

**Imperial Valley Community College District
Actuarial Study of
Retiree Health Liabilities
As of September 1, 2011**

*Prepared by:
Total Compensation Systems, Inc.*

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Table of Contents

PART I: EXECUTIVE SUMMARY 3

A. INTRODUCTION..... 3

B. GENERAL FINDINGS

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- ¾ the amount necessary to amortize the UAAL over a period of 30 years.
- ¾ the annual contribution required to fund retiree benefits over the working lifetime of eligible employees (the "normal cost").
- ¾ The Annual Required Contribution (ARC) which is the basis of calculating the annual OPEB cost and net OPEB obligation under GASB 43 and 45.

We summarized the data used to perform this study in Appendix A. No effort was made to verify this information beyond brief tests for reasonableness and consistency.

All cost and liability figures contained in this study are estimates of future results. Future results can vary dramatically and the accuracy of estimates contained in this report depends on the actuarial assumptions used. Normal costs and liabilities could easily vary by 10 - 20% or more from estimates contained in this report.

B. General Findings

We estimate the "pay-as-you-go" cost of providing retiree health benefits in the year beginning September 1, 2011 to be \$922,381.

For current employees, the value of benefits "accrued" in the year beginning September 1, 2011 (the normal cost) is \$1,327,983. This normal cost would increase each year based on covered payroll. Had Imperial Valley CCD begun accruing retiree health benefits when each current employee and retiree was hired, a substantial liability would have accumulated. We estimate the amount that would have accumulated to be \$26,270,420. This amount is the remaining unamortized balance of the initial unfunded AAL (UAAL) is \$ **negative** \$1,300,000.

We calculated the annual cost to amortize the residual unfunded actuarial accrued liability using a 5% discount rate. We used an open 30 year amortization period. The current year cost to amortize the residual unfunded actuarial accrued liability is **negative** \$322,455.

Combining the normal cost with both the initial and residual UAAL amortization costs produces an annual required contribution (ARC) of \$2,565,899. The ARC is used as the basis for determining expenses and liabilities.

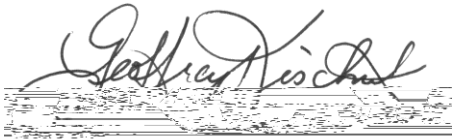
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	<u>Faculty</u>	<u>Classified</u>
Benefit types provided	Medical, dental and vision	Medical, dental and vision
Duration of Benefits	Lifetime	Lifetime*
Required Service	Age 55 to 60: 14 years Age 61 to 64: Age+Service at least 74 Age 65+: 9 years	12 years**
Minimum Age	55***	50**
Dependent Coverage	Yes	Yes

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- ¾ Several assumptions were made in estimating costs and liabilities under Imperial Valley CCD's retiree health program. Further studies may be desired to validate any assumptions where there is any doubt that the assumption is appropriate. (See Appendices B and C for a list of assumptions and concerns.) For example, Imperial Valley CCD should maintain a retiree database that includes ~~in~~ addition to date of birth, gender and employee classification ~~retirement~~ date and (if applicable) dependent date of birth, relationship and gender. It will also be helpful for Imperial Valley CCD to maintain employment termination information ~~namely~~, the number of OPEB-eligible employees in each employee class that terminate employment each year for reasons other than death, disability or retirement.

Respectfully submitted,



Geoffrey L. Kischuk, FSA, MAAA, FCA
Consultant
Total Compensation Systems, Inc.
(805) 496-1700

PART II: BACKGROUND

A. Summary

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lifetime. For this reason, the Governmental Accounting Standards Board (GASB) issued in 2004 Accounting Standards 43 and 45 for retiree health benefits. These standards apply to all public employers that pay any part of the cost of retiree health benefits for current or future retirees (including early retirees).

B. Actuarial Accrual

To actuarially accrue retiree health benefits requires determining the amount to expense each year so that the liability accumulated at retirement is, on average, sufficient (with interest) to cover all retiree health expenditures without the need for additional expenses. There are many different ways to determine the annual accrual amount.
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Under most actuarial cost methods, there are two compon

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While a longer service requirement reduces costs, cost reductions are not usually substantial unless the service period exceeds 20 years of service.

- ¾ **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. Retirement rates also depend on the amount of pension benefits available. Higher retirement rates increase normal costs but, except for differences in minimum retirement age, retirement rates tend to be consistent between public agencies for each employee type.
- ¾ **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.
- ¾ 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, employer funds earning money market rates in the county treasury are likely to earn far less than an irrevocable trust containing a diversified asset 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 are exactly met and an employer expensed the normal cost every year for all past and current employees and retirees, a sizeable liability would have accumulated (after adding interest and subtracting retiree benefit costs). The liability that would have accumulated is called the actuarial accrued liability or AAL. The excess of AAL over the **actuarial value of plan assets** 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. At inception of GASB 43 and 45, there is usually a substantial UAAL. 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:

- ¾ 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.)471 72.024 241.73 T19pe.6(e1(n))JTJ0..

PART III: LIABILITIES AND COSTS FOR RETIREE BENEFITS

A. Introduction.

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time and more fairly reflects the value of benefits "earned" each year by employees. This normal cost would increase each year based on covered payroll.

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Annual Required Contribution (ARC) Year Beginning September 1, 2011	
	<u>Total</u>
Normal Cost	\$1,327,983
Initial UAAL Amortization	\$1,560,371
Residual UAAL Amortization	\$(322,455)
ARC	<u>\$2,565,899</u>

The normal cost remains as long as there are active employees who may some day qualify for College-paid

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. GASB 43/45 require biennial or triennial valuations. 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.

- $\frac{3}{4}$ An employer should perform a valuation whenever the employer considers or puts in place an early retirement incentive program.
- $\frac{3}{4}$ An employer should perform a valuation whenever the employer adopts a retiree benefit plan for some or all employees.
- $\frac{3}{4}$ An employer should perform a valuation whenever the employer considers or implements changes to retiree benefit provisions or eligibility requirements.
- $\frac{3}{4}$ An employer should perform a valuation whenever the employer introduces or changes retiree contributions.

We recommend Imperial Valley CCD take the following actions to ease future valuations.

- $\frac{3}{4}$ 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.

PART VI: APPENDICES

APPENDIX A: MATERIALS USED FOR THIS STUDY

We relied on the following materials to complete this study.

- $\frac{3}{4}$ We used paper reports and digital files containing employee demographic data from the College personnel records.
- $\frac{3}{4}$ We used relevant sections of collective bargaining agreements provided by the College.

APPENDIX C: ACTUARIAL ASSUMPTIONS AND METHODS

Following is a summary of actuarial assumptions and methods used in this study. The College should carefully review these assumptions and methods to make sure they reflect the College's assessment of its underlying experience. It is important for Imperial Valley CCD to understand that the appropriateness of all selected actuarial assumptions and methods are Imperial Valley CCD ¶ V UHVS RQVLELOLW\ 8QOHVV RWKHUZ believes that all methods and assumptions are within a reasonable range based on the provisions of GASB 43 and 45, applicable actuarial standards of practice, Imperial Valley CCD ¶ V DFWXDO KLVWRULFDO H[SH judgement based on experience and training.

ACTUARIAL METHODS AND ASSUMPTIONS:

ACTUARIAL COST METHOD: Entry age normal. The allocation of OPEB cost is based on years of service. We used the level percentage of payroll method to allocate OPEB cost over years of service.

Entry age is based on the age at hire for eligible employees. The attribution period is determined as the difference between the expected retirement age and the age at hire. The present value of future benefits and present value of future normal costs are determined on an employee by employee basis and then aggregated.

To the extent that different benefit formulas apply to different employees of the same class, the normal cost is based on the benefit plan applicable to the most recently hired employees (including future hires if a new benefit formula has been agreed to and communicated to employees).

AMORTIZATION METHODS: We used the level percentage of payroll method to allocate amortization cost by year. We used a closed 30 year amortization period for the initial UAAL. We used an open 30 year amortization period for any residual UAAL.

SUBSTANTIVE PLAN:

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NON-ECONOMIC ASSUMPTIONS:

Economic assumptions are set under the guidance of Actuarial Standard of Practice 35 (ASOP 35).

MORTALITY: CalSTRS mortality for faculty employees.
CalPERS mortality for Miscellaneous employees for other employees.

RETIREMENT RATES: CalSTRS retirement rates for faculty employees.
CalPERS retirement rates for School employees for other employees.

VESTING RATES:

	<u>Faculty</u>	<u>Classified</u>	<u>Management</u>
Vesting Percentage	100%	100%	100%
Vesting Period	12 years	12 years	12 years

COSTS FOR RETIREE COVERAGE:

There was not sufficient information available to determine whether there is an implicit subsidy for retiree health valuation where the insurer is committed to continuing rating practices. This is especially true where sufficient information is not available to determine the magnitude of the subsidy. However, Imperial Valley CCD should recognize that costs and liabilities in this report could change significantly if either the current insurer changes rating practices or if Imperial Valley CCD changes insurers.

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	<u>Faculty</u>	<u>Classified</u>	<u>Management</u>
Current Retirees: based on actual costs			

Current Plan:

Future Retirees Pre-65

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AGING FACTORS:

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

APPENDIX D: DISTRIBUTION OF ELIGIBLE PARTICIPANTS BY AGE

ELIGIBLE ACTIVE EMPLOYEES:

<u>Age</u>	<u>Total</u>	<u>Faculty</u>	<u>Classified</u>	<u>Management</u>	<u>Board</u>
Under 25 25	3	0	3	0	0

APPENDIX E: CALCULATION OF GASB 43/45 ACCOUNTING ENTRIES

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OPEB Benefits:

Other PostEmployment Benefits. Generally medical, dental, prescription drug, life, long-term care or other potimployment bloy