

Orange County Employees Retirement System

*Revised Actuarial Valuation and Review
as of December 31, 2004*

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March 17, 2006

*Board of Retirement
Orange County Employees Retirement System
2223 Wellington Avenue
Santa Ana, CA 92701*

Dear Board Members:

We are pleased to submit this revised Actuarial Valuation and Review as of December 31, 2004 to reflect the 7.75% investment return assumption adopted by the Board, as well as changes in the rate group classifications for some members reported to us for the December 31, 2004 valuation adopted by the Board, as provided to us by the Retirement System. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2006-2007 and analyzes the preceding year's experience.

The census information on which our calculations were based was prepared by the OCERS and the financial information was provided by the Retirement System. That assistance is gratefully acknowledged. The actuarial calculations were completed under the supervision of Andy Yeung, ASA, MAAA, Enrolled Actuary.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices, including Actuarial Standards of Practice (ASOPs) Nos. 4, 27 and 35. In particular, it reflects the actuary's responsibility under Section 5.8 of ASOP No. 4 "for assessing the implications of the overall results, in terms of short- and long-range benefit security and expected cost progression."

To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our best professional judgment, the assumptions and methodologies as adopted by the Board of Retirement, individually and in combination, are reasonably related to the experience of and the expectations for the Plan and will not, in and of themselves, expose the retirement system to "unsound financial risk." In this regard, we consider "unsound financial risk" to mean the following:


*Board of Retirement
Orange County Employees Retirement System
March 17, 2006
Page 2*

- *A substantial likelihood that future required contribution rates as a percentage of payroll will be dramatically higher than the rates shown in this report, given the uncertainties of actuarial projections and assuming the full payment of all recommended contributions; or*
- *A substantial likelihood that plan assets will be insufficient to pay benefit payments when due, given the uncertainties of actuarial projections and assuming the full payment of all recommended contributions.*

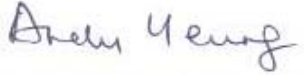
We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

THE SEGAL COMPANY

By: 

*Paul Angelo, FSA, EA, MAAA
Vice President and Actuary*



*Andy Yeung, ASA, EA, MAAA
Associate Actuary*

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SECTION 1

VALUATION SUMMARY

Purpose	i
Significant Issues in Valuation Year.....	ii
Summary of Key Valuation Results.....	iv
Summary of Key Valuation Demographic and Financial Data.....	v

SECTION 2

VALUATION RESULTS

A. Member Data	1
B. Financial Information.....	4
C. Actuarial Experience.....	7
D. Employer and Member Contributions	12
E. Information Required by GASB.....	22

SECTION 3

SUPPLEMENTAL INFORMATION

EXHIBIT A

Table of Plan Coverage	
i. General County (other than OCTA)	23
ii. General OCTA.....	24
iii. Safety Law Enforcement.....	25
iv. Safety Probation Officers.....	26
v. Safety Fire Authority	27

EXHIBIT B

Members in Active Service During Year Ended December 31, 2004	
i. General County (other than OCTA)	28
ii. General OCTA	29
iii. Safety Law Enforcement.....	30
iv. Safety Probation Officers.....	31
v. Safety Fire Authority	32

EXHIBIT C

Reconciliation of Member Data – December 31, 2003 to December 31, 2004	33
--	----

EXHIBIT D

Summary Statement of Income and Expenses on an Actuarial Value Basis.....	34
---	----

EXHIBIT E

Summary Statement of Assets	35
-----------------------------------	----

EXHIBIT F

Actuarial Balance Sheet.....	36
------------------------------	----

EXHIBIT G

Summary of Reported Asset Infor- mation as of December 31, 2004.....	37
---	----

EXHIBIT H

Development of Unfunded/(Overfunded) Actuarial Accrued Liability for Year Ended December 31, 2004	38
--	----

EXHIBIT I

Section 415 Limitations.....	39
------------------------------	----

EXHIBIT J

Definitions of Pension Terms	40
------------------------------------	----

SECTION 4

REPORTING INFORMATION

EXHIBIT I

Supplementary Information Required by GASB – Schedule of Employer Contributions	42
---	----

EXHIBIT II

Supplementary Information Required by GASB – Schedule of Funding Progress	43
---	----

EXHIBIT III

Supplementary Information Required by GASB	44
---	----

EXHIBIT IV

Actuarial Assumptions and Actuarial Cost Method	45
--	----

EXHIBIT V

Summary of Plan Provisions.....	60
---------------------------------	----

Appendix A

UAAL Amortization Schedule as of December 31, 2004.....	70
--	----

Appendix B

Member Contribution Rates.....	71
i. Plans A, G, I and M	71
ii. Plans B, H, J and N.....	73
iii. Plan E	75
iv. Plan F	77

Appendix C

Reconciliation of the December 31, 2003 Valuation Results With Those Calculated By The System's Prior Actuary	79
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SECTION 1: Valuation Summary for the Orange County Employees Retirement System

Purpose

This revised report has been prepared by The Segal Company to present a valuation of the Orange County Employees Retirement System as of December 31, 2004 to reflect an investment return assumption of 7.75% approved by the Board, as well as changes in the rate group classifications for some members reported to us for the December 31, 2004 valuation, as reported to us by the Retirement System. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- The benefit provisions of the Retirement System, as administered by the Board of Retirement;
- The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of December 31, 2004, provided by the Retirement System;
- The assets of the Plan as of December 31, 2004, provided by the Retirement System;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

Orange County Employees Retirement System's basic financial goal is to establish contributions which fully fund the System's liabilities, and which, as a percentage of payroll, remain as level as possible for each generation of active members. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.

In preparing this valuation, we have employed generally accepted actuarial methods and assumptions to evaluate the System's assets, liabilities and future contribution requirements. Our calculations are based upon member data and financial information provided to us by the System's staff. This information has not been audited by us, but it has been reviewed and found to be consistent, both internally and with prior year's information.

The contribution requirements are determined as a percentage of payroll. The System's employer rates provide for both normal cost and a contribution to amortize any unfunded or overfunded actuarial accrued liabilities. In this valuation, we have applied the Board's new funding policy to amortize the System's entire unfunded actuarial accrued liability as of December 31, 2004 over a declining 30-year period. The rates calculated in this report may be adopted by the Board for the fiscal year that extends from July 1, 2006 through June 30, 2007.

SECTION 1: Valuation Summary for the Orange County Employees Retirement System

Significant Issues in This Valuation

The following key findings were the result of this revised actuarial valuation:

- The ratio of the valuation value of assets to actuarial accrued liabilities decreased from 78.53% to 70.85%. The System's unfunded actuarial accrued liability has changed from \$1.31 billion as of December 31, 2003 to \$2.16 billion as of December 31, 2004. The increase is mainly due to a combination of benefit improvement and changes in actuarial assumptions and methods. A reconciliation of the System's unfunded actuarial accrued liability is provided in Section 3, Exhibit H.
- The aggregate employer rate calculated in this valuation has increased from 18.92% of payroll (after reflecting the cost of benefit improvements that became effective for fiscal year 2005-2006) to 20.71% of payroll. The reasons for the changes are: (i) change in membership demographics, (ii) change in actuarial methods and actuarial assumptions, (iii) adjustment to reflect 18-month delay in implementation of higher contribution rates calculated in the December 31, 2004 valuation and (iv) other actuarial losses. A reconciliation of the System's aggregate employer rate is provided in Section 2, Subsection D (see Chart 15). Please note that the 20.71% of payroll assumes a 3-year phase-in of the contribution rate increase calculated in this valuation. The contribution rate without the 3-year phase-in is 24.29% of payroll.
- The aggregate member rate calculated in this valuation has increased from 9.70% of payroll to 10.25% of payroll. The change in member rate is primarily due to the changes in actuarial assumptions. A reconciliation of the System's aggregate member rate is provided in Section 2, Subsection D (see Chart 16).
- The results of this valuation reflect the adoption by the Board of changes in economic and non-economic assumptions recommended in the June 30, 2005 Triennial Experience Study. Subsequently, the Board adopted a 3.50% inflation assumption and an investment return assumption of 7.75%. The Board also adopted: (i) a change from the Projected Unit Credit funding method to the Entry Age Normal funding method, (ii) a policy to amortize the System's entire unfunded actuarial liability as of December 31, 2004 over a declining 30-year period, (iii) a change in the method that calculates the actuarial value of assets, and (iv) other changes in the methods and procedures used in prior valuations. The impact of the assumption and method changes is provided in Section 2, Subsection D (see Charts 15 and 16). The specific assumption changes can be found in Section 4, Exhibit IV. A description of the method that calculates the actuarial value of assets is provided in Section 2, subsection B (Chart 7). The other changes in methods and procedures used in prior valuations are detailed in our letter to the System dated February 3, 2005. A copy of that letter is provided in Section 4, Appendix C.

SECTION 1: Valuation Summary for the Orange County Employees Retirement System

- As indicated in Section 2, Subsection B (see Chart 7) of this report, the total unrecognized investment gain as of December 31, 2004 is \$145,370,000. This investment gain will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, and will serve to offset any investment losses that may occur after December 31, 2004. This implies that if the System earns the assumed rate of investment return of 7.75% per year (net of expenses) on a **market value** basis, that will result in investment gains on the actuarial value of assets in the next few years.

Impact of Future Experience on Contribution Rates

Future contribution requirements may differ from those determined in the valuation because of:

- difference between actual experience and anticipated experience;
- changes in actuarial assumptions or methods;
- changes in statutory provisions; and
- difference between the contribution rates determined by the valuation and those adopted by the Board.

SECTION 1: Valuation Summary for the Orange County Employees Retirement System

Summary of Key Valuation Results (Dollar amounts in thousands)

	December 31, 2004		December 31, 2003	
Employer Contribution Rates:				
<u>General</u>	Total Rate ⁽¹⁾	Estimated Annual Amount ⁽²⁾	Total Rate ⁽³⁾	Estimated Annual Amount ⁽²⁾
Rate Group #1 – Plans A and B (non-OCTA)	13.29%	\$6,362	12.12%	\$5,801
Rate Group #2 – Plans I and J (2.7% @ 55)	18.26%	148,706	16.27%	132,500
Rate Group #3 – Plans G and H (2.5% @ 55 – non-Rancho Santa Margarita)	16.59%	7,696	14.81%	6,870
Rate Group #4 – Plan H (2.5% @ 55 - Rancho Santa Margarita)	7.41%	78	4.70%	50
Rate Group #5 – Plans A and B (OCTA)	13.10%	11,479	10.95%	9,595
Rate Group #9 - Plans M and N (TCA)	14.56%	837	12.57%	723
<u>Safety</u>				
Rate Group #6 – Plans E and F (Probation)	21.00%	11,079	14.80%	7,808
Rate Group #7 – Plans E and F (Law Enforcement)	38.48%	53,020	38.89%	53,585
Rate Group #8 – Plans E and F (Fire Authority)	33.20%	21,076	32.88%	20,873
<u>All Groups Combined</u>	20.71%	\$260,333	18.92%	\$237,805
Average Member Contribution Rates:				
<u>General</u>	Total Rate ⁽¹⁾	Estimated Annual Amount ⁽²⁾	Total Rate ⁽³⁾	Estimated Annual Amount ⁽²⁾
Rate Group #1 – Plans A and B (non-OCTA)	7.08%	\$3,389	6.88%	\$3,293
Rate Group #2 – Plans I and J (2.7% @ 55)	10.31%	83,962	9.65%	78,588
Rate Group #3 – Plans G and H (2.5% @ 55 – non-Rancho Santa Margarita)	10.36%	4,806	9.73%	4,513
Rate Group #4 – Plan H (2.5% @ 55 - Rancho Santa Margarita)	11.13%	117	10.66%	112
Rate Group #5 – Plans A and B (OCTA)	7.97%	6,984	7.65%	6,703
Rate Group #9 – Plans M and N (TCA)	8.26%	475	8.14%	468
<u>Safety</u>				
Rate Group #6 – Plans E and F (Probation)	11.62%	6,130	11.37%	5,998
Rate Group #7 – Plans E and F (Law Enforcement)	11.81%	16,273	11.48%	15,818
Rate Group #8 – Plans E and F (Fire Authority)	10.61%	6,735	10.09%	6,405
<u>All Groups Combined</u>	10.25%	\$128,871	9.70%	\$121,898
Funded Status⁽⁴⁾:				
Actuarial accrued liability	\$7,403,972		\$6,099,433	
Valuation value of assets	5,245,821		4,790,099	
Funded percentage	70.85%		78.53%	
Unfunded Actuarial Accrued Liability	\$2,158,151		\$1,309,334	
Key Assumptions:				
Interest rate	7.75%		7.50%	
Inflation rate	3.50%		4.00%	
Across-the-board real salary increase	0.00%		0.00%	

⁽¹⁾ Rates presented here assumed a three year phase-in will be adopted. Please refer to Section 2, Subsection C (Chart 13) for the rates before the phase-in.

⁽²⁾ Based on December 31, 2004 projected annual compensation.

⁽³⁾ December 31, 2003 rates have been adjusted to reflect the benefit improvements that became effective for fiscal year 2005 – 2006.

⁽⁴⁾ December 31, 2003 funded status has not been adjusted to reflect the benefit improvements that became effective for fiscal year 2005 – 2006.

SECTION 1: Valuation Summary for the Orange County Employees Retirement System

Summary of Key Valuation Demographic and Financial Data

	December 31, 2004	December 31, 2003	Percentage Change
Active Members:			
Number of members	22,502	22,672	-0.7%
Average age	44.1	43.5	N/A
Average service	11.1	10.7	3.7%
Projected total compensation	\$1,257,085,000	\$1,243,963,814	1.1%
Average projected compensation	\$55,865	\$54,864	1.8%
Retired Member and Beneficiaries:			
Number of members:			
Service retired	6,920	6,642	4.2%
Disability retired	1,172	1,134	3.4%
Beneficiaries	1,341	1,303	2.9%
Total	9,433	9,079	3.9%
Average age	68.3	N/A	N/A
Average monthly benefit ⁽¹⁾	\$2,057	\$1,936	6.3%
Vested Terminated Members:			
Number of terminated vested members ⁽²⁾	1,910	2,278	-16.2%
Total Account Balance	\$51,841,637	\$47,753,550	8.6%
Summary of Financial Data (dollar amounts in thousands):			
Market value of assets ⁽³⁾	\$5,556,995	\$4,959,626	12.0%
Return on market value of assets	11.26%	19.80%	N/A
Actuarial value of assets	\$5,256,380	\$4,811,317	9.3%
Return on actuarial value of assets	8.35%	N/A	N/A
Valuation value of assets	\$5,245,821	\$4,790,099	9.5%
Return on valuation value of assets	8.55%	1.40%	N/A

⁽¹⁾ Excludes monthly benefits payable from the RMBR and STAR COLA.

⁽²⁾ This includes members who chose to leave their contributions on deposit even though they have less than five years of service.

⁽³⁾ Includes County Investment Account of \$155,245,000 and \$143,744,000 as of December 31, 2004 and December 31, 2003, respectively.

SECTION 2: Valuation Results for the Orange County Employees Retirement System

A. MEMBER DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, vested terminated members, retired members and beneficiaries.

This section presents a summary of significant statistical data on these member groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A, B, and C.

A historical perspective of how the member population has changed over the past four valuations can be seen in this chart.

CHART 1
Member Population: 2001 – 2004

Year Ended December 31	Active Members	Vested Terminated Members*	Retired Members and Beneficiaries	Ratio of Non-Actives to Actives
2001	22,329	1,872	8,216	0.45
2002	22,723	2,177	8,688	0.48
2003	22,672	2,278	9,079	0.50
2004	22,502	1,910	9,433	0.50

**Includes terminated members due a refund of member contributions*

SECTION 2: Valuation Results for the Orange County Employees Retirement System

Active Members

Plan costs are affected by the age, years of service and compensation of active members. In this year's valuation, there were 22,502 active members with an average age of 44.1, average years of service of 11.1 years and average compensation of \$55,865. The 22,672 active members in the prior valuation had an average age of 43.6, average service of 10.7 years and average compensation of \$54,864.

Inactive Members

In this year's valuation, there were 1,910 members with a vested right to a deferred or immediate vested benefit or entitled to a return of their member contributions versus 2,278 in the prior valuation.

These graphs show a distribution of active members by age and by years of service.

CHART 2
Distribution of Active Members by Age as of December 31, 2004

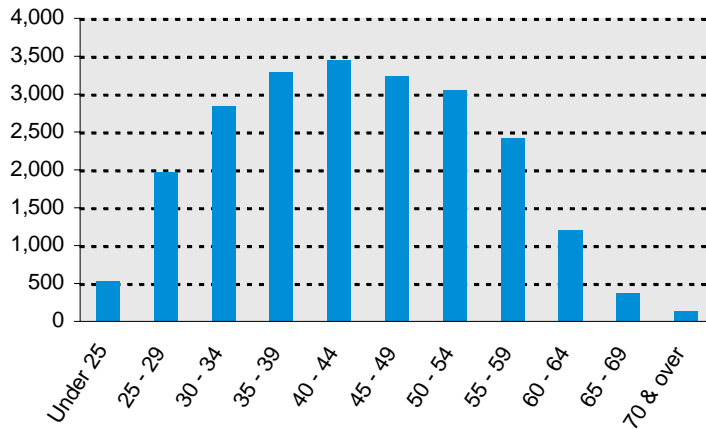
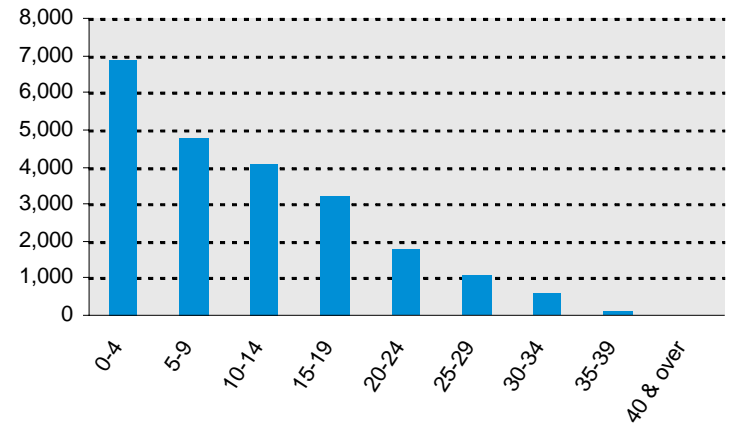


CHART 3
Distribution of Active Members by Years of Service as of December 31, 2004



SECTION 2: Valuation Results for the Orange County Employees Retirement System

Retired Members and Beneficiaries

As of December 31, 2004, 8,092 retired members and 1,341 beneficiaries were receiving total monthly benefits of \$19,404,000. For comparison, in the previous valuation, there were 7,775 retired members and 1,288 beneficiaries receiving total monthly benefits of \$17,577,000. These monthly benefits exclude benefits payable from the RMBR and STAR COLA.

These graphs show a distribution of the current retired members based on their monthly amount and age, by type of pension.

CHART 4

Distribution of Retired Members and Beneficiaries by Type and by Monthly Amount as of December 31, 2004

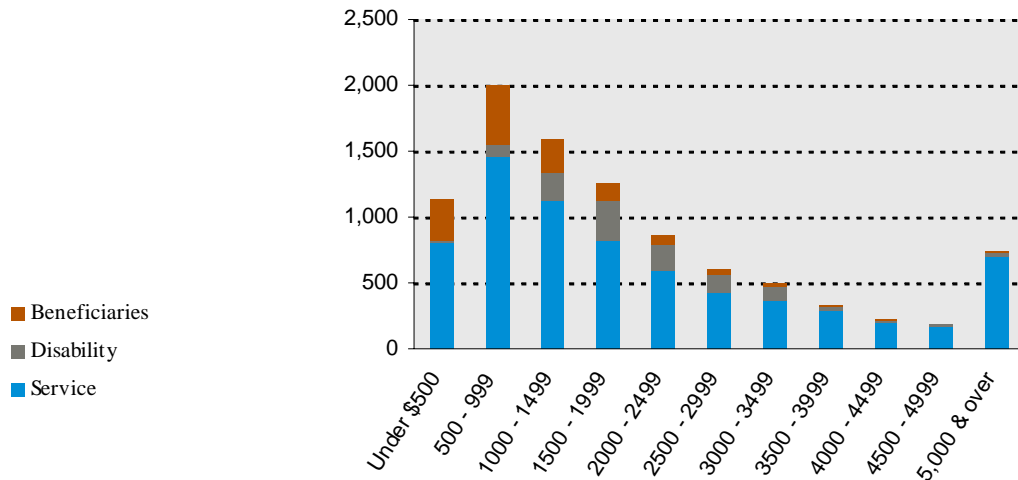
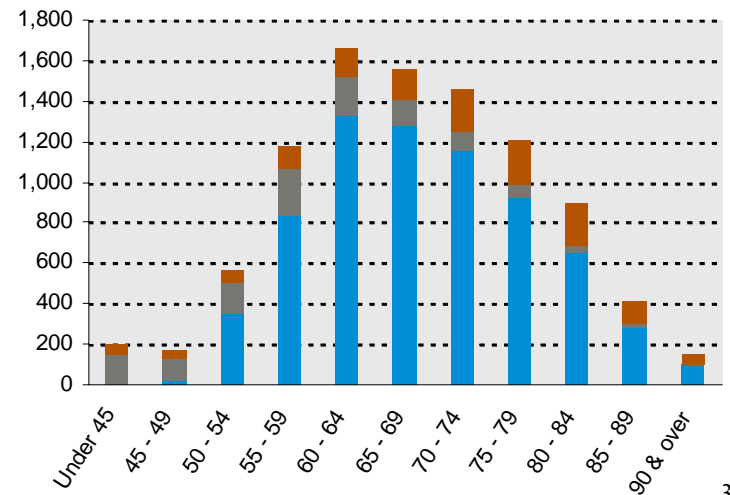


CHART 5

Distribution of Retired Members and Beneficiaries by Type and by Age as of December 31, 2004



SECTION 2: Valuation Results for the Orange County Employees Retirement System

B. FINANCIAL INFORMATION

Retirement plan funding anticipates that, over the long term, both contributions and net investment earnings (less investment fees and administrative expenses) will be needed to cover benefit payments.

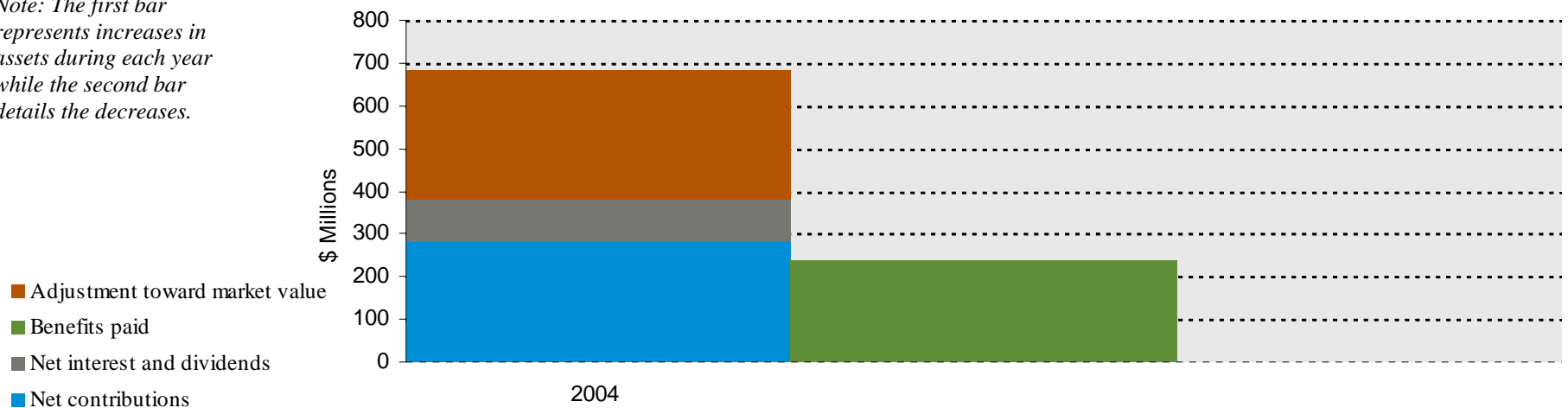
Retirement plan assets change as a result of the net impact of these income and expense components. The adjustment toward market value shown in the chart is the “non-cash” earnings on investments implicitly included in the actuarial value of assets. Additional financial information, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits D and E.

The chart depicts the components of changes in the actuarial value of assets over the last year.

Note: The first bar represents increases in assets during each year while the second bar details the decreases.

CHART 6

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended December 31, 2004



SECTION 2: Valuation Results for the Orange County Employees Retirement System

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board of Retirement has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets does not have an immediate effect on the actuarial value of assets.

The determination of the Actuarial Value of Assets and Valuation Value of Assets is provided below.

The chart shows the determination of the actuarial value of assets as of the valuation date.

CHART 7

Determination of Actuarial and Valuation Value of Assets for Year Ended December 31, 2004

Plan Year Ending	Total Actual Market Return (net)	Expected Market Return (net)	Investment Gain (Loss)	Deferred Factor	Deferred Return
2004	\$544,457,000	\$362,744,000	\$181,713,000	0.8	\$145,370,000
1. Net Market Value of Assets (Excludes \$155,245,000 in County Investment Account)					\$5,401,750,000
2. Actuarial Value of Assets					5,256,380,000
3. Non-valuation Reserves					
(a) Unclaimed member deposit					655,000
(b) Medicare medical insurance reserve					84,000
(c) RMBR					<u>9,820,000</u>
(d) Subtotal					\$10,559,000
4. Valuation Value of Assets (2)-(3)(d)					\$5,245,821,000

SECTION 2: Valuation Results for the Orange County Employees Retirement System

The market value, actuarial value, and valuation value of assets are representations of the OCERS's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets, but with less volatility. The valuation value of assets is the actuarial value, excluding any non-valuation reserves. The valuation asset value is significant because the OCERS's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

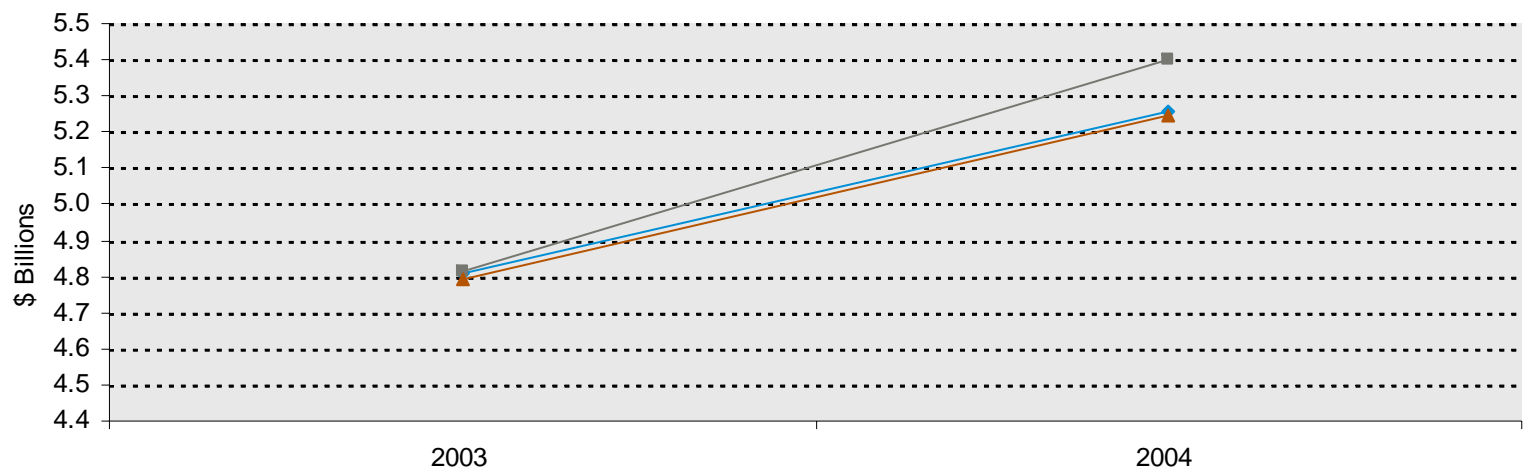
This chart shows the change in market value, actuarial value and valuation value over the past two years.

Notes: Market Value of Assets excludes the County Investment Account.

—◆— Actuarial Value
—■— Market Value
—▲— Valuation Value

CHART 8

Market Value, Actuarial Value and Valuation Value of Assets as of December 31, 2003 – 2004



SECTION 2: Valuation Results for the Orange County Employees Retirement System

C. ACTUARIAL EXPERIENCE

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term

development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

The total experience gain was \$31.2 million, a gain of \$50.5 million from investments and a loss of \$19.4 million from all other sources. A discussion of the major components of the actuarial experience is on the following pages.

This chart provides a summary of the actuarial experience during the past year.

CHART 9

Actuarial Experience for Year Ended December 31, 2004 (Dollar Amounts in Thousands)

1. Net gain/(loss) from investments ⁽¹⁾	\$50,536
2. Net gain/(loss) from other experience ⁽²⁾	<u>(19,372)</u>
3. Net experience gain/(loss): (1) + (2)	\$31,164

⁽¹⁾ Details in Chart 10. This also includes the impact of the change in the method for calculating the actuarial and valuation value of assets.

⁽²⁾ See Section 3, Exhibit H.

SECTION 2: Valuation Results for the Orange County Employees Retirement System

Investment Rate of Return

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the OCERS’s investment policy. For valuation purposes, the assumed rate of return on the valuation value of assets was 7.50% (based on December 31, 2003 valuation). The actual rate of return on a valuation basis for the 2004 plan year was 8.55%. Please note that part of the actuarial gain on the valuation value of assets was due to a change in the method that calculates the actuarial and valuation value of assets.

Since the actual return for the year was greater than the assumed return, the OCERS experienced an actuarial gain during the year ended December 31, 2004 with regard to its investments.

This chart shows the gain/(loss) due to investment experience.

CHART 10
Investment Experience for Year Ended December 31, 2004 – Valuation Value and Actuarial Value of Assets

	Valuation Value	Actuarial Value
1. Actual return	\$411,453,073	\$403,652,000
2. Average value of assets	\$4,812,233,427	\$4,832,022,500
3. Actual rate of return: (1) ÷ (2)	8.55%	8.35%
4. Assumed rate of return	7.50%	7.50%
5. Expected return: (2) x (4)	\$360,917,507	\$362,401,688
6. Actuarial gain/(loss): (1) – (5)	<u>\$50,535,566</u>	<u>\$41,250,312</u>

SECTION 2: Valuation Results for the Orange County Employees Retirement System

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. The chart below shows the rate of return on an actuarial, valuation, and market basis for the last year.

Based upon this experience, future expectations and discussions with the Board, the Board has acted to increase the assumed rate of return from 7.50% to 7.75% for this valuation.

CHART 11

Investment Return – Actuarial Value, Valuation Value and Market Value: (Dollar Amounts in Thousands)

Year Ended December 31	Valuation Value Investment Return		Actuarial Value Investment Return		Market Value Investment Return ⁽¹⁾	
	Amount	Percent	Amount	Percent	Amount	Percent
2004	\$411,453	8.55%	\$403,652	8.35%	\$544,457	11.26%

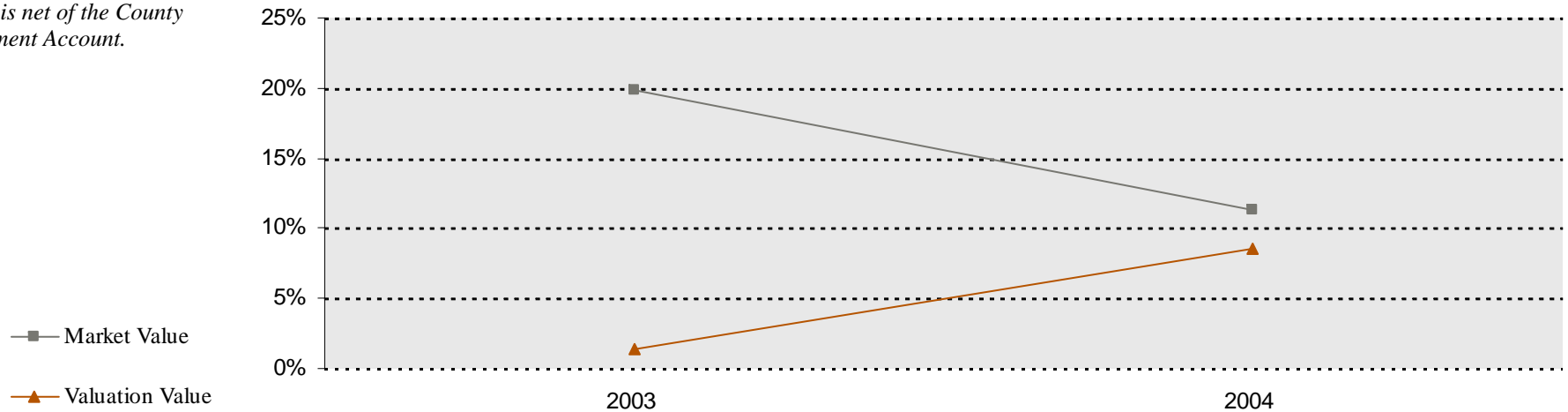
⁽¹⁾ Net of County Investment Account.

SECTION 2: Valuation Results for the Orange County Employees Retirement System

Subsection B described the actuarial asset valuation method that gradually takes into account fluctuations in the market value rate of return. The effect of this is to stabilize the actuarial rate of return, which contributes to leveling pension plan costs.

*This chart illustrates how this leveling effect has actually worked over the years 2003 - 2004 .
Note: The Market value return is net of the County Investment Account.*

CHART 12
Market and Valuation Rates of Return for Years Ended December 31, 2003 - 2004



SECTION 2: Valuation Results for the Orange County Employees Retirement System

Other Experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- actual turnover among the participants,
- retirement experience (earlier or later than expected),
- mortality (more or fewer deaths than expected),

- the number of disability retirements, and
- salary increases different than assumed.

The net loss from this other experience for the year ended December 31, 2004 amounted to \$19.4 million which is 0.26% of the actuarial accrued liability. See Exhibit H in Section 3 for a detailed development of the Unfunded Actuarial Accrued Liability.

SECTION 2: Valuation Results for the Orange County Employees Retirement System

D. EMPLOYER AND MEMBER CONTRIBUTIONS

Employer contributions consist of two components:

Normal Cost

The annual contribution rate that, if paid annually from a member's first year of membership through the year of retirement, would accumulate to the amount necessary to fully fund the member's retirement-related benefits. Accumulation includes annual crediting of interest at the assumed investment earning rate. The contribution rate is expressed as a level percentage of the member's compensation.

Please note that for members who have prior benefit service in another OCERS plan (e.g. Probation Safety members with prior General plan service), their normal cost rate for the current plan is calculated based on the date they enter service with their current plan.

Contribution to the Unfunded

Actuarial Accrued Liability (UAAL)

The annual contribution rate that, if paid annually over the UAAL amortization period, would accumulate to the amount necessary to fully fund the UAAL. Accumulation includes annual crediting of interest at the assumed investment earning rate. The contribution (or rate credit in the case of a negative unfunded actuarial accrued liability) is calculated to remain as a level percentage of future active member payroll (including payroll for new members as they enter the System) assuming a constant number of active members. In order to remain as a level percentage of payroll, amortization payments (credits) are scheduled to increase at the annual inflation rate of 3.50% (i.e., 3.50% inflation plus 0.00% real across-the-board salary increase). The current UAAL is being recognized over a declining 30-year period.

The recommended employer contributions are provided on Chart 13.

SECTION 2: Valuation Results for the Orange County Employees Retirement System

Member Contributions

Articles 6 and 6.8 of the 1937 Act define the methodology to be used in the calculation of member basic contribution rates for General members and Safety members, respectively. The basic contribution rate is determined so that the accumulation of a member's basic contributions made in a given year until a certain age will be sufficient to fund an annuity at that age that is equal to:

- 1/200 of Final Average Salary for General Plan A;
- 1/120 of Final Average Salary for General Plan B;
- 1/100 of Final Average Salary for General Plans G, H, I, and J;
- 1/120 of Final Average Salary for General Plans M and N;
- 1/200 of Final Average Salary for Safety Plan E and;
- 1/100 of Final Average Salary for Safety Plan F.

The Annuity age is 60 for General Plans A, B, M, and N, 55 for Plans G, H, I, and J, and 50 for Safety Plans E and F. It is assumed that contributions are made annually at the same rate, starting at entry age. In addition to their basic contributions, members pay one-half of the total normal cost necessary to fund their cost-of-living benefits. Accumulation includes semi-annual crediting of interest at the assumed investment earning rate.

Member contribution rates are provided in Appendix A.

SECTION 2: Valuation Results for the Orange County Employees Retirement System

CHART 13

Recommended Employer Contribution Rates as of December 31, 2004 (Dollar Amounts in Thousands)

General Employers

	December 31, 2004 Valuation		December 31, 2003 Valuation	
	<u>Rate</u>	<u>Estimated Annual Amount⁽¹⁾</u>	<u>Rate</u>	<u>Estimated Annual Amount⁽¹⁾</u>
Rate Group #1 - Plans A and B (non-OCTA)				
Normal Cost	9.55%	\$4,571	5.56%	\$2,661
UAAL ⁽²⁾	<u>6.08%</u>	<u>\$2,912</u>	<u>6.56%</u>	<u>\$3,140</u>
Total Contribution	15.63%	\$7,483	12.12%	\$5,801
Total Contribution After 3 Year Phase-In	13.29%	\$6,362	N/A	N/A
Rate Group #2 - Plans I and J (2.7% @ 55)⁽³⁾				
Normal Cost	11.74%	\$95,608	6.07%	\$49,433
UAAL ⁽²⁾	<u>10.49%</u>	<u>\$85,428</u>	<u>10.20%</u>	<u>\$83,067</u>
Total Contribution	22.23%	\$181,036	16.27%	\$132,500
Total Contribution After 3 Year Phase-In	18.26%	\$148,706	N/A	N/A
Rate Group #3 - Plans G and H (2.5% @ 55 – non-City of Rancho Santa Margarita)				
Normal Cost	10.80%	\$5,010	5.16%	\$2,394
UAAL ⁽²⁾	<u>9.35%</u>	<u>\$4,336</u>	<u>9.65%</u>	<u>\$4,476</u>
Total Contribution	20.15%	\$9,346	14.81%	\$6,870
Total Contribution After 3 Year Phase-In	16.59%	\$7,696	N/A	N/A

⁽¹⁾ See page 15 for projected annual compensation.

⁽²⁾ December 31, 2004 rate includes adjustment to reflect 18-month delay between date of valuation and date of rate implementation.

⁽³⁾ For employers with future service only benefit improvement, please refer to the employer rate adjustment on page 17.

SECTION 2: Valuation Results for the Orange County Employees Retirement System

CHART 13 (Continued)

Recommended Employer Contribution Rates as of December 31, 2004 (Dollar Amounts in Thousands)

General Employers

	December 31, 2004 Valuation		December 31, 2003 Valuation	
	Rate	Estimated Annual Amount ⁽¹⁾	Rate	Estimated Annual Amount ⁽¹⁾
Rate Group #4 – Plan H (2.5% @ 55 - City of Rancho Santa Margarita)				
Normal Cost	10.53%	\$111	1.77%	\$19
UAAL ⁽²⁾	<u>2.30%</u>	<u>\$24</u>	<u>2.93%</u>	<u>\$31</u>
Total Contribution	12.83%	\$135	4.70%	\$50
Total Contribution After 3 Year Phase-In	7.41%	\$78	N/A	N/A
Rate Group #5 – Plans A and B (OCTA)				
Normal Cost	11.71%	\$10,261	4.41%	\$3,864
UAAL ⁽²⁾	<u>5.68%</u>	<u>\$4,977</u>	<u>6.54%</u>	<u>\$5,731</u>
Total Contribution	17.39%	\$15,238	10.95%	\$9,595
Total Contribution After 3 Year Phase-In	13.10%	\$11,479	N/A	N/A
Rate Group #9 – Plans M and N (TCA)				
Normal Cost	11.45%	\$658	5.65%	\$325
UAAL ⁽²⁾	<u>7.09%</u>	<u>\$407</u>	<u>6.92%</u>	<u>\$398</u>
Total Contribution	18.54%	\$1,065	12.57%	\$723
Total Contribution After 3 Year Phase-In	14.56%	\$837	N/A	N/A

⁽¹⁾ Based on December 31, 2004 projected annual compensation (also in thousands):

Rate Group # 1	\$ 47,868
Rate Group # 2	814,380
Rate Group # 3	46,387
Rate Group # 4	1,051
Rate Group # 5	87,627
Rate Group # 9	<u>5,747</u>
Total	\$1,003,060

⁽²⁾ December 31, 2004 rate includes adjustment to reflect 18-month delay between date of valuation and date of rate implementation.

SECTION 2: Valuation Results for the Orange County Employees Retirement System

CHART 13 (Continued)

Recommended Employer Contribution Rates as of December 31, 2004 (Dollar Amounts in Thousands)

Safety Employers

	December 31, 2004 Valuation		December 31, 2003 Valuation	
	Rate	Estimated Annual Amount ⁽¹⁾	Rate	Estimated Annual Amount ⁽¹⁾
Rate Group #6 – Plans E and F (Probation)				
Normal Cost	21.37%	\$11,274	6.57%	\$3,466
UAAL ⁽²⁾	<u>12.04%</u>	<u>\$6,351</u>	<u>8.23%</u>	<u>\$4,342</u>
Total Contribution	33.41%	\$17,625	14.80%	\$7,808
Total Contribution After 3 Year Phase-In	21.00%	\$11,079	N/A	N/A
Rate Group #7 – Plans E and F (Law Enforcement)				
Normal Cost	20.43%	\$28,150	16.86%	\$23,231
UAAL ⁽²⁾	<u>17.22%</u>	<u>\$23,730</u>	<u>22.03%</u>	<u>\$30,354</u>
Total Contribution	37.65%	\$51,880	38.89%	\$53,585
Total Contribution After 3 Year Phase-In	38.48%	\$53,020	N/A	N/A
Rate Group #8 – Plans E and F (Fire Authority)				
Normal Cost	20.33%	\$12,906	17.98%	\$11,414
UAAL ⁽²⁾	<u>13.52%</u>	<u>\$8,581</u>	<u>14.90%</u>	<u>\$9,459</u>
Total Contribution	33.85%	\$21,487	32.88%	\$20,873
Total Contribution After 3 Year Phase-In	33.20%	\$21,076	N/A	N/A

General and Safety Employers Combined

Rate Groups #1 – #9

Total Contributions	24.29%	\$305,295	18.92%	\$237,805
Total Contributions After 3 Year Phase-in	20.71%	\$260,333	N/A	N/A

⁽¹⁾ Based on December 31, 2004 projected annual compensation (also in thousands):

Rate Group # 6	\$52,757
Rate Group # 7	\$137,787
Rate Group # 8	<u>\$63,481</u>
Total	\$254,025

⁽²⁾ December 31, 2004 rate includes adjustment to reflect 18-month delay between date of valuation and date of rate implementation.

SECTION 2: Valuation Results for the Orange County Employees Retirement System

CHART 13 (Continued)

Recommended Employer Contribution Rates as of December 31, 2004 (Dollar Amounts in Thousands)

**December 31, 2004 Rate Adjustment for General Employers with 2.7% @ 55
Future Service Only Benefit Improvement (Plans I and J)**

Reduction to UAAL Rate Calculated in December 31, 2004 Valuation	<u>Rate</u>	<u>Estimated Annual Amount⁽¹⁾</u>
Reduction to Total Contribution/Reduction to Total Contribution After 3 Year Phase-In	-3.24%	-\$94

⁽¹⁾ Based on December 31, 2004 projected annual compensation (also in thousands):

Retirement System	\$1,402
Local Agency Formation Commission	544
Children & Family Commission	<u>942</u>
Total	\$2,888

**December 31, 2004 Rate Adjustment for General Employers with 2.5% @ 55
Future Service Only Benefit Improvement (Plans G and H)**

Reduction to UAAL Rate Calculated in December 31, 2004 Valuation	<u>Rate</u>	<u>Estimated Annual Amount⁽²⁾</u>
Reduction to Total Contribution/Reduction to Total Contribution After 3 Year Phase-In	-4.05%	-\$44

⁽²⁾ Based on December 31, 2004 projected annual compensation (also in thousands):

Law Library	\$1,075
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SECTION 2: Valuation Results for the Orange County Employees Retirement System

CHART 14

“Pick – Up” - Discount Percentages

For every dollar of member contribution “picked up” by the employer and not deposited in the member’s contribution account, the employer can contribute less than a dollar. This is because the “pick-up” amount is not deposited in the member’s contribution account and so is not payable to a member who withdraws his or her contributions following termination of employment, and is not payable as an additional death benefit. The contribution discount percentages have changed since the prior valuation as a result of the changes in the actuarial assumptions that anticipate lower incidence of contribution refunds. They are as follows:

	December 31, 2004 Valuation Pick-Up Percentage		December 31, 2003 Valuation Pick-Up Percentage	
<i>General Members</i>				
Rate Group #1 (non-OCTA)	Plan A: 99.66%	Plan B: 97.26%	Plan A: 90.42%	Plan B: 83.28%
Rate Group #2 (2.7% @ 55)	Plan I: 99.59%	Plan J: 97.60%	Plan I: 90.42%	Plan J: 83.28%
Rate Group #3 (2.5% @ 55 – non-Rancho Santa Margarita)	Plan G: 99.50%	Plan H: 97.96%	Plan G: 90.42%	Plan H: 83.28%
Rate Group #4 (2.5% @ 55 – Rancho Santa Margarita)	N/A	Plan H: 96.92%	N/A	Plan H: 86.52%
Rate Group #5 (OCTA)	Plan A: 99.59%	Plan B: 97.43%	Plan A: 78.40%	Plan B: 79.48%
Rate Group #9 (TCA)	Plan M: 97.14%	Plan N: 97.14%	Plan M: 100.00%	Plan N: 83.43%
<i>Safety Members</i>				
Rate Group #6 (Probation)	Plan E: 99.49%	Plan F: 96.37%	Plan E: 89.52%	Plan F: 79.18%
Rate Group #7 (Law Enforcement)	Plan E: 100.00%	Plan F: 99.57%	Plan E: 99.47%	Plan F: 97.88%
Rate Group #8 (Fire Authority)	Plan E: 100.00%	Plan F: 99.63%	Plan E: 99.01%	Plan F: 98.36%

SECTION 2: Valuation Results for the Orange County Employees Retirement System

CHART 14 (Continued)

“Pick – Up” - Average Entry Age

The following table provides the average entry age by employer used in determining the “pick-up” contributions under Section 31581.1.

<u>Employer</u>	<u>Code</u>	<u>Average Entry Age</u>
<i>General</i>		
Orange County	101	33
Cemetery District	102	32
Law Library	103	40
Vector Control District	104	34
Retirement System	105	35
Fire Authority	106	32
Department of Education	108	25
Transportation Corridor Agency	109	37
City of San Juan Capistrano	110	35
Sanitation District	111	34
OCTA	112	37
U.C.I. (Bi-weekly)	113	23
U.C.I. (Monthly)	114	22
Children & Families Commission	118	28
Local Agency Formation Commission	119	32
City of Rancho Santa Margarita	120	40
Superior Court	121	32
IHSS Public Authority	122	45
<i>Safety</i>		
Probation	101	28
Law Enforcement	101	26
Fire Authority	106	26

SECTION 2: Valuation Results for the Orange County Employees Retirement System

The contribution rates as of December 31, 2004 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

Reconciliation of Recommended Contribution

The chart below details the changes in the recommended contribution from the prior valuation to the current year's valuation.

The chart reconciles the contribution from the prior valuation to the amount determined in this valuation.

CHART 15

Reconciliation of Recommended Contribution from December 31, 2003 to December 31, 2004 (Dollars in Thousands)

	Contribution Rate	Estimated Amount ⁽¹⁾
Recommended Contribution Rate as of December 31, 2003 After Reflecting Plan Amendments Effective for FY 2005-2006	18.92%	\$237,805
Effect of methodology and procedure changes ⁽²⁾	2.86%	\$35,953
Effect of investment gain	-0.44%	-5,531
Effect of lower than expected salary increase	-0.36%	-4,526
Effect of higher normal cost from change in membership demographics	0.47%	5,908
Effect of changes in actuarial assumptions recommended in December 31, 2004 Triennial Experience Study	6.02%	75,677
Effect of adjustment for 18-month delay in implementation of higher contribution rates	1.74%	21,873
Effect of change to Entry Age Normal, 3.5% inflation, and 30 year level dollar amortization schedule	-4.04%	-50,665
Effect of change in investment return assumption to 7.75%	-2.03%	-25,656
Effect of other experience (gain)/loss	<u>1.15%</u>	<u>14,457</u>
Total change	5.37%	\$67,490
Recommended Contribution Rate as of December 31, 2004	24.29%	\$305,295
Recommended Contribution Rate as of December 31, 2004 After 3 Year Phase-in	20.71%	\$260,333

⁽¹⁾ Based on December 31, 2004 projected compensation of \$1,257,085,000.

⁽²⁾ See Appendix C for the detail of these changes.

SECTION 2: Valuation Results for the Orange County Employees Retirement System

The member contribution rates as of December 31, 2004 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

Reconciliation of Recommended Contribution Rate
 The chart below details the changes in the recommended member contribution rate from the prior valuation to the current year’s valuation.

The chart reconciles the member contribution from the prior valuation to the amount determined in this valuation.

CHART 16
Reconciliation of Average Recommended Member Contribution from December 31, 2003 to December 31, 2004 (Dollar Amounts in Thousands)

	<u>Contribution Rate</u>	<u>Estimated Amount</u> ⁽¹⁾
Average Recommended Contribution Rate as of December 31, 2003 After Reflecting Plan Amendments Effective for FY 2005 – 2006.	9.70%	\$121,898
Effect of change in actuarial assumptions	0.55%	\$6,973
Average Recommended Contribution Rate as of December 31, 2004	10.25%	\$128,871

⁽¹⁾ Based on December 31, 2004 projected compensation of \$1,257,085,000.

SECTION 2: Valuation Results for the Orange County Employees Retirement System

E. INFORMATION REQUIRED BY GASB

Governmental Accounting Standards Board (GASB) reporting information provides standardized information for comparative purposes of governmental pension plans. This information allows a reader of the financial statements to compare the funding status of one governmental plan to another on relatively equal terms.

Critical information to GASB is the historical comparison of the GASB required contributions to the actual contributions. This comparison demonstrates whether a plan is being funded on an actuarially sound basis and in accordance with the GASB funding requirements. Chart 17 below presents a graphical representation of this information for the Plan.

The other critical piece of information regarding the Plan’s financial status is the funded ratio. This ratio compares the actuarial value of assets to the actuarial accrued liabilities of the plan as calculated under GASB. High ratios indicate a well-funded plan with assets sufficient to pay most benefits. Lower ratios may indicate recent changes to benefit structures, funding of the plan below actuarial requirements, poor asset performance, or a variety of other changes.

The details regarding the calculations of these values and other GASB numbers may be found in Section 4, Exhibits I, II, and III.

These graphs show key GASB information. In Chart 17, actual contributions excludes transfer from the County Investment Account.

CHART 17
Required Versus Actual Contributions

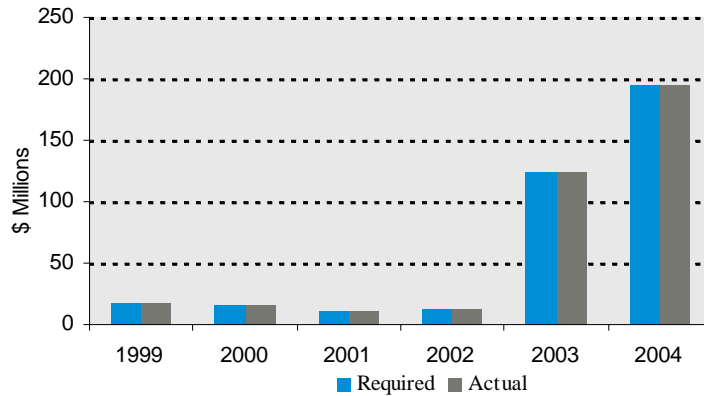
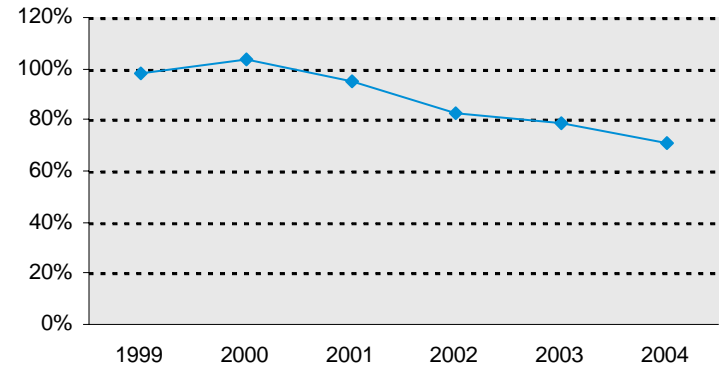


CHART 18
Funded Ratio



SECTION 3: Supplemental Information for the Orange County Employees Retirement System

EXHIBIT A

Table of Plan Coverage

i. General County (other than OCTA)

Category	Year Ended December 31		Change From Prior Year
	2004	2003	
Active members in valuation			
Number	16,880	17,000	-0.7%
Average age	44.5	42.1	N/A
Average service	10.7	10.6	0.9%
Projected total compensation ⁽¹⁾	\$915,432,956	\$899,473,663	1.8%
Projected average compensation	\$54,235	\$52,910	2.5%
Account balances	\$676,555,330	Not Available	N/A
Total active vested members	11,649	Not Available	N/A
Vested terminated members			
Number	1,588	1,953	-18.7%
Average age	44.9	Not Available	N/A
Total account balance	\$43,095,905	\$39,957,126	7.9%
Retired members			
Number in pay status	5,782	7,420	1.9% (Total)
Average age	70.4	Not Available	N/A
Average monthly benefit	\$1,948	\$1,712	4.7% (Total)
Disabled members			
Number in pay status	631	Included above	N/A
Average age	61.9	Included above	N/A
Average monthly benefit	\$1,688	Included above	N/A
Beneficiaries			
Number in pay status	1,151	Included above	N/A
Average age	71.6	Included above	N/A
Average monthly benefit	\$1,071	Included above	N/A

(1) For members without a salary reported for the December 31, 2004 valuation, we have assigned them an annual salary of \$51,414.

SECTION 3: Supplemental Information for the Orange County Employees Retirement System

EXHIBIT A

Table of Plan Coverage

ii. General OCTA

Category	Year Ended December 31		Change From Prior Year
	2004	2003	
Active members in valuation			
Number	2,048	2,023	1.2%
Average age	46.1	45.9	N/A
Average service	8.7	9.1	-4.4
Projected total compensation ⁽¹⁾	\$87,627,026	\$86,061,172	1.8%
Projected average compensation	\$42,787	\$42,541	0.6%
Account balances	\$68,734,751	Not Available	N/A
Total active vested members	1,063	Not Available	N/A
Vested terminated members			
Number	175	190	-7.9%
Average age	47.3	Not Available	N/A
Total account balance	\$5,656,978	\$5,065,832	11.7%
Retired members			
Number in pay status	351	560	11.3% (Total)
Average age	66.0	Not Available	N/A
Average monthly benefit	\$1,417	\$1,402	4.3% (Total)
Disabled members			
Number in pay status	194	Included above	N/A
Average age	57.9	Included above	N/A
Average monthly benefit	\$1,761	Included above	N/A
Beneficiaries			
Number in pay status	78	Included above	N/A
Average age	66.1	Included above	N/A
Average monthly benefit	\$918	Included above	N/A

(1) For members without a salary reported for the December 31, 2004 valuation, we have assigned them an annual salary of \$51,414.

SECTION 3: Supplemental Information for the Orange County Employees Retirement System

EXHIBIT A

Table of Plan Coverage

iii. Safety Law Enforcement

Category	Year Ended December 31		Change From Prior Year
	2004	2003	
Active members in valuation			
Number	1,828	1,846	-1.0%
Average age	40.6	40.2	N/A
Average service	13.1	12.9	1.6%
Projected total compensation ⁽¹⁾	\$137,787,931	\$141,377,525	-2.5%
Projected average compensation	\$75,376	\$76,586	-1.6%
Account balances	\$108,085,839	Not Available	N/A
Total active vested members	1,602	Not Available	N/A
Vested terminated members			
Number	100	87	14.9%
Average age	40.1	Not Available	N/A
Total account balance	\$2,107,072	\$1,940,181	8.6%
Retired members			
Number in pay status	607	921	8.6% (Total)
Average age	63.2	Not Available	N/A
Average monthly benefit	\$4,766	\$3,772	6.0% (Total)
Disabled members			
Number in pay status	289	Included above	N/A
Average age	55.5	Included above	N/A
Average monthly benefit	\$3,147	Included above	N/A
Beneficiaries			
Number in pay status	104	Included above	N/A
Average age	67.3	Included above	N/A
Average monthly benefit	\$1,867	Included above	N/A

(1) For members without a salary reported for the December 31, 2004 valuation, we have assigned them an annual salary of \$71,478.

SECTION 3: Supplemental Information for the Orange County Employees Retirement System

EXHIBIT A

Table of Plan Coverage

iv. Safety Probation

Category	Year Ended December 31		Change From Prior Year
	2004	2003	
Active members in valuation			
Number	955	1,008	-5.3%
Average age	37.5	37.1	N/A
Average service	9.2	8.9	3.4%
Projected total compensation ⁽¹⁾	\$52,756,126	\$54,612,276	-3.4%
Projected average compensation	\$55,242	\$54,179	2.0%
Account balances	\$37,001,635	Not Available	N/A
Total active vested members	619	Not Available	N/A
Vested terminated members			
Number	38	34	11.8%
Average age	36.9	Not Available	N/A
Total account balance	\$692,520	\$509,553	35.9%
Retired members			
Number in pay status	90	51	84.3% (Total)
Average age	59.7	Not Available	N/A
Average monthly benefit	\$4,313	\$3,927	6.6% (Total)
Disabled members			
Number in pay status	3	Included above	N/A
Average age	38.5	Included above	N/A
Average monthly benefit	\$1,785	Included above	N/A
Beneficiaries			
Number in pay status	1	Included above	N/A
Average age	46.4	Included above	N/A
Average monthly benefit	\$101	Included above	N/A

(1) For members without a salary reported for the December 31, 2004 valuation, we have assigned them an annual salary of \$71,478.

SECTION 3: Supplemental Information for the Orange County Employees Retirement System

EXHIBIT A

**Table of Plan Coverage
v. Safety Fire Authority**

Category	Year Ended December 31		Change From Prior Year
	2004	2003	
Active members in valuation			
Number	791	795	-0.5%
Average age	44.8	44.6	N/A
Average service	15.0	14.5	3.4%
Projected total compensation ⁽¹⁾	\$63,480,172	\$62,439,478	1.7%
Projected average compensation	\$80,253	\$78,540	2.2%
Account balances	\$59,150,833	Not Available	N/A
Total active vested members	701	Not Available	N/A
Vested terminated members			
Number	9	14	-35.7%
Average age	45.1	Not Available	N/A
Total account balance	\$289,163	\$280,858	3.0%
Retired members			
Number in pay status	90	127	19.7% (Total)
Average age	59.7	Not Available	N/A
Average monthly benefit	\$3,708	\$3,201	11.3% (Total)
Disabled members			
Number in pay status	55	Included above	N/A
Average age	56.2	Included above	N/A
Average monthly benefit	\$3,427	Included above	N/A
Beneficiaries			
Number in pay status	7	Included above	N/A
Average age	49.4	Included above	N/A
Average monthly benefit	\$2,784	Included above	N/A

(1) For members without a salary reported for the December 31, 2004 valuation, we have assigned them an annual salary of \$71,478.

SECTION 3: Supplemental Information for the Orange County Employees Retirement System

EXHIBIT B

**Members in Active Service and Projected Average Compensation as of December 31, 2004
By Age and Years of Service**

i. General (other than OCTA)

Age	Total	Years of Service								
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	460	450	10	--	--	--	--	--	--	--
	33,088	32,982	37,849	--	--	--	--	--	--	--
25 - 29	1,437	1,094	340	3	--	--	--	--	--	--
	40,433	39,997	41,845	39,313	--	--	--	--	--	--
30 - 34	2,070	1,024	768	268	10	--	--	--	--	--
	47,778	45,251	50,653	48,652	62,368	--	--	--	--	--
35 - 39	2,336	753	683	684	215	1	--	--	--	--
	52,907	47,205	55,616	55,975	54,441	\$68,447	--	--	--	--
40 - 44	2,411	553	530	625	517	173	13	--	--	--
	56,292	49,406	56,399	57,535	62,213	55,466	\$60,590	--	--	--
45 - 49	2,350	485	416	490	491	324	135	9	--	--
	58,030	48,551	56,158	57,457	62,967	65,171	64,983	\$55,742	--	--
50 - 54	2,341	394	396	418	427	315	258	126	7	--
	60,782	51,067	58,311	57,163	63,713	66,179	70,937	66,224	\$69,587	--
55 - 59	1,974	300	295	371	311	220	207	231	38	1
	61,292	47,876	57,719	58,088	61,036	64,101	74,879	72,732	68,271	\$70,990
60 - 64	1,047	145	162	225	221	122	65	74	31	2
	57,772	52,384	54,423	52,339	56,711	60,764	70,096	71,140	74,545	110,564
65 - 69	338	33	51	93	83	42	20	12	3	1
	52,951	40,557	51,975	54,542	55,345	50,175	53,832	59,261	75,736	119,831
70 & over	116	17	15	24	31	15	11	3	--	--
	50,831	39,214	47,165	53,952	53,608	50,761	57,010	59,028	--	--
Total	16,880	5,248	3,666	3,201	2,306	1,212	709	455	79	4
	\$54,235	\$44,864	\$53,748	\$55,965	\$60,878	\$62,714	\$69,989	\$69,889	\$71,133	\$102,987

SECTION 3: Supplemental Information for the Orange County Employees Retirement System

EXHIBIT B

**Members in Active Service and Projected Average Compensation as of December 31, 2004
By Age and Years of Service**

ii. General OCTA

Age	Years of Service									
	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	21	21	--	--	--	--	--	--	--	--
	\$30,756	\$30,756	--	--	--	--	--	--	--	--
25 - 29	128	110	18	--	--	--	--	--	--	--
	32,967	31,912	\$39,414	--	--	--	--	--	--	--
30 - 34	161	107	44	10	--	--	--	--	--	--
	37,775	35,420	41,456	\$46,781	--	--	--	--	--	--
35 - 39	255	166	54	24	11	--	--	--	--	--
	40,046	35,067	48,035	52,128	\$49,603	--	--	--	--	--
40 - 44	358	203	62	46	41	6	--	--	--	--
	42,032	35,553	46,767	54,638	51,449	\$51,297	--	--	--	--
45 - 49	345	132	59	54	47	39	13	1	--	--
	44,941	36,833	47,636	49,085	51,530	51,026	\$55,313	\$50,558	--	--
50 - 54	356	125	49	42	51	39	45	5	--	--
	45,296	39,974	42,051	48,599	52,303	43,434	51,484	69,764	--	--
55 - 59	253	78	39	42	31	25	31	7	--	--
	47,490	50,292	40,393	51,196	43,508	38,653	47,902	80,948	--	--
60 - 64	135	36	19	15	22	14	21	7	--	1
	44,669	35,175	41,291	48,377	44,264	56,451	47,591	54,387	--	\$109,560
65 - 69	28	7	9	4	2	3	3	--	--	--
	46,809	25,002	51,007	58,856	47,073	45,914	69,758	--	--	--
70 & over	8	2	2	1	2	1	--	--	--	--
	54,336	42,534	50,658	42,579	81,696	42,330	--	--	--	--
Total	2,048	987	355	238	207	127	113	20	--	1
	\$42,787	\$36,770	\$44,558	\$50,747	\$49,877	\$46,680	\$50,703	\$67,336	\$0	\$109,560

SECTION 3: Supplemental Information for the Orange County Employees Retirement System

EXHIBIT B

**Members in Active Service and Projected Average Compensation as of December 31, 2004
By Age and Years of Service**

iii. Safety Law Enforcement

Age	Years of Service								
	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35 & over
Under 25	14	13	1	--	--	--	--	--	--
	\$55,405	\$54,284	\$69,980	--	--	--	--	--	--
25 - 29	140	78	62	--	--	--	--	--	--
	63,128	58,586	68,843	--	--	--	--	--	--
30 - 34	322	62	183	77	--	--	--	--	--
	68,698	62,142	70,646	\$69,349	--	--	--	--	--
35 - 39	411	33	97	190	91	--	--	--	--
	73,546	63,374	71,483	74,270	\$77,922	--	--	--	--
40 - 44	435	19	25	73	248	70	--	--	--
	78,211	68,144	70,229	72,366	79,863	\$84,035	--	--	--
45 - 49	273	7	12	30	76	102	45	1	--
	80,212	68,221	72,843	73,513	76,043	82,075	\$91,038	\$93,095	--
50 - 54	158	6	3	6	37	30	66	10	--
	85,822	74,107	87,118	74,844	76,230	85,058	90,342	106,994	--
55 - 59	70	8	6	6	15	13	17	3	2
	85,004	74,482	86,433	92,692	83,632	82,916	87,026	78,536	\$116,125
60 - 64	5	--	1	--	1	--	2	--	1
	79,308	--	81,901	--	75,033	--	73,255	--	93,095
65 - 69	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
Total	1,828	226	390	382	468	215	130	14	3
	\$75,376	\$62,089	\$71,005	\$73,153	\$78,688	\$83,180	\$89,887	\$99,903	\$108,448

SECTION 3: Supplemental Information for the Orange County Employees Retirement System

EXHIBIT B

**Members in Active Service and Projected Average Compensation as of December 31, 2004
By Age and Years of Service**

iv. Safety Probation

Age	Years of Service									
	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	17	17	--	--	--	--	--	--	--	--
	\$38,711	\$38,711	--	--	--	--	--	--	--	--
25 - 29	219	178	40	1	--	--	--	--	--	--
	44,450	42,164	\$54,416	\$52,732	--	--	--	--	--	--
30 - 34	236	79	136	20	1	--	--	--	--	--
	54,174	45,559	58,238	60,646	\$52,676	--	--	--	--	--
35 - 39	176	37	65	62	12	--	--	--	--	--
	56,127	44,764	54,449	63,170	63,863	--	--	--	--	--
40 - 44	93	9	21	30	29	4	--	--	--	--
	60,077	46,953	50,139	62,152	68,061	\$68,350	--	--	--	--
45 - 49	91	6	14	16	25	21	9	--	--	--
	63,989	49,424	55,446	64,120	62,273	71,306	\$74,448	--	--	--
50 - 54	61	7	9	8	11	9	11	6	--	--
	65,556	43,597	55,615	70,514	63,597	66,968	77,949	\$78,224	--	--
55 - 59	52	3	3	4	12	8	9	12	1	--
	70,911	50,497	54,485	63,719	62,332	75,011	69,336	89,769	\$68,214	--
60 - 64	9	--	1	1	2	2	2	1	--	--
	59,584	--	52,732	67,382	64,077	67,382	37,139	78,947	--	--
65 - 69	1	--	--	--	1	--	--	--	--	--
	67,382	--	--	--	67,382	--	--	--	--	--
70 & over	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
Total	955	336	289	142	93	44	31	19	1	--
	\$55,242	\$43,436	\$55,994	\$63,092	\$64,437	\$70,645	\$71,799	\$85,554	\$68,214	--

SECTION 3: Supplemental Information for the Orange County Employees Retirement System

EXHIBIT B

**Members in Active Service and Projected Average Compensation as of December 31, 2004
By Age and Years of Service**

v. Safety Fire Authority

Age	Years of Service									
	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	5	5	--	--	--	--	--	--	--	--
	\$56,462	\$56,462	--	--	--	--	--	--	--	--
25 - 29	44	33	11	--	--	--	--	--	--	--
	58,605	56,700	\$64,319	--	--	--	--	--	--	--
30 - 34	63	19	28	15	1	--	--	--	--	--
	68,480	61,471	70,571	\$73,225	\$71,935	--	--	--	--	--
35 - 39	112	18	16	53	25	--	--	--	--	--
	73,543	67,912	69,919	74,414	78,068	--	--	--	--	--
40 - 44	159	10	10	30	75	34	--	--	--	--
	78,873	66,282	71,058	77,880	79,953	\$83,369	--	--	--	--
45 - 49	181	3	3	19	29	91	34	2	--	--
	84,429	68,121	74,027	80,205	79,494	85,543	\$90,203	\$87,354	--	--
50 - 54	137	1	3	6	6	49	31	35	6	--
	86,859	48,569	74,535	80,568	77,440	84,101	87,672	93,246	\$96,190	--
55 - 59	78	--	5	--	1	15	21	27	8	1
	92,791	--	87,017	--	161,380	83,094	85,585	100,811	98,473	\$87,862
60 - 64	11	1	3	--	--	1	1	4	1	--
	88,843	75,531	89,484	--	--	94,130	94,127	82,481	115,111	--
65 - 69	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
70 & over	1	--	--	--	--	--	--	--	1	--
	130,939	--	--	--	--	--	--	--	130,939	--
Total	791	90	79	123	137	190	87	68	16	1
	\$80,253	\$61,500	\$71,671	\$76,309	\$79,938	\$84,634	\$88,232	\$95,443	\$100,686	\$87,862

SECTION 3: Supplemental Information for the Orange County Employees Retirement System

EXHIBIT C

Reconciliation of Member Data – December 31, 2003 to December 31, 2004

	Active Members	Vested Former Members	Pensioners	Disableds	Beneficiaries	Total
Number as of December 31, 2003	22,672	2,278	6,642	1,134	1,303	34,029
New members	1,159	77	0	0	111	1,347
Terminations – with vested rights	-341	341	0	0	0	0
Contributions Refunds	-456	-750	0	0	0	-1,206
Retirements	-382	-79	461	0	0	0
New disabilities	-41	-4	-23	68	0	0
Return to work	32	-32	0	0	0	0
Deaths	-118	-10	-198	-24	-62	-412
Data adjustments	-23	89	38	-6	-11	87
Number as of December 31, 2004	22,502	1,910	6,920	1,172	1,341	33,845

SECTION 3: Supplemental Information for the Orange County Employees Retirement System

EXHIBIT D

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended December 31, 2004	
Contribution income:		
Employer contributions	\$194,430,000	
Employee contributions	81,931,000	
Transfer from County Investment Account	<u>3,579,000</u>	
Net contribution income		\$279,940,000
Investment income:		
Interest, dividends and other income	\$127,810,000	
Recognition of capital appreciation	303,044,000	
Less investment and administrative fees	<u>-27,202,000</u>	
Net investment income		<u>403,652,000</u>
Total income available for benefits		\$683,592,000
Less benefit payments		-\$238,529,000
Change in reserve for future benefits		\$445,063,000

SECTION 3: Supplemental Information for the Orange County Employees Retirement System

EXHIBIT E

Summary Statement of Assets

	Year Ended December 31, 2004	Year Ended December 31, 2003
Cash equivalents	\$287,076,000	\$550,646,000
Accounts receivable:		
Contributions	\$15,813,000	\$13,176,000
Investment Income	20,266,000	13,585,000
Securities Settlements	<u>10,740,000</u>	<u>6,615,000</u>
Total accounts receivable	46,819,000	33,376,000
Investments:		
Investments	\$5,356,914,000	\$4,421,845,000
Security Lending Collateral	809,189,000	290,166,000
Fixed Assets Net Depreciation	<u>3,558,000</u>	<u>4,231,000</u>
Total investments at market value	<u>6,169,661,000</u>	<u>4,716,242,000</u>
Total assets	<u>\$6,503,556,000</u>	<u>\$5,300,264,000</u>
Less accounts payable:		
Securities Settlements	-\$111,514,000	-\$24,318,000
Security Lending Liability	-809,189,000	-290,166,000
All other	<u>-25,858,000</u>	<u>-26,154,000</u>
Total accounts payable	-\$946,561,000	-\$340,638,000
Net assets at market value⁽¹⁾	<u>\$5,556,995,000</u>	<u>\$4,959,626,000</u>
Net assets at actuarial value	<u>\$5,256,380,000</u>	<u>\$4,811,317,000</u>
Net assets at valuation value	<u>\$5,245,821,000</u>	<u>\$4,790,099,000</u>

⁽¹⁾ Includes County Investment Account of \$155,245,000 and \$143,744,000 as of December 31, 2004 and December 31, 2003, respectively.

SECTION 3: Supplemental Information for the Orange County Employees Retirement System

EXHIBIT F

Actuarial Balance Sheet

An overview of your Plan’s funding is given by an Actuarial Balance Sheet. In this approach, we first determine the amount and timing of all future payments that will be made by the Plan for current participants. We then discount these payments at the valuation interest rate to the date of the valuation, thereby determining their present value. We refer to this present value as the “liability” of the Plan.

Second, we determine how this liability will be met. These actuarial “assets” include the net amount of assets already accumulated by the Plan, the present value of future member contributions, the present value of future employer normal cost contributions, and the present value of future employer amortization payments.

Assets

1. Total valuation assets	\$5,245,821,000
2. Present value of future contributions by members	\$831,059,000
3. Present value of future employer contributions for:	
a. entry age normal cost	\$1,665,459,000
b. unfunded actuarial accrued liability	<u>\$2,158,151,000</u>
4. Total current and future assets	\$9,900,490,000

Liabilities

5. Present value of retirement allowance payable to present retired members	\$2,896,397,000
6. Present value of retirement allowances to be granted	<u>\$7,004,093,000</u>
7. Total actuarial liabilities	\$9,900,490,000

SECTION 3: Supplemental Information for the Orange County Employees Retirement System

EXHIBIT G

Summary of Reported Asset Information as of December 31, 2004

Reserves

Included in Valuation Value of Assets

Active Members Reserve (Book Value)	\$1,007,576,000
Retired Members Reserve (Book Value)	2,655,699,000
Employer Advanced Reserve (Book Value)	1,422,602,000
Unrealized Appreciation Included in Valuation Value of Assets	<u>\$159,944,000</u>
Subtotal: Valuation Value of Assets	\$5,245,821,000

Not Included in Valuation Value of Assets

RMBR	\$9,820,000
Unclaimed Member Deposit	655,000
Medicare Medical Insurance Reserve	<u>84,000</u>
Subtotal: Actuarial Value of Assets	\$5,256,380,000
Unrecognized Investment Income (Loss)	<u>145,370,000</u>
Subtotal: Market Value of Assets (Net of County Investment Account)	\$5,401,750,000
County Investment Account	<u>155,245,000</u>
Total: Gross Market Value of Assets	\$5,556,995,000

SECTION 3: Supplemental Information for the Orange County Employees Retirement System

EXHIBIT H

Development of Unfunded/(Overfunded) Actuarial Accrued Liability for Year Ended December 31, 2004

1.	Unfunded actuarial accrued liability at beginning of year, prior to benefit improvements		\$1,309,334,000
2.	Changes in methods and procedures		106,630,000
3.	Total normal cost at middle of year		188,163,000
4.	Actual employer and member contributions		-279,940,000
5.	Interest		<u>102,756,000</u>
6.	Expected unfunded actuarial accrued liability		<u>\$1,426,943,000</u>
7.	Actuarial (gain)/loss and other changes:		
	(a) Gain on investment return ⁽¹⁾	-\$50,536,000	
	(b) Other experience (gain) / loss	19,372,000	
	(c) Benefit improvements	365,409,000	
	(d) Change in actuarial assumptions recommended in the December 31, 2004 triennial experience study	579,681,000	
	(e) Change to 3.5% inflation assumption and Entry Age Normal funding method	33,129,000	
	(f) Change in investment return assumption to 7.75%	<u>-215,847,000</u>	
	(g) Total changes		<u>731,208,000</u>
8.	Unfunded actuarial accrued liability at end of year		<u>\$2,158,151,000</u>

⁽¹⁾ This also includes the impact of the change in the method for calculating the valuation value of assets.

SECTION 3: Supplemental Information for the Orange County Employees Retirement System

EXHIBIT I

Section 415 Limitations

Section 415 of the Internal Revenue Code (IRC) specifies the maximum benefits that may be paid to an individual from a defined benefit plan and the maximum amounts that may be allocated each year to an individual's account in a defined contribution plan.

A qualified pension plan may not pay benefits in excess of the Section 415 limits. The ultimate penalty for non-compliance is disqualification: active participants could be taxed on their vested benefits and the IRS may seek to tax the income earned on the plan's assets.

In particular, Section 415(b) of the IRC limits the maximum annual benefit payable at the Normal Retirement Age to a dollar indexed for inflation. That limit is \$170,000 for 2005 and \$175,000 for 2006. Normal Retirement Age for these purposes is age 62. These are the limits in simplified terms. They must be adjusted based on each participant's circumstances, for such things as age at retirement, form of benefits chosen and after tax contributions.

Benefits in excess of the limits may be paid through a qualified governmental excess plan that meets the requirements of Section 415(m).

Legal Counsel's review and interpretation of the law and regulations should be sought on any questions in this regard.

Contributions rates determined in this valuation have not been reduced for the Section 415 limitations. Actual limitations will result in gains as they occur.

SECTION 3: Supplemental Information for the Orange County Employees Retirement System

EXHIBIT J

Definitions of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Assumptions or Actuarial

Assumptions:

The estimates on which the cost of the Plan is calculated including:

- (a) Investment return — the rate of investment yield that the Plan will earn over the long-term future;
- (b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;
- (c) Retirement rates — the rate or probability of retirement at a given age;
- (d) Turnover rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

Normal Cost:

The amount of contributions required to fund the level cost allocated to the current year of service.

Actuarial Accrued Liability

For Actives:

The equivalent of the accumulated normal costs allocated to the years before the valuation date.

Actuarial Accrued Liability

For Pensioners:

The single sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

Unfunded Actuarial Accrued

Liability:

The extent to which the actuarial accrued liability of the Plan exceeds (or is exceeded by) the assets of the Plan. There is a wide range of approaches to paying off the unfunded or overfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.

SECTION 3: Supplemental Information for the Orange County Employees Retirement System

**Amortization of the Unfunded
(Overfunded) Actuarial
Accrued Liability:**

Payments made over a period of years equal in value to the Plan's unfunded or overfunded actuarial accrued liability.

Investment Return:

The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.

SECTION 4: Supplemental Information for the Orange County Employees Retirement System

EXHIBIT I

Supplementary Information Required by GASB – Schedule of Employer Contributions

Plan Year Ended December 31	Annual Required Contributions	Actual Contributions	Percentage Contributed
1999	\$17,591,000	\$17,591,000	100.0%
2000	15,561,000	15,561,000	100.0%
2001	12,060,000	12,060,000	100.0%
2002	13,289,000	13,289,000	100.0%
2003	124,243,000	124,243,000	100.0%
2004	194,430,000	194,430,000	100.0%

Note: The above contributions do not include transfers from the County Investment Account.

SECTION 4: Supplemental Information for the Orange County Employees Retirement System

EXHIBIT II

Supplementary Information Required by GASB – Schedule of Funding Progress

Actuarial Valuation Date December 31	Valuation Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll* [(b) - (a) / (c)]
1999	\$3,931,744,000	\$4,017,279,000	\$85,535,000	97.87%	\$912,490,000	9.37%
2000	4,497,362,000	4,335,025,000	-162,337,000	103.74%	994,669,000	-16.32%
2001	4,586,844,000	4,843,899,000	257,055,000	94.69%	1,122,763,000	22.89%
2002	4,695,675,000	5,673,754,000	978,079,000	82.76%	1,242,348,000	78.73%
2003	4,790,099,000	6,099,433,000	1,309,334,000	78.53%	1,243,964,000	105.25%
2004	5,245,821,000	7,403,972,000	2,158,151,000	70.85%	1,257,085,000	171.68%

SECTION 4: Supplemental Information for the Orange County Employees Retirement System

EXHIBIT III

Supplementary Information Required by GASB

Valuation date	December 31, 2004
Actuarial cost method	Entry Age Normal Actuarial Cost Method
Amortization method	Level percent of payroll for total unfunded liability (3.50% payroll growth assumed)
Remaining amortization period	30 years closed (declining) for all UAAL
Asset valuation method	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual and the expected return on a market value basis, and is recognized over a five-year period. The Valuation Value of Assets is the Actuarial Value of Assets reduced by the value of the non-valuation reserves.
Actuarial assumptions:	
Investment rate of return	7.75%
Inflation rate	3.50%
Real across-the-board salary increase	0.00%
Projected salary increases *	4.10% to 10.50% for General members; 3.50% to 9.50% for Safety members based on age.
Cost of living adjustments	3.00%
Plan membership:	
Retired members and beneficiaries receiving benefits	9,433
Terminated members entitled to, but not yet receiving benefits	1,910
Active members	<u>22,502</u>
Total	33,845

* See Exhibit IV for these increases.

SECTION 4: Supplemental Information for the Orange County Employees Retirement System

EXHIBIT IV

Actuarial Assumptions and Actuarial Cost Method

Post – Retirement Mortality Rates:

Healthy:

For General Members and Beneficiaries: 1994 Group Annuity Mortality Table set forward one year.

For Safety Members and Beneficiaries: 1994 Group Annuity Mortality Table set forward one year.

Disabled:

For General Members and Safety members: 1994 Group Annuity Mortality Table set forward five years.

Employee Contribution Rates

and Optional Benefits:

For General Members: 1994 Group Annuity Mortality Table set forward one year weighted 40% male and 60% female.

For Safety and Probation Members: 1994 Group Annuity Mortality Table set forward one year weighted 80% male and 20% female.

SECTION 4: Supplemental Information for the Orange County Employees Retirement System

Termination Rates Before Retirement:

Age	Rate (%)			
	Mortality			
	General		Safety	
	Male	Female	Male	Female
25	0.07	0.03	0.07	0.03
30	0.08	0.04	0.08	0.04
35	0.09	0.05	0.09	0.05
40	0.12	0.08	0.12	0.08
45	0.17	0.10	0.17	0.10
50	0.29	0.16	0.29	0.16
55	0.49	0.26	0.49	0.26
60	0.90	0.51	0.90	0.51
65	1.62	0.97	1.62	0.97

All pre-retirement deaths are assumed to be non-service connected.

SECTION 4: Supplemental Information for the Orange County Employees Retirement System

Termination Rates Before Retirement (continued):

Age	Rate (%)			
	General all other ⁽¹⁾	General OCTA ⁽²⁾	Safety – Law & Fire ⁽³⁾	Safety - Probation ⁽⁴⁾
20	0.00	0.00	0.05	0.00
25	0.03	0.00	0.08	0.06
30	0.08	0.03	0.16	0.16
35	0.13	0.08	0.32	0.20
40	0.18	0.28	0.52	0.20
45	0.20	0.58	0.72	0.20
50	0.23	0.76	0.98	0.20
55	0.31	0.92	2.24	0.20
60	0.41	1.30	3.60	0.08

⁽¹⁾ 60% of General all other disabilities are assumed to be duty disabilities. The other 40% are assumed to be ordinary disabilities.

⁽²⁾ 70% of General - OCTA disabilities are assumed to be duty disabilities. The other 30% are assumed to be ordinary disabilities.

⁽³⁾ 85% of Safety – Law Enforcement and Fire disabilities are assumed to be duty disabilities. The other 15% are assumed to be ordinary disabilities.

⁽⁴⁾ 85% of Safety - Probation disabilities are assumed to be duty disabilities. The other 15% are assumed to be ordinary disabilities.

SECTION 4: Supplemental Information for the Orange County Employees Retirement System

Termination Rates Before Retirement (Continued):

Rate (%)				
Withdrawal (< 5 Years of Service)				
Years of Service	General all other	General OCTA	Safety – Law & Fire	Safety - Probation
0	10.0	10.0	3.0	11.0
1	8.0	7.0	2.0	10.0
2	6.0	6.0	2.0	8.0
3	6.0	5.0	1.0	6.0
4	5.0	4.0	1.0	5.0
Withdrawal (5+ Years of Service) ⁽¹⁾				
Age	General all other	General OCTA	Safety – Law & Fire	Safety – Probation
20	5.0	3.0	1.0	5.0
25	5.0	3.0	1.0	5.0
30	5.0	3.0	1.0	5.0
35	4.4	3.0	0.9	4.4
40	3.5	3.0	0.6	3.7
45	2.5	3.0	0.5	2.9
50	2.0	2.7	0.2	2.2
55	1.0	1.9	0.0	1.4
60	0.0	0.6	0.0	0.4

⁽¹⁾ 15% of all terminated vested members will choose a refund of contributions and 85% will choose a deferred vested benefit.

SECTION 4: Supplemental Information for the Orange County Employees Retirement System

Retirement Rates:

Age	Rate (%)		
	General	Safety - Law and Fire ⁽¹⁾	Safety – Probation ⁽¹⁾
50	3.0	10.0	4.0
51	3.0	15.0	6.0
52	3.0	20.0	8.0
53	3.0	20.0	10.0
54	3.0	20.0	15.0
55	4.0	25.0	20.0
56	5.0	25.0	25.0
57	6.0	30.0	25.0
58	7.0	30.0	30.0
59	9.0	40.0	30.0
60	11.0	100.0	40.0
61	13.0	100.0	50.0
62	15.0	100.0	60.0
63	17.0	100.0	100.0
64	19.0	100.0	100.0
65	25.0	100.0	100.0
66	20.0	100.0	100.0
67	20.0	100.0	100.0
68	20.0	100.0	100.0
69	20.0	100.0	100.0
70	100.0	100.0	100.0

⁽¹⁾ Retirement rate is 100% after a member accrues a benefit of 100% of final average earnings.

SECTION 4: Supplemental Information for the Orange County Employees Retirement System

**Retirement Age and Benefit for
Deferred Vested Members:**

For future deferred vested members, we make the following retirement assumption:

General Age: 57

Safety Age: 53

We assume that 40% of future General and Safety deferred vested members are reciprocal. For reciprocals, we assume 5.1% compensation increases per annum.

**Liability Calculation for Current
Deferred Vested Members:**

Liability for a current deferred vested member is estimated at 3.35 times the member's total basic plus cola member contribution account balance.

Future Benefit Accruals:

1.0 year of service per year for the full-time employees. Continuation of current partial service accrual for part-time employees. There is no assumption to anticipate conversion of unused sick leave at retirement.

Unknown Data for Members:

Same as those exhibited by members with similar known characteristics. If not specified, members are assumed to be male.

Percent Married:

80% of male members and 50% of female members are assumed to be married at retirement or time of pre-retirement death.

Age of Spouse:

Female (or male) spouses are four years younger (or older) than their spouses.

Net Investment Return:

7.75%; net of investment and administrative expenses.

**Employee Contribution
Crediting Rate:**

5.00%, compounded semi-annually.

Consumer Price Index:

Increase of 3.50% per year, retiree COLA increases due to CPI subject to a 3.0% maximum change per year.

SECTION 4: Supplemental Information for the Orange County Employees Retirement System

Salary Increases:

Annual Rate of Compensation Increase (%)		
Inflation: 3.50%, plus the following Merit and Longevity increases:		
Age	General	Safety
20	7.0	6.0
25	5.2	5.1
30	3.4	3.6
35	2.2	1.8
40	1.7	0.7
45	1.6	0.5
50	1.4	0.5
55	0.9	0.5
60	0.6	0.0
65+	0.6	

There are assumed to be no “across the board” salary increases (other than inflation).

Annual Payoffs Assumptions:

Additional payoffs are expected to be received during a member’s final average earnings period. The percentages used in this valuation are:

	<u>Final One</u> <u>Year Salary</u>	<u>Final Three</u> <u>Year Salary</u>
General Members	4.50%	2.10%
Safety - Probation	4.50%	2.10%
Safety - Law	9.30%	6.30%
Safety - Fire	5.10%	2.40%

Please note that the annual payoffs assumptions are the same for service and disability retirements.

SECTION 4: Supplemental Information for the Orange County Employees Retirement System

Actuarial Value of Assets:

Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual and the expected return on a market value basis, and is recognized over a five-year period.

Valuation Value of Assets:

The Valuation Value of Assets is the Actuarial Value of Assets reduced by the value of the non-valuation reserves.

Actuarial Cost Method:

Entry Age Normal Actuarial Cost Method. Entry Age is the age at the member's hire date. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by salaries, with Normal Cost determined as a level percentage of individual salary, as if the current benefit accrual rate had always been in effect. The total unfunded Actuarial Accrued Liability is amortized over a declining 30-year period.

Please note that for members who have prior benefit service in another OCERS plan (e.g. Probation Safety members with prior General plan service), the normal cost rate for the current plan is calculated based on the date they enter service with their current plan.

SECTION 4: Supplemental Information for the Orange County Employees Retirement System

Changes in Actuarial Assumptions and Methods

Based on the May 6, 2005 review of economic and non-economic assumptions, several assumptions were changed. Previously, those assumptions were as follows:

Post – Retirement Mortality Rates:

Healthy:

General and Probation males and Safety members: 1983 Group Annuity Mortality Table for males.

General and Probation females and Safety beneficiaries: 1983 Group Annuity Mortality Table for females.

Disabled:

For General members: 60% of the CHE 1981 General Disability Mortality Table.

For Safety members: 60% of the 1981 Safety Disability Mortality Table.

Employee Contribution Rates and Optional Benefits:

For General members: 1983 Group Annuity Mortality Table 50% male and 50% females.

For Safety members: 1983 Group Annuity Mortality Table for males.

SECTION 4: Supplemental Information for the Orange County Employees Retirement System

Change in Actuarial Assumptions and Methods (Previous Assumptions Continued):

Termination Rates Before Retirement:

General (Non-OTCA) - Male					
<u>Age</u>	<u>Ordinary Withdrawal</u>	<u>Vested Withdrawal</u>	<u>Ordinary Disability</u>	<u>Duty Disability</u>	<u>Ordinary Death</u>
25	12.56%	0.70%	0.00%	0.01%	0.05%
30	8.88%	0.90%	0.01%	0.04%	0.06%
35	6.16%	1.00%	0.02%	0.10%	0.09%
40	4.32%	1.10%	0.04%	0.10%	0.12%
45	3.28%	0.74%	0.06%	0.14%	0.22%
50	2.64%	0.41%	0.11%	0.16%	0.39%
55	2.16%	0.16%	0.21%	0.19%	0.61%
60	0.00%	0.00%	0.52%	0.19%	0.92%
65	0.00%	0.00%	0.00%	0.00%	1.56%

General (Non-OTCA) - Female					
<u>Age</u>	<u>Ordinary Withdrawal</u>	<u>Vested Withdrawal</u>	<u>Ordinary Disability</u>	<u>Duty Disability</u>	<u>Ordinary Death</u>
25	9.90%	0.20%	0.00%	0.00%	0.03%
30	7.20%	0.80%	0.01%	0.04%	0.03%
35	5.51%	1.00%	0.03%	0.05%	0.05%
40	4.44%	1.02%	0.06%	0.06%	0.07%
45	3.54%	1.18%	0.10%	0.14%	0.10%
50	2.53%	0.60%	0.15%	0.16%	0.16%
55	1.86%	0.28%	0.21%	0.19%	0.25%
60	0.00%	0.00%	0.26%	0.19%	0.42%
65	0.00%	0.00%	0.00%	0.00%	0.71%

SECTION 4: Supplemental Information for the Orange County Employees Retirement System

Change in Actuarial Assumptions and Methods (Previous Assumptions Continued):

Termination Rates Before Retirement (Continued):

General (OTCA) - Male					
<u>Age</u>	<u>Ordinary Withdrawal</u>	<u>Vested Withdrawal</u>	<u>Ordinary Disability</u>	<u>Duty Disability</u>	<u>Ordinary Death</u>
25	15.07%	0.70%	0.00%	0.01%	0.05%
30	10.66%	0.90%	0.01%	0.02%	0.06%
35	7.39%	1.00%	0.02%	0.04%	0.09%
40	5.18%	1.10%	0.04%	0.05%	0.12%
45	3.94%	0.74%	0.06%	0.15%	0.22%
50	3.17%	0.41%	0.11%	0.22%	0.39%
55	2.59%	0.16%	0.21%	0.40%	0.61%
60	0.00%	0.00%	0.52%	0.63%	0.92%
65	0.00%	0.00%	0.00%	0.00%	1.56%

General (OTCA) - Female					
<u>Age</u>	<u>Ordinary Withdrawal</u>	<u>Vested Withdrawal</u>	<u>Ordinary Disability</u>	<u>Duty Disability</u>	<u>Ordinary Death</u>
25	17.00%	0.20%	0.00%	0.00%	0.03%
30	15.10%	0.80%	0.01%	0.04%	0.03%
35	12.00%	1.00%	0.03%	0.05%	0.05%
40	7.50%	1.02%	0.06%	0.10%	0.07%
45	4.73%	1.18%	0.10%	0.90%	0.10%
50	3.38%	0.60%	0.15%	1.00%	0.16%
55	2.48%	0.28%	0.21%	1.00%	0.25%
60	0.00%	0.00%	0.26%	1.00%	0.42%
65	0.00%	0.00%	0.00%	0.00%	0.71%

SECTION 4: Supplemental Information for the Orange County Employees Retirement System

Change in Actuarial Assumptions and Methods (Previous Assumptions Continued):

Termination Rates Before Retirement (Continued):

<u>Age</u>	Safety – Law Enforcement				
	<u>Ordinary Withdrawal</u>	<u>Vested Withdrawal</u>	<u>Ordinary Disability</u>	<u>Duty Disability</u>	<u>Ordinary Death</u>
25	1.75%	0.34%	0.00%	0.11%	0.05%
30	1.18%	0.29%	0.01%	0.13%	0.06%
35	0.67%	0.25%	0.02%	0.32%	0.09%
40	0.26%	0.26%	0.04%	0.66%	0.12%
45	0.00%	0.22%	0.12%	0.66%	0.22%
50	0.00%	0.15%	0.23%	0.66%	0.39%
55	0.00%	0.00%	0.00%	1.00%	0.61%
60	0.00%	0.00%	0.00%	0.00%	0.92%
65	0.00%	0.00%	0.00%	0.00%	0.00%

<u>Age</u>	Safety – Fire Authority				
	<u>Ordinary Withdrawal</u>	<u>Vested Withdrawal</u>	<u>Ordinary Disability</u>	<u>Duty Disability</u>	<u>Ordinary Death</u>
25	1.75%	0.34%	0.00%	0.03%	0.05%
30	1.18%	0.29%	0.01%	0.04%	0.06%
35	0.67%	0.25%	0.02%	0.05%	0.09%
40	0.26%	0.26%	0.04%	0.09%	0.12%
45	0.00%	0.22%	0.12%	0.50%	0.22%
50	0.00%	0.15%	0.23%	1.20%	0.39%
55	0.00%	0.00%	0.00%	2.00%	0.61%
60	0.00%	0.00%	0.00%	0.00%	0.92%
65	0.00%	0.00%	0.00%	0.00%	0.00%

SECTION 4: Supplemental Information for the Orange County Employees Retirement System

Change in Actuarial Assumptions and Methods (Previous Assumptions Continued):

Termination Rates Before Retirement (Continued):

<u>Age</u>	Safety – Probation Officers - Male				
	<u>Ordinary Withdrawal</u>	<u>Vested Withdrawal</u>	<u>Ordinary Disability</u>	<u>Duty Disability</u>	<u>Ordinary Death</u>
25	12.56%	0.70%	0.00%	0.01%	0.05%
30	8.88%	0.90%	0.01%	0.04%	0.06%
35	6.16%	1.00%	0.02%	0.10%	0.09%
40	4.32%	1.10%	0.04%	0.20%	0.12%
45	3.28%	0.74%	0.06%	0.28%	0.22%
50	2.64%	0.41%	0.11%	0.32%	0.39%
55	2.16%	0.16%	0.21%	0.38%	0.61%
60	0.00%	0.00%	0.52%	0.38%	0.92%
65	0.00%	0.00%	0.00%	0.00%	1.56%

<u>Age</u>	Safety – Probation Officers - Female				
	<u>Ordinary Withdrawal</u>	<u>Vested Withdrawal</u>	<u>Ordinary Disability</u>	<u>Duty Disability</u>	<u>Ordinary Death</u>
25	9.90%	0.20%	0.00%	0.00%	0.03%
30	7.20%	0.80%	0.01%	0.04%	0.03%
35	5.51%	1.00%	0.03%	0.05%	0.05%
40	4.44%	1.02%	0.06%	0.12%	0.07%
45	3.54%	1.18%	0.10%	0.28%	0.10%
50	2.53%	0.60%	0.15%	0.32%	0.16%
55	1.86%	0.28%	0.21%	0.38%	0.25%
60	0.00%	0.00%	0.26%	0.38%	0.42%
65	0.00%	0.00%	0.00%	0.00%	0.71%

SECTION 4: Supplemental Information for the Orange County Employees Retirement System

Change in Actuarial Assumptions and Methods (Previous Assumptions Continued):

Retirement Rates:

<u>Age</u>	<u>General Members and Safety Probation Officers</u>		<u>Law Enforcement and Fire Authority</u>
	<u>Male</u>	<u>Female</u>	
50	2.00%	2.93%	26.60%
51	1.44%	1.90%	20.00%
52	1.90%	2.03%	20.00%
53	2.15%	2.29%	20.00%
54	2.37%	2.25%	20.00%
55	3.26%	4.05%	20.00%
56	4.10%	3.70%	20.00%
57	4.86%	5.14%	20.00%
58	5.08%	5.23%	20.00%
59	5.95%	5.58%	20.00%
60	6.32%	7.21%	100.00%
61	8.29%	9.25%	100.00%
62	11.98%	13.00%	100.00%
63	11.44%	11.52%	100.00%
64	12.00%	12.07%	100.00%
65	15.00%	19.40%	100.00%
66	13.12%	19.46%	100.00%
67	14.55%	20.89%	100.00%
68	21.14%	20.94%	100.00%
69	21.42%	37.25%	100.00%
70	100.00%	100.00%	100.00%

SECTION 4: Supplemental Information for the Orange County Employees Retirement System

Change in Actuarial Assumptions and Methods (Previous Assumptions Continued):

Retirement Age and Benefit for Deferred Vested Members:

For future deferred vested members, we make the following retirement assumption:

General Age: 57
 Safety Age: 50

Net Investment Return:

7.50%; net of investment and administrative expenses.

Consumer Price Index:

Increase of 4.0% per year.

Salary Increases:

Annual Rate of Compensation Increase		
Inflation: 4.0%; plus the following Merit and Longevity increase:		
Age	General	Safety
25	0.5%	0.5%
30	0.5%	0.5%
35	0.5%	0.5%
40	0.5%	0.5%
45	0.5%	0.5%
50	0.5%	0.5%
55	0.5%	0.5%
60	0.5%	0.5%
65	0.5%	0.5%

There are assumed to be no “across the board” salary increases (other than inflation).

Actuarial Value of Assets:

The Actuarial Value of Assets is determined by applying the average ratio of the market value of assets to the book value of assets during the last five years to the book value of assets as of the date of the valuation.

Actuarial Cost Method:

Projected Unit Credit

SECTION 4: Reporting Information for the Orange County Employees Retirement System

EXHIBIT V

Summary of Plan Provisions

This exhibit summarizes the major provisions of the OCERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Membership Eligibility: Membership with OCERS begins with the day of employment in an eligible position by the County or a participating employer.

General Plans

2.5% @ 55 Plans (City of Rancho Santa Margarita, Orange County Sanitation District and Law Library⁽¹⁾)

Plan G General members hired before September 21, 1979.

Plan H General members hired on or after September 21, 1979

2.7% @ 55 Plans (City of San Juan Capistrano, Orange County Employees except bargaining unit AFSCME members, Orange County Superior Court, Orange County Local Agency Formation Commission⁽¹⁾, Orange County Employees Retirement System⁽²⁾, Children and Family Commission⁽³⁾ and Orange County Fire Authority)

Plan I General members hired before September 21, 1979.

Plan J General members hired on or after September 21, 1979.

⁽¹⁾ *Improvement is prospective only for service after June 23, 2005.*

⁽²⁾ *Improvement for management employees is prospective only for service after June 30, 2005.*

⁽³⁾ *Improvement is prospective only for service after December 22, 2005.*

2.0% @ 55 Plans (Transportation Corridor Agency)

Plan M General members hired before September 21, 1979.

Plan N General members hired on or after September 21, 1979.

All Other General Employers

Plan A General members hired before September 21, 1979.

Plan B General members hired on or after September 21, 1979.

SECTION 4: Reporting Information for the Orange County Employees Retirement System

Safety Plans

Law Enforcement, Fire Protection and Probation Members

Plan E Safety members hired before September 21, 1979.

Plan F Safety members hired on or after September 21, 1979.

Final Compensation for Benefit Determination:

Plans A, E, G, I and M Highest consecutive twelve months of compensation earnable. (§31462.1) (FAS1)

Plans B, F, H, J and N Highest consecutive thirty-six months of compensation earnable. (§31462) (FAS3)

Service: Years of service. (Yrs)

Service Retirement Eligibility:

General Age 50 with 10 years of service, or age 70 regardless of service, or after 30 years, regardless of age. (§31672)

Safety and Probation Age 50 with 10 years of service, or after 20 years, regardless of age. (§31663.25)
All part time employees over age 55 with 10 years of employment may retire with 5 years of service.

Benefit Formula:

General Plans

<i>2.5% @ 55</i>	Retirement Age	Benefit Formula
<i>Plan G (§31676.18)</i>	50	(2.00% x FAS1 x Yrs)
	55	(2.50% x FAS1 x Yrs)
	60	(2.50% x FAS1 x Yrs)
	62	(2.62% x FAS1 x Yrs)*
	65	(2.62% x FAS1 x Yrs)*
* Reflects benefit factors from Plan A as they provide a better benefit than those under 2.5% @ 55.		
<i>Plan H (§31676.18)</i>	50	(2.00% x FAS3 x Yrs)
	55	(2.50% x FAS3 x Yrs)

SECTION 4: Reporting Information for the Orange County Employees Retirement System

Benefit Formula (continued):

<i>Plan H (§31676.18) (Cont'd)</i>	Retirement Age	Benefit Formula
	60	(2.50% x FAS3 x Yrs)
	62	(2.50% x FAS3 x Yrs)
	65	(2.50% x FAS3 x Yrs)
<i>2.7% @ 55</i>	Retirement Age	Benefit Formula
<i>Plan I (§31676.19)</i>	50	(2.00% x FAS1 x Yrs)
	55	(2.70% x FAS1 x Yrs)
	60	(2.70% x FAS1 x Yrs)
	62	(2.70% x FAS1 x Yrs)
	65	(2.70% x FAS1 x Yrs)
<i>Plan J (§31676.19)</i>	50	(2.00% x FAS3 x Yrs)
	55	(2.70% x FAS3 x Yrs)
	60	(2.70% x FAS3 x Yrs)
	62	(2.70% x FAS3 x Yrs)
	65	(2.70% x FAS3 x Yrs)

SECTION 4: Reporting Information for the Orange County Employees Retirement System

Benefit Formula (continued):

	Retirement Age	Benefit Formula
<i>2.0% @ 55</i>		
<i>Plan M (§31676.16)</i>	50	(1.43% x FAS1 x Yrs)
	55	(2.00% x FAS1 x Yrs)
	60	(2.34% x FAS1 x Yrs)**
	62	(2.62% x FAS1 x Yrs)**
	65	(2.62% x FAS1 x Yrs)**
<i>Plan N (§31676.16)</i>	50	(1.43% x FAS3 x Yrs)
	55	(2.00% x FAS3 x Yrs)
	60	(2.26% x FAS3 x Yrs)
	62	(2.37% x FAS3 x Yrs)
	65	(2.43% x FAS3 x Yrs)***
<i>All Other General Members</i>	Retirement Age	Benefit Formula
<i>Plan A (§31676.12)</i>	50	(1.34% x FAS1 x Yrs)
	55	(1.77% x FAS1 x Yrs)
	60	(2.34% x FAS1 x Yrs)
	62	(2.62% x FAS1 x Yrs)
	65	(2.62% x FAS1 x Yrs)

** Reflects benefit factors from Plan A as they provide a better benefit than those under 2.0% @ 55.

*** Reflects benefit factors from Plan B as they provide a better benefit than those under 2.0% @ 55.

SECTION 4: Reporting Information for the Orange County Employees Retirement System

Benefit Formula (continued):

	Retirement Age	Benefit Formula
<i>Plan B (§31676.1)</i>	50	(1.18% x FAS3 x Yrs)
	55	(1.49% x FAS3 x Yrs)
	60	(1.92% x FAS3 x Yrs)
	62	(2.09% x FAS3 x Yrs)
	65	(2.43% x FAS3 x Yrs)

Safety Plans

	Retirement Age	Benefit Formula
<i>Plan E (§31664.1)</i>	50	(3.00% x FAS1 x Yrs)
	55	(3.00% x FAS1 x Yrs)
	60	(3.00% x FAS1 x Yrs)
<i>Plan F (§31664.1)</i>	50	(3.00% x FAS3 x Yrs)
	55	(3.00% x FAS3 x Yrs)
	60	(3.00% x FAS3 x Yrs)

Maximum Benefit: 100% of Highest Average Compensation.
 (§31676.1, §31676.12, §31676.16, §31676.18, §31676.19, §31664.1)

Ordinary Disability:

General Plans

Plans A, B, G, H, I, J, M and N

Eligibility Five years of service. (§31720)

SECTION 4: Reporting Information for the Orange County Employees Retirement System

Benefit Formula

Plans A, G, I and M:
1.8% per year of service, and if the benefit does not exceed one-third of Final Compensation, the service is projected to 62, but the total benefit cannot be more than one-third of Final Compensation. (§31727.2)

Plans B, H, J and N:
1.5% per year of service, and if the benefit does not exceed one-third of Final Compensation, the service is projected to 65, but the total benefit cannot be more than one-third of Final Compensation. (§31727.1)

Safety Plans

Plans E and F

Eligibility

Five years of service. (§31720)

Benefit Formula

1.8% per year of service. If the benefit does not exceed one-third of Final Compensation, the service is projected to 55, but the total benefit cannot be more than one-third of Final Compensation. (§31727)

For all members, 100% of the Service Retirement benefit will be paid, if greater.

Line-of-Duty Disability:

All Members

Eligibility

No age or service requirements. (§31720)

Benefit Formula

50% of the Final Compensation or 100% of Service Retirement benefit, if greater. (§31727.4)

SECTION 4: Reporting Information for the Orange County Employees Retirement System

Pre-Retirement Death:

All Members

Eligibility

None.

Benefit

Refund of employee contributions with interest plus one month's compensation for each year of service to a maximum of six month's compensation. (§31781) A lump sum benefit in the amount of \$1,000 is payable upon the death of a member (with 10 years of service) to his/her eligible beneficiary. (§31790)

Death in line of duty

50% of Final Compensation or 100% of Service Retirement benefit, if greater, payable to spouse or minor-children. (§31787)

OR

Vested Members

Eligibility

Five years of service.

Benefit

60% of the greater of Service or Ordinary Disability Retirement benefit payable to eligible surviving spouse (§31765.1, §31781.1), in lieu of §31781.

Death After Retirement:

All Members

Service or

Ordinary Disability Retirement

60% of member's unmodified allowance continued to eligible spouse. (§31760.1) A lump sum benefit in the amount of \$1,000 is payable upon the death of a member (with 10 years of service) to his/her eligible beneficiary. (§31790) An eligible spouse is a surviving spouse who was married to the member at least one year prior to the date of retirement. (§31760.1)

Line-of-Duty Disability

100% of member's allowance continued to eligible spouse. (§31786) A lump sum benefit in the amount of \$1,000 is payable upon the death of a member (with 10 years of service) to his/her eligible beneficiary. (§31790)

SECTION 4: Reporting Information for the Orange County Employees Retirement System

Withdrawal Benefits:

<i>Less than Five Years of Service</i>	Refund of accumulated employee contributions with interest or earned benefit at age 70. (§31628) Effective January 1, 2003, A member may also elect to leave their contributions on deposit in the retirement fund. (§31629.5)
<i>Five or More Years of Service</i>	If contributions left on deposit, entitled to earned benefits commencing at any time after eligible to retire. (§31700)

Post-retirement

Cost-of-Living Benefits:

Future changes based on Consumer Price Index to a maximum of 3% per year, excess “banked.” (§31870.1)

Supplemental Benefit:

Non-vested supplemental COLA and medical benefits are also paid by the System to eligible retirees and survivors. These benefits have been excluded from this valuation.

Member Contributions:

Please refer to Appendix A for the specific rates.

General Plans

Plan A

<i>Basic</i>	Provide for an average annuity payable at age 60 equal to 1/200 of FAS1. (§31621.5)
<i>Cost-of-Living</i>	Provide for one-half of future Cost-of-Living costs.

Plan B

<i>Basic</i>	Provide for an average annuity payable at age 60 equal to 1/120 of FAS3. (§31621)
<i>Cost-of-Living</i>	Provide for one-half of future Cost-of-Living costs.

Plans G, H, I and J

<i>Basic</i>	Provide for an average annuity payable at age 55 equal to 1/100 of FAS3 (FAS1 for Plans G and I). (§31621.8)
<i>Cost-of-Living</i>	Provide for one-half of future Cost-of-Living costs.

SECTION 4: Reporting Information for the Orange County Employees Retirement System

Plan M

Basic

Provide for an average annuity payable at age 60 equal to 1/120 of FAS1. (§31621)

Cost-of-Living

Provide for one-half of future Cost-of-Living costs.

Plan N

Basic

Provide for an average annuity payable at age 60 equal to 1/120 of FAS3. (§31621)

Cost-of-Living

Provide for one-half of future Cost-of-Living costs.

Safety Plans:

Plans E

Basic

Provide for an average annuity payable at age 50 equal to 1/200 FAS1. (§31639.5)

Cost-of-Living

Provide for one-half of future Cost-of-Living costs.

Plans F

Basic

Provide for an average annuity payable at age 50 equal to 1/100 of FAS3. (§31639.25)

Cost-of-Living

Provide for one-half of future Cost-of-Living costs.

Other Information:

Safety members with 30 or more years of service are exempt from paying member contributions. The same applies for General members hired on or before March 7, 1973.

SECTION 4: Reporting Information for the Orange County Employees Retirement System

Changes in Plan Provisions

The following plan changes are included in this valuation:

- (a) Probation adopted 3.0% of final average pay at age 50 on service earned after June 30, 2005.
- (b) The Orange County Sanitation District and City of Rancho Santa Margarita adopted 2.5% of final average pay at age 55 on all service.
- (c) The General employees of Orange County (with the exception of bargaining unit AFSCME), Orange County Superior Court, Orange County Fire Authority and City of San Juan Capistrano all adopted 2.7% of final average pay at age 55 on all service.
- (d) The Orange County Local Agency Formation Commission adopted 2.7% of final average pay at age 55 on service earned after June 23, 2005. Orange County Employees Retirement System (management employees) adopted 2.7% of final average pay at 55 on service earned after June 30, 2005. Children and Family Commission adopted 2.7% of final average pay at 55 on service earned after December 22, 2005.
- (e) The Law Library adopted 2.5% of final average pay at age 55 on service earned after June 23, 2005.
- (f) Transportation Corridor Agency adopted 2.0% of final average pay at age 55 on all service.

NOTE: *The summary of major plan provisions is designed to outline principle plan benefits as interpreted for purposes of the actuarial valuation. If the System should find the plan summary not in accordance with the actual provisions, the System should alert the actuary so that both can be sure the proper provisions are valued.*

SECTION 4: Reporting Information for the Orange County Employees Retirement System

Appendix A

UAAL Amortization Schedule as of December 31, 2004

Rate Groups	Date Established	Initial Base	Amortization Amount	Years Remaining	Remaining Base
<i>General Members</i>					
Rate Group #1 – Non-OCTA	12/31/2004	\$45,292,000	\$2,653,000	30	\$45,292,000
Rate Group #2 – 2.7% @ 55	12/31/2004	1,331,507,000	78,008,000	30	1,331,507,000
Rate Group #3 – 2.5% @ 55 (non-Rancho Santa Margarita)	12/31/2004	67,595,000	3,960,000	30	67,595,000
Rate Group #4 – 2.5% @ 55 (Rancho Santa Margarita)	12/31/2004	191,000	11,000	30	191,000
Rate Group #5 – OCTA	12/31/2004	70,302,000	4,119,000	30	70,302,000
Rate Group #9 – TCA	12/31/2004	6,061,000	355,000	30	6,061,000
<i>Safety Members</i>					
Rate Group #6 – Probation	12/31/2004	82,839,000	4,853,000	30	82,839,000
Rate Group #7 – Law Enforcement	12/31/2004	409,515,000	23,992,000	30	409,515,000
Rate Group #8 – Fire Authority	12/31/2004	<u>144,849,000</u>	<u>8,486,000</u>	30	<u>144,849,000</u>
Total	12/31/2004	<u>\$2,158,151,000</u>	<u>\$126,437,000</u>		<u>\$2,158,151,000</u>

SECTION 4: Reporting Information for the Orange County Employees Retirement System

Appendix B

Members Contribution Rates

**General Plans A (OCTA and Non-OCTA), G, I and M Members' Contribution Rates from the December 31, 2004 Actuarial Valuation
(Expressed as a Percentage of Monthly Payroll)**

Calculated Under Adopted Assumptions

<u>Entry Age</u>	<u>Plan I (2.7% @ 55)</u>		<u>Plan G (2.5% @ 55)</u>		<u>Plan M (2.0% @ 55)</u>		<u>Plan A (OCTA)</u>		<u>Plan A (Non-OCTA)</u>	
	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>
15	7.35%	9.89%	7.35%	9.76%	5.07%	7.17%	3.04%	5.16%	3.04%	4.90%
16	7.35%	9.89%	7.35%	9.76%	5.07%	7.17%	3.04%	5.16%	3.04%	4.90%
17	7.34%	9.88%	7.34%	9.75%	5.07%	7.17%	3.04%	5.16%	3.04%	4.90%
18	7.33%	9.87%	7.33%	9.75%	5.08%	7.18%	3.05%	5.17%	3.05%	4.91%
19	7.33%	9.87%	7.33%	9.75%	5.08%	7.18%	3.05%	5.17%	3.05%	4.91%
20	7.34%	9.88%	7.34%	9.75%	5.09%	7.19%	3.05%	5.17%	3.05%	4.91%
21	7.35%	9.89%	7.35%	9.76%	5.11%	7.21%	3.06%	5.19%	3.06%	4.93%
22	7.37%	9.92%	7.37%	9.79%	5.12%	7.24%	3.07%	5.21%	3.07%	4.95%
23	7.39%	9.95%	7.39%	9.83%	5.15%	7.27%	3.09%	5.23%	3.09%	4.97%
24	7.43%	10.00%	7.43%	9.87%	5.18%	7.31%	3.11%	5.26%	3.11%	5.00%
25	7.47%	10.06%	7.47%	9.93%	5.21%	7.36%	3.13%	5.30%	3.13%	5.03%
26	7.52%	10.12%	7.52%	10.00%	5.25%	7.42%	3.15%	5.34%	3.15%	5.07%
27	7.58%	10.20%	7.58%	10.07%	5.30%	7.48%	3.18%	5.38%	3.18%	5.12%
28	7.64%	10.29%	7.64%	10.16%	5.35%	7.55%	3.21%	5.43%	3.21%	5.16%
29	7.71%	10.38%	7.71%	10.25%	5.40%	7.63%	3.24%	5.49%	3.24%	5.21%
30	7.79%	10.49%	7.79%	10.35%	5.46%	7.71%	3.27%	5.55%	3.27%	5.27%
31	7.87%	10.59%	7.87%	10.46%	5.52%	7.79%	3.31%	5.61%	3.31%	5.33%
32	7.96%	10.71%	7.96%	10.57%	5.58%	7.88%	3.35%	5.67%	3.35%	5.39%
33	8.05%	10.83%	8.05%	10.70%	5.65%	7.98%	3.39%	5.74%	3.39%	5.46%
34	8.14%	10.96%	8.14%	10.82%	5.72%	8.08%	3.43%	5.82%	3.43%	5.53%
35	8.24%	11.10%	8.24%	10.96%	5.80%	8.19%	3.48%	5.89%	3.48%	5.60%
36	8.35%	11.24%	8.35%	11.10%	5.87%	8.30%	3.52%	5.97%	3.52%	5.67%
37	8.46%	11.38%	8.46%	11.24%	5.95%	8.41%	3.57%	6.05%	3.57%	5.75%

SECTION 4: Reporting Information for the Orange County Employees Retirement System

General Plans A (OCTA and Non-OCTA), G, I and M Members' Contribution Rates from the December 31, 2004 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

Calculated Under Adopted Assumptions

<u>Entry Age</u>	<u>Plan I (2.7% @ 55)</u>		<u>Plan G (2.5% @ 55)</u>		<u>Plan M (2.0% @ 55)</u>		<u>Plan A (OCTA)</u>		<u>Plan A (Non-OCTA)</u>	
	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>
38	8.57%	11.53%	8.57%	11.39%	6.04%	8.52%	3.62%	6.13%	3.62%	5.83%
39	8.68%	11.68%	8.68%	11.54%	6.12%	8.64%	3.67%	6.22%	3.67%	5.91%
40	8.80%	11.84%	8.80%	11.69%	6.21%	8.76%	3.72%	6.31%	3.72%	5.99%
41	8.91%	12.00%	8.91%	11.85%	6.29%	8.89%	3.78%	6.40%	3.78%	6.08%
42	9.04%	12.16%	9.04%	12.01%	6.38%	9.02%	3.83%	6.49%	3.83%	6.16%
43	9.16%	12.33%	9.16%	12.17%	6.48%	9.14%	3.89%	6.58%	3.89%	6.25%
44	9.28%	12.50%	9.28%	12.34%	6.57%	9.28%	3.94%	6.67%	3.94%	6.34%
45	9.41%	12.67%	9.41%	12.51%	6.66%	9.41%	4.00%	6.77%	4.00%	6.43%
46	9.54%	12.84%	9.54%	12.68%	6.76%	9.55%	4.06%	6.87%	4.06%	6.53%
47	9.67%	13.02%	9.67%	12.85%	6.86%	9.69%	4.12%	6.97%	4.12%	6.62%
48	9.81%	13.20%	9.81%	13.04%	6.96%	9.83%	4.18%	7.08%	4.18%	6.72%
49	9.94%	13.39%	9.94%	13.22%	7.07%	9.98%	4.24%	7.18%	4.24%	6.82%
50	10.08%	13.58%	10.08%	13.40%	7.17%	10.13%	4.30%	7.29%	4.30%	6.93%
51	10.23%	13.77%	10.23%	13.59%	7.28%	10.29%	4.37%	7.40%	4.37%	7.03%
52	10.37%	13.96%	10.37%	13.79%	7.40%	10.45%	4.44%	7.52%	4.44%	7.14%
53	10.53%	14.17%	10.53%	13.99%	7.51%	10.61%	4.51%	7.64%	4.51%	7.26%
54	10.69%	14.38%	10.69%	14.20%	7.64%	10.78%	4.58%	7.76%	4.58%	7.37%
55	10.69%	14.38%	10.69%	14.20%	7.76%	10.96%	4.66%	7.89%	4.66%	7.49%
56	10.69%	14.38%	10.69%	14.20%	7.89%	11.14%	4.73%	8.02%	4.73%	7.62%
57	10.69%	14.38%	10.69%	14.20%	8.02%	11.32%	4.81%	8.15%	4.81%	7.74%
58	10.69%	14.38%	10.69%	14.20%	8.15%	11.51%	4.89%	8.28%	4.89%	7.87%
59	10.69%	14.38%	10.69%	14.20%	8.28%	11.70%	4.97%	8.42%	4.97%	8.00%
60	10.69%	14.38%	10.69%	14.20%	8.28%	11.70%	4.97%	8.42%	4.97%	8.00%
<i>COLA Loading:</i>		34.62%		32.92%		41.22%		69.37%		60.95%

Interest: 7.75%

Salary Increases: See Exhibit IV, page 51

Mortality: See Exhibit IV, page 45

SECTION 4: Reporting Information for the Orange County Employees Retirement System

**General Plans B (OCTA and Non-OCTA), H, J and N Members' Contribution Rates from the December 31, 2004 Actuarial Valuation
(Expressed as a Percentage of Monthly Payroll)
Calculated Under Adopted Assumptions**

<u>Entry Age</u>	<u>Plan J (2.7% @ 55)</u>		<u>Plan H (2.5% @ 55)</u>		<u>Plan N (2.0% @ 55)</u>		<u>Plan B (OCTA)</u>		<u>Plan B (Non-OCTA)</u>	
	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>
15	7.03%	9.46%	7.03%	9.34%	4.87%	6.87%	4.87%	6.89%	4.87%	6.65%
16	7.03%	9.46%	7.03%	9.34%	4.87%	6.87%	4.87%	6.89%	4.87%	6.65%
17	7.02%	9.45%	7.02%	9.33%	4.87%	6.87%	4.87%	6.89%	4.87%	6.65%
18	7.01%	9.44%	7.01%	9.32%	4.87%	6.87%	4.87%	6.89%	4.87%	6.65%
19	7.01%	9.44%	7.01%	9.32%	4.87%	6.87%	4.87%	6.89%	4.87%	6.65%
20	7.02%	9.45%	7.02%	9.33%	4.88%	6.90%	4.88%	6.92%	4.88%	6.67%
21	7.03%	9.46%	7.03%	9.34%	4.90%	6.91%	4.90%	6.93%	4.90%	6.69%
22	7.05%	9.48%	7.05%	9.37%	4.91%	6.94%	4.91%	6.96%	4.91%	6.71%
23	7.07%	9.52%	7.07%	9.40%	4.94%	6.97%	4.94%	6.99%	4.94%	6.74%
24	7.10%	9.56%	7.10%	9.44%	4.96%	7.01%	4.96%	7.03%	4.96%	6.78%
25	7.14%	9.62%	7.14%	9.50%	5.00%	7.06%	5.00%	7.08%	5.00%	6.83%
26	7.19%	9.68%	7.19%	9.56%	5.04%	7.11%	5.04%	7.13%	5.04%	6.88%
27	7.25%	9.76%	7.25%	9.63%	5.08%	7.17%	5.08%	7.19%	5.08%	6.94%
28	7.31%	9.84%	7.31%	9.72%	5.13%	7.24%	5.13%	7.26%	5.13%	7.00%
29	7.38%	9.93%	7.38%	9.81%	5.18%	7.31%	5.18%	7.33%	5.18%	7.07%
30	7.45%	10.03%	7.45%	9.90%	5.23%	7.39%	5.23%	7.41%	5.23%	7.15%
31	7.53%	10.13%	7.53%	10.00%	5.29%	7.47%	5.29%	7.49%	5.29%	7.23%
32	7.61%	10.24%	7.61%	10.11%	5.35%	7.56%	5.35%	7.58%	5.35%	7.31%
33	7.70%	10.36%	7.70%	10.23%	5.42%	7.65%	5.42%	7.68%	5.42%	7.40%
34	7.79%	10.48%	7.79%	10.35%	5.49%	7.75%	5.49%	7.77%	5.49%	7.50%
35	7.88%	10.61%	7.88%	10.48%	5.56%	7.85%	5.56%	7.87%	5.56%	7.59%
36	7.98%	10.75%	7.98%	10.61%	5.63%	7.96%	5.63%	7.98%	5.63%	7.69%
37	8.09%	10.89%	8.09%	10.75%	5.71%	8.06%	5.71%	8.09%	5.71%	7.80%

SECTION 4: Reporting Information for the Orange County Employees Retirement System

**General Plans B (OCTA and Non-OCTA), H, J and N Members' Contribution Rates from the December 31, 2004 Actuarial Valuation
(Expressed as a Percentage of Monthly Payroll)
Calculated Under Adopted Assumptions**

<u>Entry Age</u>	<u>Plan J (2.7% @ 55)</u>		<u>Plan H (2.5% @ 55)</u>		<u>Plan N (2.0% @ 55)</u>		<u>Plan B (OCTA)</u>		<u>Plan B (Non-OCTA)</u>	
	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>
38	8.19%	11.03%	8.19%	10.89%	5.79%	8.17%	5.79%	8.20%	5.79%	7.91%
39	8.30%	11.17%	8.30%	11.03%	5.87%	8.29%	5.87%	8.31%	5.87%	8.02%
40	8.41%	11.32%	8.41%	11.18%	5.95%	8.40%	5.95%	8.43%	5.95%	8.13%
41	8.53%	11.48%	8.53%	11.33%	6.04%	8.52%	6.04%	8.55%	6.04%	8.24%
42	8.64%	11.63%	8.64%	11.49%	6.12%	8.65%	6.12%	8.67%	6.12%	8.36%
43	8.76%	11.79%	8.76%	11.64%	6.21%	8.77%	6.21%	8.79%	6.21%	8.48%
44	8.88%	11.95%	8.88%	11.80%	6.30%	8.90%	6.30%	8.92%	6.30%	8.60%
45	9.00%	12.11%	9.00%	11.96%	6.39%	9.02%	6.39%	9.05%	6.39%	8.73%
46	9.12%	12.28%	9.12%	12.13%	6.48%	9.16%	6.48%	9.18%	6.48%	8.85%
47	9.25%	12.45%	9.25%	12.29%	6.58%	9.29%	6.58%	9.32%	6.58%	8.99%
48	9.38%	12.63%	9.38%	12.47%	6.68%	9.43%	6.68%	9.46%	6.68%	9.12%
49	9.51%	12.80%	9.51%	12.64%	6.78%	9.57%	6.78%	9.60%	6.78%	9.26%
50	9.64%	12.98%	9.64%	12.82%	6.88%	9.72%	6.88%	9.74%	6.88%	9.40%
51	9.78%	13.17%	9.78%	13.00%	6.99%	9.86%	6.99%	9.89%	6.99%	9.54%
52	9.92%	13.35%	9.92%	13.19%	7.09%	10.02%	7.09%	10.05%	7.09%	9.69%
53	10.30%	13.86%	10.30%	13.68%	7.21%	10.18%	7.21%	10.21%	7.21%	9.84%
54	10.69%	14.38%	10.69%	14.20%	7.32%	10.34%	7.32%	10.37%	7.32%	10.00%
55	10.69%	14.38%	10.69%	14.20%	7.44%	10.51%	7.44%	10.54%	7.44%	10.16%
56	10.69%	14.38%	10.69%	14.20%	7.57%	10.68%	7.57%	10.71%	7.57%	10.33%
57	10.69%	14.38%	10.69%	14.20%	7.69%	10.86%	7.69%	10.89%	7.69%	10.50%
58	10.69%	14.38%	10.69%	14.20%	7.98%	11.27%	7.98%	11.30%	7.98%	10.90%
59	10.69%	14.38%	10.69%	14.20%	8.28%	11.70%	8.28%	11.73%	8.28%	11.31%
60	10.69%	14.38%	10.69%	14.20%	8.28%	11.70%	8.28%	11.73%	8.28%	11.31%
<i>COLA Loading:</i>		34.62%		32.92%		41.22%		41.62%		36.57%

Interest: 7.75%
Salary Increases: See Exhibit IV, page 51
Mortality: See Exhibit IV, page 45

SECTION 4: Reporting Information for the Orange County Employees Retirement System

**Safety Plan E (Fire, Law and Probation) Members' Contribution Rates from the December 31, 2004 Actuarial Valuation
(Expressed as a Percentage of Monthly Payroll)
Calculated Under Adopted Assumptions**

<u>Entry Age</u>	<u>Plan E (Fire Authority)</u>		<u>Plan E (Law Enforcement)</u>		<u>Plan E (Probation)</u>	
	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>
15	3.77%	8.56%	3.77%	8.46%	3.77%	8.20%
16	3.77%	8.56%	3.77%	8.46%	3.77%	8.20%
17	3.77%	8.56%	3.77%	8.46%	3.77%	8.20%
18	3.77%	8.56%	3.77%	8.46%	3.77%	8.20%
19	3.77%	8.56%	3.77%	8.46%	3.77%	8.20%
20	3.78%	8.57%	3.78%	8.48%	3.78%	8.21%
21	3.78%	8.59%	3.78%	8.50%	3.78%	8.21%
22	3.79%	8.61%	3.79%	8.52%	3.79%	8.25%
23	3.81%	8.64%	3.81%	8.55%	3.81%	8.28%
24	3.83%	8.68%	3.83%	8.59%	3.83%	8.32%
25	3.85%	8.73%	3.85%	8.64%	3.85%	8.37%
26	3.87%	8.79%	3.87%	8.69%	3.87%	8.42%
27	3.90%	8.86%	3.90%	8.76%	3.90%	8.48%
28	3.93%	8.93%	3.93%	8.84%	3.93%	8.56%
29	3.97%	9.02%	3.97%	8.92%	3.97%	8.64%
30	4.02%	9.12%	4.02%	9.02%	4.02%	8.73%
31	4.06%	9.22%	4.06%	9.12%	4.06%	8.84%
32	4.12%	9.34%	4.12%	9.24%	4.12%	8.95%
33	4.17%	9.47%	4.17%	9.37%	4.17%	9.08%
34	4.24%	9.62%	4.24%	9.51%	4.24%	9.21%
35	4.30%	9.77%	4.30%	9.66%	4.30%	9.36%
36	4.38%	9.93%	4.38%	9.82%	4.38%	9.52%
37	4.45%	10.11%	4.45%	10.00%	4.45%	9.68%

SECTION 4: Reporting Information for the Orange County Employees Retirement System

**Safety Plan E (Fire, Law and Probation) Members' Contribution Rates from the December 31, 2004 Actuarial Valuation
(Expressed as a Percentage of Monthly Payroll)**

Calculated Under Adopted Assumptions

<u>Entry Age</u>	<u>Plan E (Fire Authority)</u>		<u>Plan E (Law Enforcement)</u>		<u>Plan E (Probation)</u>	
	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>
38	4.53%	10.29%	4.53%	10.18%	4.53%	9.86%
39	4.61%	10.48%	4.61%	10.36%	4.61%	10.04%
40	4.70%	10.67%	4.70%	10.55%	4.70%	10.22%
41	4.79%	10.87%	4.79%	10.75%	4.79%	10.41%
42	4.88%	11.07%	4.88%	10.95%	4.88%	10.60%
43	4.97%	11.28%	4.97%	11.15%	4.97%	10.80%
44	5.06%	11.49%	5.06%	11.36%	5.06%	11.00%
45	5.15%	11.70%	5.15%	11.57%	5.15%	11.21%
46	5.25%	11.91%	5.25%	11.78%	5.25%	11.41%
47	5.34%	12.13%	5.34%	12.00%	5.34%	11.62%
48	5.44%	12.35%	5.44%	12.21%	5.44%	11.83%
49	5.54%	12.57%	5.54%	12.43%	5.54%	12.04%
50	5.54%	12.57%	5.54%	12.43%	5.54%	12.04%
51	5.54%	12.57%	5.54%	12.43%	5.54%	12.04%
52	5.54%	12.57%	5.54%	12.43%	5.54%	12.04%
53	5.54%	12.57%	5.54%	12.43%	5.54%	12.04%
54	5.54%	12.57%	5.54%	12.43%	5.54%	12.04%
55	5.54%	12.57%	5.54%	12.43%	5.54%	12.04%
56	5.54%	12.57%	5.54%	12.43%	5.54%	12.04%
57	5.54%	12.57%	5.54%	12.43%	5.54%	12.04%
58	5.54%	12.57%	5.54%	12.43%	5.54%	12.04%
59	5.54%	12.57%	5.54%	12.43%	5.54%	12.04%
60	5.54%	12.57%	5.54%	12.43%	5.54%	12.04%
<i>COLA Loading:</i>		<i>127.03%</i>		<i>124.53%</i>		<i>117.49%</i>

Interest: 7.75%
Salary Increases: See Exhibit IV, page 51
Mortality: See Exhibit IV, page 45

SECTION 4: Reporting Information for the Orange County Employees Retirement System

**Safety Plan F (Fire, Law and Probation) Members' Contribution Rates from the December 31, 2004 Actuarial Valuation
(Expressed as a Percentage of Monthly Payroll)
Calculated Under Adopted Assumptions**

<u>Entry Age</u>	<u>Plan F (Fire Authority)</u>		<u>Plan F (Law Enforcement)</u>		<u>Plan F (Probation)</u>	
	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>
15	7.25%	11.86%	7.25%	11.77%	7.25%	11.51%
16	7.25%	11.86%	7.25%	11.77%	7.25%	11.51%
17	7.25%	11.86%	7.25%	11.77%	7.25%	11.51%
18	7.25%	11.86%	7.25%	11.77%	7.25%	11.51%
19	7.26%	11.87%	7.26%	11.78%	7.26%	11.52%
20	7.27%	11.88%	7.27%	11.79%	7.27%	11.54%
21	7.28%	11.91%	7.28%	11.81%	7.28%	11.56%
22	7.30%	11.94%	7.30%	11.85%	7.30%	11.59%
23	7.33%	11.98%	7.33%	11.89%	7.33%	11.63%
24	7.36%	12.03%	7.36%	11.94%	7.36%	11.68%
25	7.40%	12.10%	7.40%	12.01%	7.40%	11.75%
26	7.45%	12.18%	7.45%	12.09%	7.45%	11.83%
27	7.51%	12.27%	7.51%	12.18%	7.51%	11.92%
28	7.57%	12.38%	7.57%	12.29%	7.57%	12.02%
29	7.64%	12.50%	7.64%	12.40%	7.64%	12.14%
30	7.73%	12.63%	7.73%	12.54%	7.73%	12.27%
31	7.82%	12.78%	7.82%	12.69%	7.82%	12.41%
32	7.92%	12.95%	7.92%	12.85%	7.92%	12.57%
33	8.03%	13.13%	8.03%	13.03%	8.03%	12.75%
34	8.15%	13.33%	8.15%	13.22%	8.15%	12.94%
35	8.28%	13.54%	8.28%	13.43%	8.28%	13.14%
36	8.42%	13.77%	8.42%	13.66%	8.42%	13.36%
37	8.57%	14.01%	8.57%	13.90%	8.57%	13.60%

SECTION 4: Reporting Information for the Orange County Employees Retirement System

**Safety Plan F (Fire, Law and Probation) Members' Contribution Rates from the December 31, 2004 Actuarial Valuation
(Expressed as a Percentage of Monthly Payroll)**

Calculated Under Adopted Assumptions

<u>Entry Age</u>	<u>Plan F (Fire Authority)</u>		<u>Plan F (Law Enforcement)</u>		<u>Plan F (Probation)</u>	
	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>
38	8.72%	14.26%	8.72%	14.15%	8.72%	13.84%
39	8.88%	14.52%	8.88%	14.41%	8.88%	14.10%
40	9.04%	14.79%	9.04%	14.67%	9.04%	14.35%
41	9.21%	15.06%	9.21%	14.95%	9.21%	14.62%
42	9.38%	15.34%	9.38%	15.22%	9.38%	14.89%
43	9.56%	15.63%	9.56%	15.51%	9.56%	15.17%
44	9.73%	15.92%	9.73%	15.80%	9.73%	15.45%
45	9.91%	16.21%	9.91%	16.09%	9.91%	15.74%
46	10.10%	16.51%	10.10%	16.38%	10.10%	16.03%
47	10.28%	16.81%	10.28%	16.68%	10.28%	16.32%
48	10.67%	17.45%	10.67%	17.31%	10.67%	16.94%
49	11.08%	18.11%	11.08%	17.97%	11.08%	17.58%
50	11.08%	18.11%	11.08%	17.97%	11.08%	17.58%
51	11.08%	18.11%	11.08%	17.97%	11.08%	17.58%
52	11.08%	18.11%	11.08%	17.97%	11.08%	17.58%
53	11.08%	18.11%	11.08%	17.97%	11.08%	17.58%
54	11.08%	18.11%	11.08%	17.97%	11.08%	17.58%
55	11.08%	18.11%	11.08%	17.97%	11.08%	17.58%
56	11.08%	18.11%	11.08%	17.97%	11.08%	17.58%
57	11.08%	18.11%	11.08%	17.97%	11.08%	17.58%
58	11.08%	18.11%	11.08%	17.97%	11.08%	17.58%
59	11.08%	18.11%	11.08%	17.97%	11.08%	17.58%
60	11.08%	18.11%	11.08%	17.97%	11.08%	17.58%
<i>COLA Loading:</i>		63.52%		62.27%		58.75%

Interest: 7.75%
Salary Increases: See Exhibit IV, page 51
Mortality: See Exhibit IV, page 45

SECTION 4: Reporting Information for the Orange County Employees Retirement System

Appendix C

Reconciliation of the December 31, 2003 Valuation Results with Those Calculated by the System's Prior Actuary

194348/05794.012



THE SEGAL COMPANY
 120 Montgomery Street, Suite 500 San Francisco, CA 94104-4308
 T 415.263.8200 F 415.263.8290 www.segalco.com

VIA E-MAIL AND U.S. MAIL

February 3, 2005

Mr. Keith Bozarth
 Chief Executive Officer
 Orange County Employees Retirement System
 2223 Wellington Avenue
 Santa Ana, CA 92701

Re: **Orange County Employees Retirement System
 Segal's Reconciliation of the December 31, 2003 Valuation Results
 with those Calculated by Towers Perrin**

Dear Keith:

In this letter, we have documented Segal's reconciliation of the December 31, 2003 valuation results with those calculated by Towers Perrin (TP) in their actuarial report dated July 16, 2004. This reconciliation was carried out as part of the transition of actuarial services to Segal to ensure that we could independently replicate the actuarial values and contribution requirements as determined by TP for the employer and the members using the plan provisions and actuarial assumptions adopted by the Board for the December 31, 2003 valuation.

Membership Data

Membership data used in our reconciliation was provided by TP. Please note that we did not attempt to audit or reconcile the TP data back to the source data originally supplied by the System. A summary of the number of members included in the valuation is set forth in the table below.

Membership Count	Segal			TP			Segal Total/ TP Total
	General	Safety	Total	General	Safety	Total	
Active Members	19,003	3,645	22,648	19,022	3,649	22,671	99.9%
Inactive Members	2,143	135	2,278	2,143	135	2,278	100.0%
Retirees and Beneficiaries	7,967	1,099	9,066	7,980	1,099	9,079	99.9%
Total	29,113	4,879	33,992	29,145	4,883	34,028	99.9%



Statistical Information

The statistical information was reproduced on the Segal system and compares to that presented in the December 31, 2003 valuation as shown in the table below.

	<u>Segal</u>			<u>TP</u>			<u>Segal Total/ TP Total</u>
	<u>General</u>	<u>Safety</u>	<u>Total</u>	<u>General</u>	<u>Safety</u>	<u>Total</u>	
Active Members							
- Average Attained Age	44.2	40.3	43.6	44.1	40.4	43.5	100.2%
- Average Service	10.1	12.1	10.4	10.4	12.1	10.7	97.2%
Retirees and Beneficiaries							
- Average Pension	\$1,692	\$3,696	\$1,935	\$1,691	\$3,713	\$1,936	100.0%

Actuarial Liability Results

In our reconciliation, we compared the following actuarial values:

- The total actuarial accrued liabilities for active members (the equivalent of the accumulated normal costs allocated to the years before the valuation date) and inactive members (the single sum value of the lifetime benefits to current pensioners, beneficiaries and deferred vested members);
- The actuarial value of assets; and
- The next year's employee, employer and total normal cost (the amount of contributions required to fund the dollar normal cost allocated to the current year of service).

The valuation programs used by two different actuaries rarely produce identical results. This can be due to differences in decrement timing (such as, exactly when will a member expected to retire at a given age actually retire: beginning, middle or end of that year) or other differences in methodology. Even though there is no generally accepted actuarial principle that provides guidance on what is considered an acceptable difference, a variance of 5% or less is generally considered acceptable. The comparisons of these results are set forth in the table on the following page.

Mr. Keith Bozarth
Orange County Employees Retirement System
Segal's Reconciliation of the December 31, 2003 Valuation Results
With those Calculated by Towers Perrin
February 3, 2005
Page 3

(In Thousand Dollars)	Segal			TP			Segal Total/ TP Total
	General	Safety	Total	General	Safety	Total	
Actuarial Accrued Liability (AAL)	\$4,241,070	\$1,964,994	\$6,206,064	\$4,143,155	\$1,956,278	\$6,099,433	101.7%
Actuarial Value of Assets	\$3,493,884	\$1,296,215	\$4,790,099	\$3,493,884	\$1,296,215	\$4,790,099	100.0%
Next Year's Employee Normal Cost*	\$68,785	\$28,099	\$96,884	\$68,785	\$28,099	\$96,884	100.0%
Next Year's Employer Normal Cost**	\$56,070	\$36,802	\$92,872	\$53,514	\$37,247	\$90,761	102.3%
Next Year's Total Normal Cost	\$124,855	\$64,901	\$189,756	\$122,299	\$65,346	\$187,645	101.1%

* The TP employee normal costs included above are actually those calculated by Segal's valuation software. Even though the aggregate employee normal costs are not provided in the TP December 31, 2003 valuation report, TP has provided Segal with the employee normal cost for each member in OCTA. Segal has reproduced TP's employee normal cost for members in that group. That leads us to conclude that there are no material differences in how the two valuation programs calculate employee normal cost.

** Segal's employer normal costs are calculated using a method that we believe to be consistent with that used by TP. See Segal's recommendations below on suggested changes to the current method for the upcoming benefit improvement studies and annual valuation.

We observe that our system produced a higher actuarial accrued liability and a higher total normal cost when compared to TP. Since our results were within 5% of those produced by TP, we believe that the liabilities calculated by TP in the December 31, 2003 valuation were reasonable, accurate and in accordance with generally accepted actuarial principles, and that they reflect the plan provisions and actuarial assumptions adopted by the Board for the December 31, 2003 valuation.

Observations and Recommendations

Calculation of the UAAL Rate

We recommend that the current UAAL rate calculation methodology be continued for the benefit improvement studies. We further recommend that the System consider the following changes be considered for incorporation into the December 31, 2004 valuation.

1. There is a difference of \$106.6 million in UAAL produced by Segal's valuation software. This is about 1.7% of the total AAL. The higher UAAL will be combined with the System's other actuarial

gains or losses during calendar year 2004 and used to set the System's UAAL rate in the December 31, 2004 valuation.

2. As part of our reconciliation, we have also compared the total outstanding balance of all the amortization layers (\$1,184.8 million) with the System's UAAL as of December 31, 2003 (\$1,309.3 million). The difference is \$124.5 million. We believe the difference arises from the methodology that was applied in calculating the new actuarial gains or losses in previous valuations. We propose that the difference between the current UAAL payment and the amount required to amortize the full UAAL be included in setting the System's new UAAL rate in the December 31, 2004 valuation.
3. The current UAAL rate has been calculated assuming that employer UAAL contributions would be made at the end of the year. We believe an adjustment can be made to more accurately align the employer UAAL rate to reflect that, on the average, UAAL contributions are paid at the middle of the year. This will result in a reduction in the current UAAL rate.

Calculation of the Employer Normal Cost Rate

TP has provided Segal with the total, employer and employee normal cost for each member in OCTA. From those cost calculations, we make the following observations and suggested changes for the upcoming benefit improvement studies requested by certain employers in advance of the December 31, 2004 valuation, as well as for the December 31, 2004 valuation:

1. Currently, employee normal cost is calculated by taking the current year's salary and multiplying that times the employee rate. Implicit in that calculation was the assumption that all active employees as of December 31, 2003 would remain employed during calendar year 2004 and there would be no termination until the end of the year. We propose that this methodology be continued for the benefit improvement studies but believe it should be reviewed as part of the December 31, 2004 valuation.
2. Currently, employer normal cost was calculated by taking the difference between the total normal cost and the employee normal cost described above. Since terminal pay was not programmed into TP's valuation software, TP made a normal cost adjustment outside of their valuation software by multiplying the expected percentage of terminal pay times the net employer normal cost to approximate the impact of including terminal pay. We believe this method could understate the employer normal cost as we believe that the total normal cost should be adjusted by the terminal pay percentage before netting out the employee normal cost contributions. We propose that this new methodology be applied in both the benefit improvement studies and the December 31, 2004 valuation.
3. We understand that the current total normal cost was calculated assuming that the contributions would be made by the employer and the employee as of the beginning of the year. We propose that the current methodology be continued for the improvement studies. However, an adjustment to reflect that, on the average, normal cost contributions are paid at the middle of the year should be included in the December 31, 2004 valuation.

Mr. Keith Bozarth
Orange County Employees Retirement System
Segal's Reconciliation of the December 31, 2003 Valuation Results
With those Calculated by Towers Perrin
February 3, 2005
Page 5

With the above normal cost adjustments, we estimate that the total employer normal cost calculated in the December 31, 2003 valuation would have increased from \$93 million to about \$104 million.

Please let us know if you have any questions.

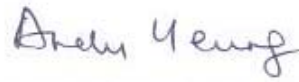
Sincerely,



Paul Angelo, FSA, MAAA
Vice President and Actuary

AYY/gxk:jc

cc: James W. Buck
Stephen Cadena



Andy Yeung, ASA, MAAA
Associate Actuary

183452/05794.002