# February 26, 2004

### **PRIVATE**

Mr. Thomas Smith Vice Chancellor Peralta Community College District 333 E. 8th Street Oakland, CA 94606

Re: Peralta Community College District ("District") Retiree Medical Study

Dear Mr. Smith:

We are pleased to present the results of our actuarial study for the District.

# **Background**

The District pays the cost of lifetime post-retirement medical benefits for both its classified and certificated retirees who meet certain eligibility requirements, as well as the spouses and dependent children of those retirees during the retiree's lifetime. Eligibility for District-paid benefits varies based on bargaining unit.

The District selected The Epler Company to perform an actuarial study to measure the liabilities under the plan as of January 1, 2004, to recommend pre-funding rates, and to estimate the expense and disclosure required under the proposed GASB standard. Results are presented both in the aggregate for all bargaining units, and broken down separately by classified, academic, and management groups.

This report updates the results of our previous study, conducted as of July 1, 2002. We recommend that a follow-up study be done at least once every three years, to see how the liabilities are changing over time, the actual impact of any benefit changes, and to see how the funding recommendations are tracking with actual experience.

We have set forth the details of our findings in the remainder of this report, and we are available to answer any questions the District may have concerning the contents of this report.

### **Financial Results**

We have determined that the amount of actuarial liability for retiree benefits, as of January 1, 2004, is approximately \$140,000,000. 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 6% 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 620 retirees as well as 724 currently active employees expected to retire and receive benefits in the future. It does not consider employees not yet hired as of the valuation date.

If the above amount is apportioned into past service and future service components, as is required by private sector accounting standards, the past service liability component is \$115,000,000 as of January 1, 2004. The \$115,000,000 past service liability is comprised of liabilities of \$60,000,000 for active employees expected to retiree in the future and \$55,000,000 for retirees. Since the District has not set aside any funds to pay future retiree benefits, the unfunded past service liability (past service liability less assets) is also \$115,000,000.

# ACCOUNTING COMPLIANCE: PROPOSED GASB STANDARD

Effective for fiscal years beginning in 1993, the Financial Accounting Standards Board required the use of accrual accounting for postretirement medical benefits for private sector companies subject to Generally Accepted Accounting Principles (GAAP). They did so by means of Statement of Financial Accounting Standards Number 106 (FAS 106).

This standard does not apply to the District; rather, the standards of the Government Accounting Standards Board (GASB) apply, and the GASB standard for accrual accounting of postretirement medical benefits is still not final. GASB released a proposed statement in February 2003. Our analysis for GASB is based on our understanding of the proposed statement, which has a proposed effective date of 2006.

Accrual accounting for retiree medical liabilities is similar in concept to a pension valuation. All benefits for current actives and retirees expected to be paid from the plan are considered. Future hires are not considered.

The valuation process can be broken down into three main steps:

1. Project a cash flow for the fund showing medical expenses incurred under the plan, including premiums for prepaid plans, and claims for indemnity plans. The cash flow takes into account the likelihood of each employee reaching age for eligibility to retire and receive medical benefits. This is done by applying the turnover assumption to each active employee for the period between the valuation date and early retirement date. Once the employees reach the earliest retirement date, a certain percent are assumed to enter the retiree group each year. All remaining employees are assumed to have retired by age 65 at the latest. (Employees already over age 65 as of the valuation date are assumed to retire immediately). The gross per capita claim cost as of the valuation date is projected to increase at the medical trend rate both before and after the employee's assumed retirement. These projected claim costs are multiplied by the number of expected future retirees in a given future year to arrive at the projected cash flow for that year. Also, a certain number of retirees will leave the group each year due to expected deaths and this group will cease to be included in the cash flow from that point forward. Because this is a closed-group valuation, the number of retirees dying each year will eventually exceed the number of new retirees, and the size of the cash flow will begin to decrease and eventually go to zero.

The cash flow for active employees is combined with the cash flow for current retirees to obtain a single "best estimate" of the future benefits payable under the plan. The cash flow begins to trend downward after about 40 years because future hires are not included.

Representative years for the estimated cash flow are shown below, based on the current plan of benefits:

Year	<b>Estimated Benefits</b>
2005	\$4,286,000
2010	\$7,042,000
2015	\$9,032,000
2020	\$9,338,000
2025	\$11,098,000
2030	\$11,098,000
2040	\$9,032,000
2050	\$4,363,000

Please see the "Actuarial Assumptions" section for a complete description of the assumptions used in deriving the above cash flow.

2. Discount the cash flow to the valuation date, using the "discount rate" shown in the Actuarial Assumption section of this report. The proposed standard calls for a discount rate to be representative of the rate of return available on long-term, quality investments. Typically, long-term U.S. Treasury bonds were used as a bellwether for the discount rate. Since the Treasury has discontinued the issuance of 30-year bonds, we now use an index based on high quality corporate bonds. We have selected 6.0% as the discount rate for the present study (7.0% was used in the previous study).

The discounting of the cash flow produces a single number called the Actuarial Present Value (APV) of benefits. Under the current plan, the APV for the District is \$140,000,000.

3. Apportion the APV to the current and future fiscal years using a reasonable actuarial cost method. FAS 106 requires the use of the Projected Unit Credit (PUC) Cost Method which assumes employees' retirement benefits accrue ratably over their expected working careers, from hire until the "date of full eligibility" for postretirement medical benefits. The proposed GASB standard does not require any one particular cost method to be used, unless the plan is already using a method to determine cash contributions used to prefund the benefits. We have used the PUC method for this study. The portion of the APV attributed to past service is called the Actuarial Accrued Liability (AAL). The portion attributed to the current year's service is called the "Normal Cost". For retirees, the AAL is equal to the full APV, and the Normal Cost is zero.

For the first year of application, the proposed standard requires an employer to expense the following amount (called the Annual Required Contribution, or ARC):

Normal Cost (adjusted with interest to year-end)

+ 30-year amortization of the initial unfunded AAL

In future years, actuarial losses (or gains) resulting from experience differing from assumptions are amortized and added into, (or subtracted from), the ARC, along with the amortization of any future plan changes or assumption changes that may occur. Finally, an adjustment is made in future years to account for the difference, if any, between the prior years' ARCs and the amounts actually contributed.

# **RESULTS**

# Peralta Community College District Estimated Annual Expense for 2004 Under Proposed GASB Accrual Accounting Standard

Normal Cost At Year-End	\$3,500,000
30-year Amortization of Transition Obligation (Unfunded AAL)	8,700,000
Annual Required Contribution (ARC)	\$12,200,000

The above calculation is based on the following values:

Actuarial Present Value (APV)	\$140,000,000
Actuarial Accrued Liability (AAL)	\$115,000,000
Value of Plan Assets	\$0
Unfunded AAL	\$115,000,000

The APBO has decreased from \$127,000,000 to \$115,000,000 since 2002, a decrease of \$11,000,000. This net decrease is attributable to several factors, including (1) passage of time including additional accruals and shortening of the discount period, (2) actuarial gains/losses due to experience different from assumed and corrections to the census data, and (3) changes in the assumptions.

This information is being presented to help the District understand the long-term nature of these liabilities and the expected impact of the numbers at some point in the future. We wish to emphasize that it is not necessary to reflect any of these numbers in the District's financial statements at present.

### **Funding Methodologies**

The District may be interested in developing a pre-funding methodology for its retiree health care plan. We understand that the availability of excess funds may serve as a limiting factor. However, pre-funding in general reduces the ultimate cost of the program by the interest earnings on the fund, and may provide greater confidence in the District's ability to pay benefits as they come due. The District should weigh these considerations against the lost opportunity cost of any potential contributions. Also, there may be a concern that pre-funding of the benefits which *may* be paid in the future implies a guarantee or impairs the District's ability to change the benefit structure prospectively. The District should get a legal opinion on this issue before establishing such a fund.

There are multiple ways to approach the funding of a retiree medical plan. In the *Financial Results* section, we determined the annual expense for all future benefits. The expense is an orderly methodology, developed by the FASB, to fund a retirement plan. 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 following table provides the District with three alternative funding scenarios to fund all retiree benefits. The scenarios all assume the District earns 5.0% on its assets and contributions and benefits are paid mid-year.

### The scenarios are:

- 1. A level contribution amount for the next 20 years.
- 2. A level percentage of the unfunded past service liability. The fund is exhausted by the end of the 2028 fiscal year and the scenario essentially reverts to pay-as-you-go at that point.
- 3. A level percent of payroll over the next 20 years. We assume payroll increases by 3% per year

These contribution schedules are provided to give the District a sense of the various alternatives available to it to pre-fund its retiree medical obligation. The three contribution schedules only provide a means to spread costs in different ways.

Within the scenarios, you can see the effect that pre-funding has on the assets. Depending on the amount earned on the assets, the earlier the contributions are made, the less District contributions in aggregate will have to be made to fulfill the obligations. Of course, this will have to be weighed against alternative uses of the contribution amounts.

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

Peralta Community College District
Contribution Schedule (All Benefits)

		Level	Level % of Past	Level % of
Year	Pay-as-you-go	Contribution	Service Liability	Payroll
2004	\$4,028,000	\$12,460,000	\$7,360,000	\$9,726,250
2005	4,286,000	12,460,000	7,375,467	10,018,038
2006	5,147,000	12,460,000	7,447,142	10,318,579
2007	5,706,000	12,460,000	7,527,617	10,628,136
2008	6,228,000	12,460,000	7,612,847	10,946,000
2009	6,793,000	12,460,000	7,701,539	11,275,389
2010	7,042,000	12,460,000	7,793,035	11,613,651
2011	7,774,000	12,460,000	7,884,274	11,962,061
2012	8,188,000	12,460,000	7,977,690	12,320,923
2013	8,608,000	12,460,000	8,070,138	12,690,550
2014	8,993,000	12,460,000	8,160,869	13,071,267
2015	9,032,000	12,460,000	8,248,928	13,463,405
2016	9,690,000	12,460,000	8,332,266	13,867,307
2017	9,990,000	12,460,000	8,412,909	14,283,326
2018	10,301,000	12,460,000	8,488,498	14,711,826
2019	10,557,000	12,460,000	8,558,449	15,153,181
2020	9,338,000	12,460,000	8,622,014	15,607,776
2021	11,079,000	12,460,000	8,676,835	16,076,009
2022	11,254,000	12,460,000	8,727,737	16,558,290
2023	11,402,000	12,460,000	8,770,592	17,055,038
2023	11,604,000	0	8,804,982	0
2024	11,098,000	0	8,830,475	0
2023	11,098,000	0	11,098,000	0
2035	11,115,000	0	11,115,000	0
2033	9,032,000	0	9,032,000	0
2040	4,363,000	0	4,363,000	0
2030	4,303,000	•	, ,	

### **Actuarial Assumptions**

In order to perform the valuation, it is necessary for the actuary to make certain assumptions regarding such items as rates of employee turnover, retirement, and mortality, as well as economic assumptions regarding health inflation and interest rates. Our assumptions are based on a standard set of assumptions we have used for similar studies, modified as appropriate for the District. For example, turnover rates were derived by using a standard turnover table (T-5). The discount rate of 6.0%, the expected return on assets of 5.0%, and the healthcare inflation of 15% graded down to 6.0% over 7 years are based on our best estimate of the expected long-term plan experience in accordance with our understanding of the guidelines for selection of these rates under the appropriate accrual accounting standards. These assumptions should be reviewed from time to time to see if they are tracking well with experience.

A complete description of the actuarial assumptions used in the valuation is set forth in Exhibit II.

# Cash Flow (Pay-as-you-go Costs)

As part of the valuation, we prepared a projection of the expected annual expense to the District to pay premiums on behalf of its retirees. Projected pay-as-you-go expenses for selected future years are as follows:

Year	Pay-as-you-go
2005	\$4,286,000
2010	\$7,042,000
2015	\$9,032,000
2020	\$9,338,000
2025	\$11,098,000
2030	\$11,098,000
2040	\$9,032,000
2050	\$4,363,000

# Breakdown By Employee Classification

# Liability and Accrual Expense Items

	Management	Academic	Classified	Total
Present Value of Benefits	\$10,000,000	\$60,000,000	\$70, 000,000	\$140,000,000
Unfunded Past Service Liability	8, 000,000	47, 000,000	60, 000,000	115,000,000
Annual Accrual Accounting Expense	1, 000,000	5, 000,000	6, 200,000	12,200,000

# Certification

Our actuarial certification is contained in Exhibit III.

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

Sincerely, THE EPLER COMPANY

David P. Kendall, ASA, EA, MAAA Vice President and Actuary

### **Benefit Plan Provisions**

This study analyzes the medical insurance plans of the District. Our findings and assumptions are based on the plans and rates in effect as of the valuation date, January 1, 2004.

The District offers two plan choices to both its actives and retirees. The two plans offered are a self-funded Blue Cross Prudent Buyer PPO plan and the Kaiser Health Plan (Kaiser Senior Advantage for Medicare-eligible retirees). The monthly aggregate (composite) funding rate under the Blue Cross plan was assumed to be \$1,048.30, effective January 1, 2004. The premium rates for Kaiser, also effective January 1, 2004, are shown in the following table:

Tier	Premium
Retiree under 65	\$305.42
Retiree over 65	\$219.26
Retiree & Spouse (both under 65)	\$610.84
Retiree & Spouse (both over 65)	\$438.52
Retiree & Spouse (1 over – 1 under	\$524.68
Family	\$794.09

Retirees become eligible for benefits under the following conditions:

- Certificated members and academic managers may retire at the age of 55 or older with at least 5 years of service, or at age 50 with 30 years of service. They become eligible for lifetime medical benefits if they have at least 5 years of service with the District.
- Classified Locals 39 and 790 members may retire from regular contract service at the age of 50 or older with at least 5 years of service. They become eligible for lifetime medical benefits if they have at least 10 years of service with the District.
- Classified managers and confidential members were assumed to become eligible for District-paid medical benefits upon attainment of age 55 with at least 10 years of service.

The District pays 100% of the retiree eligible and spouse medical premiums during the retiree's lifetime. Eligible dependents' coverage is also paid in full by the District during the retiree's lifetime.

# **Actuarial Assumptions**

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

Valuation Date:

January 1, 2004

(Prior Valuation Date was July 1,2002)

Discount Rate:

6.0% per annum

(Prior Rate was 7.0%)

Rate of Return on Assets: 5.0% per annum

(Same as Prior Rate)

# Demographic Assumptions:

Pre-retirement Turnover:

According to Sarason Table T-5 Less Mortality

Sample rates are as follows:

Age	Turnover
25	7.6
30	7.2
35	6.4
40	5.2
45	4.0
50	2.6
55	1.0

Pre-retirement Mortality:

1983 Group Annuity Mortality, male and female tables. Sample rates are as follows:

	Deaths/1000		
Age	Male	<u>Female</u>	
25	0.5	0.3	
30	0.6	0.3	
35	0.9	0.5	
40	1.2	0.7	
45	2.2	1.0	
50	3.9	1.6	
55	6.1	2.5	
60	9.2	4.2	

Exhibit II

Post-retirement Mortality 1983 Group Annuity Mortality, male and female tables. Sample rates are as follows:

	<u>Death</u> :	s/1000
Age	Male	<u>Female</u>
65	15.6	7.1
70	27.5	12.4
75	44.6	24.0
80	74.1	42.9
85	114,8	69.9
90	166.3	111.8

# Retirement Rates:

Age	Percent Retiring*
50-58	5
59	12
60	18
6 l	18
62	18
63	23
64	18
65	8
66	27
67	13
68	40
69	35
70	100

<sup>\*</sup>Of those having met eligibility for District benefits (that is, having the requisite service). The percentage refers to the probability that an active employee reaching the stated age will retire within the following year.

# Trend Rates:

Based on select and ultimate rates as follows:

Year ending	Increase
2004	15
2005	12
2006	11
2007	10
2008	Q
2009	8
2010	7
2011+	6

### Claim Cost Development

The assumed cost per retiree is based on the average expected premium under the District's plans, based upon the observed mix of plan selection (i.e., Blue Cross and Kaiser) of the current retiree group.

The average cost per retiree was found to be \$5,731 per year prior to age 65, and \$3,801 after age 65. This cost includes medical, prescription drugs, and dental premiums for retiree only. A claim cost curve was developed using an assumption for aging and Medicare participation and payments. This results in an expected claim cost at every age. These expected claim costs were used in the "Financial Results" section of the report. The projected cash flows and funding scenarios were based on the average premiums, since Kaiser and Blue Cross premiums are not age specific.

# Spouse Coverage

Given that actual spouses dates of birth have been provided for the actives enrolled in Blue Cross, the percentage married of this group was determined based on actual experience. Thus the percentage married was found to be 54%.

With regard to the active group enrolled in Kaiser. 54% were assumed to have eligible spouses upon retirement and thereafter. Male spouses were assumed to be 3 years older than female spouses.

# Exhibit III

For retirees, actual marital status as of the valuation date was used if available; otherwise, assumed spousal ages were used as described above.

<u>Dependent Coverage</u>: 5% of the retirees under the age of 65 were assumed to have District-paid dependent coverage.

# **Actuarial Certification**

The reserves set forth in this study are based on our actuarial valuation of the health and welfare benefit plans of the Peralta Community College District ("District"), as of January 1, 2004.

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, Kaiser, and Blue Cross in December, 2003. We also made use of premiums, enrollee data, and copies of relevant sections of collective bargaining agreements provided to us by the District. Some additional details surrounding the program were clarified via electronic mail and telephone discussions with District representatives.

There were approximately 1,400 additional employees who the District has informed us are part-time or otherwise benefit-ineligible, and these employees have not been included in this study.

In my opinion, the assumptions used in performing the valuation, as summarized in this report, and the results based thereupon, represent my best estimate of anticipated experience, required reserves and costs of the Plan under the proposed accrual accounting standards of GASB.

Certified by:

David P. Kendall, FSA, EA, MAAA Date: \_\_\_\_\_\_ Vice President and Actuary Enrollment No. 02-4569