Long Beach Community College District
Actuarial Study of
Retiree Health Liabilities
As of September 1, 2009

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PART I: EXECUTIVE SUMMARY

A. Introduction

Long Beach Community College District engaged Total Compensation Systems, Inc. (TCS) to analyze liabilities associated with its current retiree health program as of September 1, 2009 (the valuation date). Numbers in this report assume that they will first be used to calculate accounting entries for June 30, 2010 financial statements.

This actuarial study is intended to serve the following purposes:

- To provide information to enable Long Beach CCD to manage the costs and liabilities associated with its retiree health benefits.
- To provide information to enable Long Beach CCD to communicate the financial implications of retiree health benefits to internal financial staff, the Board, employee groups and other affected parties.
- To provide information needed to comply with Governmental Accounting Standards Board Accounting Standards 43 and 45 related to "other postemployment benefits" (OPEB's).

Because this report was prepared in compliance with GASB 43 and 45, as appropriate, Long Beach CCD should not use this report for any other purpose without discussion with TCS. This means that any discussions with employee groups, governing Boards, etc. should be restricted to the implications of GASB 43 and 45 compliance.

This actuarial report includes several estimates for Long Beach CCD's retiree health program. In addition to the tables included in this report, we also performed cash flow adequacy tests as required under Actuarial Standard of Practice 6 (ASOP 6). Our cash flow adequacy testing covers a twenty-year period. We would be happy to make this cash flow adequacy test available to

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	Faculty	Classified	Management
Benefit types provided	Medical only	Medical only	Medical only
Duration of Benefits	1 year for every 5 years of service	1 year for every 3 years of service	1 year for every 3 years of service
Required Service	15 Years*	12 Years*	12 Years*
Minimum Age	55	50	50
Dependent Coverage	Yes	Yes	Yes
College Contribution %	100%	100%	100%
College Cap	Same as active	Same as active	Same as active

*Those hired prior to 2/1/95 may elect the above benefits or coverage to age 67 if retiring before age 65, or 2 to 4 years of coverage (depending on years of service) if retiring at age 65 or older.

D. Recommendations

It is outside the scope of this report to make specific recommendations of actions Long Beach CCD should take to manage the substantial liability created by the current retiree health program. Total Compensation Systems, Inc. can assist in identifying and evaluating options once this report has been studied. The following recommendations are intended only to allow the College to get more information from this and future studies. Because we have not conducted a comprehensive administrative audit of Long Beach CCD's practices, it is possible that Long Beach CCD is already complying with some or all of our recommendations.

We recommend that Long Beach CCD inventory all benefits and services provided to retirees – whether contractually or not and whether retiree-paid or not. For each, Long Beach CCD should

PART II: BACKGROUND

A. Summ

rates reduce normal costs. Employment termination can vary considerably between community college districts.

Vesting rates reflect years of service required to earn full or partial retiree benefits. While longer vesting periods reduce costs, cost reductions are not usually substantial unless full vesting requires more than 20 years of service.

Retirement rates determine what proportion of employees retire at each age (assuming employees reach the requisite length of service). Retirement rates often vary by employee classification and implicitly reflect the minimum retirement age required for eligibility. Higher retirement rates increase normal costs but, except for differences in minimum retirement age, retirement rates tend to be consistent between community college districts for each employee type.

Participation rates indicate what proportion of retirees are expected to elect retiree health benefits if a significant retiree contribution is required. Higher participation rates increase costs.

The ***discount rate*** estimates investment earnings for assets earmarked to cover retiree health benefit liabilities. The discount rate depends on the nature of underlying assets. For example, earmarked funds earning money market rates in the county treasury are likely to earn far less than a diversified portfolio including stocks, bonds, etc. A higher discount rate can dramatically lower normal costs. GASB 43 and 45 require the interest assumption to reflect likely *long term* investment return.

The assumptions listed above are not exhaustive, but are the most common assumptions used in actuarial cost calculations. The actuary selects the assumptions which - taken together - will yield reasonable results. It's not necessary (or even possible) to predict individual assumptions with complete accuracy.

If all actuarial assumptions were exactly met and an employer had expensed the normal cost every year for all past and current employees and retirees, the funds would have accumulated to a sizeable amount (after adding interest and subtracting retiree benefit costs from the accumulated funds). The fund that would have accumulated is called the actuarial accrued liability or AAL. The excess of the AAL over funds earmarked for retiree health benefits is called the *unfunded* actuarial accrued liability (or UAAL). Under GASB 43 and 45, in order for assets to count toward offsetting the AAL, the assets have to be held in an irrevocable trust that is safe from creditors and can only be used to provide OPEB benefits to eligible participants.

The actuarial accrued liability (AAL) can arise in several ways. First, at the inception of actuarial funding, there is usually a substantial UAAL. Under GASB 43 and 45, some portion of this amount can be established as the "transition obligation" subject to certain constraints. UAAL can also increase as the result of operation of a retiree health plan - e.g., as a result of plan changes or changes in actuarial assumptions. Finally, AAL can arise from actuarial gains and losses. Actuarial gains and losses result from differences between actuarial assumptions and actual plan experience.

Under GASB 43 and 45, employers have several options on how the UAAL can be amortized as follows:

The employer can select an amortization period of 1 to 30 years. (For certain situations that result in a reduction of the AAL, the amortization period must be at least 10 years.)

The employer may apply the same amortization period to the total combined UAAL or can apply different periods to different components of the UAAL.

The employer may elect a “closed” or “open” amortization period.

The employer may choose to amortize on a level dollar or level percentage of payroll method.

UAAL amortization payments can be higher than the normal cost. The magnitude of the UAAL depends not only on all the assumptions discussed earlier, but also on the average age of employees. The higher employees' average age, the greater the AAL.

Actuarial Present Value of Total Projected Benefits

September 1, 2009	Total	Faculty	Classified	Management
Active: Pre-65	$5,717,222	$2,394,600	$1,983,283	$1,339,339
Post-65	$32,546,159	$14,117,833	$15,227,912	$3,200,414
Subtotal	$38,263,381	$16,512,433	$17,211,195	$4,539,753
Retiree: Pre-65	$4,494,636	$962,098	$2,935,121	$597,417
Post-65	$4,930,009	$1,720,289	$2,354,742	$854,978
Subtotal	$9,424,645	$2,682,387	$5,289,863	$1,452,395
Grand Total	$47,688,027	$19,194,820	$22,501,058	$5,992,149
Subtotal Pre-65	$10,211,858	$3,356,698	$4,918,404	$1,936,756
Subtotal Post-65	$37,476,168	$15,838,122	$17,582,654	$4,055,392

The APVTPB should be accrued over the working lifetime of employees. At any time much of it has not been "earned" by employees. The APVTPB is used to develop expense and liability figures. To do so, the APVTFB is divided into two parts: the portions attributable to service rendered prior to the valuation date (the past service liability or actuarial accrued liability under GASB 43 and 45) and to service after the valuation date but prior to retirement (the future service liability).

The past service and future service liabilities are each funded in a different way. We will start with the future service liability which is funded by the normal cost.

D. Cost to Prefund Retiree Benefits

1. Normal Cost

The average hire age for eligible employees is 38. To accrue the liability by retirement, the College would accrue the retiree liability over a period of about 22 years (assuming an average retirement age of 60). We applied an "entry age normal" actuarial cost method to determine funding rates for active employees. The table below summarizes the calculated normal cost.

Normal Cost Year Beginning September 1, 2009	Total	Faculty	Classified	Management
# of Employees	844	333	398	113
Per Capita Normal Cost				
Pre-65 Benefit	N/A	$443	$275	$724
Post-65 Benefit	N/A	$2,271	$2,091	$1,531
First Year Normal Cost				
Pre-65 Benefit	$338,781	$147,519	$109,450	$81,812
Post-65 Benefit	$1,761,464	$756,243	$832,218	$173,003
Total	$2,100,245	$903,762	$941,668	$254,815

Accruing retiree health benefit costs using normal costs would level out the cost of retiree health benefits over time and more fairly reflect the value of benefits "earned" each year by employees. This normal cost would

increase each year based on covered payroll.

2. Amortization of Unfunded Actuarial Accrued Liability (UAAL)

If actuarial assumptions are borne out by experience, the College could fully accrue retiree benefits by expensing an amount each year that equals the normal cost. If no accruals had taken place in the past, there would be a shortfall of many years' contributions, accumulated interest and forfeitures for terminated or deceased employees. This shortfall is called the actuarial accrued liability (AAL). We calculated the AAL as the APVTPB minus the present value of future normal costs. We have offset the actuarial accrued liability by the actuarial value of plan assets. The actuarial value of plan assets was calculated using a 15 year smoothing formula with a 20% corridor around market value.

The College can amortize the UAAL over many years. The table below shows the annual amount necessary

Annual Required Contribution (ARC) Year Beginning September 1, 2009	Total
Normal Cost	$2,100,245
Initial UAAL Amortization	$904,205
Residual UAAL Amortization	$456,117
ARC	$3,460,567

This amortization payment would increase each year based on covered payroll. Payments would continue for 30 years, after which time amortization payments would end. The normal cost remains as long as there are active employees who may some day qualify for College-paid retiree health benefits. This normal cost would increase each year based on covered payroll.

Should Long Beach CCD decide to fund retiree health benefits as shown above, the cost of current retiree

PART IV: "PAY AS YOU GO" FUNDING OF RETIREE BENEFITS

We used the actuarial assumptions shown in Appendix C to project ten year cash flow under the retiree health program. Because these cash flow estimates reflect average assumptions applied to a relatively small number of employees, estimates for individual years are **certain** to be ***in***accurate. However, these estimates show the size of needed cash flow and also the rate of increase in annual costs. Because we have used trend rates that are constant over time, it is likely that medical costs will be understated in some years and overstated in others.

The following table shows a projection of annual amounts needed to pay the College share of retiree health premiums.

Year Beginning September 1	Total	Faculty	Classified	Management
2009	$2,121,158	$876,922	$877,671	$366,565
2010	$1,980,246	$797,345	$844,998	$337,903
2011	$1,928,601	$745,234	$872,411	$310,956
2012	$1,855,933	$723,122	$820,496	$312,315
2013	$1,807,718	$697,093	$861,988	$248,637
2014	$1,825,483	$745,818	$812,611	$267,054
2015	$2,129,035	$990,949	$851,383	$286,703
2016	$2,178,577	$1,099,433	$895,974	$183,170
2017	$2,378,774	$1,225,976	$984,424	$168,374
2018	$2,599,450	$1,344,493	$1,088,997	$165,960

PART V: RECOMMENDATIONS FOR FUTURE VALUATIONS

To effectively manage benefit costs, an employer must periodically examine the existing liability for retiree benefits as well as future annual expected premium costs. We recommend every two or three years as will be required under GASB 43/45. In addition, a valuation should be conducted whenever plan changes, changes in actuarial assumptions or other employer actions are likely to cause a material change in accrual costs and/or liabilities.

Following are examples of actions that could trigger a new valuation.

An employer should perform a valuation whenever the employer considers or puts in place an early retirement incentive program.

An employer should perform a valuation whenever the employer adopts a retiree benefit plan for some or all employees.

An employer should perform a valuation whenever the employer considers or implements changes to retiree benefit provisions or eligibility requirements.

An employer should perform a valuation whenever the employer introduces or changes retiree contributions.

We recommend Long Beach CCD take the following actions to ease future valuations.

We have used our training, experience and information available to us to establish the actuarial assumptions used in this valuation. We have no information to indicate that any of the assumptions do not reasonably reflect future plan experience. However, the College should review the actuarial assumptions in Appendix C carefully. If the College has any reason to believe that any of these assumptions do not reasonably represent the expected future experience of the retiree health plan, the College should engage in discussions or perform analyses to determine the best estimate of the assumption in question.

AGING FACTORS:

Attained Age	Medical Annual Increases
50-64	3.5%
65-69	3.0
70-74	2.5
75-79	1.5
80-84	0.5
85+	0.0

APPENDIX D: DISTRIBUTION OF ELIGIBLE PARTICIPANTS BY AGE

ELIGIBLE ACTIVE EMPLOYEES:

Age	Total	Faculty	Classified	Management
Under 25	6	0	6	0
25-29	33	1	30	2
30-34	64	11	47	6
35-39	99	37	47	15
40-44	116	44	48	24
45-49	126	47	61	18
50-54	134	50	60	24
55-59	134	70	53	11
60-64	93	47	35	11
65 and older	39	26	11	2
Total	844	333	398	113

ELIGIBLE RETIREES:

Age	Total	Faculty	Classified	Management
Under 50	1	0	1	0
50-54	5	0	5	0
55-59	17	1	12	4
60-64	66	24	29	13
65-69	42	19	14	9
70-74	16	5	8	3
75-79	3	2	1	0
80-84	0	0	0	0
85-89	0	0	0	0
90 and older	0	0	0	0
Total	150	51	70	29

OPEB Benefits:	Other PostEmployment Benefits. Generally medical, dental, prescription drug, life, long-term care or other postemployment benefits that are not pension benefits.
Open Amortization Period:	Under an open amortization period, the remaining unamortized balance is subject to a new amortization schedule each valuation. This would be similar, for example, to a homeowner refinancing a mortgage with a new 30-year conventional mortgage every two or three years.
Participation Rate:	The proportion of retirees who elect to receive retiree benefits. A lower participation rate results in lower normal cost and actuarial accrued liability. The participation rate often is related to retiree contributions.
Retirement Rate:	