



August 8, 2015

Ms. Susan Kinder  
Chief Business Official  
Livermore Valley Joint Unified School District  
685 East Jack London Blvd.  
Livermore, CA 94550

Re: Livermore Valley Joint Unified School District ("District") GASB 45 Valuation

Dear Ms. Kinder:

This report sets forth the results of our GASB 45 actuarial valuation of the District's retiree health insurance program as of July 1, 2015.

In June, 2004 the Governmental Accounting Standards Board (GASB) issued its final 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, 2015. This report may be compared with the valuation performed by DF&A as of July 1, 2013, 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 \$7,881,328 as of July 1, 2015. This represents the present value of all benef

This includes benefits for 63 retirees as well as 1,261 active employees who may become eligible to retire and receive benefits in the future

**Livermore Valley Joint Unified School District**  
**Annual Liabilities and Expense under**  
**GASB 45 Accrual Accounting Standard**  
**Projected Unit Credit Cost Method**

Item	Amounts for Fiscal 2015-16
Present Value of Future Benefits (PVFB)	
Active	\$7,226,697
Retired	<u>654,631</u>
<b>Total: PVFB</b>	<b>\$7,881,328</b>
Accrued Liability (AL)	
Actives	\$4,546,617
Retired	<u>654,631</u>
<b>Total: AL</b>	<b>\$5,201,248</b>
Assets	<u>(0)</u>
<b>Total: Unfunded AL</b>	<b>\$5,201,248</b>
Annual Required Contributions (ARC)	
Service Cost At Year-End	\$358,625
30-year Amortization of Unfunded AL	<u>300,789</u>
<b>Total: ARC</b>	<b>\$659,414</b>
Adjustments to ARC	
Interest on Net OPEB (Asset)*	(32,545)
Adjustment to ARC*	<u>47,052</u>
<b>Total: Annual OPEB Cost (AOC) for 2015-16</b>	<b>\$673,921</b>

\*Amounts based on estimated June 30, 2015 Net OPEB (Asset) of (\$813,618).

The ARC of \$659,414, shown above, should be used for both the 2015-16 and 2016-17 fiscal years, but the Annual OPEB Cost for both years must include an adjustment based on the Net OPEB Obligation (NOO) as reported in the prior financial statement, which is not known precisely i Td [(0).0f\* 48

## **Differences from Prior Valuation**

The most recent prior valuation was completed as of July 1, 2013 by DF&A. The AL (Accrued Liability) as of that date was \$6,633,919 (see page 3 of the prior report), compared to \$5,201,248 as of July 1, 2015. 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 2013. The AL increases as employees accrue more service and get closer to receiving benefits, and decreases as benefit obligations to 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 \$1,480 due to lower than expected increases in healthcare premiums.
2. We changed to more up-to-date mortality tables. This change caused an increase in the AL of \$7,564.
3. We increased the percentage of future retirees assumed to waive benefits from 10% to 30%, to reflect emerging plan experience. This change caused a decrease in the AL of \$1,296,850.
4. There was a net gain (a decrease in the AL) fro

## **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 funding (as contrasted with expensing) retiree healthcare benefits. The schedules all assume that the retiree fund earns, or is otherwise credited with, 4.0% per annum on its investments, a starting Fund 20 balance of \$165,126 as of July 1, 2015, and that contributions and benefits are paid mid-year.

The schedules are:

1. A level contribution amount for the next 18 years (a longer period would result in the fund's exhaustion in the early years).
2. A level percent of the Unfunded Accrued Liability.
3. A constant percentage (3%) increase for the next 15 years (see note for schedule 1).

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



## **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 are taken from a standard actuarial table, T-9, without adjustment. This matches the District's historic turnover patterns. Retirement rates were also based on recent District retirement patterns. Both assumptions should be reviewed in the next valuation to see if they are tracking well with experience.

The discount rate of 4.0% is based on our best estimate of expected long-term plan experience. It is in accordance with our understanding of the guidelines for selection of this rate under GASB 45 for unfunded plans such as the District's. The healthcare trend rates are based on our analysis of recent District experience and our knowledge of the general healthcare environment.

In determining the cost of covering early retirees (those under the age of 65), we used an age-adjusted claims cost matrix fitted to the average single premium for early retirees. A complete description of the actuarial assumptions used in the valuation is set forth in the "Actuarial Assumptions" section.

## **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:

<b>FYB</b>	<b>Pay-as-you-go</b>
2015	\$451,739
2016	510,929
2017	607,127
2018	619,797
2019	658,033
2020	687,440
2025	558,944
2030	412,946
2035	219,500
2040	86,197
2045	35,323
2050	7,228
2055	637
2060	0

### **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 bargaining unit (or non-represented group) and separately by active employees (future retirees) and current retirees.

### **Net OPEB Obligation/(Asset) and Annual OPEB Cost (AOC)**

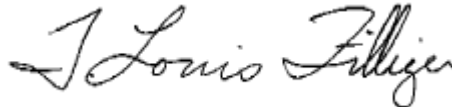
Exhibit II shows a development of the District's Net OPEB Obligation/(Asset) as of June 30, 2008 through June 30, 2015, and the Annual OPEB Cost ("AOC") for the fiscal years 2008-09 through 2015-16. The Net OPEB (Asset) as of June 30, 2015 and the AOC for 2015-16 are estimates as of the date this report is being published.

### **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.

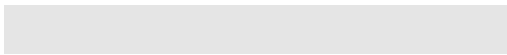
We have enjoyed working with the District on this report, and are available to answer any questions you may have concerning any information contained herein.

Sincerely,  
DEMSEY, FILLIGER AND ASSOCIATES



T. Louis Filliger, FSA, EA, MAAA  
Partner & Actuary





## Benefit Plan Provisions (Continued)

### Changes that became effective on or after July 1, 2005:

#### LEA Retirees:

Retiring between July 1, 2005 and June 30, 2006 - No remaining retirees in this category.

Retiring between July 1, 2006 and June 30, 2010 - District-paid coverage will be for retiree only (spousal coverage will be at retiree's expense) for the remainder of their benefit periods. Benefits are subject to a cap of \$10,000 per year (adjusted for banked contributions, if any).

Retiring on or after July 1, 2010 - District-paid coverage will be for retiree only, and subject to a cap of \$7,500 per year (adjusted for banked contributions, if any) for the remainder of their benefit periods.

#### Retirees other than LEA:

Retiring on or after July 1, 2005, District-paid coverage will be for retiree only (spousal coverage will be at retiree's expense) up to \$7,000 per year for all coverages (\$5,900 for SEIU).

### Health Insurance Premiums

The following table shows monthly CVT premium rates for selected coverage. The rates became effective as of October 1, 2014.

CVT Plan	Retiree Only	Retiree + Spouse <65	Retiree + Family
Blue Cross PPO 1A	\$1,200.00	\$2,064.00	\$2,604.00
Blue Cross PPO 4B	1,073.00	1,846.00	2,328.00
Blue Cross PPO 6B	991.00	1,705.00	2,150.00
Blue Cross PPO 7A	989.00	1,701.00	2,146.00
Blue Cross PPO 8B	900.00	1,548.00	1,953.00
Blue Cross PPO 10D	654.00	1,125.00	1,419.00
Wellness PPO 1C	999.00	1,719.00	2,168.00
HDHP-2	683.00	1,175.00	1,482.00
CVT Bronze PPO	528.00	908.00	1,146.00
Blue Shield HMO 1	1,421.00	2,443.00	3,082.00
Kaiser Plan 2 (without Chiro)	1,225.00	2,106.00	2,656.00
Kaiser Plan 3	1,185.00	2,036.00	2,569.00
Kaiser Plan 5 (without Chiro)	1,153.00	1,981.00	2,499.00
Kaiser Plan 7	1,119.00	1,924.00	2,427.00
Kaiser HSA	774.00	1,330.00	1,654.00
Kaiser Bronze HMO	684.00	1,176.00	1,483.00
Dental	67.34	121.95	175.33
Vision (LEA)	10.05	18.89	29.47
Vision (All others)	12.66	23.36	36.29

**Valuation Data**

## Actuarial Assumptions

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

Valuation Date:	July 1, 2015
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 the Crocker-Sarason Table T-9 less mortality, without adjustment. Sample rates are as follows:

Age	Turnover (%)
25	17.2%
30	15.8
35	13.7
40	11.3
45	8.4
50	5.1
55	1.7

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

<b>Actuarial Assumptions (Continued)</b>
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Claim Cost per Retiree or Spouse:

Age	Medical/Rx	Dental/Vision
50	\$8,216	\$950
55	9,525	950
60	11,042	950
64	12,428	950
65	3,113	950
70	3,354	950
75	3,613	950

Retirement Rates:

Age	Percent Retiring*
55-59	10.0%
60	35.0
61	30.0
62	35.0
63	25.0
64	30.0
65	100.0

\* Of those having met eligibility for District-paid benefits. The percentage refers to the probability that an active employee reaching the stated age will retire within the following year.

Trend Rates:

Year	Medical/Rx	Dental/Vision
2015	8.0%	4.0%
2016	7.0	4.0
2017	6.0	4.0
2018+	5.0	4.0

Percent Married:

Future retirees: 0% (benefits not District-paid).  
Current retirees: actual dependent data was used.

Percent Waiving:

30% of future retirees assumed to waive coverage.

Cap Increases:

All caps assumed frozen for all future years.

## **Actuarial Certification**

The results set forth in this report are based on our actuarial valuation of the health and welfare benefit plans of the Livermore Valley Joint Unified School District ("District") as of July 1, 2015.

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 July, 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

**Livermore Valley Joint Unified School District**  
**GASB 45 Valuation Results By Employee Group**

**Exhibit I**

	<u>7/1/2015</u> <u>Valuation Results</u> <u>LEA</u>	<u>7/1/2015</u> <u>Valuation Results</u> <u>CSEA</u>	<u>7/1/2015</u> <u>Valuation Results</u> <u>LMA</u>	<u>7/1/2015</u> <u>Valuation Results</u> <u>SEIU</u>	<u>7/1/2015</u> <u>Valuation Results</u> <u>All Others</u>	<u>7/1/2015</u> <u>Valuation Results</u> <u>Total All Groups</u>
District-paid Present Value of Benefits:						
Actives	\$ 4,399,387	\$ 1,731,209	\$ 341,970	\$ 528,333	\$ 225,798	\$ 7,226,697
Retirees	<u>477,306</u>	<u>121,923</u>	<u>13,542</u>	<u>20,962</u>	<u>20,898</u>	<u>654,631</u>
Total District-Paid PVFB:	\$ 4,876,693	\$ 1,853,132	\$ 355,512	\$ 549,295	\$ 246,696	\$ 7,881,328
District-paid Accrued Liability:						
Actives	\$ 2,730,244	\$ 1,125,398	\$ 194,662	\$ 335,877	\$ 160,436	\$ 4,546,617
Retirees	<u>477,306</u>	<u>121,923</u>	<u>13,542</u>	<u>20,962</u>	<u>20,898</u>	<u>654,631</u>
Total District-Paid AL:	\$ 3,207,550	\$ 1,247,321	\$ 208,204	\$ 356,839	\$ 181,334	\$ 5,201,248
Assets*	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
District-paid Unfunded Accrued Liability ("UAL")	<b>\$ 3,207,550</b>	<b>\$ 1,247,321</b>	<b>\$ 208,204</b>	<b>\$ 356,839</b>	<b>\$ 181,334</b>	<b>\$ 5,201,248</b>
<u>GASB 45 ARC ("Annual Required Contributions")</u>						
Service Cost at Year-end	\$ 217,457	\$ 86,233	\$ 21,077	\$ 23,921	\$ 9,937	\$ 358,625
30-year amortization of District-paid UAL	<u>185,493</u>	<u>72,133</u>	<u>12,040</u>	<u>20,636</u>	<u>10,487</u>	<u>300,789</u>
Total ARC (District's Annual Expense)	<b>\$ 402,950</b>	<b>\$ 158,366</b>	<b>\$ 33,117</b>	<b>\$ 44,557</b>	<b>\$ 20,424</b>	<b>\$ 659,414</b>

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

	<b>Amounts</b>
<b>Net OPEB Obligation 6/30/2008</b>	-
ARC for 2008-9	710,244
Interest on Net OPEB Obligation	-
Amortization adjustment to ARC	-
<b>Annual OPEB Cost 2008-9</b>	<b>710,244</b>
Employer Contribution	<u>(1,683,335)</u>
<b>Net OPEB (Asset) 6/30/2009</b>	<b>(973,091)</b>
ARC for 2009-10	945,423
Interest on Net OPEB (Asset)	