2020	98,397	127,675	124,195	129,789
2021	98,538	127,675	107,585	133,682
2022	98,421	127,675	93,492	137,693
2023	97,064	127,675	81,497	141,824
2024	95,343	127,675	71,243	146,078
2025	93,239	127,675	62,447	150,461
2026	90,760	127,675	54,872	154,975
2027	87,907	127,675	48,325	159,624
2028	84,847	127,675	42,643	164,412
2029	81,755	127,675	37,697	169,345
2030	78,780	127,675	32,751	174,425
2031	75,788	127,675	27,383	179,658
2032	72,819	127,675	22,895	0
2033	70,034	127,675	19,144	0
2034	67,191	0	16,007	0
2035	63,731	0	13,384	0
2036	59,619	0	11,192	0
2037	55,577	0	9,358	0
2038	51,818	0	7,826	0
2039	49,276	0	6,545	0
2040	47,097	0	5,473	0
2041	44,596	0	4,577	0
2042	43,325	0	3,828	0
2043	43,280	0	3,202	0
2044	43,463	0	2,679	0
2045	43,831	0	2,241	0
2046	44,429	0	1,875	0
2047	45,407	0	1,570	0
2048	46,973	0	1,314	0
2049	48,634	0	1,100	0
2050	49,808	0	922	0
2055	60,771	0	384	0
2060	58,419	0	165	0
2065	49,421	0	75	0
2070	36,333	0	37	0

#### **Actuarial Assumptions**

In order to perform the valuation, the actuary must make certain assumptions regarding such items as rates of employee turnover, retirement, and mortality, as well as economic assumptions regarding healthcare inflation and interest rates. Our assumptions are based on a standard set of assumptions we have used for similar valuations, modified as appropriate for the District. For example, turnover rates were taken from a standard actuarial table, T-5, increased by 100% at all ages. This table was chosen because it matches District turnover experience.

Retirement rates were also based on recent District experience, but are less reliable due to the relatively small size of the retiree group. 10% of eligible future retirees (i.e., those with 40 years of service) were assumed to waive statutory minimum coverage under the District's health plans upon retirement.

The discount rate of 4.0% is based on our best estimate of expected long-term plan experience and is in accordance with our understanding of the guidelines for selection of these rates under GASB 45. The healthcare trend rates are based on our knowledge of the general healthcare environment and the specific coverages offered by the District. Please see the "Actuarial Assumptions" section of the report for further details.

#### Projected Annual Pay-as-you go Costs

As part of the valuation, we prepared a projection of the expected annual cost to the District to pay benefits on behalf of its retirees on a pay-as-you-go basis. These numbers are computed on a closed group basis, assuming no new entrants, and are net of retiree contributions. Projected pay-as-you-go costs for selected years are as follows:

FYB	Pay-as-you-go
2014	\$98,088
2015	98,115
2016	98,638
2017	98,967
2018	99,022
2019	98,854
2020	98,397
2025	93,239
2030	78,780
2035	63,731
2040	47,097
2045	43,831
2050	49,808
2055	60,771
2060	58,419
2065	49,421
2070	36,333

#### Breakdown by Employee/Retiree Group

Exhibit I, attached at the end of the report, shows a breakdown of the GASB 45 components (ARC, AL, Service Cost, and PVFB) by division and separately by active employees (future retirees) and current retirees.

#### Net OPEB Obligation (NOO) and Annual OPEB Cost (AOC)

Exhibit II shows a development of the District's Net OPEB Obligation ("NOO") as of June 30, 2010 through June 30, 2014, and the Annual OPEB Cost ("AOC") for the fiscal years 2010-11 through 2014-15.

#### Certification

The actuarial certification, including a caveat regarding limitations of scope, if any, is contained in the "Actuarial Certification" section at the end of the report.

We have enjoyed working with the District on this report, and are available to answer any questions you may have concerning any information contained herein.

Sincerely,

DEMSEY, FILLIGER AND ASSOCIATES

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T. Louis Filliger, FSA, EA, MAAA

Partner & Actuary

#### **Benefit Plan Provisions**

#### **Active Employee Coverage**

The District sponsors healthcare coverage under the California Public Employees Medical and Hospital Care Act ("PEMHCA"), commonly referred to as PERS Health. PEMHCA provides health insurance through a variety of Health Maintenance Organization (HMO) and Preferred Provider Organization (PPO) options. Participation in PEMHCA is financed in part by the District through a statutory minimum contribution to PEMHCA. The statutory minimum was \$119.00 per month for calendar 2014, \$122.00 per month for 2015, and is scheduled by law to be indexed with medical inflation (CPI) for years 2016 and thereafter.

#### Post-Retirement Coverage

The District also offers medical coverage to its retirees. The District makes the required statutory PEMHCA contribution as described above, subject to the "Equal Contribution Method" under which the District's contribution for retirees is equal to its basic contribution for active employees.

Pursuant to Board resolutions authorized by California Government Code Section 22895, a retiree who retires on or after July 1, 2010 must have 40 years of credited service with the District in order to receive a lifetime District contribution equal to the statutory minimum described above. Retirees who retire on or after July 1, 2010 without having completed at least 40 years of credited service with the District are not eligible to receive a District contribution towards retiree health benefits. These rules apply to all employees of the District, including Certificated, Classified, and Management groups.

The District also pays a 0.34%-of-premium administrative fee to PEMHCA for each eligible retiree.

The following table shows January 1, 2014 monthly PERS Health (PEMHCA) premiums for retirees within the Bay Area region:

	Blue Shield HMO	Kaiser HMO	PERS Choice PPO	PERS Care PPO	
	LIVIO	TIVIO	PPU	PPU	
Basic Plan					
Retiree	\$836.59	\$742.72	\$690.77	\$720.04	
Retiree + 1	1,673.18	1,485.44	1,381.54	1,440.08	
Family	2,175.13	1,931.07	1,796.00	1,872.10	
Medicare Supplement					
Retiree	\$298.21	\$294.97	\$307.23	\$327.36	
Retiree + 1	596.42	589.94	614.46	654.72	
Family	894.63	884.91	921.69	982.08	

#### Valuation Data

#### **Active and Retiree Census**

Age distribution of retirees and surviying spouses included in the valuation

	Statutory
Age	Minimum
Under 55	1
55-59	0
60-64	5
65-69	12
70-74	19
75-79	20
80-84	5
85-89	3
90+	_3
Total	68
Average Age	73.74

Age/Years of service distribution of active employees included in the valuation

Years→	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
Age									
<25	1								1
25-29	13	1							14
30-34	15	7	1						23
35-39	10	11	11	1					33
40-44	15	9	4	2	0				30
45-49	7	9	12	2	1	0			31
50-54	7	7	4	2	2	1	0		23
55-59	4	5	5	8	4	0	0	0	26
60-64	4	1	3	3	1	3	1	0	16
65+	2	4	3	_2	_1	1	_1	0	_14
All Ages	78	54	43	20	9	5	2	0	211

Average Age: Average Service:

45.79

8.36

#### **Actuarial Assumptions**

The liabilities set forth in this report are based on the actuarial assumptions described in this section.

Valuation Date:

July 1, 2014

Actuarial Cost Method:

Projected Unit Credit

Amortization Method:

30-year level dollar, open period

Discount Rate:

4.0% per annum

Return on Assets:

4.0% per annum

Pre-retirement Turnover:

According to Crocker-Sarason Table T-5 less mortality, increased by 100% at all ages. Sample rates are as follows:

Age	Turnover (%)
25	15.9%
30	15.4
35	12.6
40	10.3
45	8.0
50	5.1
55	1.9

Pre-retirement Mortality:

RP-2014 Employee Mortality, without projection. Sample deaths per 1,000 employees are as follows:

Age	Males	Females
25	0.48	0.17
30	0.45	0.22
35	0.52	0.29
40	0.63	0.40
45	0.97	0.66
50	1.69	1.10
55	2.79	1.67
60	4.69	2.44

Post-retirement Mortality:

RP-2014 Healthy Annuitant Mortality, without projection. Sample deaths per 1,000 retirees are as follows:

Age	Males	Females
55	5.74	3.62
60	7.78	5.19
65	11.01	8.05
70	16.77	12.87
75	26.83	20.94
80	44.72	34.84
85	77.50	60.50
90	135.91	107.13

### Actuarial Assumptions (Continued)

Claim Cost per Retiree or Spouse (before being limited to statutory minimum benefit):

Age	Medical/Rx
50-64	\$9,105
65+	3,700

Retirement Rates:

Age	Percent Retiring*
60	8.0%
61	10.0
62	12.0
63	15.0
64	18.0
65	20.0
66	25.0
67	28.0
68	32.0
69	35.0
70	100.0

\*Of those having met the eligibility to receive PERS retirement benefits. The percentage refers to the probability that an active employee reaching the stated age will retire within the following year. The rates begin at age 60 because we assumed an earliest hire age of 20, and a person hired at age 20 would complete the required 40 years of service at age 60.

Trend Rate:

Healthcare costs were assumed to increase according to the following schedule:

FYB	Medical/Rx	Medical CPI			
2014	8.0%	4.0%			
2015	7.0	4.0			
2016	6.0	4.0			
2017+	5.0	4.0			

Percent Waiving Coverage:

10%. This assumption applies to future retirees only.

Percent of Retirees with Spouses:

Future Retirees: 50% of future retirees were assumed to have spouses. Female spouses assumed three years younger than male spouses.

Current Retirees: Based on actual spousal data.

#### **Actuarial Certification**

The results set forth in this report are based on our actuarial valuation of the health and welfare benefit plans of the Ross Valley School District ("District") as of July 1, 2014.

The valuation was performed in accordance with generally accepted actuarial principles and practices. We relied on census data for active employees and retirees provided to us by the District in October, 2015. We also made use of claims, premium, expense, and enrollment data, and copies of relevant sections of healthcare documents provided to us by the District.

The assumptions used in performing the valuation, as summarized in this report, and the results based thereupon, represent our best estimate of the actuarial costs of the program under GASB 43 and GASB 45, and the existing and proposed Actuarial Standards of Practice for measuring post-retirement healthcare benefits. We have assumed no post-valuation mortality improvements, consistent with our belief that there will be no further significant, sustained increases in life expectancy in the United States over the projection period covered by the valuation.

Throughout the report, we have used unrounded numbers, because rounding and the reconciliation of the rounded results would add an additional, and in our opinion unnecessary, layer of complexity to the valuation process. By our publishing of unrounded results, no implication is made as to the degree of precision inherent in those results. Clients and their auditors should use their own judgment as to the desirability of rounding when transferring the results of this valuation report to the clients' financial statements.

The undersigned actuary meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Certified by:

T. Louis Filliger, FSA, EA, MAAA Date: ////

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Partner & Actuary

#### Ross Valley School District GASB 45 Valuation Results By Employee Group

	7/1/2014 Valuation Results <u>Certificated</u>		7/1/2014 Valuation Results <u>Classified</u>		7/1/2014 Valuation Results <u>Management</u>		7/1/2014 Valuation Results Total All Groups	
District-paid Present Value of Benefits:								
Actives Retirees	\$	251,084 906,380	\$	55,948 477,156	\$	21,840 57,052	\$	328,872 1,440,588
Total District-Paid PVFB:	\$	1,157,464	\$	533,104	\$	78,892	\$	1,769,460
District-paid Accrued Liability:								
Actives Retirees	\$	80,081 906,380	\$	29,403 477,156	\$	11,720 57,052	\$	121,204 1,440,588
Total District-Paid AL: Assets*	\$	986,461	\$	506,559	\$	68,772	\$	1,561,792
District-paid Unfunded Accrued Liability ("UAL")	\$	986,461	\$	506,559	\$	68,772	\$	1,561,792
GASB 45 ARC ("Annual Required Contributions")								
Service Cost at Year-end 30-year amortization of District-paid UAL	\$	6,221 57,048	\$	1,419 29,294	\$	554 3,977	\$	8,194 90,319
Total ARC (District's Annual Expense)	\$	63,269	\$	30,713	\$	4,531	\$	98,513

<sup>\*</sup>Assets, if any, allocated in proportion to AL for illustration purposes only; GASB 45 does not provide authority for this calculation.

	Amount			
Net OPEB Obligation 6/30/2010	456,540			
ARC for 2010-11	99,000			
Interest on Net OPEB Obligation	15,979			
Amortization adjustment to ARC	(39,579)			
Annual OPEB Cost 2010-11	75,400			
Employer Contribution	(89,875)			
Change in Net OPEB Obligation 2010-11	(14,475)			
Net OPEB Obligation 6/30/2010	456,540			
Net OPEB Obligation 6/30/2011	442,065			
ARC for 2011-12	101,000			
Interest on Net OPEB Obligation	15,000			
Amortization adjustment to ARC	(38,400)			
Annual OPEB Cost 2011-12	77,600			
Employer Contribution	(92,555)			
Change in Net OPEB Obligation 2011-12	(14,955)			
Net OPEB Obligation 6/30/2011	442,065			
Net OPEB Obligation 6/30/2012	427,110			
ARC for 2012-13	90,203			
Interest on Net OPEB Obligation	17,084			
Amortization adjustment to ARC	(24,700)			
Annual OPEB Cost 2012-13	82,587			
Employer Contribution	(112,837)			
Change in Net OPEB Obligation 2012-13	(30,250)			
Net OPEB Obligation 6/30/2012	427,110			
Net OPEB Obligation 6/30/2013	396,860			
ARC for 2013-14	90,203			
Interest on Net OPEB Obligation	15,874			
Amortization adjustment to ARC	(22,950)			
Annual OPEB Cost 2013-14	83,127			
Employer Contribution	(94,502)			
Change in Net OPEB Obligation 2013-14	(11,375)			
Net OPEB Obligation 6/30/2013	396,860			
Net OPEB Obligation 6/30/2014	385,485			
ARC for 2014-15	98,513			
Interest on Net OPEB Obligation	15,419			
Amortization adjustment to ARC	(22,293)			
Annual OPEB Cost 2014-15	91,639			