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March 16, 2006

Teachers' Retirement Board
California State Teachers' Retirement System

Re: Defined Benefit Program
Actuarial Valuation as of June 30, 2005

Dear Members of the Board:

At your request, we have performed an actuarial valuation of the Defined Benefit Program of the State Teachers' Retirement Plan as of June 30, 2005. Details about the actuarial valuation are contained in the following report.

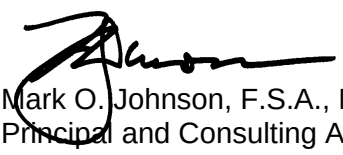
I certify that the information included in this report is complete and accurate to the best of my knowledge and belief. All calculations have been prepared in accordance with generally recognized and accepted actuarial principles and practices that are consistent with the applicable Standards of Practice adopted by the American Academy of Actuaries.

Milliman's work product was prepared exclusively for CalSTRS for a specific and limited purpose. It is a complex, technical analysis that assumes a high level of knowledge concerning CalSTRS operations, and uses CalSTRS data, which Milliman has not audited. It is not for the use or benefit of any third party for any purpose. Any third party recipient of Milliman's work product who desires professional guidance should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs.

Milliman has been engaged by CalSTRS as an independent actuary. The undersigned is a Fellow of the Society of Actuaries, a Member of the American Academy of Actuaries, and an Enrolled Actuary, and is experienced in performing actuarial valuations for large public employee retirement systems.

Any distribution of this report must be provided in its entirety including this cover letter, unless prior written consent is obtained from Milliman.

Respectfully submitted,



Mark O. Johnson, F.S.A., M.A.A.A., E.A.
Principal and Consulting Actuary

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Section 1
Summary of the Findings

The primary purpose of the actuarial valuation is to analyze the sufficiency of future contributions from members, employers, and the State, to meet the current and future obligations of the Defined Benefit (DB) Program. By using the actuarial methods and assumptions adopted by the Teachers' Retirement Board, this actuarial valuation provides the best estimate of the long-term financing of the DB Program.

The key findings of this Actuarial Valuation are:

♦ **Funding Sufficiency**

Our findings indicate that, as of June 30, 2005, the future revenue from contributions and appropriations for the DB Program is **not** expected to be sufficient to finance its obligations. This is consistent with our projections in the 2003 and 2004 Actuarial Valuations.

The projected revenue shortfall is due primarily to investment return experience for the fiscal years ending in 2001, 2002, and 2003 that was significantly less than the long-term actuarial assumption of 8% per year. Based on the current Actuarial Value of Assets and all future experience emerging as assumed, the Unfunded Actuarial Obligation will not be amortized over any future period.

(Percent of Earned Salaries)	2005 Valuation	2004 Valuation
Amortization Period based on Current Revenues		
Total Level Rate over the Amortization Period	17.567%	17.499%
Normal Cost Rate	16.829	16.827
Amortization Rate	0.738%	0.672%
Amortization Period (Based on current revenue projections)	*Does not amortize*	*Does not amortize*
Calculated Contribution Rate for 30-Year Funding Period		
Normal Cost Rate	16.829%	16.827%
Amortization Rate	4.491	5.235
Total Level Rate over the Amortization Period	21.320%	22.062%
Estimated Additional Revenue Needed *(Based on current valuation assumptions)*	3.753%	4.563%

Based on the current valuation results, the actuarial value of assets and assumptions about future experience, we find that a level contribution rate of 21.320% will amortize the Unfunded Actuarial Obligation over a thirty-year period. This is equivalent to an **increase of 3.753% of Earned Salaries** for a period of thirty years from the valuation date.

- **Supplemental Contributions**

The Legislature has established a test for the funded status of the benefit structure in effect in 1990. Under State law EC §22955(b), additional funds are required to be contributed by the State if at least one of the following two separate conditions is met.

1. Additional funding is required if the sum of the 8% contribution from the members and the 8% contribution from the employers is not sufficient to pay the Normal Cost of the benefits in effect as of July 1, 1990.

2. Additional funding is required if the Actuarial Value of Assets associated with the benefit provisions in effect as of July 1, 1990 is less than the Actuarial Obligation for those benefits.

We found that revenue is sufficient to finance the Normal Costs associated with the 1990 Benefit Structure and there was an Actuarial Surplus as of June 30, 2005 related only to the 1990 Benefit Structure. Therefore, **no additional supplemental contributions are called for at this time**.

- **Funding Progress**

The Funded Status of a retirement plan is equal to the difference between its Actuarial Value of Assets and its Actuarial Obligation. The Funded Ratio is equal to the Actuarial Value of Assets divided by the Actuarial Obligation.

($Millions)	2005 Valuation	2004 Valuation
Actuarial Obligation	$ 142,193	$ 138,254
Actuarial Value of Assets	121,882	114,094
Unfunded Actuarial Obligation	$ 20,311	$ 24,160
Funded Ratio	86%	83%

Overall, the DB Program is in a better financial condition than one year ago as measured by the Funded Ratio as of June 30, 2005.

Based on the 2004 Actuarial Valuation, the Unfunded Actuarial Obligation was expected to grow from $24.2 billion to $26.2 billion by June 30, 2005. The actual Unfunded Actuarial Obligation of $20.3 billion was determined including the impact of a net actuarial gain of $5.9 billion from the expected level. A brief summary of the actuarial gains and losses for the year is shown below and described more fully in Section 6 of this report.

($Millions)	2005 Valuation
Unfunded Actuarial Obligation	
Amount on July 1, 2004	$ 24,160
Increase due to interest and under-funding	2,028
Expected Amount on July 1, 2005	$ 26,188
Actuarial (Gains) and Losses by Source	
Data Correction on Salaries	$ (3,674)
Salary increases less than assumed	(1,992)
Investment return on the Actuarial Value of Assets, including recognition of prior deferred investment losses	(929)
Change in SBMA and THBF Reserves	671
All other sources combined	47
Net Actuarial (Gains) and Losses	$ (5,877)
Unfunded Actuarial Obligation July 1, 2005	$ 20,311

♦ **Changes since the 2004 Valuation**

There was one minor legislative change since the prior report that had an impact on this valuation. Senate Bill 102 (2004) allows Sick Leave Service Credit up to 0.2 years to count for eligibility for One-Year Final Compensation, the Career Factor and the Longevity Bonus formula.

The actuarial assumptions and methods used in this valuation are the same as used in the prior valuation.

♦ **Further Information**

Details of our findings are included in later sections of this report. The Appendices include supporting documentation on the benefit and eligibility provisions used to project future benefits, the actuarial methods and assumptions

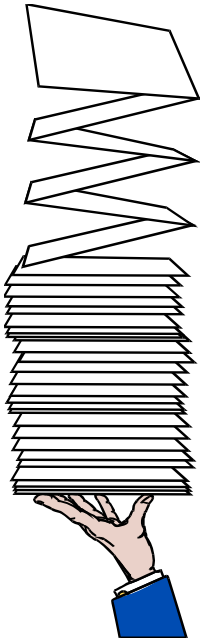
used to value the projected benefits, and the underlying census data provided by CalSTRS for this valuation.

A summary of the key results of this actuarial valuation is shown on the next page. Note the 2004 salary information in the summary has been restated from our previous report to reflect corrected data.

Summary of Key Valuation Results

		2005 Valuation	2004 Valuation	Percentage Change
1.	**Total Membership**			
A.	Active Members	450,282	444,680	1.3%
B.	Inactive Members	124,394	116,128	7.1%
C.	Retired Members and Beneficiaries	201,241	193,245	4.1%
D.	Total Membership	775,917	754,053	2.9%
2.	**Earned Salaries as of Valuation Date (All Members)**			
A.	Annual Total *($Millions)*	$ 23,257	$ 22,589	3.0%
B.	Annual Average per Active Member	$ 51,649	$ 50,798	1.7%
3.	**Average Annual Allowance Payable**			
A.	Service Retirement	$ 31,404	$ 29,856	5.2%
4.	**Actuarial Obligation *($Millions)***			
A.	Active Members	$ 75,667	$ 77,384	(2.2)%
B.	Inactive Members	2,764	2,645	4.5%
C.	Retired Members and Beneficiaries	63,762	58,225	9.5%
D.	Total	$ 142,193	$ 138,254	2.8%
5.	**Value of System Assets *($Millions)***			
A.	Fair Value	$ 126,447	$ 113,815	11.1%
B.	Smoothing Reserve	(782)	3,391	(123.1)%
C	Actuarial Value	$ 125,665	$ 117,206	7.2%
D.	Ratio of Actuarial Value to Fair Value	*99%*	*103%*	
E.	Less SBMA Reserve	(2,265)	(1,719)	31.8%
F.	Less THBF Allocation	(1,518)	(1,393)	9.0%
G	Net Actuarial Value	$ 121,882	$ 114,094	6.8%
6.	**Funded Status**			
A.	Unfunded Actuarial Obligation *($Millions)*	$ 20,311	$ 24,160	(15.9)%
B.	Funded Ratio *(5G ÷ 4D)*	86%	83%	
7.	**Contribution Rates *(percent of salaries)***			
A.	30-Year Projected Revenue	17.567%	17.499%	0.4%
B.	Normal Cost Rate	16.829	16.827	0.0%
C.	Available for Amortization of UAO *(7A – 7B)*	0.738%	0.672%	9.8%
D.	Period to Amortize	Does not amortize	Does not amortize	
E.	Projected 30-Year Level Funding Rate	21.320%	22.062%	(3.4)%
F.	Projected Shortfall (Surplus) *(7E – 7A)*	3.753%	4.563%	(17.8)%

Section 2
Scope of the Report



This report presents the actuarial valuation of the Defined Benefit Program of the State Teachers' Retirement Plan as of June 30, 2005.

In reading our Actuarial Certification in Section 3, please pay particular attention to the guidelines employed in the preparation of this report. We also comment on the sources and reliability of both the data and the actuarial assumptions upon which our findings depend. Those comments are the basis for our certification that this report is complete and accurate to the best of our knowledge and belief.

A summary of the key results of this valuation was presented in the previous section. The remainder of this report is arranged as follows.

Section 4 describes the benefit obligations of CalSTRS including the development of the Normal Cost and the Actuarial Obligation.

Section 5 outlines the Fair Value of Assets of the DB Program and the determination of the Actuarial Value of Assets as of June 30, 2005. All of the assets of the Program are available to finance future benefits and expenses, except those allocated for the Supplemental Benefit Maintenance Account (SBMA) and the Teachers' Health Benefits Fund (THBF).

Section 6 shows the relationship between the Actuarial Value of Assets and the Actuarial Obligation, also called the Funded Status.

Section 7 discusses the calculations used to determine if a supplemental contribution is required from the State in accordance with EC §22955(b). The key elements of this calculation pertain to an evaluation of the assets and obligations associated with the benefits in effect in 1990.

The funding sufficiency of the current projected revenue stream for the DB Program is tested in Section 8.

This report includes several appendices:

Appendix A	A summary of the current benefit structure, as determined by the provisions of governing law on June 30, 2005.
Appendix B	A summary of the actuarial methods and assumptions used to estimate actuarial obligations and the funding sufficiency. In our opinion, the assumptions used in the valuation are reasonably related to the past experience of the DB Program, are internally consistent, and represent our best estimate of future conditions affecting the Program. Nevertheless, the emerging costs of the Program will vary from those presented in this report to the extent that actual experience differs from that projected by the actuarial assumptions.
Appendix C	Schedules of valuation data classified by various categories of plan members. We relied upon the membership and beneficiary data supplied by CalSTRS. We compared the data for this and the prior valuation and tested for reasonableness. Based on these tests, we believe the data to be sufficient for the purposes of our calculations.
Appendix D	A glossary of actuarial terms used in this report.

Section 3
Actuarial Certification

The major findings of the 2005 Actuarial Valuation are contained in this report. This report reflects the benefit provisions and contribution rates in effect as of the valuation date. To the best of our knowledge and belief, this report is complete and accurate and contains sufficient information to fully and fairly disclose the funded condition of the Defined Benefit Program as of June 30, 2005.

In preparing the valuation, we relied without audit upon the financial and membership data furnished by CalSTRS. Although we did not audit this data, we compared the data for this and the prior valuation and tested for reasonableness. Based on these tests, we believe the data to be sufficiently accurate for the purposes of our calculations. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

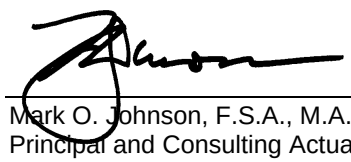
The findings have been determined according to actuarial assumptions and methods that were chosen on the basis of recent experience of the DB Program and of current expectations concerning future economic conditions. In our opinion, the assumptions used in the actuarial valuation are appropriate for purposes of the valuation, are internally consistent, and reflect reasonable expectations. The assumptions represent our best estimate of future conditions affecting the DB Program. Nevertheless, the emerging costs of the DB Program will vary from those presented in this report to the extent that actual experience differs from that projected by the assumptions.

The Teachers' Retirement Board has sole authority to determine the actuarial assumptions and methods used for the valuation of the DB Program. The Board adopted all of the actuarial methods and assumptions used in the 2005 valuation.

On the basis of the foregoing, I hereby certify that, to the best of my knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with principles prescribed by the Actuarial Standards Board and the code of Professional conduct and Qualification Standards for Public Statements of Actuarial Opinion of the American Academy of Actuaries. In addition, the assumptions and methods used meet the parameters set by Governmental Accounting Standards Board Statement No. 25 for financial statement disclosures.

This report was prepared exclusively for CalSTRS for a specific and limited purpose. It is a complex, technical analysis that assumes a high level of knowledge concerning CalSTRS operations. It is not for the use or benefit of any third party for any purpose. Any third party recipient of Milliman's work product who desires professional guidance should not rely on this report, but should engage qualified professionals for advice appropriate to its own specific needs.

The undersigned is an independent actuary, a Fellow of the Society of Actuaries, a Member of the American Academy of Actuaries, an Enrolled Actuary, and experienced in performing valuations for large public employee retirement systems.



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Section 4
Actuarial Obligation

In this section, the discussion will focus on the commitments of CalSTRS for retirement benefits, which are referred to as its actuarial obligation.

In an active system with new entrants, the actuarial obligation, or liabilities, will generally exceed the actuarial value of assets. This deficiency has to be provided by future contributions and investment returns. An actuarial valuation method sets out a schedule of future contributions and determines if they will amortize any deficiency in an orderly fashion.

Normal Cost

The **Normal Cost** represents the cost assigned to an average member for a given year such that it would meet the continuing costs of a particular benefit if contributed each year starting with the date of membership. The Entry Age Actuarial Cost Method is designed to produce a Normal Cost that remains a level percentage of Earned Salaries, so it is best expressed as a rate.

The following chart shows the Normal Cost Rate has increased from 16.827% to 16.829% since the last valuation. This increase of only 0.002% of salaries is due to demographic changes in the membership. **Table 1** provides more details on the calculation of the Normal Cost and Normal Cost Rates.

	($Millions)		
	Earned Salaries	**Normal Cost**	**Normal Cost Rate**
June 30, 2004	$ 23,766	$ 3,999	16.827%
June 30, 2005	$ 23,293	$ 3,920	16.829%

The Normal Cost Rate is expected to remain fairly stable as a percentage of Earned Salaries as long as the benefit provisions are not amended, membership experience emerges as assumed, and the demographic characteristics of the membership remain reasonably consistent. The change in the Normal Cost Rate reported in this valuation is well within expected levels of fluctuation.

Actuarial Obligation

The next step in the actuarial valuation process is to project all future DB Program benefit payments for current members and retirees. The level of benefits currently being paid is known, but assumptions are needed to estimate how long they will be paid, and the amount and timing of the payment of future benefits for active and inactive members who are not currently receiving payments. The summation of the discounted values of all of the projected benefit payments for all current members at the assumed rate of return is called the **Actuarial Present Value of Projected Benefits**.

Details are shown in **Table 2** and summarized below.

($Millions)	**2005 Valuation**	**2004 Valuation**
Benefits Being Paid	$ 63,762	$ 58,225
Inactive Deferred Benefits	2,764	2,645
Active Members' Benefits	122,806	125,525
Present Value of Projected Benefits	$ 189,332	$ 186,395
Present Value of Future Normal Costs	47,139	48,141
Actuarial Obligation	$ 142,193	$ 138,254

The **Actuarial Present Value of Future Normal Costs** is the value of all remaining Normal Costs expected to be received over the future working lifetime of current active members. The **Actuarial Obligation** is the difference between the Actuarial Present Value of Projected Benefits and the Actuarial Present Value of Future Normal Costs. The Actuarial Obligation is equal to the assets that would exist if the current Normal Cost Rate had been paid for all members since entry into the Program, and if all experience had emerged as assumed.

Table 1 Normal Cost

($Millions)	2005	2004
Estimated Annual Earned Salaries [1]	$ 23,293	$ 23,766
Present Value of Future Normal Costs for Current Active Members	$ 47,139	$ 48,141
Present Value of Future Earned Salaries for Current Active Members	$280,107	$286,092
Normal Cost		
Retirement	$ 3,582	$ 3,653
Disability	133	135
Death	62	64
Withdrawal	143	147
Total Normal Cost	$ 3,920	$ 3,999
Normal Cost Rate Percent of Earned Salaries		
Retirement	15.378%	15.371%
Disability	0.571	0.568
Death	0.266	0.269
Withdrawal	0.614	0.619
Total Normal Cost	**16.829%**	**16.827%**

Note:

[1] Annual rate of Earned Salaries for active members on the valuation date, excluding active members over age 70 on the valuation date that are assumed to retire immediately and, therefore, do not generate a Normal Cost.

Table 2 Actuarial Obligation

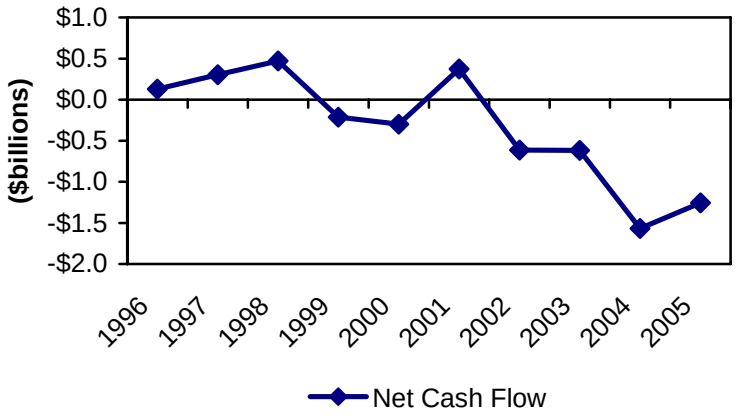
($Millions)	2005	2004
Present Value of Projected Benefits to All Current Members		
Benefits Currently Being Paid		
Service Retirement	$ 58,634	$ 53,438
Disability	1,898	1,786
Survivors	3,230	3,001
Total	63,762	58,225
Benefits to Inactive Members	2,764	2,645
Benefits to Active Members		
Retirement	118,253	120,883
Disability	2,478	2,516
Death	1,425	1,466
Withdrawal	650	660
Total	122,806	125,525
Total Present Value of Benefits	$189,332	$186,395
Present Value of Future Normal Costs	47,139	48,141
Actuarial Obligation	**$142,193**	**$138,254**

Section 5
Valuation Assets

In many respects, an actuarial valuation can be thought of as an inventory process. The inventory is taken as of the actuarial valuation date, which for this valuation is June 30, 2005. On that date, the assets available for the payment of retirement benefits are appraised.

The next step in the valuation process is to calculate the **Actuarial Value of Assets** that will be used to determine the funding status of the Program. As shown in **Table 3**, the Fair Market Value of assets was reported as $126,447 million as of June 30, 2005, up from $113,815 million as of June 30, 2004. **Table 4** shows the asset changes for the period.

As shown in Table 4, the net cash flow (contributions less benefits and expenses) continues to be negative. You can see in the following graph that 2004 was inconsistent with the trend over the last few years, which was due to a $500 million reduction in the State's contribution to the SBMA.



Because the underlying calculations in the actuarial valuation are long-term in nature, it is advantageous to use an asset smoothing method to lessen the impact of short-term fluctuations in the value of assets. The asset smoothing method projects an expected Actuarial Value of Assets from the Actuarial Value of Assets as of the previous year. The projection uses the assumed rate of investment return, then recognizes only one-third of the

difference between the expected value and the Fair Market Value to arrive at the Actuarial Value of Assets. The calculation of the Actuarial Value of Assets is shown in **Table 5** and the result is shown below.

($Millions)	June 30, 2005	June 30, 2004
Fair Market Value	$ 126,447	$ 113,815
Actuarial Value of Assets	$ 125,665	$ 117,206
Unrecognized Investment Gains or (Losses)	$ 782	$ (3,391)
Ratio of AVA to FMV	99%	103%

Due to the asset smoothing method, there are investment gains of $782 million that have not yet been recognized (the difference between the Actuarial and Fair Market Value of Assets). This means the heavy investment losses incurred over the past few years have all been recognized as of this time. Absent investment returns less than the assumed rate in future years to offset the unrecognized investment gains, the current gains will gradually be reflected in the Actuarial Value of Assets.

If the future returns on the Fair Market Value of Assets are 8% each year, then as the current unrecognized gains flow through the smoothing method and are recognized, future valuations will show an actuarial gain. The result will be a slow increase in the DB Program's funded status, ultimately decreasing the Unfunded Actuarial Obligation by the $782 million of currently unrecognized investment gains.

Table 6 shows a history of the Actuarial Value of Assets compared to the Fair Market Value of Assets.

Table 3 Statement of Program Assets

($Millions)	June, 2005	June, 2004
Invested Assets		
Short-term	$ 1,367	$ 1,253
Debt Securities	32,227	27,866
Equity	78,887	74,161
Alternative	6,922	5,406
Real Estate	8,548	6,642
Total Investments [(1)]	$ 127,951	$ 115,328
Cash and Cash Equivalents	176	187
Receivables	7,090	1,625
Liabilities [(1)]	(8,770)	(3,325)
Fair Market Value of Net Assets	**$ 126,447**	**$ 113,815**

Note:

(1) Excludes offsetting entries from Securities Lending Collateral and Obligation

Table 4 Statement of Changes in Program Assets

($Millions)	June, 2005	June, 2004
Contributions		
Members	$ 1,748	$ 1,641
Employers	2,005	1,918
State of California	1,219	549
Total Contributions	4,972	4,108
Benefits and Expenses		
Retirement, Death, and Survivors	(5,836)	(5,279)
Refunds of Member Contributions	(79)	(79)
Purchasing Power Benefits	(221)	(224)
Administrative Expenses	(93)	(94)
Total Benefits and Expenses	(6,229)	(5,676)
Net Cash Flow	**$ (1,257)**	**$ (1,568)**
Investment Income		
Realized Income	$ 3,813	$ 2,830
Net Appreciation	10,119	13,538
Net Securities Lending Income	66	69
Investment Expenses	(100)	(83)
Other (Expense) Income	(9)	(2)
Net Investment Return	13,889	16,352
Net Increase	**$ 12,632**	**$ 14,784**
Fair Market Value of Net Assets		
Beginning of Year	113,815	99,031
End of Year	**$ 126,447**	**$ 113,815**
Estimated Net Rate of Return [1]	12.3%	16.6%

Note:

[1] Estimated return on Fair Market Value basis, net of all investment expenses and assuming uniform cash flow throughout the year

Table 5 Actuarial Value of Assets

($Millions)	June, 2005	June, 2004
Actuarial Value at Beginning of Year	$ 117,206	$ 111,604
Contributions	4,972	4,108
Benefits and Expenses	(6,229)	(5,676)
Expected Return at 8%	9,326	8,866
Expected Actuarial Value End of Year	$ 125,275	$ 118,902
Fair Market Value	126,447	113,815
Difference between Fair Market Value and Expected Actuarial Value	$ 1,172	$ (5,087)
Recognition Factor	One-third	One-third
Recognized Gain or Loss	$ 390	$ (1,696)
Actuarial Value at End of Year	**$ 125,665**	**$ 117,206**
Unrecognized Investment Gains or (Losses)	**$ 782**	**$ (3,391)**
Ratio of Actuarial Value of Assets to Fair Market Value of Assets	*99%*	*103%*
Estimated Net Rate of Return [(1)]	8.3%	6.5%

Note:

(1) Estimated return on Actuarial Value basis, net of all investment expenses and assuming uniform cash flow throughout the year

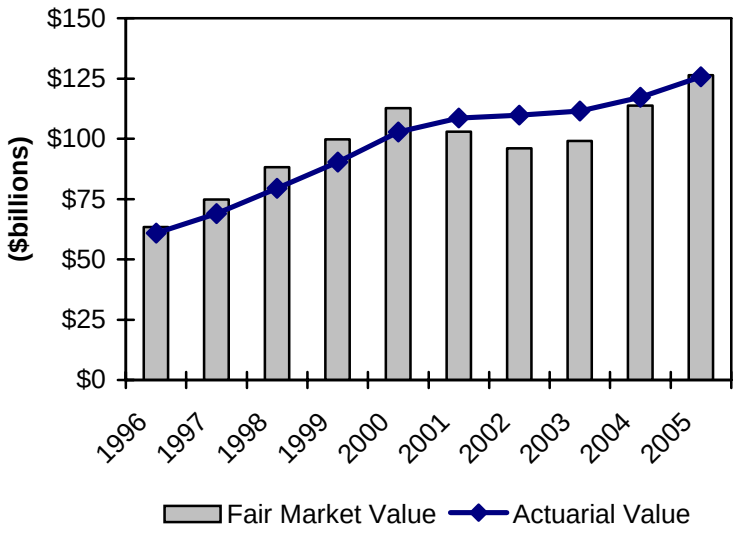
Table 6 History of Actuarial Value of Assets

($Millions) June 30 [1]	Fair Market Value	*Estimated Return* [2]	Actuarial Value	Ratio of Actuarial to Market
1996	$ 63,455	*13.3%*	$ 60,876	96%
1997	74,778	*17.3*	68,966	92
1998	88,198	*17.3*	79,381	90
1999	99,780	*13.4*	90,265	90
2000	112,771	*12.7*	102,790	91
2001	102,915	*(9.1)*	108,571	105
2002	96,028	*(6.1)*	109,755	114
2003	99,031	*3.8*	111,604	113
2004	113,815	*16.6*	117,206	103
2005	126,447	*12.3*	125,665	99

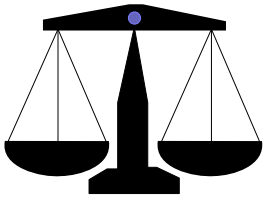
Note:

(1) Asset Method adopted for 1999 valuation with retroactive calculation to July 1, 1993

(2) Estimated return on Fair Market Value basis, net of all investment expenses and assuming uniform cash flow throughout the year



Section 6
Funded Status



The **Unfunded Actuarial Obligation** is the excess of the Actuarial Obligation over the Actuarial Value of Assets, which represents a liability that must be funded over time. Contributions in excess of the Normal Cost are used to amortize the Unfunded Actuarial Obligation. An **Actuarial Surplus** exists if the Actuarial Value of Assets exceeds the Actuarial Obligation.

The **Funded Ratio** is equal to the Actuarial Value of Assets divided by the Actuarial Obligation. A Funded Ratio of 100% means the Value of Assets equals the Actuarial Obligation, and the DB Program could be financed by contributions equal to the Normal Cost, if all future experience emerges as assumed.

The Funded Status is shown below and in **Table 7**.

($Millions)	2005 Valuation	2004 Valuation
Actuarial Obligation	$ 142,193	$ 138,254
Actuarial Value of Assets		
From Table 5	125,665	117,206
Less SBMA Reserve	(2,265)	(1,719)
Less THBF Allocation	(1,518)	(1,393)
Net for Funding	121,882	114,094
Unfunded Actuarial Obligation	$ 20,311	$ 24,160
Funded Ratio (on A.V.A.)	**86%**	**83%**
Alternate Funded Ratio (based on Fair Market Value)	*86%*	*80%*

Overall, the DB Program is in a better financial condition than one year ago as measured by the Funded Ratio as of June 30, 2005.

Future benefits provided through the Supplemental Benefits Maintenance Account (SBMA) are not part of the projected benefits included in this valuation. Therefore, the SBMA Reserve is subtracted from the DB Program assets

to arrive at the value available to support the benefits included in this valuation.

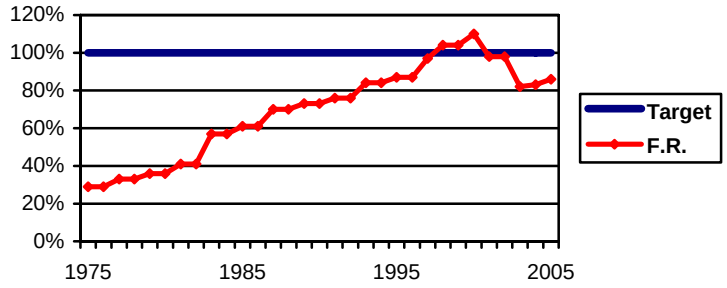
In addition, the Teachers' Retirement Board has established a policy of allocating funds for future costs associated with the Teachers' Health Benefits Fund (THBF). By subtracting the current value of the set aside, as maintained on an accumulation basis by CalSTRS staff, the remaining DB Program assets are available to support the benefits included in this valuation.

The following table shows a history of the Funded Status of the DB Program.

$(Millions) YE	Actuarial Obligation	Actuarial Value of Assets	Unfunded Actuarial Obligation	Funded Ratio
1975	**$ 12,834**	**$ 3,775**	**$ 9,059**	**29%**
1977	15,203	5,019	10,184	33%
1979	17,971	6,488	11,483	36%
1981	22,545	9,345	13,200	41%
1983	26,553	15,023	11,530	57%
1985	**28,401**	**17,457**	**10,944**	**61%**
1987	34,637	24,401	10,236	70%
1989	40,266	29,327	10,939	73%
1991	47,100	36,001	11,099	76%
1993	53,581	45,212	8,369	84%
1995	**63,391**	**55,207**	**8,184**	**87%**
1997	69,852	67,980	1,872	97%
1998	74,234	77,290	(3,056)	104%
1999	86,349	90,001	(3,652)	104%
2000	93,124	102,225	(9,101)	110%
2001	109,881	107,654	2,227	98%
2003	131,777	108,667	23,110	82%
2004	138,254	114,094	24,160	83%
2005	**142,193**	**121,882**	**20,311**	**86%**

The historical Funded Ratios are plotted in the following graph. In years in which a valuation was not performed, the Funded Ratio from the previous year is used.

Historical Funded Ratio



Actuarial Gains and Losses

Comparing the Unfunded Actuarial Obligation as of two valuation dates does not provide enough information to determine if there were actuarial gains or losses. The correct comparison is between the Unfunded Actuarial Obligation on the valuation date and the Expected Unfunded Actuarial Obligation projected from the prior valuation date using the actuarial assumptions in effect since the previous valuation.

The actuarial gains and losses since the last report are summarized in the following table and shown in **Table 8**.

($Millions)	Expected Results	Actual Results	(Gain) or Loss
Actuarial Obligation	$147,622	$142,193	$ (5,429)
Act. Value of Assets	121,434	121,882	(448)
Unfunded Act. Oblig.	$ 26,188	$ 20,311	$ (5,877)
Actuarial (Gains) or Losses by Source			
Data correction on salaries			$ (3,674)
Salaries increased less than assumed			(1,992)
All other non-investment sources			237
(Gain) or Loss on the Actuarial Obligation			(5,429)
Investment Return on Actuarial Value of Assets			(929)
State contribution on July 1, 2005 included in assets			(31)
Other contributions in excess of assumed			(159)
Change in the SBMA Reserve			546
Change in the Health Benefit Fund Allocation			125
(Gain) or Loss on the Actuarial Value of Assets			(448)
Total Actuarial (Gain) or Loss			$ (5,877)

Based on the 2004 Actuarial Valuation, the Unfunded Actuarial Obligation was expected to increase to $26,188 million (See Table 14, 2004 report). The actual Unfunded Actuarial Obligation of $20,311 million represents a net actuarial gain of $5,877 million.

- The majority of the $5,429 million net gain on the Actuarial Obligation is due to the correction of a data error in the collection of salary information.

- Another major impact is the fact that over the one-year period since the last valuation, annual wage increases (about 2% on average) were less than assumed.

- All other non-investment experience represents only a relatively small portion of the expected Actuarial Obligation. These relatively minor net gains and losses, other than the data correction and one-year salary increases, indicate that the census is consistent from the prior period, and the actual experience (except for salaries) tracked closely with the actuarial assumptions.

- On the asset side, there are a number of sources of the actuarial gain or loss. First, we identified an investment return on the Actuarial Value of Assets greater than the 8% assumption. Although the return on Fair Market Value was estimated at 12.3%, the return on the Actuarial Value of Assets was estimated at only 8.3% due to the recognition of prior deferred investment losses. This is consistent with our prediction in the 2004 Actuarial Valuation that a return in excess of approximately 12% on a Fair Market Value basis would have been required to equal a return of 8% on the Actuarial Value of Assets.

- The State made quarterly supplemental contributions pursuant to EC §22955(b) totaling $122.6 million. The last contribution was made on July 1, 2005, but was included in the CalSTRS financial statements as being made in the 2004-05 fiscal year. Therefore, this represents a gain of $30.7 million in the 2004-05 fiscal year.

- We also calculated the net amount of member and employer contributions in excess of those projected in the previous valuation. The normal contributions (8.25% by employers and 6.00% by members) were less than anticipated by about $219 million, which follows because the 2004-05 salaries were less than we assumed. On the other hand, the additional contributions by members and employers for ancillary reasons such as service purchases or other types of benefit changes, created an asset gain of about $372 million. These additional contributions are mostly offset by corresponding increases in the Actuarial Obligation. The net amount of contributions in excess of our projections was $153 million, which equates to about $159 million with interest to the valuation date.

- The amount allocated to the SBMA Reserve increased by $546 million over the year. The Board's allocation of funds for future costs associated with the THBF increased by $125 million due to investment credits greater than the sum of all payments in the year.

($Millions)	**(Gain) or Loss**	
Actuarial (Gains) or Losses on the Actuarial Obligation		**Percent of Act. Oblig.**
Data correction on salaries	$ (3,674)	(2.6)%
Salaries increased less than assumed	(1,992)	(1.4)
All other non-investment sources	237	0.2
(Gain) or Loss on the Actuarial Obligation	$ (5,429)	(3.8)%
Actuarial (Gains) or Losses on the Actuarial Value of Assets		**Percent of AVA**
Return on Actuarial Value of Assets	$ (929)	(0.8)%
State contribution on July 1, 2005	(31)	-
Other ctrbs. in excess of assumed	(159)	(0.1)
Change in the SBMA Reserve	546	0.4
Change in the THBF Allocation	125	0.1
(Gain) or Loss on the Actuarial Value of Assets	$ (448)	(0.4)%

These gains and losses are within a reasonable range for variances in a single year.

Table 7 Funded Status

($Millions)	2005	2004
Actuarial Obligation *(Table 2)*	$142,193	$138,254
Actuarial Value of Assets		
Calculated *(Table 5)*	125,665	117,206
Less SBMA Reserve	(2,265)	(1,719)
Less THBF Allocation	(1,518)	(1,393)
Program Assets	121,882	114,094
Unfunded Actuarial Obligation	**$ 20,311**	**$ 24,160**
Funded Ratio	**86%**	**83%**

Table 8 Actuarial Gains and Losses

($Millions)		Expected	Actual	(Gain) Loss
Actuarial Obligation				
Actuarial Obligation June 30, 2004		$138,254		
Normal Cost for 2004-05		4,287		
Benefits Paid (Excludes Purchasing Power)		(5,915)		
Expected Interest at 8%		10,996		
Actuarial Obligation June 30, 2005		**$147,622**	**$142,193**	**$ (5,429)**
By Source:	*Legislative Amendment (Sick Leave)*			*$ 18*
	Data Correction on Salaries			*(3,674)*
	New Entrants			*207*
	Rehired Members			*115*
	Retiree Mortality			*(40)*
	Active Member Mortality			*(10)*
	Service Retirements			*100*
	Terminations			*116*
	Disablement			*75*
	Service Purchases			*0*
	Salaries Increased Less than Assumed			*(1,992)*
	All Other Non-investment Sources			*(344)*
	Total (Gain) Loss on the Actuarial Obligation			*$ (5,429)*
Actuarial Value of Assets				
Actuarial Value of Assets June 30, 2004		$114,094		
Expected Contributions for 2004-05		4,195		
Benefits Paid (Excludes Purchasing Power)		(5,915)		
Expected Interest at 8% on A.V.A.		9,060		
Actuarial Value of Assets June 30, 2005		**$121,434**	**$121,882**	**$ (448)**
By Source:	*Investment Return on Actuarial Value of Assets (including the recognition of prior deferred investment losses)*			*$ (929)*
	State Contribution received July 1, 2005 and included in audit			*(31)*
	Other contributions in excess of assumed			*(159)*
	Change in SBMA Reserve			*546*
	Change in Allocation for future THBF costs			*125*
	Total (Gain) Loss on the Actuarial Value of Assets			*$ (448)*
Unfunded Actuarial Obligation		**$ 26,188**	**$ 20,311**	**$ (5,877)**

Section 7
Supplemental Contributions

Under State law EC §22955(b), additional funds are required to be contributed by the State if at least one of the following two separate conditions is met.

1. Additional funding is required if the sum of the 8% contribution from the members and the 8% contribution from the employers is not sufficient to pay the Normal Cost of the benefits in effect as of July 1, 1990.

2. Additional funding is required if the Actuarial Value of Assets associated with the benefit provisions in effect as of July 1, 1990 is less than the Actuarial Obligation for those benefits.

Normal Cost Deficit: Since the Normal Cost Rate for the 1990 Benefit Structure is less than the 16% rate cited in the statute, there is no Normal Cost Deficit.

	2005 Valuation	2004 Valuation
Normal Cost Deficit – 1990 Benefit Structure		
Normal Cost Rate	14.279%	14.268%
Revenue for 1990 Benefits	16.000	16.000
Normal Cost Deficit	0.000%	0.000%

1990 Unfunded Actuarial Obligation: The Actuarial Obligation for the DB Program is recalculated using the benefit provisions in place during 1990. CalSTRS provides us with separate census data for this determination. The process has limitations since we don't know, for example, if members who retired would have done so if the post-1990 benefit enhancements had not been enacted. However, we believe we are using the most reasonable process to estimate what the Actuarial Obligation would be if only the 1990 benefits were currently in place.

There were no benefit improvements enacted between 1990 and 1998 that had a material cost. All benefit enhancements enacted with effective dates from July 1, 1990 to December 31, 1998 have been presumed to be

cost-neutral. Due to the enhanced retirement benefits enacted since 1990, we are using a separate set of retirement probabilities to evaluate the 1990 Benefit Structure.

The Actuarial Obligation related to the 1990 Benefit Structure is $119 billion. This compares to the Actuarial Obligation for the DB Program of $142 billion.

($Millions)	2005 Valuation	2004 Valuation
Actuarial Obligation – 1990 Benefit Structure		
Value of Projected Benefits	$158,613	$155,979
Value of Future Normal Costs	39,742	40,554
Actuarial Obligation	$118,871	$115,425

The Actuarial Value of Assets needs to be adjusted to reflect the contributions started on October 1, 1998, and an estimate of the additional benefits paid out due to the post-1990 benefit increases up to June 30, 2005. This task also has some limitations since we do not have precise data regarding the portion of, or the timing of, benefit payments that would be attributable to only the 1990 benefits.

The most significant adjustments to the assets are:

- Eliminate contributions in excess of 16.00%,
- Add back the member contributions that were directed to the DBS Program,
- Add back the benefit enhancements that have been paid, and
- Adjust for interest.

See **Table 9** for the details of the asset adjustment.

($Millions)	June, 2005	June, 2004
Asset Adjustment – 1990 Benefit Structure		
Actuarial Value for DB Program	$121,882	$114,094
Adjustments per Table 9	1,322	742
Board's THBF allocation	1,518	1,393
Actuarial Value of Assets	$124,722	$116,229

For purposes of testing the funding sufficiency of the 1990 Benefit Structure, note we did not reserve the Board's allocation of assets for future THBF costs.

The following table summarizes the Funded Status of the 1990 Benefit Structure as detailed in **Table 10**. The 1990 Benefit Structure has an Actuarial Surplus.

($Millions)	2005 Valuation	2004 Valuation
Funded Status – 1990 Benefit Structure		
Actuarial Obligation	$ 118,871	$ 115,425
Actuarial Value of Assets	124,722	116,229
Unfunded Actuarial Obligation	$ (5,851)	$ (804)
Funded Ratio	105%	101%

Supplemental State Contributions: The statute calls for a supplemental State contribution if one of the two conditions described above is met. Since neither triggering condition is met in the 2005 Actuarial Valuation, additional funding from the State under this statutory provision is not required at this time.

The funded status of the 1990 Benefit Structure in future years is difficult to predict with certainty because the Actuarial Value of Assets for the 1990 Benefit Structure includes adjustments for contributions and benefits paid in excess of those in place in 1990. The benefits paid can vary considerably depending on demographic experience. In addition, the Actuarial Obligation can only be assessed accurately when current census data is evaluated. Based on information available at this time, and if experience is consistent with the actuarial assumptions, we believe the 1990 Benefit Structure will continue to have an Actuarial Surplus.

Table 9 Asset Adjustment for 1990 Benefit Structure

($Millions)	2005	2004
Assets Allocated to Post-1990 Benefit Increases		
Allocated Market Value at Beginning of Year	$ 721	$ 193
Contributions During the Year		
EC §22951 at 0.250% of Earned Salaries	(59)	(58)
EC §22955 at 2.017% of second preceding fiscal year Earned Salaries	(472)	(451)
2% DBS redirection reallocated to DB Program	502	490
THBF costs reallocated to DB Program	28	27
Total Adjustment to Contributions	(1)	8
Benefits Paid During the Year		
Post-1990 Benefits Paid During the Year	582	503
2% DBS redirection reallocated to DB Program	(84)	(45)
Total Adjustment to Benefits Paid	498	458
Estimated Investment Earnings for the Year [1]	112	62
Total Allocated Market Value at End of Year	**$ 1,330**	**$ 721**
Ratio of Actuarial Value to Market Value [2]	99.382%	102.979%
Actuarial Value of Assets for Post-1990 Benefit Increases	**$ 1,322**	**$ 742**

Note:

[1] Based on Fair Market Value and uniform cash flow for contributions, benefits, and expenses. The rates of return used in these calculations were 16.64% for 2003-04 and 12.27% for 2004-05.

[2] Developed from Table 5

Table 10 Funding Sufficiency for 1990 Benefit Structure

($Millions)	2005	2004
Actuarial Obligation		
Present Value of Projected Benefits		
Benefits Currently Being Paid	$ 57,226	$ 52,600
Benefits to Inactive Members	2,634	2,517
Benefits to Active Members	98,753	100,862
Total	$158,613	$155,979
Present Value of Future Normal Costs	39,742	40,554
Actuarial Obligation	$118,871	$115,425
Actuarial Value of Assets		
Actuarial Value of Assets *(Table 7)*	$121,882	$114,094
Plus, Asset Adjustment *(Table 9)*	1,322	742
Plus, Allocation to Health Benefits	1,518	1,393
Net Assets Available	$124,722	$116,229
Funded Status		
Actuarial Obligation	$118,871	$115,425
Actuarial Value of Assets	124,722	116,229
Unfunded Actuarial Obligation (Surplus)	$ (5,851)	$ (804)
Funded Ratio	105%	101%
Amortization Period		
Revenue for 1990 Benefits	16.000%	16.000%
Normal Cost Rate for 1990 Benefits	(14.279)	(14.268)
EC 22955(b)	0.000	0.000
Revenue Available for Amortization	1.721%	1.732%
Amortization Period	*Amortization Not Required*	*Amortization Not Required*

Table 11 Amortization of 1990 Unfunded Actuarial Obligation

$(Millions) Year	FYE	Beginning Unfunded Act. Oblig.	Amortization Payment: Total Contrib. [1]	Amortization Payment: Normal Cost	Amortization Payment: Available Amtzn.	Interest Charge at 8%	Ending Unfunded Act. Oblig.
1	2006	$ (5,851)	$ 3,995	$ 3,565	$ 430	$ (485)	$ (6,766)
2	2007	(6,766)					

Note:

[1] The total contribution excludes $30,650,000 in 2005-06 for the State's additional contribution pursuant to EC §22955(b) based on the 2003 Actuarial Valuation because it was counted as received as of June 30, 2005 in the CalSTRS financial statements. The figure shown represents 16.000% of the projected Earned Salaries.

Section 8
Funding Sufficiency

The contributions to fund the DB Program include those listed below and described in **Table 12**. Since each contribution is not paid uniformly over time as a percentage of Earned Salaries, we have calculated an equivalent rate over a 30-year period, the period used to test the sufficiency of the statutory revenue stream.

Source of Revenue	Current Rate	Equivalent Rate
Members	8.000%	8.000%
Directed to DBS Accounts	(2.000)	(0.540)
Employers	8.000	8.000
Employers	0.250	0.250
State	2.017	1.857
State – 1990 Benefit Structure	0.000	0.000
Equivalent Level Contribution Rate over 30 Years		**17.567%**

Twenty-five percent of the members' contributions are temporarily directed to the Defined Benefit Supplement Program (DBS) through December of 2010. When converted to a level percentage over a thirty-year period, this is equal to a reduction in the value of contributions of only 0.540% of future salaries.

The State contribution rate will be 2.017% of the second preceding fiscal year Earned Salaries which is equivalent to a lesser percentage of current Earned Salaries. For example, the State contribution for the 2005-06 will be equal to 2.017% of the 2003-04 Earned Salaries. Based on two years of known future contributions and projections for the rest, the equivalent rate for the thirty-year period is 1.857% of current Earned Salaries.

As demonstrated in Tables 10 and 11, the supplemental contribution from the State is not needed at this time. Our projections in the 2004 valuation report included a State supplemental contribution of $31 million as of July 1, 2005. This contribution has been reported as received in the 2004-05 fiscal year by the System.

Note that the future costs associated with the Teachers' Health Benefit Fund have been set aside through a

reduction to the Actuarial Value of Assets. Therefore, it is not appropriate to deduct the expected annual costs from the revenue intended to fund the DB Program benefits.

The calculation of the equivalent rates in **Table 13** results in 17.567% of Earned Salaries over a thirty-year period.

Table 14 shows the amortization of the Unfunded Actuarial Obligation on a year-by-year basis. Based on the current Actuarial Value of Assets and all future experience emerging as assumed, the Unfunded Actuarial Obligation will not be amortized over the next 30 years. This is consistent with our projections from 2003 and 2004 as well. **Table 15** summarizes these findings.

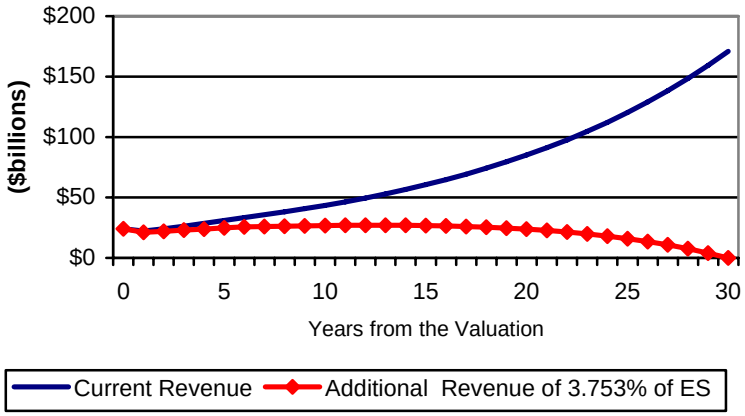
	2005 Valuation	2004 Valuation
Normal Cost Rate	16.829%	16.827%
Amortization Rate	4.491	5.235
Total Level Rate over a 30-Year Period	21.320	22.062%
Projected Revenue	17.567%	17.499%
Estimated Additional Revenue Needed	3.753%	4.563%

The DB Program is in a slightly better funded position than one year ago and the future thirty-year funding requirement is somewhat lower as a percentage of future salaries. However, it is clear that based on the current data, method, assumptions, the projected revenue for the DB Program is not sufficient.

Table 16 (in the same format as Table 14) shows the amortization of the Unfunded Actuarial Obligation over a thirty-year period **IF contribution revenue is increased by 3.753% of current year Earned Salaries**. We did not address the source of the additional revenue as it is not relevant to the amortization schedule.

The following graph illustrates the expected amortization of the Unfunded Actuarial Obligation with and without the additional revenue stream.

Projected Unfunded Actuarial Obligation



One of the future contingencies that may lessen the impact of the funding shortage is the potential growth of the active DB Program membership. An increase in the number of active members will improve the financial condition of the DB Program because the additional revenue should exceed the expected Normal Cost Rate (the Normal Cost Rate is the expected total cost for a new member). The excess of revenue over the Normal Cost Rate for additional members will provide added resources to finance the current Unfunded Actuarial Obligation.

Table 12 Contributions

		Current Rate	Equivalent Rate [1]
EC 22901	Members	8.000%	8.000%
EC 22901.5	Directed to DBS Accounts [2]	(2.000)	(0.540)
EC 22950	Employers	8.000	8.000
EC 22950 (c)	Employers for THBF [3]	*as needed*	0.000
EC 22951	Employers	0.250	0.250
EC 22955 (a)	State [4]	2.017	1.857
EC 22955 (b)	State [5]	0.000	0.000
Equivalent Level Contribution Rate over 30-Year Period			**17.567%**

Note:

[1] Equivalent level contribution rate payable over the next 30 years. See Table 13 for details.

[2] 25% of Member Contributions will be directed to Defined Benefit Supplement Accounts through December 31, 2010.

[3] The Teachers' Health Benefit Fund is financed by a redirection of employer contributions. The Teachers' Retirement Board has set aside DB Program assets to finance these future costs. See Table 7.

[4] The State's contribution of 2.017% is paid quarterly based on second prior fiscal year salaries.

[5] Additional funding is provided only if the Normal Cost Rate is greater than 16.000% of salaries for benefits in effect on July 1, 1990 or there is an Unfunded Actuarial Obligation (related to the 1990 Benefit Structure). The 1990 Benefit Structure was adequately funded as of June 30, 2005.

Table 13 30-Year Projection of Contributions

($Millions) FYE	Projected Salaries	Member *22901*	Member DBS *22901.5*	Employer *22950 & 22951*	State *22955(a)*	State *22955(b)*	Total Contrib.
2006	$ 24,969	$ 1,998	$ (499)	$ 2,060	$ 469	$ 0 [3]	$ 4,028
2007	26,030	2,082	(521)	2,147	481	0	4,189
2008	27,137	2,171	(543)	2,239	504	0	4,371
2009	28,290	2,263	(566)	2,334	525	0	4,556
2010	29,492	2,359	(590)	2,433	547	0	4,749
2011	30,746	2,460	(307)	2,537	571	0	5,261
2012	32,052	2,564	0	2,644	595	0	5,803
2013	33,414	2,673	0	2,757	620	0	6,050
2014	34,835	2,787	0	2,874	646	0	6,307
2015	36,315	2,905	0	2,996	674	0	6,575
2016	37,858	3,029	0	3,123	703	0	6,855
2017	39,467	3,157	0	3,256	732	0	7,145
2018	41,145	3,292	0	3,394	764	0	7,450
2019	42,893	3,431	0	3,539	796	0	7,766
2020	44,716	3,577	0	3,689	830	0	8,096
2021	46,617	3,729	0	3,846	865	0	8,440
2022	48,598	3,888	0	4,009	902	0	8,799
2023	50,664	4,053	0	4,180	940	0	9,173
2024	52,817	4,225	0	4,357	980	0	9,562
2025	55,061	4,405	0	4,543	1,022	0	9,970
2026	57,402	4,592	0	4,736	1,065	0	10,393
2027	59,841	4,787	0	4,937	1,111	0	10,835
2028	62,384	4,991	0	5,147	1,158	0	11,296
2029	65,036	5,203	0	5,365	1,207	0	11,775
2030	67,800	5,424	0	5,593	1,258	0	12,275
2031	70,681	5,654	0	5,831	1,312	0	12,797
2032	73,685	5,895	0	6,079	1,368	0	13,342
2033	76,817	6,145	0	6,337	1,426	0	13,908
2034	80,082	6,407	0	6,607	1,486	0	14,500
2035	83,485	6,679	0	6,888	1,549	0	15,116
PV [1]	$452,272	$ 36,182	$ (2,443)	$ 37,312	$ 8,398	$ 0	$ 79,449
Level Rate [2]		**8.000%**	**(0.540)%**	**8.250%**	**1.857%**	**0.000%**	**17.567%**

Note:

[1] Present Value, as of the valuation date, of 30-year series of contributions and appropriations.

[2] Equivalent level rate payable over the 30-year period.

[3] $31 million deposited on July 1, 2005 was reported in the CalSTRS financial statements as paid in the 2004-05 fiscal year.

Table 14 Amortization of Unfunded Actuarial Obligation [1]

$(Millions) Year	FYE	Beginning Unfunded Act. Oblig.	Amortization Payment: Total Contrib.	Amortization Payment: Normal Cost	Amortization Payment: Available Amtzn.	Interest Charge at 8%	Ending Unfunded Act. Oblig.
1	2006	$ 20,311	$ 4,027	$ 4,202	$ (175)	$ 1,632	$ 22,118
2	2007	22,118	4,191	4,381	(190)	1,776	24,084
3	2008	24,084	4,371	4,567	(196)	1,935	26,215
4	2009	26,215	4,556	4,761	(205)	2,105	28,525
5	2010	28,525	4,750	4,963	(213)	2,291	31,029
6	2011	31,029	5,259	5,174	85	2,478	33,422
7	2012	33,422	5,803	5,394	409	2,658	35,671
8	2013	35,671	6,050	5,623	427	2,837	38,081
9	2014	38,081	6,307	5,862	445	3,029	40,665
10	2015	40,665	6,575	6,111	464	3,236	43,437
11	2016	43,437	6,855	6,371	484	3,456	46,409
12	2017	46,409	7,146	6,642	504	3,693	49,598
13	2018	49,598	7,450	6,924	526	3,948	53,020
14	2019	53,020	7,766	7,219	547	4,219	56,692
15	2020	56,692	8,096	7,525	571	4,513	60,634
16	2021	60,634	8,440	7,845	595	4,828	64,867
17	2022	64,867	8,799	8,179	620	5,164	69,411
18	2023	69,411	9,173	8,526	647	5,528	74,292
19	2024	74,292	9,563	8,889	674	5,916	79,534
20	2025	79,534	9,969	9,266	703	6,335	85,166
21	2026	85,166	10,393	9,660	733	6,785	91,218
22	2027	91,218	10,835	10,071	764	7,267	97,721
23	2028	97,721	11,295	10,499	796	7,786	104,711
24	2029	104,711	11,775	10,945	830	8,344	112,225
25	2030	112,225	12,276	11,410	866	8,944	120,303
26	2031	120,303	12,797	11,895	902	9,588	128,989
27	2032	128,989	13,341	12,400	941	10,283	138,331
28	2033	138,331	13,908	12,927	981	11,028	148,378
29	2034	148,378	14,499	13,477	1,022	11,829	159,185
30	2035	159,185	15,116	14,050	1,066	12,693	170,812

Note:

[1] Based on the actuarial value of assets.

Table 15 Funding Sufficiency

($Millions)	June, 2005	June, 2004
Funded Status ***(Table 7)***		
Actuarial Obligation	$ 142,193	$ 138,254
Actuarial Value of Assets	121,882	114,094
Unfunded Actuarial Obligation	$ 20,311	$ 24,160
Funded Ratio	86%	83%
Level Contributions over 30 Years ***(Table 12)***	17.567%	17.499%
Amortization Period based on Current Revenues		
Total Level Rate over the Amortization Period	17.567%	17.499%
Normal Cost Rate	16.829	16.827
Amortization Rate	0.738%	0.672%
Amortization Period (Based on current revenue projections)	*Does not amortize*	*Does not amortize*
Calculated Contribution Rate for 30-Year Funding Period		
Normal Cost Rate	16.829%	16.827%
Amortization Rate	4.491	5.235
Total Level Rate over the Amortization Period	21.320%	22.062%
Estimated Additional Revenue Needed *(Based on current valuation assumptions)*	3.753%	4.563%

Table 16 Amortization of Unfunded Actuarial Obligation [1] Including Additional Contributions [2]

$(Millions) Year	FYE	Beginning Unfunded Act. Oblig.	Amortization Payment Total [2] Contrib.	Amortization Payment Normal Cost	Amortization Payment Available Amtzn.	Interest Charge at 8%	Ending Unfunded Act. Oblig.
1	2006	$ 20,311	$ 4,964	$ 4,202	$ 762	$ 1,595	$ 21,144
2	2007	21,144	5,168	4,381	787	1,660	22,017
3	2008	22,017	5,389	4,567	822	1,729	22,924
4	2009	22,924	5,618	4,761	857	1,800	23,867
5	2010	23,867	5,857	4,963	894	1,875	24,848
6	2011	24,848	6,413	5,174	1,239	1,939	25,548
7	2012	25,548	7,006	5,394	1,612	1,980	25,916
8	2013	25,916	7,304	5,623	1,681	2,008	26,243
9	2014	26,243	7,615	5,862	1,753	2,031	26,521
10	2015	26,521	7,938	6,111	1,827	2,051	26,745
11	2016	26,745	8,276	6,371	1,905	2,065	26,905
12	2017	26,905	8,627	6,642	1,985	2,075	26,995
13	2018	26,995	8,994	6,924	2,070	2,078	27,003
14	2019	27,003	9,376	7,219	2,157	2,075	26,921
15	2020	26,921	9,775	7,525	2,250	2,066	26,737
16	2021	26,737	10,190	7,845	2,345	2,048	26,440
17	2022	26,440	10,623	8,179	2,444	2,018	26,014
18	2023	26,014	11,075	8,526	2,549	1,982	25,447
19	2024	25,447	11,545	8,889	2,656	1,931	24,722
20	2025	24,722	12,036	9,266	2,770	1,869	23,821
21	2026	23,821	12,547	9,660	2,887	1,792	22,726
22	2027	22,726	13,081	10,071	3,010	1,700	21,416
23	2028	21,416	13,637	10,499	3,138	1,590	19,868
24	2029	19,868	14,216	10,945	3,271	1,461	18,058
25	2030	18,058	14,820	11,410	3,410	1,310	15,958
26	2031	15,958	15,450	11,895	3,555	1,137	13,540
27	2032	13,540	16,107	12,400	3,707	939	10,772
28	2033	10,772	16,791	12,927	3,864	710	7,618
29	2034	7,618	17,505	13,477	4,028	451	4,041
30	2035	4,041	18,249	14,050	4,199	158	0

Note:

[1] Based on the actuarial value of assets.

[2] An additional contribution of 3.753% of Earned Salaries is included for each of the thirty years. This schedule is for illustrative purposes only since any legislated increase in contributions would likely be effective after the valuation date.

Appendix A
Provisions of Governing Law

All of the actuarial calculations contained in this report are based upon our understanding of the CalSTRS DB Program as contained in Part 13 of the California Education Code. The provisions used in this valuation are summarized below for reference purposes.

Normal Retirement

Eligibility Requirement:	Age 60 with five years of credited service.
Allowance:	Two percent of final compensation for each year of credited service.
Final Compensation:	Average salary earnable for the highest three consecutive years of credited service for one position. For members with 25 years of service, the calculation is based on the highest average compensation earnable in a consecutive 12-month period.
Credited Service:	For each year of membership, credited service is granted based on the ratio of salary earned to full-time salary earnable for one position.
Sick Leave Service Credit:	Credited service is granted for unused sick leave at the time of retirement. Sick Leave Service Credit up to 0.2 years of Credited Service may be used for eligibility for One-Year Final Compensation or to attain the Career Factor or the Longevity Bonus.
Career Factor:	If a member has thirty years of credited service, the age factor is increased by 0.2%. However, the maximum age factor is 2.4%.
Longevity Bonus:	For members attaining 30 years of service by January 1, 2011, a longevity bonus of $200 per month is added to the unmodified allowance. The bonus is increased to $300 per month with 31 years of service, and $400 per month with 32 or more years of service.
IRC Section 415:	Benefits are subject to limits imposed under Internal Revenue Code (IRC) Section 415. However, no limits are imposed in the valuation of the DB Program in order to address the potential pay-as-you-go funding needs of the Teachers' Replacement Benefits Program Fund.

IRC Section 401(a)(17):	Compensation is limited under IRC Section 401(a)(17) and assumed to increase at the rate of inflation.

Early Retirement

Eligibility Requirement:	Age 55 with five years of credited service, or age 50 with 30 years of credited service.
Benefit Reduction:	A 1/2% reduction in the normal retirement allowance for each full month or partial month the member is younger than age 60, plus a reduction of 1/4% for each full month or partial month the member is younger than age 55.

Late Retirement

Allowance:	Members continue to earn additional service credit after age 60. The 2% age factor increases by 0.033% for each quarter year of age that the member is over age 60, up to a maximum of 2.4%.

Deferred Retirement

Allowance:	Any time after satisfying the minimum service requirement, a member may cease active service, leave the accumulated contributions on deposit, and later retire upon attaining the minimum age requirement.

Post-Retirement Benefit Adjustment

Benefit Improvement:	Two percent simple increase on September 1 following the first anniversary of the effective date of the allowance, applied to all continuing allowances.

Disability Allowance - Coverage A

Eligibility Requirement:	Member has five years of credited California service and has not attained age 60.
Allowance:	Fifty percent of final compensation or 5% of final compensation for each year of service credit if over age 45 with less than 10 years of service credit.
Children's Benefit:	10% for each eligible dependent child, up to a maximum of 40% of final compensation. The increment for each eligible child continues until the child marries or attains age 22.

Offsets:	Allowance, including children's increment, is reduced by disability benefits payable under Social Security, Workers' Compensation and district-paid income protection plan.

Disability Allowance - Coverage B

Eligibility Requirement:	Member has five years of credited California service.
Allowance:	Fifty percent of final compensation, regardless of age and service credit.
Children's Benefit:	10% for each eligible child up to four children, for a maximum of 40% of final compensation. The increment for each child continues until the child attains age 21, regardless of student, marital, or employment status.
Offsets:	The member's allowance is reduced by disability benefits payable under Workers' Compensation.

Death Before Retirement - Coverage A

Eligibility Requirement:	One or more years of service credit for active members or members receiving a disability allowance.
Lump Sum Payment:	$6,163 lump sum to the designated beneficiary. If there is no surviving spouse, domestic partner or eligible children, the contributions and interest are paid to the designated beneficiary.
Allowance:	The surviving spouse or domestic partner with eligible children will receive a family benefit of 40% of final compensation for as long as there is at least one eligible child. An additional 10% of final compensation is payable for each eligible child up to a maximum benefit of 90%. If there is no surviving spouse or domestic partner, an allowance of 10% of final compensation is payable to eligible children up to a maximum benefit of 50%. When there are no eligible children, the spouse or domestic partner may elect to receive one half of a 50% joint and survivor allowance projected to age 60, or take a lump sum payment of the remaining contributions and interest.

Death Before Retirement - Coverage B

Eligibility:	One or more years of service credit for active members.
Lump Sum Payment:	$24,652 lump sum to the designated beneficiary. If there is no surviving spouse or domestic partner, the contributions and interest are paid to the designated beneficiary.
Allowance:	A lump sum payment of the contributions and interest. or One half of a 50% joint and survivor allowance, beginning on the member's 60th birthday, or immediately with a reduction based on the member and spouse's (or domestic partner's) age at the time the benefit begins. If the surviving spouse or domestic partner elects a monthly allowance, each eligible child would receive 10% of the member's final compensation, with a maximum benefit of 50%.

Death After Retirement

Lump Sum Payment:	$6,163 lump sum to the designated beneficiary.
Annuity Form:	If the retirant had elected one of the joint and survivor options, the retirement allowance would be modified in accordance with the option selected. If no option had been elected, payment of the unpaid contributions and interest, if any, remaining in the retirant's account.

Termination from the Program

Refund:	Refund of contributions with interest as credited to the member's account to date of withdrawal. A refund terminates membership and all rights to future benefits from the System.
Re-entry After Refund:	Former members who re-enter the System, may redeposit all amounts previously refunded plus regular interest. The member must earn one year of credited service after re-entry before becoming eligible for System benefits.

Appendix B
Actuarial Methods and Assumptions

This section of the report discloses the actuarial methods and assumptions used in this Actuarial Valuation. These methods and assumptions have been chosen on the basis of recent experience of the DB Program and on current expectations as to future economic conditions.

The assumptions are intended to estimate the future experience of the members of the DB Program and of the DB Program itself in areas that affect the projected benefit flow and anticipated investment earnings. Any variations in future experience from that expected from these assumptions will result in corresponding changes in estimated costs of the DB Program's benefits.

Please refer to the 2003 Actuarial Experience Analysis for further information on the revisions made to the actuarial assumptions in 2003. There were no changes in assumptions or methods in this actuarial valuation.

Actuarial Cost Method

The accruing costs of all benefits are measured by the Entry Age Actuarial Cost Method. The projected revenue in excess of the Normal Cost is tested for sufficiency to amortize the Unfunded Actuarial Obligation created by this method. Amortization is calculated on a level percentage of salary including general wage inflation but no increase or decrease in the number of active members.

Method: The actuarial present value of projected benefits for each individual member included in the valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages. The portion of this actuarial present value allocated to a valuation year is called the Normal Cost. The Normal Cost is based on the benefit structure available to new entrants on the valuation date. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future Normal Costs is called the Actuarial Obligation. The excess of the Actuarial Obligation over the Actuarial Value of Assets is called the Unfunded Actuarial Obligation. If the Actuarial Value of Assets exceeds the Actuarial Obligation, the difference is called the Actuarial Surplus.

Entry Age: The ages at entry of future active members are assumed to average the same as the entry ages of the present active members they replace. If the number of active members should increase (or decrease), it is further assumed that the average entry age of the larger (or smaller) group will be the same, from an actuarial standpoint, as that of the present active group. Under these assumptions, the Normal Cost Rate will not vary with the termination of the present active membership, or with an expansion or contraction of the active membership.

Asset Valuation Method

The assets are valued using a method that delays recognition of investment gains or losses. The expected actuarial value is the prior year's actuarial value increased with net cash flow of funds, and all increased with interest during the past year at the expected investment return assumption. One-third of the difference between the expected actuarial value of assets and the Fair Market Value of assets is added to the expected actuarial value of assets to arrive at the Actuarial Value of Assets.

The asset smoothing method was adopted for the 1999 actuarial valuation and is effective for the investment experience beginning in July of 1993.

Actuarial Assumptions

The Actuarial Standards Board has adopted Actuarial Standard of Practice No. 27, *Selection of Economic Assumptions for Measuring Pension Obligations*. This Standard provides guidance on selecting economic assumptions under defined benefit retirement programs such as the System. In our opinion, the economic assumptions have been developed in accordance with the Standard.

The Actuarial Standards Board has adopted Actuarial Standard of Practice No. 35, *Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations*. This Standard provides guidance on selecting demographic assumptions under defined benefit retirement programs such as the System. In our opinion, the demographic assumptions have been developed in accordance with the Standard.

The assumptions are intended to estimate the future experience of the members of the DB Program and of the System itself in areas that affect the projected benefit flow and anticipated investment earnings. Any variations in future experience from that expected from these assumptions will result in corresponding changes in estimated costs of the Program's benefits.

The demographic assumptions are listed in **Table B.1** and illustrated at selected ages and duration combinations in **Tables B.2** – **B.7**.

Table B.1 List of Major Valuation Assumptions

I. Economic Assumptions

A.	Investment Return (net of investment and administrative expenses)		8.00%
B.	Interest on Member Accounts		6.00%
C.	Wage Growth		4.25%
D.	Inflation		3.25%

II. Demographic Assumptions

A.	Mortality			
	(1) Active	- Male	1999 CalSTRS Retired – M (-2 years)	Table B.2
		- Female	1999 CalSTRS Retired – F (-2 years)	Table B.2
	(2) Retired *	- Male	1999 CalSTRS Retired – M	Table B.2
		- Female	1999 CalSTRS Retired – F	Table B.2
	(3) Beneficiary *	- Male	1999 CalSTRS Beneficiary – M	Table B.2
		- Female	1999 CalSTRS Beneficiary – F	Table B.2
	(4) Disabled *	- Male	1994 GAM-M (minimum 2.5% with select rates in first three years)	Table B.2
		- Female	1994 GAM-F (minimum 2.2% with select rates in first three years)	Table B.2

* *Future retirees and beneficiaries are valued with a 2-year age setback*

B.	Service Retirement	Experience Tables	Table B.3
C.	Disability Retirement	Experience Tables	Table B.4
D.	Withdrawal	Experience Tables	Table B.5
	Probability of Refund	Experience Tables	Table B.6
E.	Merit Salary Increases	Experience Tables	Table B.7
F.	Supplemental Assumptions		Table B.8

Table B.2 Mortality

	Active Members	
Age	Male	Female
25	0.051%	0.029%
30	0.066	0.029
35	0.080	0.037
40	0.085	0.051
45	0.107	0.077
50	0.158	0.103
55	0.258	0.157
60	0.443	0.256
65	0.798	0.509

	Retired Members *		Beneficiaries *		Disabled (After Year 3) *	
Age	Male	Female	Male	Female	Male	Female
50	0.190%	0.121%	0.233%	0.121%	2.500%	2.200%
55	0.321	0.191	0.398	0.191	2.500	2.200
60	0.558	0.336	0.709	0.336	2.500	2.200
65	1.015	0.668	1.294	0.668	2.500	2.200
70	1.803	1.176	2.173	1.176	2.500	2.200
75	2.848	1.834	3.405	1.834	3.721	2.269
80	5.021	3.778	5.586	3.778	6.203	3.940
85	9.419	6.503	8.961	6.503	9.724	6.774
90	14.754	11.627	14.754	11.627	15.293	11.627
95	23.361	18.621	23.361	18.621	23.361	18.621

Select rates for disability:		
First year of disablement	11.4%	6.0%
Second year of disablement	7.7	3.8
Third year of disablement	6.2	3.0

* *Future retirees and beneficiaries are valued with a 2-year age setback*

Table B.3 Service Retirement

	Only for the1990 Benefit Structure		For the DB Program			
			Under 30 Years		30 or More Years	
Age	Male	Female	Male	Female	Male	Female
50	0.0%	0.0%	0.0%	0.0%	1.5%	1.5%
51	0.0	0.0	0.0	0.0	1.5	1.5
52	0.0	0.0	0.0	0.0	1.5	1.5
53	0.0	0.0	0.0	0.0	2.0	1.5
54	1.5	1.5	0.0	0.0	2.0	2.0
55	5.8	7.0	3.0	5.0	6.0	8.0
56	3.9	4.5	2.0	3.5	6.0	8.0
57	4.9	4.5	2.0	3.5	8.0	10.0
58	6.8	7.0	3.0	4.5	12.0	15.0
59	17.5	14.0	5.0	6.0	16.0	18.0
60	25.0	22.0	7.0	10.0	25.0	30.0
61	16.5	15.0	7.0	10.0	40.0	35.0
62	16.5	15.0	9.0	12.0	35.0	32.0
63	15.0	15.0	13.0	18.0	27.0	30.0
64	17.5	18.0	12.0	15.0	27.0	27.0
65	20.0	18.0	14.0	16.0	27.0	27.0
66	16.0	18.0	10.0	15.0	27.0	27.0
67	16.0	18.0	10.0	15.0	27.0	27.0
68	16.0	16.0	10.0	15.0	27.0	27.0
69	16.0	16.0	10.0	15.0	27.0	27.0
70	100.0	100.0	100.0	100.0	100.0	100.0

Table B.4 Disability Retirement

Coverage A

Age	Male	Female
25	0.021%	0.021%
30	0.030	0.030
35	0.051	0.060
40	0.081	0.090
45	0.111	0.110
50	0.159	0.220
55	0.210	0.280

Coverage B

	Entry Ages - Male		Entry Ages - Female	
Age	Under 40	40 and Up	Under 40	40 and Up
25	0.021%		0.030%	
30	0.030		0.030	
35	0.051		0.051	
40	0.120		0.090	
45	0.150	0.118%	0.141	0.139%
50	0.195	0.202	0.231	0.252
55	0.270	0.312	0.318	0.367
60	0.195	0.477	0.243	0.530
65	0.120	0.853	0.168	0.916

Table B.5 Withdrawal

	Entry Ages - Male					
Year	Under 25	25 - 29	30 - 34	35 - 39	40 - 44	45 & Up
0	15.3%	15.3%	15.3%	15.3%	15.3%	15.3%
1	12.5	12.5	12.5	12.5	12.5	13.5
2	7.7	7.7	7.7	7.7	7.7	8.6
3	6.3	5.4	5.4	5.4	5.4	6.3
4	4.4	4.4	4.4	4.4	4.4	4.4
5	3.9	3.0	3.0	3.0	3.0	3.6
10	2.0	2.0	2.0	2.0	2.4	
15	1.1	1.1	1.1	1.2		
20	0.6	0.6	0.6			
25	0.5	0.5				
30	0.0					

	Entry Ages - Female					
Year	Under 25	25 - 29	30 - 34	35 - 39	40 - 44	45 & Up
0	15.3%	15.3%	15.3%	15.3%	15.3%	15.3%
1	10.0	10.0	10.0	10.0	10.0	10.0
2	7.2	7.2	7.2	7.2	7.2	7.2
3	6.3	6.3	5.8	5.3	4.9	4.9
4	5.8	5.8	5.4	4.9	3.9	3.0
5	5.5	5.8	4.2	2.9	2.5	2.5
10	2.3	2.0	1.7	1.4	1.6	
15	1.1	0.9	1.0	0.9		
20	0.6	0.7	0.9			
25	0.6	0.6				
30	0.0					

Table B.6 Probability of Refund

	Entry Ages - Male				
Year	**Under 25**	**25 - 29**	**30 - 34**	**35 - 39**	**40 and Up**
Under 5	100%	100%	100%	100%	100%
10	50	50	42	45	45
15	42	42	36	30	
20	34	36	27		
25	24	27			
30	0				

	Entry Ages - Female				
Year	**Under 25**	**25 - 29**	**30 - 34**	**35 - 39**	**40 and Up**
Under 5	100%	100%	100%	100%	100%
10	40	35	36	36	35
15	30	30	30	30	
20	25	20	20		
25	15	10			
30	0				

Table B.7 Merit Salary Increases

	Entry Age - Annual Increase in Salaries Due to Merit					
Yr.	Under 25	25 - 29	30 - 34	35 - 39	40 - 44	45 & up
1	5.6%	5.3%	5.1%	4.8%	4.8%	3.5%
2	5.6	5.1	4.9	4.7	4.7	3.3
3	5.6	5.0	4.8	4.6	4.6	3.0
4	5.5	4.8	4.6	4.4	4.4	2.9
5	5.5	4.8	4.5	3.8	3.8	2.6
10	3.2	3.0	2.7	2.3	2.2	1.6
15	1.5	1.5	1.4	1.1	1.1	0.8
20	1.3	1.1	1.1	0.8	0.8	0.6
25	1.1	0.9	0.8	0.5	0.5	
30	0.9	0.7	0.6	0.5		
35	0.8	0.7	0.6			
40	0.8	0.6				
45	0.8					

Table B.8 Supplemental Assumptions

Unused Sick Leave

Add 0.67 years of Credited Service at retirement; pro-rated for part-time members.

Optional Forms:

Option 1: Valued as single life annuity
Option 8: Valued as 65% joint and survivor annuity

Probability of Marriage

Male: 90%
Female: 70%

Male spouses are assumed to be three years older than female spouses.

Number of Children

Male: 0.53
Female: 0.23

Only married members are assumed to have children.

Assumed Offsets

The following offsets, expressed as a percentage of Final Compensation, are assumed for life.

	Coverage A		Coverage B	
	Male	Female	Male	Female
Death	9.1%	5.8%	0.0%	0.0%
Disability	5.3%	2.3%	2.7%	2.9%

Appendix C
Valuation Data

The membership data for this actuarial valuation was supplied by CalSTRS and accepted without audit. We have examined the data for reasonableness and consistency with prior valuations and periodic reports from the CalSTRS staff to the Teachers' Retirement Board.

In preparing this report, we relied upon the membership data furnished by CalSTRS. Although we did not audit this data, we compared the data for this and the prior valuation and tested for reasonableness. Based on these tests, we believe the data to be sufficiently accurate for the purposes of this valuation. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

Tables C.1 – C.6 summarize the census data used in this valuation.

Table C.1 Summary of Statistical Information

	June 30, 2005	June 30, 2004
Number of Members		
Active Members [1]	450,282	444,680
Inactive Members [1]	124,394	116,128
Retirees and Beneficiaries		
Service Retirants	176,008	169,022
Disabilitants	7,571	7,311
Survivors	17,662	16,912
Total	201,241	193,245
Total Membership in Valuation	775,917	754,053
Active Member Statistics		
Earned Salaries	$23,257 million	$22,589 million [2]
Average Salary	$ 51,649	$ 50,798 [2]
Average Age	44.5 years	44.5 years
Average Service	10.7 years	10.7 years

Note:

[1] Some active members were reported with no Earnable Salaries, in which case their liabilities, if any, were included with inactive members

[2] Restated due to incorrect data submitted for prior valuation.

Table C.2 Age and Service Distribution
Active Male Members

	Service					
Age	**Under 1**	**1 – 5**	**6 – 10**	**11 - 15**	**16 - 20**	**21 - 25**
Under 25	417	539				
25 to 30	1,375	7,882	408			
30 to 35	925	9,145	6,708	151		
35 to 40	772	6,029	7,682	3,236	88	
40 to 45	632	4,409	4,453	3,804	2,312	67
45 to 50	658	3,842	3,443	2,820	3,334	1,814
50 to 55	610	3,831	3,154	2,483	3,082	2,615
55 to 60	515	3,429	2,759	2,128	2,417	2,051
60 to 65	252	1,838	1,230	993	1,028	712
65 to 70	127	701	411	245	258	157
70 & Up	70	407	166	87	76	49
Unknown	1	3				
Total	6,354	42,055	30,414	15,947	12,595	7,465

	Service					
Age	**26 - 30**	**31 - 35**	**36 - 40**	**41 - 45**	**Over 45**	**Total**
Under 25						956
25 to 30						9,665
30 to 35						16,929
35 to 40						17,807
40 to 45						15,677
45 to 50	118					16,029
50 to 55	3,193	278				19,246
55 to 60	3,763	4,817	384			22,263
60 to 65	1,001	1,552	998	15		9,619
65 to 70	161	179	162	93	5	2,499
70 & Up	50	60	45	30	30	1,070
Unknown						4
Total	8,286	6,886	1,589	138	35	131,764

Table C.3 Age and Service Distribution
Active Female Members

	Service					
Age	**Under 1**	**1 - 5**	**6 - 10**	**11 - 15**	**16 - 20**	**21 - 25**
Under 25	1,802	2,848				
25 to 30	3,523	29,433	2,033			
30 to 35	1,816	21,415	20,524	525		
35 to 40	1,480	12,393	16,718	8,150	399	
40 to 45	1,390	10,141	9,857	8,043	6,201	232
45 to 50	1,234	9,875	9,442	6,848	7,168	4,404
50 to 55	1,091	8,789	9,727	7,922	7,957	6,027
55 to 60	715	5,917	6,822	6,758	8,016	5,409
60 to 65	278	2,358	2,591	2,405	3,206	2,543
65 to 70	114	777	592	505	607	527
70 & Up	57	407	211	143	159	143
Unknown	10	20				
Total	13,510	104,373	78,517	41,299	33,713	19,285

	Service					
Age	**26 - 30**	**31 - 35**	**36 - 40**	**41 - 45**	**Over 45**	**Total**
Under 25						4,650
25 to 30						34,989
30 to 35						44,280
35 to 40						39,140
40 to 45						35,864
45 to 50	328					39,299
50 to 55	6,068	523	1			48,105
55 to 60	6,302	6,727	806	2		47,474
60 to 65	2,312	1,762	1,514	59	2	19,030
65 to 70	476	278	161	111	13	4,161
70 & Up	140	102	62	35	37	1,496
Unknown						30
Total	15,626	9,392	2,544	207	52	318,518

Table C.4 Age and Service Distribution All Active Members

	Service					
Age	**Under 1**	**1 - 5**	**6 - 10**	**11 - 15**	**16 - 20**	**21 - 25**
Under 25	2,219	3,387				
25 to 30	4,898	37,315	2,441			
30 to 35	2,741	30,560	27,232	676		
35 to 40	2,252	18,422	24,400	11,386	487	
40 to 45	2,022	14,550	14,310	11,847	8,513	299
45 to 50	1,892	13,717	12,885	9,668	10,502	6,218
50 to 55	1,701	12,620	12,881	10,405	11,039	8,642
55 to 60	1,230	9,346	9,581	8,886	10,433	7,460
60 to 65	530	4,196	3,821	3,398	4,234	3,255
65 to 70	241	1,478	1,003	750	865	684
70 & Up	127	814	377	230	235	192
Unknown	11	23				
Total	19,864	146,428	108,931	57,246	46,308	26,750

	Service					
Age	**26 - 30**	**31 - 35**	**36 - 40**	**41 - 45**	**Over 45**	**Total**
Under 25						5,606
25 to 30						44,654
30 to 35						61,209
35 to 40						56,947
40 to 45						51,541
45 to 50	446					55,328
50 to 55	9,261	801	1			67,351
55 to 60	10,065	11,544	1,190	2		69,737
60 to 65	3,313	3,314	2,512	74	2	28,649
65 to 70	637	457	323	204	18	6,660
70 & Up	190	162	107	65	67	2,566
Unknown						34
Total	23,912	16,278	4,133	345	87	450,282

Table C.5 Inactive Members

Fiscal Year Ending June 30	Number Vested	Total Number	Male % of Total	Female % of Total
1996	13,261	56,424	26.8%	73.2%
1997	13,925	59,385	27.2	72.8
1998	14,038	61,848	27.4	72.6
1999	15,421	69,112	27.7	72.3
2000	16,211	75,580	27.8	72.2
2001	18,469	87,146	28.1	71.9
2002	19,703	96,159	28.0	72.0
2003	20,627	104,617	28.3	71.7
2004	22,511	116,128	28.7	71.3
2005	24,113	124,394	28.8	71.2

Fiscal Year Ending June 30	Average Account on Deposit	Average Age	Average Service Credit	Average Years Inactive
1996	$ 10,931	47.2	3.5	8.0
1997	11,431	47.3	3.5	8.2
1998	11,731	47.5	3.4	8.3
1999	12,105	47.1	3.3	8.0
2000	12,325	46.8	3.2	7.8
2001	12,889	50.7	3.2	8.2
2002	12,997	46.0	3.1	7.3
2003	12,691	46.0	3.0	7.4
2004	12,418	45.8	2.9	7.3
2005	12,177	45.9	2.9	7.4

Table C.6 Service Retirants

Fiscal Year Ending June 30	Total	Male % of Total	Female % of Total
1996	133,764	38.2%	61.8%
1997	135,809	38.3	61.7
1998	139,193	38.3	61.7
1999	142,309	38.3	61.7
2000	145,415	38.1	61.9
2001	149,727	38.0	62.0
2002	154,884	37.8	62.2
2003	159,172	37.6	62.4
2004	169,022	37.2	62.8
2005	176,008	36.9	63.1

Fiscal Year Ending June 30	Average Age at Retirement	Average Years of Service Credit	Final Average Compensation	Average Current Allowance Payable
1996	60.9	24.7	$ 2,743	$ 1,502
1997	60.8	24.8	2,837	1,566
1998	60.8	24.7	2,945	1,638
1999	60.7	24.8	3,057	1,729
2000	60.7	25.0	3,175	1,824
2001	60.7	25.4	3,356	2,033
2002	60.7	25.7	3,539	2,183
2003	60.7	25.9	3,735	2,339
2004	60.7	26.0	3,931	2,488
2005	60.8	26.1	4,103	2,617

Appendix D
Glossary

The following definitions are largely excerpts from a list adopted in 1981 by the major actuarial organizations in the United States. In some cases, the definitions have been modified for specific applicability to the CalSTRS DB Program. Defined terms are capitalized throughout this Appendix.

Actuarial Assumptions: Assumptions as to the occurrence of future events affecting pension costs, such as mortality, withdrawal, disablement, and retirement, changes in compensation, rates of investment earnings and asset appreciation or depreciation, and procedures used to determine other relevant items.

Actuarial Cost Method: A procedure for determining the Actuarial Present Value of pension plan benefits and expenses and for developing an actuarially equivalent allocation of such value to time periods, usually in the form of a Normal Cost and an Actuarial Obligation.

Actuarial Gain or Loss: A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions during the period between two Actuarial Valuation dates, as determined in accordance with a particular Actuarial Cost Method.

Actuarial Obligation: That portion, as determined by a particular Actuarial Cost method, of the Actuarial Present Value of pension plan benefits and expenses which is not provided for by future Normal Costs.

Actuarial Present Value: The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions.

Actuarial Surplus: The excess, if any, of the Actuarial Value of Assets over the Actuarial Obligation.

Actuarial Valuation: The determination, as of a Valuation Date, of the Normal Cost, Actuarial Obligation, Actuarial Value

	of Assets, and related Actuarial Present Values for a pension plan.
Actuarial Value of Assets:	The value of cash, investments and other property belonging to a pension plan, as used by the actuary for the purpose of an Actuarial Valuation.
Actuarial Equivalent:	Of equal Actuarial Present Value, determined as of a given date with each value based on the same set of Actuarial Assumptions.
Entry Age Cost Method:	An actuarial cost method under which the Actuarial Present Value of Projected Benefits of each individual included in an Actuarial Valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages. The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost. The portion of this Actuarial Present Value not provided for at a valuation date by the Actuarial Present Value of future Normal Costs is called the Actuarial Obligation.
Normal Cost:	The portion of the Actuarial Present Value of Projected Benefits which is allocated to a valuation year by the Actuarial Cost Method.
Unfunded Actuarial Obligation:	The excess, if any, of the Actuarial Obligation over the Actuarial Value of Assets.
Valuation Date:	June 30, 2005.

Attachment 2
Regular Meeting – Item 6a
April 7, 2006

PROPOSED
RESOLUTION
OF THE
TEACHERS' RETIREMENT BOARD

SUBJECT: Adoption of June 30, 2005, Actuarial Valuation for the Defined Benefit Program

RESOLUTION NO. _____

WHEREAS, Section 22311 of the Education Code requires a periodic actuarial valuation of the California State Teachers' Retirement System's assets and liabilities; and

WHEREAS, Milliman has performed the necessary actuarial calculations using the June 30, 2005 data provided by the California State Teachers' Retirement System; and

WHEREAS, Milliman has determined that the assets under Section 22955(b) of the Education Code exceeds the obligation under Section 22955(b) of the Education Code and that a normal cost deficit under Section 22955(c) of the Education Code does not exist; and

WHEREAS, Milliman, based on the accompanying Actuarial Valuation Report does not recommend that contributions under Section 22955(b) be contributions be made by the State to the Teachers' Retirement Fund ; and

WHEREAS, the Teachers' Retirement Board has reviewed the June 30, 2005 Actuarial Valuation Report presented by Milliman; therefore, be it

RESOLVED that the Teachers' Retirement Board adopts the accompanying Actuarial Valuation Report from Milliman, and further

RESOLVED that the Teachers' Retirement Board finds and declares that there is not an Unfunded Actuarial Obligation associated with the benefit plan as it existed as of July, 1, 1990, nor is there a Normal Cost deficit associated with those benefits.

Adopted by:
Teachers' Retirement Board

On: April 7, 2006

_____
Jack Ehnes
Chief Executive Officer

Reviewed by:

_____
Christopher Waddell
General Counsel