

Orange County Employees Retirement System

*Actuarial Valuation and Review
as of December 31, 2008*

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June 12, 2009

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

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of December 31, 2008. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2010-2011 and analyzes the preceding year's experience. The results of this valuation were prepared using the actuarial assumptions and methods provided in our December 31, 2007 actuarial valuation report dated January 13, 2009, except for the General member retirement probabilities for those plans with improved benefit formulas. For those plans, the Board adopted the proposed retirement rates shown in our April 10, 2009 letter to the System.


The census and the unaudited financial information were 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.

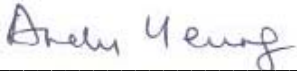
This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices, including Actuarial Standards of Practice (ASOPs) Nos. 4, 27, 35, 44 and all other relevant ASOPs. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the recommended assumptions are reasonably related to the experience of and the expectations for the Plan. The undersigned are members of the American Academy of Actuaries and meet the qualification requirements to render the actuarial opinion contained herein.

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
Senior Vice President and Actuary*


*Andy Yeung, ASA, EA, MAAA
Vice President and Associate Actuary*

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

Purpose

This report has been prepared by The Segal Company to present a valuation of the Orange County Employees Retirement System as of December 31, 2008. 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, retired members, and beneficiaries as of December 31, 2008, provided by the Retirement System;
- The assets of the Plan as of December 31, 2008, provided by the Retirement System;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

One of the general goals of an actuarial valuation is to establish contributions that fully fund the System's liabilities, and that, 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 continued with the Board's funding policy to amortize the outstanding balance of the unfunded actuarial accrued liability from the December 31, 2004 valuation over a declining period, currently 26 years. Any increases or decreases in unfunded actuarial accrued liabilities that arise in future years due to actuarial gains or losses will be amortized over separate 15-year periods. Any increases or decreases in UAAL due to changes in actuarial assumptions are amortized over separate 30-year periods. The rates calculated in this report may be adopted by the Board for the fiscal year that extends from July 1, 2010 through June 30, 2011.

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

Significant Issues in Valuation Year

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

- Ref: Pg. 45*

Ref: Pg. 40

➤ The ratio of the valuation value of assets to actuarial accrued liabilities has decreased from 74.08% to 71.34%. The System's unfunded actuarial accrued liability has increased from \$2.550 billion as of December 31, 2007 to \$3.112 billion as of December 31, 2008. The increase in unfunded actuarial accrued liability is mainly due to lower than expected investment return, change in service retirement assumption for General members with improved benefit formulas, higher than expected salary increases, new retiree losses, and other experience losses. A reconciliation of the System's unfunded actuarial accrued liability is provided in Section 3, Exhibit H.
- Ref: Pg. 20*

➤ The aggregate employer rate calculated in this valuation has increased from 24.39% of payroll to 27.30% of payroll. The reasons for the changes are: (i) unfavorable investment return, (ii) change in service retirement assumption for General members with improved benefit formulas, (iii) higher than expected individual salary increases, (iv) new retiree losses, and (v) other experience losses. A reconciliation of the System's aggregate employer rate is provided in Section 2, Subsection D (see Chart 15).
- Ref: Pg. 21*

➤ The aggregate member rate calculated in this valuation has increased from 10.66% of payroll to 10.74% of payroll. The change in member rate is primarily due to the changes in membership demographics and the change in the service retirement assumption for General members with improved benefit formulas. A reconciliation of the System's aggregate member rate is provided in Section 2, Subsection D (see Chart 16).
- Ref: Pgs. 20 and 21*

➤ The results of this valuation were prepared using the same actuarial assumptions and methods as in our December 31, 2007 actuarial valuation report dated January 13, 2009, except for the General member retirement probabilities for those plans with improved benefit formulas. For those plans, the Board adopted the proposed retirement rates shown in our April 10, 2009 letter to the System. The cost impact of this assumption change is provided in Section 2, Subsection D (see Charts 15 and 16).
- Ref: Pg. 5*

➤ As indicated in Section 2, Subsection B (see Chart 7) of this report, the total unrecognized investment loss as of December 31, 2008 is \$1,502,193,000. This investment loss 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 gains that may occur after December 31, 2008. 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, this will result in investment losses on the actuarial value of assets for the next few years.

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

The deferred losses of \$1,502 million represent about 24% of the market value of assets. Unless offset by future investment gains or other favorable experience, the recognition of the \$1,502 million market losses is expected to have a significant impact on the System's future funded factor and contribution rate requirements. This potential impact may be illustrated as follows:

- If the deferred losses were recognized immediately in the valuation value of assets, the funded percentage would decrease from 71.3% to 57.5%.
 - If the deferred losses were recognized immediately in the valuation value of assets, the aggregate employer rate would increase from 27.3% to about 37% of payroll.
- The actuarial valuation report as of December 31, 2008 is based on financial information as of that date. Changes in the value of assets subsequent to that date, to the extent that they exist, are not reflected. Declines in asset values will increase the actuarial cost of the plan, while increases will decrease the actuarial cost of the plan.

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, 2008		December 31, 2007	
Employer Contribution Rates:				
<u>General</u>	<u>Total Rate</u>	<u>Estimated Annual Amount⁽¹⁾</u>	<u>Total Rate</u>	<u>Estimated Annual Amount⁽¹⁾</u>
Rate Group #1 – Plans A and B (non-OCTA)	16.05%	\$9,113	14.17%	\$8,046
Rate Group #2 – Plans I and J (2.7% @ 55 – non-OCFA)	24.79	244,950	21.83	215,703
Rate Group #3 – Plans G and H (2.5% @ 55)	24.20	13,886	21.95	12,595
Rate Group #5 – Plans A and B (OCTA)	17.26	18,283	15.02	15,910
Rate Group #9 – Plans M and N (2.0% @ 55 – TCA)	18.74	1,377	18.73	1,376
Rate Group #10 – Plans I and J (OCFA)	24.62	5,284	23.01	4,938
Rate Group #11 – Plans M and N, future service (2.0% @ 55 – Cemetery)	17.90	194	15.15	164
<u>Safety</u>				
Rate Group #6 – Plans E and F (Probation)	32.18%	\$23,329	31.39%	\$22,756
Rate Group #7 – Plans E and F (Law Enforcement)	43.34	79,558	39.52	72,545
Rate Group #8 – Plans E and F (Fire Authority)	43.10	32,596	38.24	28,920
<u>All Groups Combined</u>	27.30%	\$428,570	24.39%	\$382,953
Average Member Contribution Rates:				
<u>General</u>	<u>Total Rate</u>	<u>Estimated Annual Amount⁽¹⁾</u>	<u>Total Rate⁽²⁾</u>	<u>Estimated Annual Amount⁽¹⁾</u>
Rate Group #1 – Plans A and B (non-OCTA)	7.18%	\$4,077	7.19%	\$4,082
Rate Group #2 – Plans I and J (2.7% @ 55 – non-OCFA)	10.64	105,134	10.51	103,850
Rate Group #3 – Plans G and H (2.5% @ 55)	10.64	6,105	10.52	6,036
Rate Group #5 – Plans A and B (OCTA)	8.34	8,834	8.35	8,845
Rate Group #9 – Plans M and N (2.0% @ 55 – TCA)	9.01	662	8.94	657
Rate Group #10 – Plans I and J (OCFA)	10.93	2,346	10.79	2,316
Rate Group #11 – Plans M and N, future service (2.0% @ 55 – Cemetery)	7.58	82	7.48	81
<u>Safety</u>				
Rate Group #6 – Plans E and F (Probation)	12.51%	\$9,069	12.57%	\$9,113
Rate Group #7 – Plans E and F (Law Enforcement)	12.75	23,405	12.75	23,405
Rate Group #8 – Plans E and F (Fire Authority)	11.80	8,924	11.81	8,932
<u>All Groups Combined</u>	10.74%	\$168,638	10.66%	\$167,317
Funded Status:				
Actuarial accrued liability	\$10,860,715		\$9,838,686	
Valuation value of assets	\$7,748,380		\$7,288,900	
Funded percentage	71.34%		74.08%	
Unfunded Actuarial Accrued Liability	\$3,112,335		\$2,549,786	
Key Assumptions:				
Interest rate	7.75%		7.75%	
Inflation rate	3.50%		3.50%	
Across-the-board real salary increase	0.00%		0.00%	

⁽¹⁾ Based on December 31, 2008 projected annual compensation.

⁽²⁾ Rates have been recalculated by applying the individual entry age based member rates determined in the December 31, 2007 valuation to the System membership as of December 31, 2008.

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

Summary of Key Valuation Demographic and Financial Data

	December 31, 2008	December 31, 2007	Percentage Change
Active Members:			
Number of members	23,720	23,618	0.4%
Average age	43.8	43.4	N/A
Average service	11.0	10.7	N/A
Projected total compensation	\$1,569,764,568	\$1,457,159,706	7.7%
Average projected compensation	\$66,179	\$61,697	7.3%
Retired Member and Beneficiaries:			
Number of members:			
Service retired	8,925	8,636	3.3%
Disability retired	1,266	1,243	1.9%
Beneficiaries	<u>1,587</u>	<u>1,542</u>	2.9%
Total	11,778	11,421	3.1%
Average age	68.4	68.1	N/A
Average monthly benefit ⁽¹⁾	\$2,785	\$2,640	5.5%
Vested Terminated Members:			
Number of vested terminated members ⁽²⁾	3,881	3,646	6.4%
Average age	42.6	42.6	N/A
Summary of Financial Data (dollar amounts in thousands):			
Market value of assets ⁽³⁾	\$6,248,558	\$7,719,690	-19.1%
Return on market value of assets	-20.76%	11.18%	N/A
Actuarial value of assets	\$7,750,751	\$7,292,205	6.3%
Return on actuarial value of assets	4.23%	10.49%	N/A
Valuation value of assets	\$7,748,380	\$7,288,900	6.3%
Return on valuation value of assets	4.25%	10.45%	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⁾ The December 31, 2008 market value excludes \$126,683,000 in the County Investment Account and \$24,345,000 in the prepaid employer contributions account. The December 31, 2007 market value excludes \$174,348,000 in the County Investment Account and \$108,301,000 in the prepaid employer contributions account.

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 seven valuations can be seen in this chart.

CHART 1
Member Population: 2002 – 2008

Year Ended December 31	Active Members	Vested Terminated Members*	Retired Members and Beneficiaries	Ratio of Non-Actives to Actives
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
2005	22,467	2,466	10,218	0.56
2006	22,791	3,195	10,915	0.62
2007	23,618	3,646	11,421	0.64
2008	23,720	3,881	11,778	0.66

**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 23,720 active members with an average age of 43.8, average years of service of 11.0 years, and average compensation of \$66,179. The 23,618 active members in the prior valuation had an average age of 43.4, average service of 10.7 years, and average compensation of \$61,697.

Inactive Members

In this year's valuation, there were 3,881 members with a vested right to a deferred or immediate vested benefit or entitled to a return of their member contributions versus 3,646 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, 2008

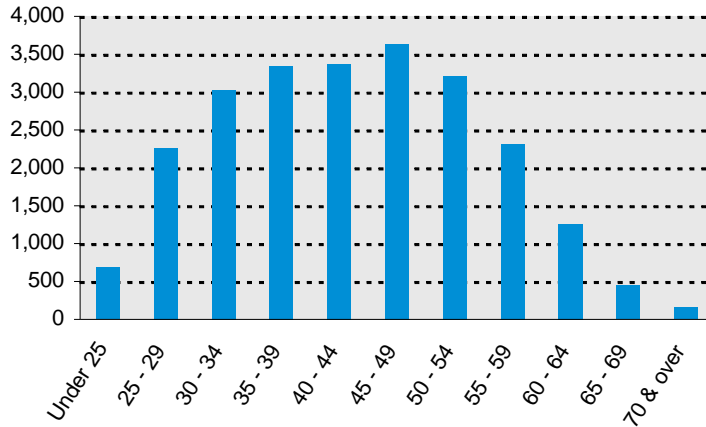
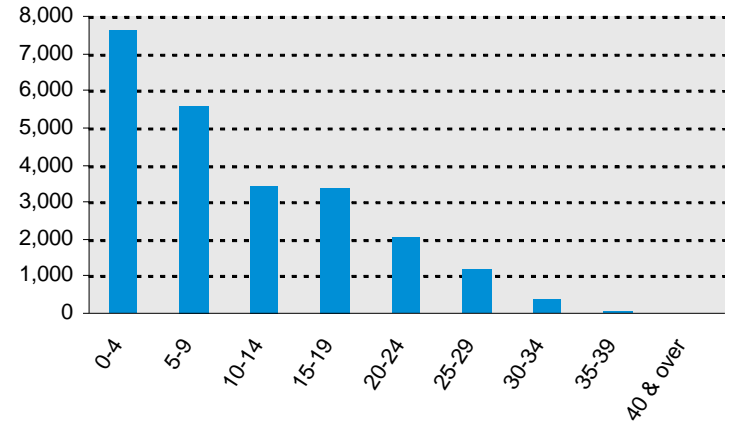


CHART 3
Distribution of Active Members by Years of Service as of December 31, 2008



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

Retired Members and Beneficiaries

As of December 31, 2008, 10,191 retired members and 1,587 beneficiaries were receiving total monthly benefits of \$32,804,000. For comparison, in the previous valuation, there were 9,879 retired members and 1,542 beneficiaries receiving total monthly benefits of \$30,148,000. These monthly benefits exclude benefits payable from the Retired Member Benefit Reserve (RMBR) and Supplemental Targeted Adjustment for Retirees Cost of Living Adjustment (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 (Excl. Beneficiaries) by Type and by Monthly Amount as of December 31, 2008

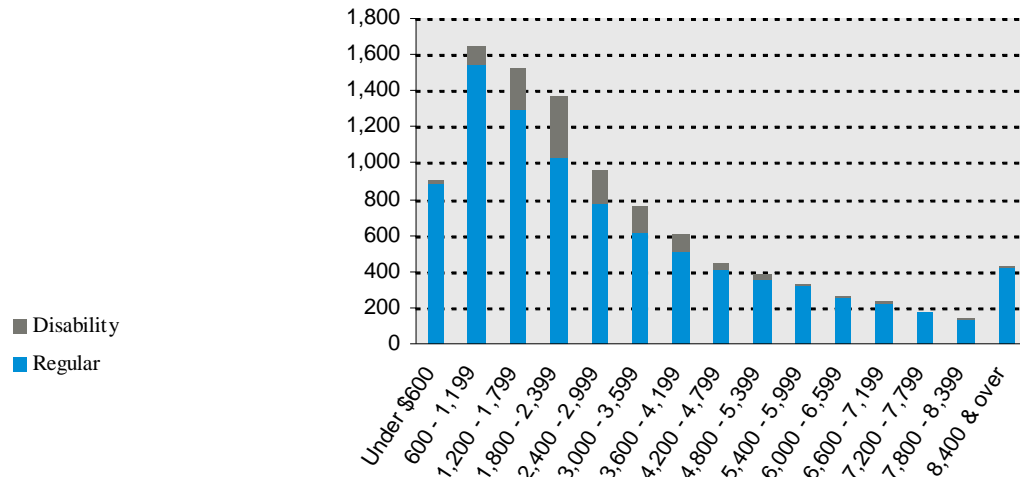
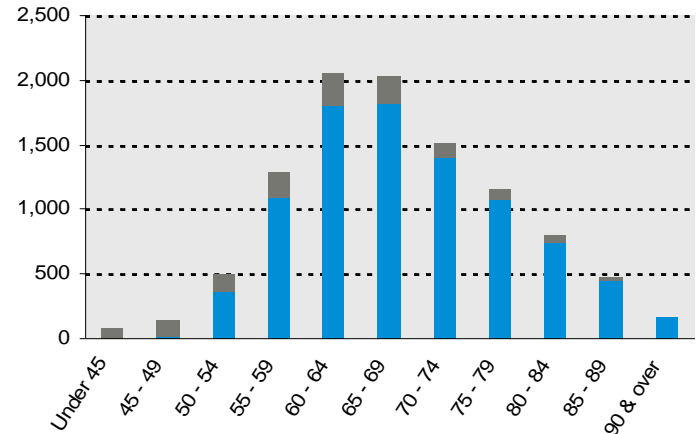


CHART 5
Distribution of Retired Members (Excl. Beneficiaries) by Type and by Age as of December 31, 2008



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

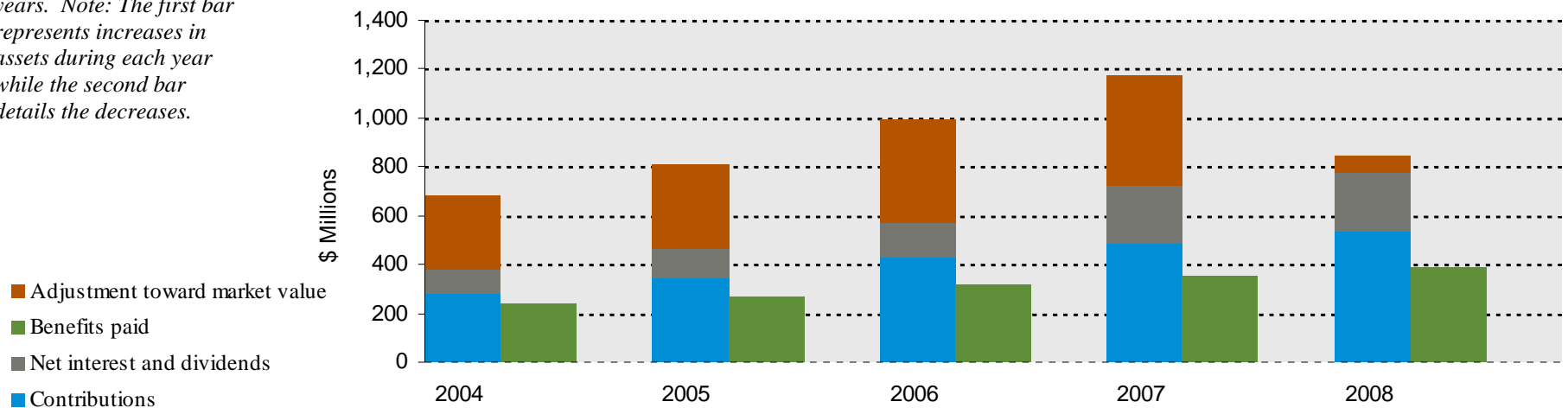
B. FINANCIAL INFORMATION

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 five years. 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 – 2008



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.

CHART 7

Determination of Actuarial and Valuation Value of Assets for Year Ended December 31, 2008

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

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	0.0	\$0
2005	441,178,000	421,743,000	19,435,000	0.2	3,887,000
2006	787,330,000	463,198,000	324,132,000	0.4	129,653,000
2007	769,613,000	533,502,000	236,111,000	0.6	141,667,000
2008	(1,617,791,000)	603,959,000	(2,221,750,000)	0.8	<u>(1,777,400,000)</u>
1.	Total Deferred Return				\$ (1,502,193,000)
2.	Net Market Value of Assets (Excludes \$126,683,000 in County Investment Account and \$24,345,000 in Prepaid Employer Contributions)				\$6,248,558,000
3.	Actuarial Value of Assets (2) – (1)				\$7,750,751,000
4.	Ratio of Actuarial Value to Market Value				124%
5.	Non-valuation Reserves				
	(a)	Unclaimed member deposit			\$1,163,000
	(b)	Medicare medical insurance reserve			99,000
	(c)	Retired member benefit reserve (RMBR)			<u>1,109,000</u>
	(d)	Subtotal			\$2,371,000
6.	Valuation Value of Assets (3) – (5)(d)				\$7,748,380,000
7.	Deferred Return Recognized in Each of the Next 4 Years				
	(a)	Amount recognized on 12/31/2009			\$(328,414,167)
	(b)	Amount recognized on 12/31/2010			(332,301,167)
	(c)	Amount recognized on 12/31/2011			(397,127,667)
	(d)	Amount recognized on 12/31/2012			<u>(444,350,000)</u>
	(e)	Subtotal (may not total exactly due to rounding)			\$ (1,502,193,000)

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

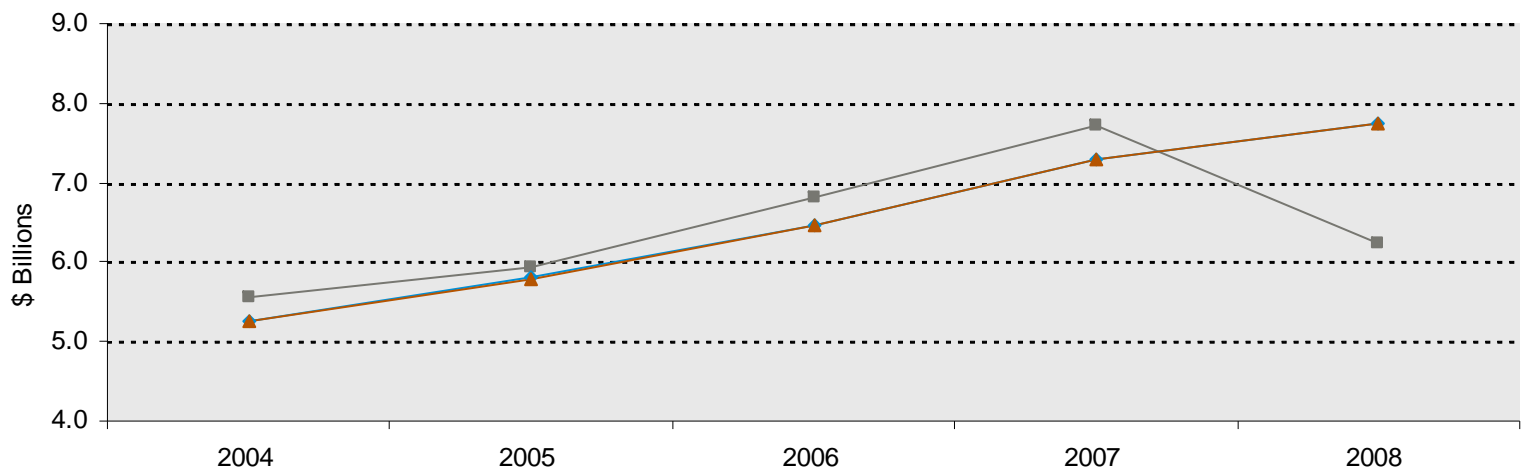
The market value, actuarial value, and valuation value of assets are representations of OCERS' financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets, but with less volatility. The valuation value of assets is the actuarial value, excluding any non-valuation reserves. The valuation value of assets is significant because OCERS' 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 five years.
Notes: Market Value of Assets excludes the County Investment Account and Prepaid Employer Contributions.

■ Market Value
◆ Actuarial Value
▲ Valuation Value

CHART 8

Market Value, Actuarial Value and Valuation Value of Assets as of December 31, 2004 – 2008



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 loss was \$427.4 million, a loss of \$257.8 million from investments and a loss of \$169.6 million from all other sources. This does not include an additional \$115.8 million increase in UAAL from assumption changes. 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, 2008 (Dollar Amounts in Thousands)

1. Net loss from investments ⁽¹⁾	\$(257,752)
2. Net loss from other experience ⁽²⁾	<u>(169,631)</u>
3. Net experience gain/(loss): (1) + (2)	\$(427,383)

⁽¹⁾ Details in Chart 10.

⁽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 OCERS' investment policy. For valuation purposes, the assumed rate of return on the valuation value of assets was 7.75%. The actual rate of return on a valuation basis for the 2008 plan year was 4.25%.

Since the actual return for the year was less than the assumed return, OCERS experienced an actuarial loss during the year ended December 31, 2008 with regard to its investments.

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

CHART 10

Investment Experience for Year Ended December 31, 2008 – Valuation Value and Actuarial Value of Assets

	Valuation Value	Actuarial Value
1. Actual return	\$312,821,000	\$311,887,000
2. Average value of assets	\$7,362,230,000	\$7,365,535,000
3. Actual rate of return: (1) ÷ (2)	4.25%	4.23%
4. Assumed rate of return	7.75%	7.75%
5. Expected return: (2) x (4)	\$570,573,000	\$570,829,000
6. Actuarial gain/(loss): (1) – (5)	<u>\$(257,752,000)</u>	<u>\$(258,942,000)</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 five years.

Based upon this experience, future expectations, and direction from the Board, we maintain the assumed rate of return of 7.75%.

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	
	Amount	Percent	Amount	Percent	Amount	Percent
2004	\$411,453	8.55%	\$403,652	8.35%	\$544,457	11.26%
2005	449,620	8.50%	461,972	8.72%	441,178	8.11%
2006	565,491	9.68%	568,254	9.71%	787,330	13.17%
2007	683,212	10.45%	685,780	10.49%	769,613	11.18%
2008	312,821	4.25%	311,887	4.23%	(1,617,791)	-20.76%
Total	\$2,422,597		\$2,431,545		\$924,787	

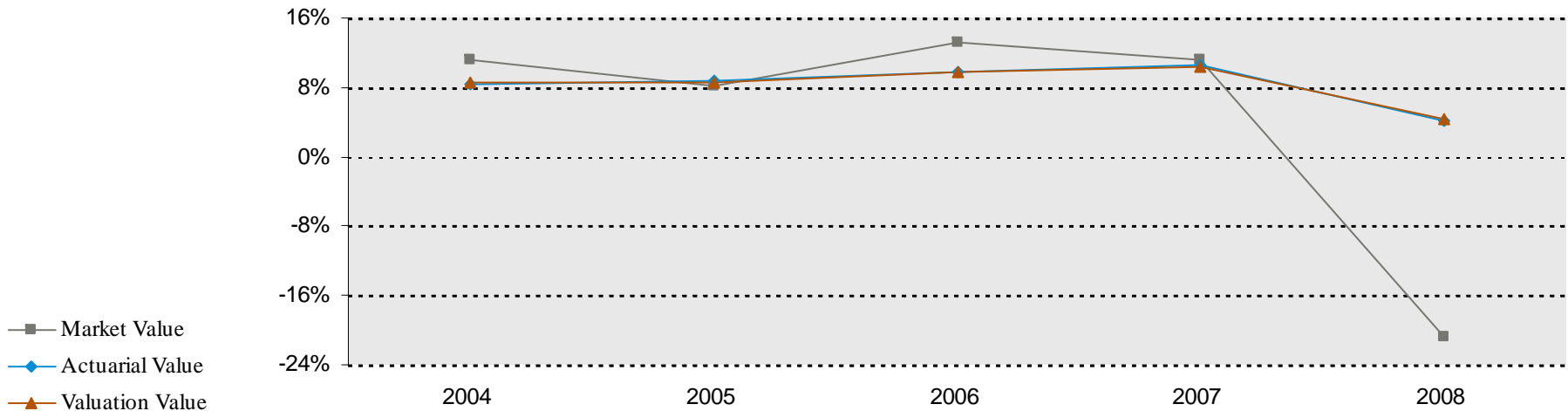
Note: The return on market value is net of the return on the County Investment Account and prepaid employer contributions account.

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 2004 – 2008.

CHART 12
Market, Actuarial, and Valuation Value Rates of Return for Years Ended December 31, 2004 – 2008



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, 2008 amounted to \$169.6 million which is 1.56% 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.

For Probation Safety members who have prior benefit service in the General OCERS plan, the normal cost rate for their current plan is calculated based on the entry date for 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%. The outstanding balance of the December 31, 2004 UAAL is being amortized over a declining 26-year period. Any new UAAL that arises in future years due to actuarial gains or losses will be amortized over separate 15-year periods. Any new UAAL resulting from changes in actuarial assumptions is amortized over separate 30-year periods.

The recommended employer contributions are provided in 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 the basic contributions, members pay one-half of the total normal cost necessary to fund cost-of-living benefits. Accumulation includes crediting of interest at the assumed investment earnings 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, 2008 (Dollar Amounts in Thousands)

General Employers	December 31, 2008 Valuation		December 31, 2007 Valuation	
	Rate	Estimated Annual Amount ⁽¹⁾	Rate	Estimated Annual Amount ⁽¹⁾
Rate Group #1 - Plans A and B (non-OCTA)				
Normal Cost	8.99%	\$5,104	8.92%	\$5,065
UAAL ⁽²⁾	<u>7.06%</u>	<u>4,009</u>	<u>5.25%</u>	<u>2,981</u>
Total Contribution	16.05%	\$9,113	14.17%	\$8,046
Rate Group #2 - Plans I and J (2.7% @ 55 – non-OCFA)⁽³⁾				
Normal Cost	11.79%	\$116,497	11.24%	\$111,063
UAAL ⁽²⁾	<u>13.00%</u>	<u>128,453</u>	<u>10.59%</u>	<u>104,640</u>
Total Contribution	24.79%	\$244,950	21.83%	\$215,703
Rate Group #3 - Plans G and H (2.5% @ 55)⁽³⁾				
Normal Cost	11.19%	\$6,421	10.54%	\$6,048
UAAL ⁽²⁾	<u>13.01%</u>	<u>7,465</u>	<u>11.41%</u>	<u>6,547</u>
Total Contribution	24.20%	\$13,886	21.95%	\$12,595

⁽¹⁾ See page 15 for projected annual compensation.

⁽²⁾ UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.

⁽³⁾ For employers with future service only benefit improvements, 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, 2008 (Dollar Amounts in Thousands)

General Employers

	December 31, 2008 Valuation		December 31, 2007 Valuation	
	Rate	Estimated Annual Amount ⁽¹⁾	Rate	Estimated Annual Amount ⁽¹⁾
Rate Group #5 – Plans A and B (OCTA)				
Normal Cost	11.32%	\$11,991	11.26%	\$11,927
UAAL ⁽²⁾	<u>5.94%</u>	<u>6,292</u>	<u>3.76%</u>	<u>3,983</u>
Total Contribution	17.26%	\$18,283	15.02%	\$15,910
Rate Group #9 – Plans M and N (2.0% @ 55 - TCA)				
Normal Cost	13.02%	\$957	12.60%	\$926
UAAL ⁽²⁾	<u>5.72%</u>	<u>420</u>	<u>6.13%</u>	<u>450</u>
Total Contribution	18.74%	\$1,377	18.73%	\$1,376
Rate Group #10 – Plans I and J (2.7% @ 55 - OCFA)				
Normal Cost	12.03%	\$2,582	11.48%	\$2,464
UAAL ⁽²⁾	<u>12.59%</u>	<u>2,702</u>	<u>11.53%</u>	<u>2,474</u>
Total Contribution	24.62%	\$5,284	23.01%	\$4,938
Rate Group #11 – Plans M and N, future service (2.0% @ 55 - Cemetery)				
Normal Cost	10.85%	\$118	10.79%	\$117
UAAL ⁽²⁾	<u>7.05%</u>	<u>76</u>	<u>4.36%</u>	<u>47</u>
Total Contribution	17.90%	\$194	15.15%	\$164

⁽¹⁾ Based on December 31, 2008 projected annual compensation (also in thousands):

Rate Group #1	\$56,779
Rate Group #2	988,103
Rate Group #3	57,379
Rate Group #5	105,925
Rate Group #9	7,348
Rate Group #10	21,460
Rate Group #11	<u>1,083</u>
Total – General Members	\$1,238,077

⁽²⁾ UAAL rate has been adjusted 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, 2008 (Dollar Amounts in Thousands)

Safety Employers

	December 31, 2008 Valuation		December 31, 2007 Valuation	
	Rate	Estimated Annual Amount ⁽¹⁾	Rate	Estimated Annual Amount ⁽¹⁾
Rate Group #6 – Plans E and F (Probation)				
Normal Cost	20.15%	\$14,608	20.49%	\$14,854
UAAL ⁽²⁾	<u>12.03%</u>	<u>8,721</u>	<u>10.90%</u>	<u>7,902</u>
Total Contribution	32.18%	\$23,329	31.39%	\$22,756
Rate Group #7 – Plans E and F (Law Enforcement)				
Normal Cost	21.39%	\$39,265	21.27%	\$39,044
UAAL ⁽²⁾	<u>21.95%</u>	<u>40,293</u>	<u>18.25%</u>	<u>33,501</u>
Total Contribution	43.34%	\$79,558	39.52%	\$72,545
Rate Group #8 – Plans E and F (Fire Authority)				
Normal Cost	21.16%	\$16,003	21.02%	\$15,897
UAAL ⁽²⁾	<u>21.94%</u>	<u>16,593</u>	<u>17.22%</u>	<u>13,023</u>
Total Contribution	43.10%	\$32,596	38.24%	\$28,920
General and Safety Employers Combined				
Rate Groups #1 – #11				
Total Contributions	27.30%	\$428,570	24.39%	\$382,953

⁽¹⁾ Based on December 31, 2008 projected annual compensation (also in thousands):

Rate Group #6	\$72,495
Rate Group #7	183,565
Rate Group #8	<u>75,627</u>
Total – Safety Members	\$331,687

⁽²⁾ UAAL rate has been adjusted 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, 2008 (Dollar Amounts in Thousands)

**December 31, 2008 Rate Adjustment for General Employers with 2.7% @ 55 – Rate Group #2
Future Service Only Benefit Improvement (Plans I and J)**

Reduction to UAAL Rate Calculated in December 31, 2008 Valuation	<u>Rate</u>	Estimated Annual <u>Amount⁽¹⁾</u>
Reduction to Total Contribution	-1.89%	-\$78

⁽¹⁾ Based on December 31, 2008 projected annual compensation (also in thousands):

Retirement System	\$1,870
Local Agency Formation Commission	443
Children & Family Commission	<u>1,834</u>
Total	\$4,147

**December 31, 2008 Rate Adjustment for General Employers with 2.5% @ 55 – Rate Group #3
Future Service Only Benefit Improvement (Plans G and H)**

Reduction to UAAL Rate Calculated in December 31, 2008 Valuation	<u>Rate</u>	Estimated Annual <u>Amount⁽²⁾</u>
Reduction to Total Contribution	-4.24%	-\$50

⁽²⁾ Based on December 31, 2008 projected annual compensation (also in thousands):

Law Library	\$1,172
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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 are as follows:

	December 31, 2008 Valuation Pick-Up Percentage		December 31, 2007 Valuation Pick-Up Percentage	
<i>General Members</i>				
Rate Group #1 (non-OCTA)	Plan A: 100.00%	Plan B: 96.62%	Plan A: 00.00%	Plan B: 96.27%
Rate Group #2 (2.7% @ 55 – non-OCFA)	Plan I: 99.63%	Plan J: 96.98%	Plan I: 99.57%	Plan J: 96.96%
Rate Group #3 (2.5% @ 55)	Plan G: 99.45%	Plan H: 97.79%	Plan G: 99.38%	Plan H: 97.86%
Rate Group #5 (OCTA)	Plan A: 99.71%	Plan B: 97.14%	Plan A: 99.59%	Plan B: 97.02%
Rate Group #9 (2.0% @ 55 – TCA)	Plan M: 97.32%	Plan N: 97.32%	Plan M: 97.42%	Plan N: 97.42%
Rate Group #10 (2.7% @ 55 – OCFA)	Plan I: 100.00%	Plan J: 97.42%	Plan I: 99.56%	Plan J: 97.41%
Rate Group #11 (2.0% @ 55 – Cemetery)	Plan M: 96.84%	Plan N: 96.84%	Plan M: 97.42%	Plan N: 97.42%
<i>Safety Members</i>				
Rate Group #6 (Probation)	Plan E: 100.00%	Plan F: 95.94%	Plan E: 98.70%	Plan F: 95.86%
Rate Group #7 (Law Enforcement)	Plan E: 100.00%	Plan F: 99.68%	Plan E: 100.00%	Plan F: 99.70%
Rate Group #8 (Fire Authority)	Plan E: 100.00%	Plan F: 99.69%	Plan E: 100.00%	Plan F: 99.70%

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	31
Law Library	103	43
Retirement System	105	36
Fire Authority	106	34
Department of Education	108	26
Transportation Corridor Agency	109	40
City of San Juan Capistrano	110	34
Sanitation District	111	34
OCTA	112	37
U.C.I. (Bi-weekly)	113	22
U.C.I. (Monthly)	114	20
Children & Families Commission	118	32
Local Agency Formation Commission	119	33
Superior Court	121	33
IHSS Public Authority	122	43
<i>Safety</i>		
Probation	101	28
Law Enforcement	101	27
Fire Authority	106	27

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

The contribution rates as of December 31, 2008 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 or methods.

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 employer contribution from the prior valuation to the amount determined in this valuation.

CHART 15

**Reconciliation of Recommended Employer Contribution Rate from December 31, 2007 to December 31, 2008
(Dollar Amounts in Thousands)**

	Contribution Rate	Estimated Amount ⁽¹⁾
<u>Aggregate Recommended Contribution Rate as of December 31, 2007</u>	24.39%	\$382,953
Effect of investment loss	1.49%	\$23,389
Effect of difference in actual versus expected salary increases and growth in total payroll	0.11%	1,727
Effect of new retiree loss	0.32%	5,023
Effect of change in assumptions	0.43%	6,750
Effect of other experience (gain)/loss	<u>0.56%</u>	<u>8,728</u>
Subtotal	2.91%	\$45,617
<u>Aggregate Recommended Contribution Rate as of December 31, 2008</u>	27.30%	\$428,570

⁽¹⁾ Based on December 31, 2008 projected compensation of \$1,569,764,000.

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

The member contribution rates as of December 31, 2008 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, and changes in the actuarial assumptions or methods.

Reconciliation of Recommended Contribution Rate
 The chart below details the changes in the aggregate 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, 2007 to December 31, 2008 (Dollar Amounts in Thousands)

	Contribution Rate	Estimated Amount ⁽¹⁾
Average Recommended Contribution Rate as of December 31, 2007 ⁽²⁾	10.66%	\$167,317
Effect of change in demographics	-0.01%	-157
Effect of change in assumptions	<u>0.09%</u>	<u>1,478</u>
Average Recommended Contribution Rate as of December 31, 2008	10.74%	\$168,638

⁽¹⁾ Based on December 31, 2008 projected annual compensation of \$1,569,764,000.

⁽²⁾ Rates have been recalculated by applying the individual entry age based member rates determined in the December 31, 2007 valuation to the System membership as of December 31, 2008.

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

E. INFORMATION REQUIRED BY THE 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 the 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 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 shown in Chart 18 below. This ratio compares the valuation value of assets to the actuarial accrued liabilities of the plan as calculated under the 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 2008 funded ratio is 71.34%, compared to 74.08% in 2007.

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.

CHART 17
Required Versus Actual Contributions

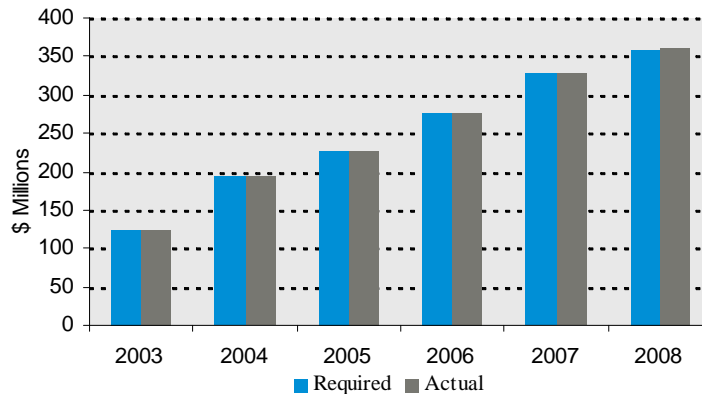
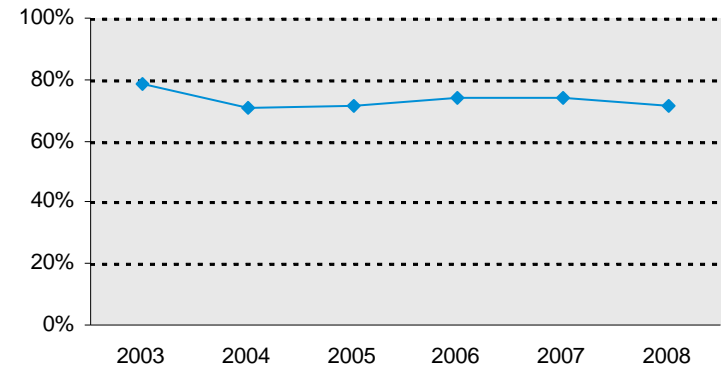


CHART 18
Funded Ratio



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

EXHIBIT A

Table of Plan Coverage

i. General (other than OCTA)

Category	Year Ended December 31		Change From Prior Year
	2008	2007	
Active members in valuation			
Number	17,773	17,791	-0.1%
Average age	44.2	43.7	N/A
Average service	10.7	10.2	N/A
Projected total compensation	\$1,132,152,974	\$1,060,016,770	6.8%
Projected average compensation	\$63,701	\$59,582	6.9%
Account balances	\$1,009,872,345	\$880,726,620	14.7%
Total active vested members	12,050	12,014	0.3%
Vested terminated members			
Number	3,138	2,938	6.8%
Average age	42.6	42.7	N/A
Retired members			
Number in pay status	7,309	7,117	2.7%
Average age	69.9	69.7	N/A
Average monthly benefit ⁽¹⁾	\$2,714	\$2,578	5.3%
Disabled members			
Number in pay status	637	631	1.0%
Average age	63.6	63.2	N/A
Average monthly benefit ⁽¹⁾	\$2,015	\$1,937	4.0%
Beneficiaries			
Number in pay status	1,332	1,303	2.2%
Average age	72.4	72.0	N/A
Average monthly benefit ⁽¹⁾	\$1,367	\$1,289	6.1%

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

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
	2008	2007	
Active members in valuation			
Number	2,022	2,012	0.5%
Average age	47.0	46.5	N/A
Average service	9.9	9.5	N/A
Projected total compensation	\$105,925,203	\$96,668,172	9.6%
Projected average compensation	\$52,386	\$48,046	9.0%
Account balances	\$90,212,591	\$82,344,406	9.6%
Total active vested members	1,353	1,269	6.6%
Vested terminated members			
Number	421	414	1.7%
Average age	46.4	45.2	N/A
Retired members			
Number in pay status	491	463	6.0%
Average age	67.1	66.5	N/A
Average monthly benefit ⁽¹⁾	\$1,944	\$1,819	6.9%
Disabled members			
Number in pay status	219	214	2.3%
Average age	60.5	60.0	N/A
Average monthly benefit ⁽¹⁾	\$2,011	\$1,959	2.7%
Beneficiaries			
Number in pay status	106	105	1.0%
Average age	67.8	67.2	N/A
Average monthly benefit ⁽¹⁾	\$1,055	\$992	6.4%

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

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
	2008	2007	
Active members in valuation			
Number	1,984	1,913	3.7%
Average age	41.1	41.0	N/A
Average service	14.2	14.3	N/A
Projected total compensation	\$183,564,617 ⁽²⁾	\$165,425,531	11.0%
Projected average compensation	\$92,522	\$86,474	7.0%
Account balances	\$146,792,972	\$134,811,644	8.9%
Total active vested members	1,614	1,644	-1.8%
Vested terminated members			
Number	154	140	10.0%
Average age	40.2	40.9	N/A
Retired members			
Number in pay status	762	728	4.7%
Average age	63.6	63.4	N/A
Average monthly benefit ⁽¹⁾	\$5,806	\$5,535	4.9%
Disabled members			
Number in pay status	313	310	1.0%
Average age	58.0	57.3	N/A
Average monthly benefit ⁽¹⁾	\$3,692	\$3,555	3.9%
Beneficiaries			
Number in pay status	125	118	5.9%
Average age	69.9	70.1	N/A
Average monthly benefit ⁽¹⁾	\$2,320	\$2,278	1.8%

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

⁽²⁾ Includes a 2% adjustment to the pay for 2008.

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

EXHIBIT A

Table of Plan Coverage

iv. Safety Probation Officers

Category	Year Ended December 31		Change From Prior Year
	2008	2007	
Active members in valuation			
Number	1,106	1,078	2.6%
Average age	37.5	37.2	N/A
Average service	9.5	9.2	N/A
Projected total compensation	\$72,494,625 ⁽²⁾	\$65,756,858	10.2%
Projected average compensation	\$65,547	\$60,999	7.5%
Account balances	\$61,279,746	\$53,217,912	15.1%
Total active vested members	756	745	1.5%
Vested terminated members			
Number	153	140	9.3%
Average age	35.7	34.9	N/A
Retired members			
Number in pay status	148	136	8.8%
Average age	61.6	61.3	N/A
Average monthly benefit ⁽¹⁾	\$4,923	\$4,811	2.3%
Disabled members			
Number in pay status	12	9	33.3%
Average age	47.7	43.0	N/A
Average monthly benefit ⁽¹⁾	\$2,473	\$2,321	6.5%
Beneficiaries			
Number in pay status	7	5	40.0%
Average age	52.6	49.7	N/A
Average monthly benefit ⁽¹⁾	\$1,447	\$862	67.9%

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

⁽²⁾ Includes a 1% adjustment to the pay for 2008.

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
	2008	2007	
Active members in valuation			
Number	835	824	1.3%
Average age	42.9	43.1	N/A
Average service	16.2	16.3	N/A
Projected total compensation	\$75,627,150 ⁽²⁾	\$69,292,375	9.1%
Projected average compensation	\$90,571	\$84,093	7.7%
Account balances	\$68,355,918	\$64,724,356	5.6%
Total active vested members	672	676	-0.6%
Vested terminated members			
Number	15	14	7.1%
Average age	40.6	44.3	N/A
Retired members			
Number in pay status	215	192	12.0%
Average age	60.3	59.9	N/A
Average monthly benefit ⁽¹⁾	\$5,808	\$5,514	5.3%
Disabled members			
Number in pay status	85	79	7.6%
Average age	59.8	58.8	N/A
Average monthly benefit ⁽¹⁾	\$4,841	\$4,459	8.6%
Beneficiaries			
Number in pay status	17	11	54.5%
Average age	54.4	55.0	N/A
Average monthly benefit ⁽¹⁾	\$3,390	\$4,069	-16.7%

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

⁽²⁾ Includes a 3% adjustment to the pay for 2008.

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

EXHIBIT A

Table of Plan Coverage

vi. Total

Category	Year Ended December 31		Change From Prior Year
	2008	2007	
Active members in valuation			
Number	23,720	23,618	0.4%
Average age	43.8	43.4	N/A
Average service	11.0	10.7	N/A
Projected total compensation	\$1,569,764,568	\$1,457,159,706	7.7%
Projected average compensation	\$66,179	\$61,697	7.3%
Account balances	\$1,376,513,571	\$1,215,824,938	13.2%
Total active vested members	16,445	16,348	0.6%
Vested terminated members			
Number	3,881	3,646	6.4%
Average age	42.6	42.6	N/A
Retired members			
Number in pay status	8,925	8,636	3.3%
Average age	68.8	68.6	N/A
Average monthly benefit ⁽¹⁾	\$3,047	\$2,887	5.5%
Disabled members			
Number in pay status	1,266	1,243	1.9%
Average age	61.3	60.8	N/A
Average monthly benefit ⁽¹⁾	\$2,623	\$2,507	4.6%
Beneficiaries			
Number in pay status	1,587	1,542	2.9%
Average age	71.6	71.3	N/A
Average monthly benefit ⁽¹⁾	\$1,443	\$1,363	5.9%

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

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, 2008
By Age and Years of Service**

i. General (other than 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	535	533	2	--	--	--	--	--	--	--
	\$39,463	\$39,427	\$49,046	--	--	--	--	--	--	--
25-29	1,713	1,444	264	5	--	--	--	--	--	--
	49,436	49,133	51,136	\$47,292	--	--	--	--	--	--
30-34	2,197	1,193	819	181	4	--	--	--	--	--
	55,729	53,756	58,222	57,311	\$62,372	--	--	--	--	--
35-39	2,435	804	866	510	249	6	--	--	--	--
	62,816	58,586	64,758	66,587	62,006	\$62,135	--	--	--	--
40-44	2,401	596	590	471	593	146	5	--	--	--
	66,503	59,508	66,581	72,303	68,726	67,126	\$62,837	--	--	--
45-49	2,611	527	517	431	579	386	166	5	--	--
	68,744	62,279	64,833	70,140	73,163	73,669	70,804	\$73,857	--	--
50-54	2,444	379	437	350	476	401	293	104	4	--
	70,844	60,782	64,683	69,376	70,913	78,849	81,859	76,851	\$51,857	--
55-59	1,846	244	371	282	355	265	204	95	30	--
	71,218	59,993	67,502	69,142	71,098	78,275	79,401	84,140	70,512	--
60-64	1,042	135	216	189	213	152	76	37	21	3
	69,410	68,317	63,589	67,795	67,437	72,587	76,557	89,298	89,463	\$51,801
65-69	404	50	84	65	116	60	14	10	2	3
	63,310	71,813	67,040	64,539	56,899	61,151	59,056	69,172	61,671	82,975
70 & over	145	8	23	17	42	28	17	8	2	--
	64,038	44,051	53,394	66,034	70,214	73,448	60,594	59,084	37,120	--
Total	17,773	5,913	4,189	2,501	2,627	1,444	775	259	59	6
	\$63,701	\$54,511	\$63,038	\$68,279	\$69,171	\$74,605	\$77,323	\$80,400	\$74,561	\$67,388

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, 2008
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	23	23	--	--	--	--	--	--	--	--
	\$35,161	\$35,160	--	--	--	--	--	--	--	--
25-29	119	104	15	--	--	--	--	--	--	--
	42,514	41,321	\$50,780	--	--	--	--	--	--	--
30-34	183	96	76	11	--	--	--	--	--	--
	46,897	42,484	52,907	\$43,885	--	--	--	--	--	--
35-39	203	96	79	21	7	--	--	--	--	--
	48,246	42,127	52,770	54,678	\$61,800	--	--	--	--	--
40-44	280	120	96	33	28	3	--	--	--	--
	51,178	45,838	53,280	55,530	61,803	\$50,497	--	--	--	--
45-49	357	92	130	45	53	27	10	--	--	--
	54,618	48,704	52,191	56,730	67,597	56,726	\$56,578	--	--	--
50-54	363	77	108	39	55	34	39	11	--	--
	56,497	55,055	52,056	59,996	59,487	63,623	57,353	\$57,787	--	--
55-59	286	52	73	26	39	34	29	32	1	--
	55,872	49,442	59,027	53,382	55,045	59,078	53,250	60,477	\$76,663	--
60-64	150	16	49	19	25	14	15	12	--	--
	54,311	51,077	53,905	51,807	55,767	65,473	51,685	51,472	--	--
65-69	50	9	14	8	7	4	4	4	--	--
	55,259	59,119	46,660	53,144	48,620	66,034	87,943	49,056	--	--
70 & over	8	2	1	1	2	--	2	--	--	--
	56,912	75,405	49,945	58,729	48,921	--	48,987	--	--	--
Total	2,022	687	641	203	216	116	99	59	1	--
	\$52,386	\$45,881	\$53,240	\$55,233	\$60,170	\$60,652	\$56,281	\$57,370	\$76,663	--

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, 2008
By Age and Years of Service**

iii. Safety Law Enforcement

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	65	65	--	--	--	--	--	--	--	--
	\$66,558	\$66,558	--	--	--	--	--	--	--	--
25-29	175	144	31	--	--	--	--	--	--	--
	74,818	72,904	\$83,713	--	--	--	--	--	--	--
30-34	270	100	107	63	--	--	--	--	--	--
	83,160	74,467	86,968	\$90,493	--	--	--	--	--	--
35-39	367	58	86	164	57	2	--	--	--	--
	89,482	85,706	87,205	91,051	\$91,703	\$104,856	--	--	--	--
40-44	419	34	43	108	169	63	2	--	--	--
	94,913	91,128	91,892	91,140	95,225	103,967	\$116,365	--	--	--
45-49	405	11	30	29	77	205	53	--	--	--
	101,783	91,847	96,517	102,695	96,890	102,883	109,182	--	--	--
50-54	176	16	4	12	30	56	49	9	--	--
	104,651	110,467	105,682	98,853	98,628	95,306	115,038	\$123,260	--	--
55-59	74	5	7	5	16	18	13	10	--	--
	103,033	106,668	97,071	117,034	105,069	95,942	103,184	107,698	--	--
60-64	32	6	5	4	3	8	4	2	--	--
	115,794	135,128	120,608	112,809	98,113	119,927	95,533	102,239	--	--
65-69	1	--	--	--	--	1	--	--	--	--
	113,209	--	--	--	--	113,209	--	--	--	--
70 & over	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
Total	1,984	439	313	385	352	353	121	21	--	--
	\$92,522	\$78,502	\$89,305	\$92,669	\$95,781	\$101,947	\$110,577	\$113,847	--	--

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, 2008
By Age and Years of Service**

iv. Safety Probation Officers

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	55	55	--	--	--	--	--	--	--	--
	\$46,756	\$46,756	--	--	--	--	--	--	--	--
25-29	187	167	20	--	--	--	--	--	--	--
	52,520	51,404	\$61,833	--	--	--	--	--	--	--
30-34	262	77	157	28	--	--	--	--	--	--
	62,896	51,867	66,507	\$72,983	--	--	--	--	--	--
35-39	228	29	81	104	13	1	--	--	--	--
	68,198	50,210	64,158	75,663	\$74,295	\$61,546	--	--	--	--
40-44	144	15	28	47	43	11	--	--	--	--
	71,225	54,408	64,405	72,580	76,880	83,621	--	--	--	--
45-49	91	5	10	18	23	30	5	--	--	--
	76,743	43,797	63,308	74,894	75,718	87,283	\$84,685	--	--	--
50-54	79	5	10	11	14	17	21	1	--	--
	76,554	51,007	68,171	65,329	76,219	80,858	87,348	\$116,452	--	--
55-59	43	2	10	4	4	11	6	6	--	--
	78,507	54,646	58,184	68,755	82,522	74,319	83,022	127,319	--	--
60-64	16	--	--	1	4	2	6	1	2	--
	83,227	--	--	61,546	76,373	76,482	82,777	78,648	\$118,160	--
65-69	1	--	--	--	--	1	--	--	--	--
	78,648	--	--	--	--	78,648	--	--	--	--
70 & over	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
Total	1,106	355	316	213	101	73	38	8	2	--
	\$65,547	\$50,719	\$65,111	\$73,836	\$76,394	\$82,515	\$85,593	\$119,877	\$118,160	--

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, 2008
By Age and Years of Service**

v. Safety Fire Authority

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	17	17	--	--	--	--	--	--	--	--
	\$62,094	\$62,094	--	--	--	--	--	--	--	--
25-29	71	65	6	--	--	--	--	--	--	--
	71,495	70,575	\$81,457	--	--	--	--	--	--	--
30-34	120	79	35	6	--	--	--	--	--	--
	77,931	74,055	85,460	\$85,046	--	--	--	--	--	--
35-39	113	44	36	22	11	--	--	--	--	--
	84,516	75,655	85,561	92,087	\$101,398	--	--	--	--	--
40-44	134	9	36	26	40	23	--	--	--	--
	93,457	79,764	89,875	92,449	95,964	\$101,199	--	--	--	--
45-49	164	4	15	37	32	41	34	1	--	--
	96,249	80,910	90,056	92,836	93,808	96,759	\$105,855	\$107,410	--	--
50-54	140	--	6	27	21	14	68	4	--	--
	102,917	--	87,056	98,668	96,768	94,489	110,412	89,761	--	--
55-59	59	--	1	11	5	2	35	5	--	--
	101,845	--	106,500	93,261	97,143	94,744	107,088	90,644	--	--
60-64	16	--	--	3	1	--	11	1	--	--
	111,168	--	--	105,447	90,260	--	112,125	138,721	--	--
65-69	1	--	--	1	--	--	--	--	--	--
	89,245	--	--	89,245	--	--	--	--	--	--
70 & over	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
Total	835	218	135	133	110	80	148	11	--	--
	\$90,571	\$72,769	\$87,224	\$93,762	\$96,035	\$97,588	\$108,706	\$96,218	--	--

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, 2008
By Age and Years of Service**

vi. Total

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	695	693	2	--	--	--	--	--	--	--
	\$42,985	\$42,968	\$49,046	--	--	--	--	--	--	--
25-29	2,265	1,924	336	5	--	--	--	--	--	--
	51,980	51,411	55,304	\$47,292	--	--	--	--	--	--
30-34	3,032	1,545	1,194	289	4	--	--	--	--	--
	59,137	55,340	62,347	66,127	\$62,372	--	--	--	--	--
35-39	3,346	1,031	1,148	821	337	9	--	--	--	--
	65,956	59,072	66,224	73,003	68,784	\$71,564	--	--	--	--
40-44	3,378	774	793	685	873	246	7	--	--	--
	70,027	58,914	67,324	75,248	75,284	80,281	\$78,130	--	--	--
45-49	3,628	639	702	560	764	689	268	6	--	--
	72,486	60,806	64,363	72,401	76,110	83,664	82,568	\$79,449	--	--
50-54	3,202	477	565	439	596	522	470	129	4	--
	72,619	61,421	62,859	71,048	72,289	80,108	87,661	79,171	\$51,857	--
55-59	2,308	303	462	328	419	330	287	148	31	--
	71,255	58,917	66,494	69,427	71,321	77,229	81,288	82,586	70,711	--
60-64	1,256	157	270	216	246	176	112	53	23	--
	69,496	69,114	62,887	67,716	66,863	74,217	77,730	81,953	91,959	--
65-69	457	59	98	74	123	66	18	14	2	--
	62,628	69,876	64,129	63,641	56,428	62,501	65,476	63,424	61,671	--
70 & over	153	10	24	18	44	28	19	8	2	--
	63,666	50,321	53,250	65,628	69,246	73,448	59,372	59,084	37,120	--
Total	23,720	7,612	5,594	3,435	3,406	2,066	1,181	358	62	--
	\$66,179	\$55,462	\$64,086	\$71,573	\$72,432	\$79,663	\$83,165	\$79,935	\$76,002	--

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

EXHIBIT C

Reconciliation of Member Data – December 31, 2007 to December 31, 2008

	Active Members	Vested Former Members	Pensioners	Disableds	Beneficiaries	Total
Number as of December 31, 2007	23,618	3,646	8,636	1,243	1,542	38,685
New members	1,373	103	0	0	119	1,595
Terminations – with vested rights	-464 ⁽¹⁾	464	0	0	0	0
Contributions refunds	-365 ⁽²⁾	-204	0	0	0	-569
Retirements	-417	-83	500	0	0	0
New disabilities	-30	-5	-14	49	0	0
Return to work	45	-39	-6	0	0	0
Deaths	-30	-3	-190	-27	-56	-306
Data adjustments	-10	2	-1	1	-18	-26
Number as of December 31, 2008	23,720	3,881	8,925	1,266	1,587	39,379

⁽¹⁾ Includes 91 terminated before January 1, 2008.

⁽²⁾ Includes 13 terminated before January 1, 2008.

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, 2008	Year Ended December 31, 2007
Contribution income:		
Employer contributions ⁽¹⁾	\$372,924,000	\$343,157,000
Employee contributions	172,291,000	159,476,000
Prepaid unearned contributions	-12,559,000	-16,421,000
Transfer from County Investment Account	<u>0</u>	<u>0</u>
Net contribution income	\$532,656,000	\$486,212,000
Investment income:		
Interest, dividends and other income	\$273,419,000	\$286,298,000
Recognition of capital appreciation	81,240,000	440,681,000
Less investment and administrative fees	<u>-42,772,000</u>	<u>-41,199,000</u>
Net investment income	<u>\$311,887,000</u>	<u>\$685,780,000</u>
Total income available for benefits	\$844,543,000	\$1,171,992,000
Less benefit payments	-\$385,997,000	-\$353,861,000
Change in reserve for future benefits	\$458,546,000	\$818,131,000

⁽¹⁾ Excludes \$24,345,000 and \$108,301,000 in prepaid employer contributions as of December 31, 2008 and December 31, 2007, respectively.

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

EXHIBIT E

Summary Statement of Assets

	Year Ended December 31, 2008	Year Ended December 31, 2007
Cash equivalents	\$371,646,000	\$335,281,000
Accounts receivable:		
Contributions	\$33,471,000	\$7,583,000
Investment income	25,908,000	29,223,000
Securities settlements	597,702,000	66,089,000
Other	<u>1,845,000</u>	<u>669,000</u>
Total accounts receivable	\$658,926,000	\$103,564,000
Investments:		
Fixed income investments	\$2,990,894,000	\$3,576,650,000
Equities	2,350,103,000	3,856,240,000
Real estate	630,025,000	623,071,000
Venture capital and limited partnership interests	498,188,000	146,262,000
Security lending collateral	295,811,000	778,391,000
Fixed assets net of accumulated depreciation	<u>2,335,000</u>	<u>2,878,000</u>
Total investments at market value	<u>\$6,767,357,000</u>	<u>\$8,983,493,000</u>
Total assets	\$7,797,929,000	\$9,422,338,000
Less accounts payable:		
Securities settlements	-\$1,065,024,000	-\$594,103,000
Security lending liability	-295,811,000	-778,391,000
All other	<u>-37,508,000</u>	<u>-47,505,000</u>
Total accounts payable	-\$1,398,343,000	-\$1,419,999,000
Net assets at market value	<u>\$6,248,558,000⁽¹⁾</u>	<u>\$7,719,690,000⁽²⁾</u>
Net assets at actuarial value	<u>\$7,750,751,000</u>	<u>\$7,292,205,000</u>
Net assets at valuation value	<u>\$7,748,380,000</u>	<u>\$7,288,900,000</u>

⁽¹⁾ The December 31, 2008 market value excludes \$126,683,000 in the County Investment Account and \$24,345,000 in the prepaid employer contributions account.

⁽²⁾ The December 31, 2007 market value excludes \$174,348,000 in the County Investment Account and \$108,301,000 in the prepaid employer contributions account.

Note: Results may not total exactly due to rounding.

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

EXHIBIT F

Actuarial Balance Sheet

An overview of the 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 value of assets	\$7,748,380,000
2. Present value of future contributions by members	1,472,576,000
3. Present value of future employer contributions for:	
a. entry age normal cost	1,658,375,000
b. unfunded actuarial accrued liability	<u>3,112,335,000</u>
4. Total current and future assets	\$13,991,666,000

Liabilities

5. Present value of retirement allowance payable to present retired members	\$4,985,517,000
6. Present value of retirement allowances to be granted to present non-retired members	<u>9,006,149,000</u>
7. Total actuarial liabilities	\$13,991,666,000

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

EXHIBIT G

Summary of Reported Asset Information as of December 31, 2008

Reserves

Included in Valuation Value of Assets

Active Members Reserve (Book Value)	\$1,481,093,000
Retired Members Reserve (Book Value)	4,567,567,000
Employer Advanced Reserve (Book Value)	1,264,819,000
ERI Contribution Reserve	2,214,000
STAR COLA Contribution Reserve	6,510,000
Unrealized Appreciation Included in Valuation Value of Assets	<u>426,177,000</u>
Subtotal: Valuation Value of Assets	\$7,748,380,000

Not Included in Valuation Value of Assets

RMBR	\$1,109,000
Unclaimed Member Deposit	1,163,000
Medicare Medical Insurance Reserve	<u>99,000</u>
Total	\$2,371,000
Subtotal: Actuarial Value of Assets	\$7,750,751,000
Unrecognized Investment Income (Loss)	<u>-1,502,193,000</u>
Subtotal: Market Value of Assets (Net of County Investment Account and Prepaid Employer Contributions)	\$6,248,558,000
County Investment Account	126,683,000
Prepaid Employer Contributions	<u>24,345,000</u>
Total: Gross Market Value of Assets	\$6,399,586,000

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, 2008

1.	Unfunded actuarial accrued liability at beginning of year		\$2,549,786,000
2.	Total normal cost at middle of year		361,097,000
3.	Actual employer and member contributions		-532,656,000
4.	Interest		<u>190,961,000</u>
5.	Expected unfunded actuarial accrued liability		\$2,569,188,000
6.	Actuarial (gain)/loss and other changes:		
	(a) Loss on investment return	\$257,752,000	
	(b) Loss on higher than expected salary increase	97,561,000	
	(c) Loss on new retirees	54,911,000	
	(d) Other experience (gain) / loss	17,159,000	
	(e) Change in actuarial assumptions	<u>115,764,000</u>	
	(f) Total changes		<u>\$543,147,000</u>
7.	Unfunded actuarial accrued liability at end of year		<u>\$3,112,335,000</u>

Note: 6(b) plus 6(c) plus 6(d) is equal to the "other experience" loss of \$169,631,000 provided on page 7.

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 \$185,000 for 2008 and \$195,000 for 2009. 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; and
- (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.

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

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 are many 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.

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: Reporting 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
2003	\$124,243,000	\$124,243,000	100.0%
2004	194,430,000	194,430,000	100.0%
2005	227,892,000	227,892,000	100.0%
2006	277,368,000	277,368,000	100.0%
2007	326,736,000	326,736,000	100.0%
2008	359,673,000	360,365,000*	100.2%

** Includes \$692,000 in additional contributions made by OCFA towards the reduction of their UAAL.*

SECTION 4: Reporting 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)
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%
2005	5,786,617,000	8,089,627,000	2,303,010,000	71.53%	1,276,764,000	180.38%
2006	6,466,085,000	8,765,045,000	2,298,960,000	73.77%	1,322,952,000	173.78%
2007	7,288,900,000	9,838,686,000	2,549,786,000	74.08%	1,457,159,000	174.98%
2008	7,748,380,000	10,860,715,000	3,112,335,000	71.34%	1,569,764,000	198.27%

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

EXHIBIT III

Supplementary Information Required by GASB

Valuation date	December 31, 2008
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	26 years closed (declining) amortization of outstanding balance of December 31, 2004 UAAL. Any increases or decreases in UAAL that arise in future years due to actuarial gains or losses will be amortized over separate 15-year periods. Any increases or decreases in UAAL due to changes in actuarial assumptions are amortized over separate 30-year periods.
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 *	4.50% to 11.50% for General members; 4.50% to 13.50% for Safety members based on service.
Cost of living adjustments	3.00%
Plan membership:	
Retired members and beneficiaries receiving benefits	11,778
Terminated members entitled to, but not yet receiving benefits	3,881
Active members	<u>23,720</u>
Total	39,379

* See Exhibit IV for these increases, including inflation rate.

SECTION 4: Reporting 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 all Beneficiaries: RP-2000 Combined Healthy Mortality Table set back one year.

For Safety Members: RP-2000 Combined Healthy Mortality Table set back two years.

Disabled:

For General Members: RP-2000 Combined Healthy Mortality Table set forward three years.

For Safety Members: RP-2000 Combined Healthy Mortality Table set forward two years.

Employee Contribution Rates:

For General Members: RP-2000 Combined Healthy Mortality Table set back one year, weighted 40% male and 60% female.

For Safety Members: RP-2000 Combined Healthy Mortality Table set back two years, weighted 80% male and 20% female.

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

Termination Rates Before Retirement:

Age	Rate (%) Mortality			
	General		Safety	
	Male	Female	Male	Female
25	0.04	0.02	0.04	0.02
30	0.04	0.02	0.04	0.02
35	0.07	0.04	0.06	0.04
40	0.10	0.06	0.10	0.06
45	0.14	0.10	0.13	0.09
50	0.20	0.16	0.19	0.14
55	0.32	0.24	0.29	0.22
60	0.59	0.44	0.53	0.39
65	1.13	0.86	1.00	0.76

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

SECTION 4: Reporting 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 ⁽³⁾
20	0.00	0.00	0.03	0.00
25	0.00	0.00	0.08	0.06
30	0.03	0.03	0.16	0.16
35	0.08	0.08	0.32	0.20
40	0.13	0.28	0.52	0.20
45	0.17	0.49	0.72	0.20
50	0.19	0.64	0.98	0.20
55	0.23	0.88	2.24	0.20
60	0.34	1.30	3.60	0.08

⁽¹⁾ 50% of General All Other disabilities are assumed to be service connected disabilities. The other 50% are assumed to be non-service connected.

⁽²⁾ 70% of General - OCTA disabilities are assumed to be service connected disabilities. The other 30% are assumed to be non-service connected.

⁽³⁾ 100% of Safety – Law Enforcement, Fire and Probation disabilities are assumed to be service connected disabilities.

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

Termination Rates Before Retirement (Continued):

Years of Service	Rate (%)			
	Termination (< 5 Years of Service)			
	General All Other ⁽¹⁾	General OCTA ⁽¹⁾	Safety – Law & Fire ⁽¹⁾	Safety - Probation ⁽¹⁾
0	13.0	17.0	4.0	17.0
1	9.0	9.0	3.0	10.0
2	8.0	8.0	2.0	8.0
3	7.0	7.0	2.0	6.0
4	5.0	6.0	1.0	5.0

Age	Termination (5+ Years of Service)			
	General All Other ⁽²⁾	General OCTA ⁽²⁾	Safety – Law & Fire ⁽³⁾	Safety – Probation ⁽²⁾
20	5.0	4.0	1.0	5.0
25	5.0	4.0	1.0	5.0
30	5.0	4.0	1.0	4.6
35	4.4	4.0	0.9	3.8
40	3.7	4.0	0.6	3.1
45	2.9	3.4	0.5	2.5
50	2.2	2.7	0.2	2.0
55	1.4	1.9	0.0	1.3
60	0.4	0.6	0.0	0.4

⁽¹⁾ 75% of all terminated members will choose a refund of contributions and 25% will choose a deferred vested benefit.

⁽²⁾ 20% of all terminated members will choose a refund of contributions and 80% will choose a deferred vested benefit.

⁽³⁾ 10% of terminated members will choose a refund of contributions and 90% will choose a deferred vested benefit.

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

Retirement Rates:

Age	Rate (%)				
	General - Enhanced	General - Non-Enhanced	Safety - Law ⁽¹⁾	Safety - Fire ⁽¹⁾	Safety - Probation ⁽¹⁾
50	2.5	3.0	15.0	10.0	4.0
51	2.5	3.0	15.0	12.0	4.0
52	2.5	3.0	15.0	14.0	4.0
53	2.5	3.0	20.0	15.0	7.0
54	5.0	3.0	20.0	17.0	10.0
55	15.0	4.0	20.0	25.0	20.0
56	8.0	5.0	20.0	25.0	20.0
57	8.0	6.0	20.0	30.0	20.0
58	10.0	7.0	25.0	30.0	25.0
59	10.0	9.0	30.0	40.0	30.0
60	13.0	11.0	100.0	100.0	35.0
61	13.0	13.0	100.0	100.0	45.0
62	15.0	15.0	100.0	100.0	60.0
63	15.0	17.0	100.0	100.0	100.0
64	20.0	19.0	100.0	100.0	100.0
65	20.0	25.0	100.0	100.0	100.0
66	24.0	20.0	100.0	100.0	100.0
67	24.0	20.0	100.0	100.0	100.0
68	24.0	20.0	100.0	100.0	100.0
69	24.0	20.0	100.0	100.0	100.0
70	100.0	100.0	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: Reporting Information for the Orange County Employees Retirement System

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

For deferred vested members, we make the following retirement age assumptions:

General Age: 57

Safety Age: 52

We assume that 30% of future General and Safety deferred vested members are reciprocal. For reciprocals, we assume 4.50% compensation increases per annum.

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

Liability for a current deferred vested member is calculated based on salary, service, and eligibility for reciprocal benefit as provided by the Retirement System. For those members without salary and/or service information, we assumed a refund of account balance.

Future Benefit Accruals:

1.0 year of service per year of employment. 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) four years younger (or older) than spouse.

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: Reporting Information for the Orange County Employees Retirement System

Salary Increases:

Annual Rate of Compensation Increase (%)

Inflation: 3.50% per year, plus the following merit and promotion increases:

Years of Service	General	Safety
Less than 1	8.00%	10.00%
1	7.00	8.00
2	6.00	7.00
3	5.00	6.00
4	4.00	4.00
5	3.00	3.00
6	2.00	2.00
7	1.75	1.75
8	1.50	1.50
9	1.25	1.25
10	1.25	1.00
11	1.25	1.00
12	1.25	1.00
13	1.25	1.00
14	1.25	1.00
15	1.25	1.00
16	1.00	1.00
17	1.00	1.00
18	1.00	1.00
19	1.00	1.00
20 & over	1.00	1.00

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

Annual Payoffs Assumptions:

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

	<u>Final One Year Salary</u>	<u>Final Three Year Salary</u>
General Members	4.50%	2.60%
Safety - Probation	4.80%	2.70%
Safety - Law	8.20%	5.60%
Safety - Fire	4.00%	3.60%

The annual payoffs assumptions are the same for service and disability retirements.

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.

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

Actuarial Cost Method:

Entry Age Normal Actuarial Cost Method. Entry Age is the current age minus Vesting Credit. 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 outstanding balance of the December 31, 2004 Unfunded Actuarial Accrued Liability is amortized over a declining 26-year period. Any increases or decreases in Unfunded Actuarial Accrued Liability that arise in future years due to actuarial gains or losses will be amortized over separate 15-year periods. Any increases or decreases in UAAL due to changes in actuarial assumptions are amortized over separate 30-year periods.

Please note that for Probation members who have prior benefit service in another General OCERS plan, the normal cost rate for the current plan is calculated assuming their Entry Age is the date they entered service with their current plan.

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

Changes in Actuarial Assumptions: Based on our review of retirements, the following assumption was changed. Previously, that assumption was as follows:

Retirement Rates:

Age	Rate (%)
	General - Enhanced
50	3.0
51	3.0
52	3.0
53	3.0
54	3.0
55	4.0
56	5.0
57	6.0
58	7.0
59	9.0
60	11.0
61	13.0
62	15.0
63	17.0
64	19.0
65	25.0
66	20.0
67	20.0
68	20.0
69	20.0
70	100.0

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 (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, Cemetery District – future service effective December 7, 2007)

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)*
<i>Plan H (§31676.18)</i>	50	(2.00% x FAS3 x Yrs)
	55	(2.50% x FAS3 x Yrs)

* Reflects benefit factors from Plan A as they provide a better benefit than those under 2.5% @ 55.

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):

<i>2.0% @ 55</i>	Retirement Age	Benefit Formula
<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. 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. (§31727.1)

Plans B, H, J and N:

1.5% per year of service. 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)

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. (§31727.2)

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 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

Basic Provide for an average annuity payable at age 60 equal to 1/200 of FAS1. (§31621.5)

Cost-of-Living Provide for 50% of future Cost-of-Living costs.

Plan B

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

Cost-of-Living Provide for 50% of future Cost-of-Living costs.

Plans G, H, I and J

Basic Provide for an average annuity payable at age 55 equal to 1/100 of FAS3 (FAS1 for Plans G and I). (§31621.8)

Cost-of-Living Provide for 50% 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 50% 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 50% 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 50% 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 50% of future Cost-of-Living costs.

Other Information:

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

NOTE: *The summary of major plan provisions is designed to outline principal 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, 2008

Rate Groups	Date Established	Source	Initial Base	Years Remaining	Remaining Base	Amortization Amount
<i>General Members</i>						
Rate Group #1 – Non-OCTA						
	12/31/2004	Restart amortization	\$44,613,000	26	\$47,381,000	\$2,999,000
	12/31/2005	Actuarial (gain) or loss	(3,774,000)	12	(3,536,000)	(379,000)
	12/31/2006	Actuarial (gain) or loss	2,619,000	13	2,522,000	254,000
	12/31/2007	Actuarial (gain) or loss	(4,903,000)	14	(4,823,000)	(460,000)
	12/31/2007	Assumption change	8,305,000	29	8,445,000	504,000
	12/31/2008	Actuarial (gain) or loss	10,802,000	15	<u>10,802,000</u>	<u>979,000</u>
Subtotal					\$60,791,000	\$3,897,000
Rate Group #2 – 2.7% @ 55						
	12/31/2004	Restart amortization	\$1,303,159,000	26	\$1,384,000,000	\$87,610,000
	12/31/2005	Actuarial (gain) or loss	85,000,000	12	79,650,000	8,540,000
	12/31/2006	Actuarial (gain) or loss	(18,810,000)	13	(18,112,000)	(1,826,000)
	12/31/2007	Actuarial (gain) or loss	9,539,000	14	9,384,000	895,000
	12/31/2007	Assumption change	68,025,000	29	69,173,000	4,125,000
	12/31/2008	Actuarial (gain) or loss	215,870,000	15	215,870,000	19,563,000
	12/31/2008	Assumption change	106,699,000	30	<u>106,699,000</u>	<u>6,251,000</u>
Subtotal					\$1,846,664,000	\$125,158,000

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

Rate Groups	Date Established	Source	Initial Base	Years Remaining	Remaining Base	Amortization Amount
Rate Group #3 – 2.5% @ 55						
	12/31/2004	Restart amortization	\$67,595,000	26	\$71,788,000	\$4,544,000
	12/31/2005	Actuarial (gain) or loss	9,864,000	12	9,243,000	991,000
	12/31/2006	Actuarial (gain) or loss	2,158,000	13	2,078,000	209,000
	12/31/2007	Actuarial (gain) or loss	(615,000)	14	(605,000)	(58,000)
	12/31/2007	Assumption change	7,781,000	29	7,912,000	472,000
	12/31/2008	Actuarial (gain) or loss	8,401,000	15	8,401,000	761,000
	12/31/2008	Assumption change	6,562,000	30	<u>6,562,000</u>	<u>384,000</u>
Subtotal					\$105,379,000	\$7,303,000
Rate Group #5 – OCTA						
	12/31/2004	Restart amortization	\$70,302,000	26	\$74,663,000	\$4,726,000
	12/31/2005	Actuarial (gain) or loss	1,340,000	12	1,256,000	135,000
	12/31/2006	Actuarial (gain) or loss	(5,778,000)	13	(5,564,000)	(561,000)
	12/31/2007	Actuarial (gain) or loss	(12,467,000)	14	(12,264,000)	(1,169,000)
	12/31/2007	Assumption change	11,504,000	29	11,698,000	698,000
	12/31/2008	Actuarial (gain) or loss	24,594,000	15	<u>24,594,000</u>	<u>2,229,000</u>
Subtotal					\$94,383,000	\$6,058,000

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

Rate Groups	Date Established	Source	Initial Base	Years Remaining	Remaining Base	Amortization Amount
Rate Group #9 – TCA						
	12/31/2004	Restart amortization	\$6,061,000	26	\$6,437,000	\$407,000
	12/31/2005	Actuarial (gain) or loss	(250,000)	12	(234,000)	(25,000)
	12/31/2006	Actuarial (gain) or loss	(319,000)	13	(307,000)	(31,000)
	12/31/2007	Actuarial (gain) or loss	(149,000)	14	(147,000)	(14,000)
	12/31/2007	Assumption change	312,000	29	317,000	19,000
	12/31/2008	Actuarial (gain) or loss	578,000	15	578,000	52,000
	12/31/2008	Assumption change	172,000	30	<u>172,000</u>	<u>10,000</u>
Subtotal					\$6,816,000	\$418,000
Rate Group #10 – OCFA						
	12/31/2004	Restart amortization	\$28,348,000	26	\$30,107,000	\$1,906,000
	12/31/2005	Actuarial (gain) or loss	1,849,000	12	1,733,000	186,000
	12/31/2006	Actuarial (gain) or loss	4,362,000	13	4,200,000	423,000
	12/31/2007	Actuarial (gain) or loss	(3,010,000)	14	(2,961,000)	(282,000)
	12/31/2007	Assumption change	2,975,000	29	3,025,000	180,000
	12/31/2008	Actuarial (gain) or loss	1,347,000	15	1,347,000	122,000
	12/31/2008	Assumption change	2,318,000	30	<u>2,318,000</u>	<u>136,000</u>
Subtotal					\$39,769,000	\$2,671,000

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

Rate Groups	Date Established	Source	Initial Base	Years Remaining	Remaining Base	Amortization Amount
<i>Rate Group #11 – Cemetery</i>						
	12/31/2004	Restart amortization	\$679,000	26	\$721,000	\$46,000
	12/31/2005	Actuarial (gain) or loss	(62,000)	12	(58,000)	(6,000)
	12/31/2006	Actuarial (gain) or loss	43,000	13	41,000	4,000
	12/31/2007	Actuarial (gain) or loss	83,000	14	82,000	8,000
	12/31/2007	Assumption change	25,000	29	25,000	1,000
	12/31/2008	Actuarial (gain) or loss	212,000	15	212,000	19,000
	12/31/2008	Assumption change	13,000	30	<u>13,000</u>	<u>1,000</u>
Subtotal					\$1,036,000	\$73,000
 <i>Safety Members</i>						
<i>Rate Group #6 – Probation</i>						
	12/31/2004	Restart amortization	\$82,839,000	26	\$87,978,000	\$5,569,000
	12/31/2005	Actuarial (gain) or loss	10,520,000	12	9,858,000	1,057,000
	12/31/2006	Actuarial (gain) or loss	2,531,000	13	2,437,000	246,000
	12/31/2007	Actuarial (gain) or loss	(1,866,000)	14	(1,836,000)	(175,000)
	12/31/2007	Assumption change	12,945,000	29	13,163,000	785,000
	12/31/2008	Actuarial (gain) or loss	13,162,000	15	<u>13,162,000</u>	<u>1,193,000</u>
Subtotal					\$124,762,000	\$8,675,000

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

Rate Groups	Date Established	Source	Initial Base	Years Remaining	Remaining Base	Amortization Amount
Rate Group #7 – Law Enforcement						
	12/31/2004	Restart amortization	\$409,515,000	26	\$434,919,000	\$27,531,000
	12/31/2005	Actuarial (gain) or loss	1,092,000	12	1,023,000	110,000
	12/31/2006	Actuarial (gain) or loss	(18,681,000)	13	(17,988,000)	(1,814,000)
	12/31/2007	Actuarial (gain) or loss	(5,815,000)	14	(5,720,000)	(545,000)
	12/31/2007	Assumption change	88,601,000	29	90,096,000	5,372,000
	12/31/2008	Actuarial (gain) or loss	94,542,000	15	<u>94,542,000</u>	<u>8,568,000</u>
Subtotal					\$596,872,000	\$39,222,000
Rate Group #8 – Fire Authority						
	12/31/2004	Restart amortization	\$144,849,000	26	\$153,835,000	\$9,738,000
	12/31/2005	Actuarial (gain) or loss	2,796,000	12	2,620,000	281,000
	12/31/2006	Actuarial (gain) or loss	(4,791,000)	13	(4,613,000)	(465,000)
	12/31/2007	Actuarial (gain) or loss	2,047,000	14	2,014,000	192,000
	12/31/2007	Assumption change	36,674,000	29	37,293,000	2,224,000
	12/31/2008	Actuarial (gain) or loss	44,714,000	15	<u>44,714,000</u>	<u>4,052,000</u>
Subtotal					\$235,863,000	\$16,022,000
Grand Total					<u>\$3,112,335,000</u>	<u>\$209,497,000</u>

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

Appendix B

Member Contribution Rates

General Tier 1 Members' Contribution Rates from the December 31, 2008 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

Calculated Under Recommended Assumptions

<u>Entry Age</u>	<u>Plan I (2.7% @ 55 non-OCFA)</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>Plan I (2.7% @ 55 OCFA)</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>	<u>Normal</u>	<u>Total</u>
15	5.98%	8.08%	5.98%	7.99%	4.23%	5.99%	2.54%	4.22%	2.54%	4.00%	5.98%	8.11%
16	5.98%	8.08%	5.98%	7.99%	4.23%	5.99%	2.54%	4.22%	2.54%	4.00%	5.98%	8.11%
17	6.09%	8.23%	6.09%	8.14%	4.31%	6.11%	2.59%	4.30%	2.59%	4.07%	6.09%	8.26%
18	6.21%	8.39%	6.21%	8.30%	4.40%	6.22%	2.64%	4.39%	2.64%	4.15%	6.21%	8.42%
19	6.32%	8.55%	6.32%	8.45%	4.48%	6.34%	2.69%	4.47%	2.69%	4.23%	6.32%	8.58%
20	6.44%	8.71%	6.44%	8.61%	4.57%	6.46%	2.74%	4.55%	2.74%	4.31%	6.44%	8.74%
21	6.57%	8.87%	6.57%	8.78%	4.65%	6.59%	2.79%	4.64%	2.79%	4.40%	6.57%	8.91%
22	6.69%	9.04%	6.69%	8.94%	4.74%	6.71%	2.85%	4.73%	2.85%	4.48%	6.69%	9.08%
23	6.82%	9.21%	6.82%	9.11%	4.83%	6.84%	2.90%	4.82%	2.90%	4.56%	6.82%	9.25%
24	6.94%	9.38%	6.94%	9.28%	4.92%	6.97%	2.95%	4.91%	2.95%	4.65%	6.94%	9.42%
25	7.07%	9.56%	7.07%	9.45%	5.02%	7.10%	3.01%	5.00%	3.01%	4.74%	7.07%	9.60%
26	7.21%	9.74%	7.21%	9.63%	5.11%	7.23%	3.07%	5.10%	3.07%	4.83%	7.21%	9.78%
27	7.34%	9.92%	7.34%	9.81%	5.21%	7.37%	3.13%	5.19%	3.13%	4.92%	7.34%	9.96%
28	7.48%	10.11%	7.48%	10.00%	5.31%	7.51%	3.18%	5.29%	3.18%	5.01%	7.48%	10.15%
29	7.62%	10.30%	7.62%	10.19%	5.41%	7.65%	3.24%	5.39%	3.24%	5.11%	7.62%	10.34%
30	7.77%	10.49%	7.77%	10.38%	5.51%	7.79%	3.31%	5.49%	3.31%	5.20%	7.77%	10.54%
31	7.91%	10.69%	7.91%	10.58%	5.61%	7.94%	3.37%	5.60%	3.37%	5.30%	7.91%	10.74%
32	8.06%	10.90%	8.06%	10.78%	5.72%	8.09%	3.43%	5.70%	3.43%	5.40%	8.06%	10.94%
33	8.22%	11.10%	8.22%	10.98%	5.83%	8.24%	3.50%	5.81%	3.50%	5.50%	8.22%	11.15%
34	8.38%	11.32%	8.38%	11.19%	5.94%	8.40%	3.56%	5.92%	3.56%	5.60%	8.38%	11.36%
35	8.54%	11.54%	8.54%	11.41%	6.05%	8.56%	3.63%	6.03%	3.63%	5.71%	8.54%	11.58%
36	8.70%	11.76%	8.70%	11.63%	6.16%	8.72%	3.70%	6.14%	3.70%	5.82%	8.70%	11.81%
37	8.88%	11.99%	8.88%	11.86%	6.28%	8.88%	3.77%	6.26%	3.77%	5.93%	8.88%	12.04%
38	9.05%	12.24%	9.05%	12.10%	6.40%	9.05%	3.84%	6.38%	3.84%	6.04%	9.05%	12.29%
39	9.22%	12.45%	9.22%	12.32%	6.52%	9.23%	3.91%	6.50%	3.91%	6.16%	9.22%	12.51%

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

**General Tier 1 Members' Contribution Rates from the December 31, 2008 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)
Calculated Under Recommended Assumptions**

<u>Entry Age</u>	<u>Plan I (2.7% @ 55 non-OCFA)</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>Plan I (2.7% @ 55 OCFA)</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>	<u>Normal</u>	<u>Total</u>
40	9.39%	12.68%	9.39%	12.54%	6.65%	9.41%	3.99%	6.63%	3.99%	6.28%	9.39%	12.73%
41	9.56%	12.92%	9.56%	12.78%	6.78%	9.59%	4.07%	6.76%	4.07%	6.40%	9.56%	12.97%
42	9.74%	13.17%	9.74%	13.02%	6.91%	9.78%	4.15%	6.89%	4.15%	6.53%	9.74%	13.22%
43	9.94%	13.43%	9.94%	13.28%	7.05%	9.98%	4.23%	7.03%	4.23%	6.66%	9.94%	13.48%
44	10.14%	13.70%	10.14%	13.55%	7.18%	10.15%	4.31%	7.16%	4.31%	6.78%	10.14%	13.76%
45	10.36%	14.00%	10.36%	13.84%	7.31%	10.34%	4.38%	7.29%	4.38%	6.90%	10.36%	14.05%
46	10.57%	14.29%	10.57%	14.13%	7.44%	10.53%	4.47%	7.42%	4.47%	7.03%	10.57%	14.35%
47	10.79%	14.58%	10.79%	14.42%	7.59%	10.73%	4.55%	7.56%	4.55%	7.16%	10.79%	14.63%
48	11.00%	14.87%	11.00%	14.70%	7.74%	10.95%	4.64%	7.71%	4.64%	7.30%	11.00%	14.93%
49	11.15%	15.07%	11.15%	14.90%	7.89%	11.17%	4.74%	7.87%	4.74%	7.45%	11.15%	15.13%
50	11.23%	15.18%	11.23%	15.01%	8.07%	11.41%	4.84%	8.04%	4.84%	7.62%	11.23%	15.24%
51	11.25%	15.20%	11.25%	15.03%	8.23%	11.65%	4.94%	8.21%	4.94%	7.77%	11.25%	15.26%
52	11.19%	15.12%	11.19%	14.96%	8.40%	11.88%	5.04%	8.38%	5.04%	7.93%	11.19%	15.18%
53	11.07%	14.96%	11.07%	14.79%	8.57%	12.12%	5.14%	8.54%	5.14%	8.09%	11.07%	15.02%
54	10.88%	14.71%	10.88%	14.55%	8.68%	12.29%	5.21%	8.66%	5.21%	8.20%	10.88%	14.77%
55	10.88%	14.71%	10.88%	14.55%	8.75%	12.38%	5.25%	8.72%	5.25%	8.26%	10.88%	14.77%
56	10.88%	14.71%	10.88%	14.55%	8.76%	12.39%	5.25%	8.73%	5.25%	8.27%	10.88%	14.77%
57	10.88%	14.71%	10.88%	14.55%	8.71%	12.33%	5.23%	8.69%	5.23%	8.23%	10.88%	14.77%
58	10.88%	14.71%	10.88%	14.55%	8.62%	12.19%	5.17%	8.59%	5.17%	8.14%	10.88%	14.77%
59	10.88%	14.71%	10.88%	14.55%	8.47%	11.99%	5.08%	8.45%	5.08%	8.00%	10.88%	14.77%
60	10.88%	14.71%	10.88%	14.55%	8.47%	11.99%	5.08%	8.45%	5.08%	8.00%	10.88%	14.77%
<i>COLA Loading:</i>		35.13%		33.65%		41.49%		66.20%		57.38%		35.68%

Interest: 7.75%

Salary Increases: See Exhibit IV, page 53

Mortality: See Exhibit IV, page 47

* Payable by members in Rate Group #9 and Rate Group #11.

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

General Tier 2 Members' Contribution Rates from the December 31, 2008 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

Calculated Under Recommended Assumptions

<u>Entry Age</u>	<u>Plan J (2.7% @ 55 non-OCFA)</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>Plan J (2.7% @ 55 OCFA)</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>	<u>Normal</u>	<u>Total</u>
15	5.72%	7.73%	5.72%	7.65%	4.05%	5.74%	4.05%	5.66%	4.05%	5.45%	5.72%	7.77%
16	5.72%	7.73%	5.72%	7.65%	4.05%	5.74%	4.05%	5.66%	4.05%	5.45%	5.72%	7.77%
17	5.83%	7.88%	5.83%	7.80%	4.13%	5.85%	4.13%	5.77%	4.13%	5.55%	5.83%	7.91%
18	5.94%	8.03%	5.94%	7.94%	4.21%	5.96%	4.21%	5.88%	4.21%	5.66%	5.94%	8.06%
19	6.06%	8.18%	6.06%	8.09%	4.29%	6.07%	4.29%	6.00%	4.29%	5.77%	6.06%	8.22%
20	6.17%	8.34%	6.17%	8.25%	4.37%	6.19%	4.37%	6.11%	4.37%	5.88%	6.17%	8.37%
21	6.29%	8.50%	6.29%	8.40%	4.46%	6.31%	4.46%	6.23%	4.46%	5.99%	6.29%	8.53%
22	6.41%	8.66%	6.41%	8.56%	4.54%	6.43%	4.54%	6.35%	4.54%	6.11%	6.41%	8.69%
23	6.53%	8.82%	6.53%	8.72%	4.63%	6.55%	4.63%	6.47%	4.63%	6.22%	6.53%	8.85%
24	6.65%	8.98%	6.65%	8.89%	4.72%	6.67%	4.72%	6.59%	4.72%	6.34%	6.65%	9.02%
25	6.77%	9.15%	6.77%	9.05%	4.80%	6.80%	4.80%	6.71%	4.80%	6.46%	6.77%	9.19%
26	6.90%	9.33%	6.90%	9.22%	4.90%	6.93%	4.90%	6.84%	4.90%	6.58%	6.90%	9.36%
27	7.03%	9.50%	7.03%	9.40%	4.99%	7.06%	4.99%	6.97%	4.99%	6.70%	7.03%	9.54%
28	7.16%	9.68%	7.16%	9.57%	5.08%	7.19%	5.08%	7.10%	5.08%	6.83%	7.16%	9.72%
29	7.30%	9.86%	7.30%	9.75%	5.18%	7.33%	5.18%	7.23%	5.18%	6.96%	7.30%	9.90%
30	7.44%	10.05%	7.44%	9.94%	5.27%	7.46%	5.27%	7.37%	5.27%	7.09%	7.44%	10.09%
31	7.58%	10.24%	7.58%	10.13%	5.37%	7.60%	5.37%	7.51%	5.37%	7.22%	7.58%	10.28%
32	7.72%	10.43%	7.72%	10.32%	5.47%	7.75%	5.47%	7.65%	5.47%	7.36%	7.72%	10.48%
33	7.87%	10.63%	7.87%	10.52%	5.58%	7.89%	5.58%	7.79%	5.58%	7.50%	7.87%	10.68%
34	8.02%	10.84%	8.02%	10.72%	5.68%	8.04%	5.68%	7.94%	5.68%	7.64%	8.02%	10.88%
35	8.18%	11.05%	8.18%	10.93%	5.79%	8.19%	5.79%	8.09%	5.79%	7.78%	8.18%	11.09%
36	8.34%	11.26%	8.34%	11.14%	5.90%	8.35%	5.90%	8.24%	5.90%	7.93%	8.34%	11.31%
37	8.49%	11.48%	8.49%	11.35%	6.01%	8.51%	6.01%	8.40%	6.01%	8.08%	8.49%	11.52%
38	8.65%	11.69%	8.65%	11.56%	6.13%	8.67%	6.13%	8.56%	6.13%	8.24%	8.65%	11.74%
39	8.81%	11.90%	8.81%	11.77%	6.24%	8.84%	6.24%	8.73%	6.24%	8.40%	8.81%	11.95%
40	8.97%	12.12%	8.97%	11.98%	6.37%	9.01%	6.37%	8.89%	6.37%	8.56%	8.97%	12.17%
41	9.13%	12.34%	9.13%	12.21%	6.49%	9.18%	6.49%	9.07%	6.49%	8.72%	9.13%	12.39%
42	9.31%	12.58%	9.31%	12.44%	6.61%	9.36%	6.61%	9.24%	6.61%	8.89%	9.31%	12.63%

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

General Tier 2 Members' Contribution Rates from the December 31, 2008 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

Calculated Under Recommended Assumptions

<u>Entry Age</u>	<u>Plan J (2.7% @ 55 non-OCFA)</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>Plan J (2.7% @ 55 OCFA)</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>	<u>Normal</u>	<u>Total</u>
43	9.49%	12.83%	9.49%	12.69%	6.74%	9.53%	6.74%	9.41%	6.74%	9.05%	9.49%	12.88%
44	9.68%	13.08%	9.68%	12.94%	6.86%	9.70%	6.86%	9.58%	6.86%	9.22%	9.68%	13.13%
45	9.87%	13.33%	9.87%	13.19%	6.98%	9.88%	6.98%	9.75%	6.98%	9.39%	9.87%	13.39%
46	10.05%	13.58%	10.05%	13.43%	7.11%	10.06%	7.11%	9.94%	7.11%	9.56%	10.05%	13.63%
47	10.20%	13.79%	10.20%	13.64%	7.25%	10.25%	7.25%	10.13%	7.25%	9.74%	10.20%	13.84%
48	10.31%	13.94%	10.31%	13.79%	7.39%	10.46%	7.39%	10.33%	7.39%	9.93%	10.31%	13.99%
49	10.36%	14.00%	10.36%	13.85%	7.54%	10.66%	7.54%	10.53%	7.54%	10.13%	10.36%	14.06%
50	10.35%	13.98%	10.35%	13.83%	7.68%	10.87%	7.68%	10.73%	7.68%	10.33%	10.35%	14.04%
51	10.27%	13.88%	10.27%	13.73%	7.82%	11.07%	7.82%	10.93%	7.82%	10.52%	10.27%	13.94%
52	10.13%	13.69%	10.13%	13.54%	7.94%	11.24%	7.94%	11.10%	7.94%	10.68%	10.13%	13.75%
53	10.50%	14.19%	10.50%	14.03%	8.03%	11.36%	8.03%	11.22%	8.03%	10.80%	10.50%	14.24%
54	10.88%	14.71%	10.88%	14.55%	8.07%	11.42%	8.07%	11.27%	8.07%	10.85%	10.88%	14.77%
55	10.88%	14.71%	10.88%	14.55%	8.06%	11.40%	8.06%	11.26%	8.06%	10.83%	10.88%	14.77%
56	10.88%	14.71%	10.88%	14.55%	8.00%	11.32%	8.00%	11.17%	8.00%	10.75%	10.88%	14.77%
57	10.88%	14.71%	10.88%	14.55%	7.89%	11.16%	7.89%	11.02%	7.89%	10.61%	10.88%	14.77%
58	10.88%	14.71%	10.88%	14.55%	8.17%	11.57%	8.17%	11.42%	8.17%	10.99%	10.88%	14.77%
59	10.88%	14.71%	10.88%	14.55%	8.47%	11.99%	8.47%	11.84%	8.47%	11.39%	10.88%	14.77%
60	10.88%	14.71%	10.88%	14.55%	8.47%	11.99%	8.47%	11.84%	8.47%	11.39%	10.88%	14.77%
<i>COLA Loading:</i>		35.13%		33.65%		41.49%		39.72%		34.43%		35.68%

Interest: 7.75%

Salary Increases: See Exhibit IV, page 53

Mortality: See Exhibit IV, page 47

* Payable by members in Rate Group #9 and Rate Group #11.

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

**Safety Tier 1 Members' Contribution Rates from the December 31, 2008 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)
Calculated Under Recommended 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	3.44%	7.83%	3.44%	7.83%	3.44%	7.29%
16	3.44%	7.83%	3.44%	7.83%	3.44%	7.29%
17	3.50%	7.98%	3.50%	7.98%	3.50%	7.43%
18	3.57%	8.13%	3.57%	8.13%	3.57%	7.57%
19	3.63%	8.28%	3.63%	8.28%	3.63%	7.71%
20	3.70%	8.44%	3.70%	8.44%	3.70%	7.85%
21	3.77%	8.59%	3.77%	8.60%	3.77%	8.00%
22	3.84%	8.75%	3.84%	8.76%	3.84%	8.15%
23	3.91%	8.92%	3.91%	8.92%	3.91%	8.30%
24	3.99%	9.09%	3.99%	9.09%	3.99%	8.46%
25	4.06%	9.26%	4.06%	9.26%	4.06%	8.62%
26	4.14%	9.43%	4.14%	9.43%	4.14%	8.78%
27	4.21%	9.61%	4.21%	9.61%	4.21%	8.95%
28	4.29%	9.79%	4.29%	9.79%	4.29%	9.12%
29	4.38%	9.98%	4.38%	9.98%	4.38%	9.29%
30	4.46%	10.17%	4.46%	10.17%	4.46%	9.47%
31	4.55%	10.36%	4.55%	10.37%	4.55%	9.65%
32	4.64%	10.57%	4.64%	10.57%	4.64%	9.84%
33	4.73%	10.78%	4.73%	10.78%	4.73%	10.03%
34	4.82%	10.99%	4.82%	11.00%	4.82%	10.24%
35	4.92%	11.22%	4.92%	11.22%	4.92%	10.44%
36	5.02%	11.45%	5.02%	11.46%	5.02%	10.66%
37	5.13%	11.70%	5.13%	11.70%	5.13%	10.89%
38	5.25%	11.96%	5.25%	11.97%	5.25%	11.14%
39	5.37%	12.24%	5.37%	12.25%	5.37%	11.40%
40	5.49%	12.52%	5.49%	12.52%	5.49%	11.66%
41	5.61%	12.79%	5.61%	12.80%	5.61%	11.91%
42	5.73%	13.07%	5.73%	13.07%	5.73%	12.17%

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

**Safety Tier 1 Members' Contribution Rates from the December 31, 2008 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)
Calculated Under Recommended 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>
43	5.86%	13.35%	5.86%	13.36%	5.86%	12.43%
44	5.95%	13.56%	5.95%	13.57%	5.95%	12.63%
45	6.01%	13.71%	6.01%	13.71%	6.01%	12.76%
46	6.00%	13.67%	6.00%	13.67%	6.00%	12.73%
47	5.94%	13.55%	5.94%	13.56%	5.94%	12.62%
48	5.86%	13.36%	5.86%	13.37%	5.86%	12.44%
49	5.71%	13.03%	5.71%	13.03%	5.71%	12.13%
50	5.71%	13.03%	5.71%	13.03%	5.71%	12.13%
51	5.71%	13.03%	5.71%	13.03%	5.71%	12.13%
52	5.71%	13.03%	5.71%	13.03%	5.71%	12.13%
53	5.71%	13.03%	5.71%	13.03%	5.71%	12.13%
54	5.71%	13.03%	5.71%	13.03%	5.71%	12.13%
55	5.71%	13.03%	5.71%	13.03%	5.71%	12.13%
56	5.71%	13.03%	5.71%	13.03%	5.71%	12.13%
57	5.71%	13.03%	5.71%	13.03%	5.71%	12.13%
58	5.71%	13.03%	5.71%	13.03%	5.71%	12.13%
59	5.71%	13.03%	5.71%	13.03%	5.71%	12.13%
60	5.71%	13.03%	5.71%	13.03%	5.71%	12.13%

COLA Loading: 127.96% 128.06% 112.27%

Interest: 7.75%
Salary Increases: See Exhibit IV, page 53
Mortality: See Exhibit IV, page 47

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

**Safety Tier 2 Members' Contribution Rates from the December 31, 2008 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)
Calculated Under Recommended 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	6.58%	10.79%	6.58%	10.79%	6.58%	10.27%
16	6.58%	10.79%	6.58%	10.79%	6.58%	10.27%
17	6.70%	10.99%	6.70%	10.99%	6.70%	10.46%
18	6.83%	11.20%	6.83%	11.20%	6.83%	10.66%
19	6.96%	11.41%	6.96%	11.41%	6.96%	10.86%
20	7.09%	11.62%	7.09%	11.62%	7.09%	11.06%
21	7.22%	11.84%	7.22%	11.84%	7.22%	11.27%
22	7.35%	12.06%	7.35%	12.06%	7.35%	11.48%
23	7.49%	12.29%	7.49%	12.29%	7.49%	11.70%
24	7.63%	12.52%	7.63%	12.52%	7.63%	11.92%
25	7.78%	12.75%	7.78%	12.75%	7.78%	12.14%
26	7.92%	12.99%	7.92%	12.99%	7.92%	12.37%
27	8.07%	13.24%	8.07%	13.24%	8.07%	12.60%
28	8.22%	13.49%	8.22%	13.49%	8.22%	12.84%
29	8.38%	13.74%	8.38%	13.75%	8.38%	13.09%
30	8.54%	14.01%	8.54%	14.01%	8.54%	13.34%
31	8.71%	14.28%	8.71%	14.28%	8.71%	13.59%
32	8.88%	14.56%	8.88%	14.56%	8.88%	13.86%
33	9.05%	14.84%	9.05%	14.85%	9.05%	14.13%
34	9.23%	15.14%	9.23%	15.15%	9.23%	14.42%
35	9.42%	15.45%	9.42%	15.46%	9.42%	14.71%
36	9.62%	15.78%	9.62%	15.78%	9.62%	15.02%
37	9.83%	16.12%	9.83%	16.12%	9.83%	15.35%
38	10.04%	16.47%	10.04%	16.47%	10.04%	15.68%
39	10.25%	16.81%	10.25%	16.82%	10.25%	16.01%
40	10.46%	17.15%	10.46%	17.16%	10.46%	16.33%
41	10.66%	17.49%	10.66%	17.49%	10.66%	16.65%
42	10.84%	17.78%	10.84%	17.79%	10.84%	16.93%
43	10.98%	18.01%	10.98%	18.01%	10.98%	17.14%
44	11.03%	18.08%	11.03%	18.09%	11.03%	17.21%

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

**Safety Tier 2 Members' Contribution Rates from the December 31, 2008 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)
Calculated Under Recommended 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>
45	10.98%	18.01%	10.98%	18.02%	10.98%	17.15%
46	10.86%	17.81%	10.86%	17.81%	10.86%	16.95%
47	10.65%	17.46%	10.65%	17.47%	10.65%	16.63%
48	11.03%	18.08%	11.03%	18.09%	11.03%	17.22%
49	11.43%	18.74%	11.43%	18.75%	11.43%	17.84%
50	11.43%	18.74%	11.43%	18.75%	11.43%	17.84%
51	11.43%	18.74%	11.43%	18.75%	11.43%	17.84%
52	11.43%	18.74%	11.43%	18.75%	11.43%	17.84%
53	11.43%	18.74%	11.43%	18.75%	11.43%	17.84%
54	11.43%	18.74%	11.43%	18.75%	11.43%	17.84%
55	11.43%	18.74%	11.43%	18.75%	11.43%	17.84%
56	11.43%	18.74%	11.43%	18.75%	11.43%	17.84%
57	11.43%	18.74%	11.43%	18.75%	11.43%	17.84%
58	11.43%	18.74%	11.43%	18.75%	11.43%	17.84%
59	11.43%	18.74%	11.43%	18.75%	11.43%	17.84%
60	11.43%	18.74%	11.43%	18.75%	11.43%	17.84%

COLA Loading: 63.98% 64.03% 56.13%

Interest: 7.75%
Salary Increases: See Exhibit IV, page 53
Mortality: See Exhibit IV, page 47

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