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March 5, 2011

Ms. Susan Skipp Chief Business Official Shoreline Unified School District P.O. Box 198 Tomales, CA 94971

Re: Shoreline Unified School District ("District") GASB 45 Valuation

Dear Ms. Skipp:

This report sets forth the results of our GASB 45 actuarial valuation of the District's retiree health insurance program as of July 1, 2010.

In June, 2004 the Government 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 three 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, 2010. 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 \$2,935,954 as of July 1, 2010. 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 5.0% 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 16 retirees as well as 99 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 \$2,935,954 into past service and future service components under the Projected Unit Credit Cost Method, the past service liability (or "Accrued Liability") component is \$1,798,111 as of July 1, 2010. 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 \$1,798,111 is comprised of liabilities of \$1,417,105 for active employees and \$381,006 for retirees. Because the District has not contributed to 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 \$1,798,111.

The District adopted GASB 45 as of July 1, 2008. GASB 43, pertaining to the financial statements of a retiree trust itself, would have taken effect one year earlier (June 30, 2008); however, the District has no trust assets at present so GASB 43 is not yet applicable.

We have determined that Shoreline Unified School District's "Annual Required Contributions", or "ARC", for the fiscal year 2010-11, is \$245,954. The \$245,954 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 will pay approximately \$97,514 for the 2010-11 fiscal year in healthcare costs for its retirees, so the difference between the accrual accounting expense (ARC) and pay-as-you-go is a decrease of \$148,440.

There are two adjustments to the ARC that are required in order to determine the District's Annual OPEB Cost (AOC) for the 2010-11 fiscal year. We have calculated these adjustments based on a reported Net OPEB Obligation (NOO) of \$99,527 as of June 30, 2010, resulting in an AOC for 2010-11 of \$244,456.

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.

Our reports usually contain a reconciliation of the AL between one GASB 45 valuation and the next. We are unable to provide a detailed reconciliation with the District's 2007 report because of the change in actuarial firms. However, we would like to mention that the District's AL appears to have increased by about 20% over what we would have expected based on an actuarial roll-forward of the 2007 valuation results. To partially mitigate the effect of this increase on the District's ARC, we have used a 30-year amortization of the UAL (rather than the 20-year period used in the 2007 report.) 30 years is the maximum period permitted by GASB 45, and is the period DF&A uses for the vast majority of our clients. DF&A will be able to provide a much more detailed reconciliation in future valuation reports.

# Shoreline Unified School District Annual Liabilities and Expense under GASB 45 Accrual Accounting Standard Projected Unit Credit Cost Method

Item	Amounts for Fiscal 2010-11
Brogent Value of Future Bonofite (BVEB)	
Present Value of Future Benefits (PVFB) Active	\$2,554,948
Retired	381,006
Total: PVFB	\$2,935,954
Accrued Liability (AL)	
Actives	\$1,417,105
Retired	<u>381,006</u>
Total: AL	\$1,798,111
Assets	<u>(0)</u>
Total: Unfunded AL	\$1,798,111
Annual Required Contributions (ARC)	
Service Cost At Year-End	\$128,984
30-year Amortization of Unfunded AL	116,970
Total: ARC	\$245,954
Adjustments to APC	
Adjustments to ARC Interest on Net OPEB Obligation*	4,976
Adjustment to Net OPEB Obligation*	(6,474)
Total: Annual OPEB Cost (AOC) for 2010-11	<u>(0,4747</u> \$244,456

\*Amounts based on June 30, 2010 Net OPEB Obligation of \$99,527.

The ARC of \$245,954, shown above, should be used for the fiscal years 2010-11, 2011-12, and 2012-13, but the Annual OPEB Cost for the 2011-12 and 2012-13 fiscal years must each include adjustments based on the ending Net OPEB Obligations (NOO) for the immediately preceding fiscal year, which are not known at this point.

When the District begins preparation of the June 30, 2011 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).

#### GASB 43 and GASB 45 Compliance Issues

There are two considerations regarding GASB 43 and GASB 45 that we would like to mention at this point:

(1) Both statements specify that in order for a retiree fund to be counted as "assets" for purposes of the statements, the fund must be set aside in a separate, irrevocable trust, that may not be used for any purpose besides the payment of plan benefits to retirees. The trust must also be beyond the reach of creditors of both the employer and/or the plan administrator, if any. For example, an earmarked reserve in the general fund is not expected to meet this definition of "assets". We recommend that the District consider taking steps to establish a retiree fund that meets the GASB requirements, as soon as possible.

(2) There has been some confusion among public agencies throughout California over what GASB 45 does and does not require. Specifically, many agencies initially believed that GASB 45 required pre-funding of retiree healthcare plans. This is not the case - the standard applies only to the expense to be charged to the agencies' income statements. Contributing to the confusion is the terminology used in both GASB 43 and GASB 45 for the annual expense - it's called the "Annual Required Contributions", even though it's neither required nor (necessarily) contributed.

#### Relationship between GASB 45 And District Funding Policy

We do not believe that it is necessary or even desirable for an agency to establish a policy of funding exactly the ARC on a cash basis each year. The reasons for this are a bit complex and beyond the scope of this report, but the important thing to understand is that GASB 45 pertains to the income statement, and funding pertains to cash flow, and there is no need for the two to be directly linked, at least for now.

Despite these concerns, we do recommend that the District adopt a policy of pre-funding its retiree healthcare plan as soon as possible. The benefits of pre-funding into an irrevocable retiree trust are numerous. To name a few, the District can expect the establishment of an irrevocable trust to result in:

- (1) improved return on investments;
- (2) healthier District financial statements;
- (3) lower ARC in future years (since pre-funded amounts reduce future years' amortization charges on the Unfunded AL, and the actuary may use a higher discount rate);
- (4) more predictable and manageable cash flows; and
- (5) greater economic security for District employees and retirees.

#### **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. This amount will fluctuate from year to year based on the asset performance and as the population matures. It will eventually reach zero when the last eligible retiree dies. 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 5.0% 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 20 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 <u>excess</u> over the "pay-as-you-go" amount.

These numbers are computed on a closed group basis, assuming no new entrants, and using unadjusted premiums. We use unadjusted premiums for these funding schedules because we do not recommend that the District pre-fund for the full age-adjusted costs reflected in the GASB 45 liabilities shown in the first section of this report. If the District's premium structure changes in the future to explicitly charge under-age 65 retirees for the full actuarial cost of their benefits, this change will be offset by a lowering of the active employee rates (all else remaining equal), resulting in a direct reduction in District operating expenses on behalf of active employees from that point forward. For this reason among others, we believe that pre-funding of the full GASB liability would be redundant.

#### **Shoreline Unified School District**

#### Sample Funding Schedules (Closed Group)

Fiscal		Level	Level % of	Constant
Year		Contribution	Unfunded	Percentage
Beginning	Pay-as-you-go	for 20 years	Liability <sup>*</sup>	Increase
2010	\$97,514	\$154,800	\$304,060	\$120,807
2011	83,561	154,800	254,665	124,431
2012	110,144	154,800	213,947	128,164
2013	128,836	154,800	183,960	132,009
2014	157,146	154,800	161,618	135,969
2015	155,575	154,800	146,091	140,048
2016	149,028	154,800	133,202	144,250
2017	160,651	154,800	121,986	148,577
2018	169,227	154,800	113,642	153,035
2019	156,436	154,800	107,255	157,626
2020	177,639	154,800	100,668	162,355
2021	165,808	154,800	96,623	167,225
2022	138,589	154,800	91,966	172,242
2023	134,084	154,800	85,750	177,409
2024	148,735	154,800	80,074	182,731
2025	142,912	154,800	76,183	188,213
2026	142,852	154,800	72,227	193,860
2027	112,101	154,800	68,622	199,676
2028	88,355	154,800	63,323	205,666
2029	72,022	154,800	57,286	211,836
2030	71,669	0	51,239	0
2031	66,490	0	46,207	0
2032	83,532	0	41,708	0
2033	88,153	0	38,865	0
2034	104,504	0	36,584	0
2035	103,238	0	35,307	0
2036	94,869	0	33,871	0
2037	64,142	0	31,973	0
2038	62,372	0	28,750	0
2039	29,879	0	25,889	0
2040	23,628	0	22,060	0
2041	27,882	0	18,674	0
2042	32,006	0	27,006	0
2043	35,840	0	35,840	0
2044	18,833	0	18,833	0
2045	0	0	0	0

\*Reverts to pay-as-you-go in 2043.

Note to auditor: when calculating the employer OPEB contribution for the year ending on the statement date, we recommend multiplying the actual District-paid premiums on behalf of retirees by a factor of 1.3778 to adjust for the implicit subsidy.

#### **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-5, without adjustment. This closely 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 5.0% 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 ageadjusted claims cost matrix fitted to the average single premium for active employees and 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-asyou-go costs for selected years are as follows:

FYB	Pay-as-you-go
2010	\$97,514
2011	83,561
2012	110,144
2013	128,836
2014	157,146
2015	155,575
2020	177,639
2025	142,912
2030	<b>71,669</b>
2035	103,238
2040	23,628
2045	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 (NOO) and Annual OPEB Cost (AOC)

Exhibit II shows a development of the District's Net OPEB Obligation ("NOO") as of June 30, 2009 and 2010, and the Annual OPEB Cost ("AOC") for the fiscal years 2009-10 and 2010-11.

#### **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

Joris Filliger

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

## **Benefit Plan Provisions**

This report analyzes the health and welfare benefit plans of the District including medical, prescription drug, dental, and vision benefits. The medical plans for retirees include three Blue Shield PPO options (100-B \$20, 90-E \$20, and 80-G \$30) with prescription drug coverage through Medco Drug Card plans 7-25, 7-25, and CS 5-15-35, respectively; two Kaiser HMO options; and Kaiser and Blue Shield high deductible plans. Delta Dental and vision coverage are also available to District employees and retirees. All coverages are provided through Redwood Empire Schools Insurance Group (RESIG).

#### **Eligibility for District-paid Benefits**

Certificated and Certificated Management employees are eligible to retire and receive District-paid health benefits after attaining age 55 and completing at least 12 consecutive years of service. Classified, and Confidential/Classified Management employees may retire with District-paid benefits after attaining age 55 and completing at least 12 years of service (8 years for employees hired prior to July 1, 2007). All retirees are subject to a cap on District-paid premiums equal to the total active employee-only premiums for the Kaiser High Option medical, plus dental and vision. This amount is \$580.12/month for the 2010-11 year.

District-paid benefits end at age 65. Dependent coverage may be elected and self-paid by the retiree. Employees with full-time equivalencies (FTE) less than 50% are not eligible for District-paid healthcare benefits, either before or after retirement. For Classified, the District cap is pro-rated by 75% or 50% for FTE less than 100%. For Certificated, the District cap is pro-rated by the FTE.

The following table summarizes the monthly premiums for each coverage. The rates shown below became effective on October 1, 2010:

Plan	Ret Only	<b>Ret</b> + 1	Ret + Family
Kaiser High Option	\$506.54	\$1,089.06	\$1,494.29
Kaiser Low Option	408.16	877.55	1,204.08
Blue Shield 100% Plan B	740.00	1,452.00	2,048.00
Blue Shield 90% Plan E	681.00	1,334.00	1,879.00
Blue Shield 80% Plan G	598.00	1,171.00	1,650.00
Kaiser High Deductible	317.51	682.65	936.66
Blue Shield High Deductible	452.00	904.00	1,288.00
Delta Dental	60.96	100.39	158.73
Vision	12.62	23.07	36.31

## Valuation Data

#### Active and Retiree Census

### Age distribution of retirees included in the valuation

Age	Count
Under 55	0
55-59	3
60-64	13
65+	_0
Total	16
Average Age	62.44

### 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	0								0
25-29	0	0							0
30-34	2	2	0						4
35-39	5	4	3	0					12
40-44	1	3	1	0	0				5
45-49	5	5	3	1	4	0			18
50-54	2	2	8	3	6	0	0		21
55-59	3	2	5	4	5	1	0	0	20
60-64	1	3	2	2	3	3	1	0	15
65+*	_1	<u>_1</u>	0	_0	_1	_0	1	_0	4
All Ages	20	22	22	10	19	4	2	0	99

\*not eligible for future District-paid retiree health benefits.

Average Age:	51.09
Average Service:	12.16

## **Actuarial Assumptions**

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

Valuation Date:	July 1, 2010
Actuarial Cost Method:	Projected Unit Credit
Amortization Method:	30-year level dollar, open period
Discount Rate:	5.0% per annum
Return on Assets:	5.0% per annum
Pre-retirement Turnover:	According to the Crocker-Sarason Table T-5 less mortality. Sample rates are as follows:

Age	Turnover (%)
25	7.7%
30	7.2
35	6.3
40	5.2
45	4.0
50	2.6
55	0.9

Pre-retirement Mortality:

1994 Group Annuity Mortality, male and female tables. Sample deaths per 1,000 employees are as follows:

Age	Males	Females
25	0.71	0.31
30	0.86	0.38
35	0.92	0.51
40	1.15	0.76
45	1.70	1.05
50	2.77	1.54
55	4.76	2.47
60	8.58	4.77

Post-retirement Mortality:

1994 Group Annuity Mortality, male and female tables. Sample deaths per 1,000 retirees are as follows:

Age	Males	Females
65	15.63	9.29
70	25.52	14.73
75	40.01	24.39
80	66.70	42.36
85	104.56	72.84
90	164.44	125.02

## Actuarial Assumptions (Continued)

Claim Cost per Retiree or Spouse:

Age	Medical/Rx	Dental/Vision
50	\$6,087	\$876
55	7,057	876
60	8,181	876
64	9,207	876
65	4,396	876
70	4,736	876
75	5,102	876

**Retirement Rates:** 

Deveent			
	Percent		
Age	Retiring*		
55	10.0%		
56	12.0		
57	15.0		
58	18.0		
59	20.0		
60	22.0		
<b>6</b> 1	25.0		
62	30.0		
63	35.0		
<b>6</b> 4	40.0		
65	100.0		

<sup>\*</sup>Of those having met the 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.

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

FYB	Medical/Rx	Dental/Vision
2010	8.0%	4.0%
2011	6.0	4.0
2012	7.0	4.0
2013+	5.0	4.0

Future retirees: 30%, with male spouses assumed 3 years older than female spouses. Current retirees: actual dependent data was used.

Assumed to increase at trend rates for all future years.

Percent Married:

Trend Rate:

Future District Contribution:

### **Actuarial Certification**

The results set forth in this report are based on our actuarial valuation of the health and welfare benefit plans of the Shoreline Unified School District ("District") as of July 1, 2010.

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 January - February, 2011. 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.

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:

Idonis Illije

T. Louis Filliger, FSA, EA, MAAA Date: 3/5/11Partner & Actuary

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

		Amount
Net OPEB Obligation	6/30/2008	-
ARC for 2008-9		207,462
Interest adjustment to ARC	, ,	-
Amortization adjustment to	ARC	<b></b>
Annual OPEB Cost 2008-	9	207,462
Employer Contribution		(157,854)
Net OPEB Obligation	6/30/2009	49,608
ARC for 2009-10		213,700
Interest adjustment to ARC		9,335
Amortization adjustment to ARC		(15,262)
Annual OPEB Cost 2009-10		207,773
Employer Contribution		(157,854)
Change in Net OPEB Obligation 2009-10		49,919
Net OPEB Obligation	6/30/2009	49,608
Net OPEB Obligation	6/30/2010	99,527
ARC for 2010-11		245,954
Interest adjustment to ARC		4,976
Amortization adjustment to ARC		(6,474)
Annual OPEB Cost 2010-11		244,456