

**The Water and Power Employees' Retirement Plan of the City  
of Los Angeles**

*Actuarial Valuation and Review  
as of July 1, 2004*

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*October 7, 2004*

*Board of Administration*

*The Water and Power Employees' Retirement Plan of the City of Los Angeles*

*111 North Hope Street, Room 357*

*Los Angeles, California 90012*

*Dear Board Members:*

*We are pleased to submit this Actuarial Valuation and Review as of July 1, 2004. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2004-2005 and analyzes the preceding year's experience.*

*The census information on which our calculations were based was prepared by the Retirement Office. That assistance is gratefully acknowledged. The actuarial calculations were completed under the supervision of Andy Yeung, MAAA, Enrolled Actuary.*

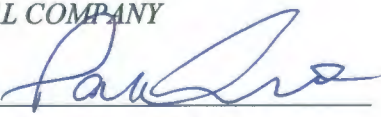
*This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and the expectations for the Plan.*

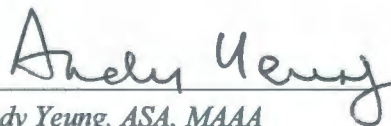
*We look forward to reviewing this report at your next meeting and to answering any questions.*

*Sincerely,*

*THE SEGAL COMPANY*

*By:*

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

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

*cc:*

*Manoj B. Desai, CPA*  
*Robert K. Rozanski*  
*Michael R. Wilkinson, Esq.*

*KYB/hy*

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## SECTION 1: Valuation Summary for The Water and Power Employees' Retirement Plan of the City of Los Angeles

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### Purpose

This report has been prepared by The Segal Company to present a valuation of the The Water and Power Employees' Retirement Plan of the City of Los Angeles as of July 1, 2004. 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 Pension Plan, as administered by the Board;
- The census of covered active members, inactive vested members, and retired members and beneficiaries as of March 31, 2004, provided by the Retirement Office;
- The assets of the Plan as of June 30, 2004, provided by the Retirement Office;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

### Significant Issues in Valuation Year

- The market value of assets earned a return of 11.22% for the July 1, 2003 to June 30, 2004 plan year. The actuarial value of assets earned a return of 5.52% for the July 1, 2003 to June 30, 2004 plan year due to the recognition of prior investment losses. This resulted in an actuarial loss of \$149.5 million when measured against the assumed rate of return of 8.00%. This actuarial investment loss increased the Plan's required contribution by 2.89% of compensation.
- The salaries for continuing actives increased by 8.6% from the rate in effect on March 31, 2003 to the rate in effect on March 31, 2004. Since this increase is larger than the assumed rate of 5.5%, the plan experienced an actuarial loss from salary increases. This loss amounted to \$57.3 million for the current year, which increased the Plan's required contribution by 1.11% of compensation. Part of this salary increase is due to the negotiated benefit package that provided for some pay increases based on years of service. We have maintained our assumed rate of 5.5% salary increases until the next experience study.
- Under the Plan's funding policy, the required contribution rate continues to be larger than the mandatory 110% matching of the employee contribution. The required contribution for the 2004-2005 plan year is 13.45% of pay, which is estimated to be \$78.2 million. This includes amortization of the Plan's unfunded actuarial accrued liability (UAAL) over various fixed periods.

**SECTION 1: Valuation Summary for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

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- The total unrecognized return (i.e., the difference between the market value of assets and the actuarial value of assets) decreased by \$355.9 million during the plan year from -\$706.9 million in 2003 to -\$351.0 million in 2004. This unrecognized return represents deferred market value losses that will be recognized over the next four years. Once recognized, the -\$351.0 million reserve will increase the required contribution by 6.89% of pay.
- This year, the balance in the General Reserve and the Reserve for Investment Gains and Losses increased from \$137 million as of June 30, 2003 to \$1,314 million as of June 30, 2004. These two reserves track changes in the book value of assets. We understand that this increase took place because of significant turnover in the Plan's portfolio. In prior years, these two reserves were excluded from the valuation assets.
- Effective with this valuation, based on our discussions with Plan staff, we have been instructed to include all but \$61 million (approximately 1% of the end of year market value of assets) of the end of year General Reserve and Reserve for Investment Gains and Losses as valuation assets.
- For the first time since 1997, the actuarial accrued liability exceeds the actuarial value of assets. This results in an unfunded actuarial accrued liability (UAAL) of \$170.4 million. The Board's funding policy determines the Department's required contribution as the normal cost increased or offset by a UAAL amortization charge or credit. Under this funding policy, the Plan's UAAL is amortized over various 15 year periods, each beginning with the year that each portion or base of the UAAL was first identified and amortized.
- The amortization bases were combined into a single surplus (i.e., credit) base in our July 1, 2000 valuation. Since then there have been significant new bases including three large experience losses, a Plan amendment and a change in the asset valuation method. The current net amortization charge is \$12,230,620. At this payment level, it would take over 40 years to pay off the UAAL. In practice what will happen is that the net amortization charge will increase substantially in 11 years, when the year 2000 surplus is fully amortized.
- To obtain a more level cost pattern, we are recommending a "fresh start" approach where the current bases are once again combined into a single base and amortized over 15 years, consistent with the current policy. Under this approach the new single amortization payment is \$18,432,327, and the recommended contribution for the 2004-2005 plan year would be 14.56% of payroll.

**SECTION 1: Valuation Summary for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

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- Governmental Accounting Standards Board Statement No. 25 (GASB 25) requires calculation of a measure of Plan cost called the Annual Required Contribution (ARC). Like the Board's required contribution, the GASB 25 ARC is determined as the normal cost increased or offset by a UAAL amortization charge or credit. However, GASB 25 requires that the net amortization charge be sufficient to amortize any UAAL over no longer than 40 years. As noted above, under the Board's current funding policy, the net amortization charge of \$12,230,620 does not meet this 40 year standard. For that reason we have determined the ARC using a 40 year amortization payment of \$13,230,711.

**SECTION 1: Valuation Summary for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

**Summary of Key Valuation Results**

	<b>2004</b>	<b>2003</b>
<b>Contributions for plan year beginning July 1:</b>		
Required under funding policy	\$ 78,160,617	\$ 44,614,638
Percentage of payroll	13.45%	8.45%
Recommended ("fresh start" 15 year amortization / employer normal cost)	84,610,392	59,777,306
Percentage of payroll	14.56%	11.33%
<b>Funding elements for plan year beginning July 1:</b>		
Total normal cost	\$ 95,837,510	\$87,003,918
Market value of assets	5,961,400,238	5,558,765,969
Actuarial value of assets	6,251,421,125	6,128,375,723
Actuarial accrued liability	6,421,813,922	6,042,086,785
Unfunded/(overfunded) actuarial accrued liability	170,392,797	-86,288,938
<b>GASB 25/27 for plan year beginning July 1:</b>		
Annual pension cost	\$ 86,026,697	\$ 50,773,126
Actual contributions	--	55,804,924
Percentage contributed	--	109.91%
Funded ratio	97.35%	101.43%
Covered payroll	581,038,783	527,787,469
<b>Demographic data for plan year beginning July 1:</b>		
Number of retired participants and beneficiaries	8,973	9,161
Number of vested former members	1,525	1,445
Number of active members	7,893	7,731
Total projected compensation	\$ 581,038,783	\$ 527,787,469
Projected average compensation	73,614	68,269

**SECTION 2: Valuation Results for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

**A. MEMBER DATA**

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, vested terminated members, retired participants 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 eight valuations can be seen in this chart.*

**CHART 1**  
**Member Population: 1997 – 2004**

<b>Year Ended June 30</b>	<b>Active Members</b>	<b>Vested Terminated Members*</b>	<b>Retired Participants and Beneficiaries</b>	<b>Ratio of Non-Actives to Actives</b>
1997	8,695	1,111	8,399	1.09
1998	8,345	1,184	8,213	1.13
1999	6,518	1,450	9,967	1.75
2000	6,807	1,387	9,749	1.64
2001	7,250	1,415	9,576	1.52
2002	7,403	1,426	9,353	1.46
2003	7,731	1,445	9,161	1.37
2004	7,893	1,525	8,973	1.33

*\*Includes terminated participants due a refund of employee contributions.*



**SECTION 2: Valuation Results for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

**Active Members**

Plan costs are affected by the age, years of service and compensation of active members. In this year's valuation, there were 7,893 active members with an average age of 46.9, average years of service of 16.8 years and average projected compensation of \$73,614. The 7,731 active members in the prior valuation had an average age of 46.3, average service of 16.3 years and average projected compensation of \$68,269.

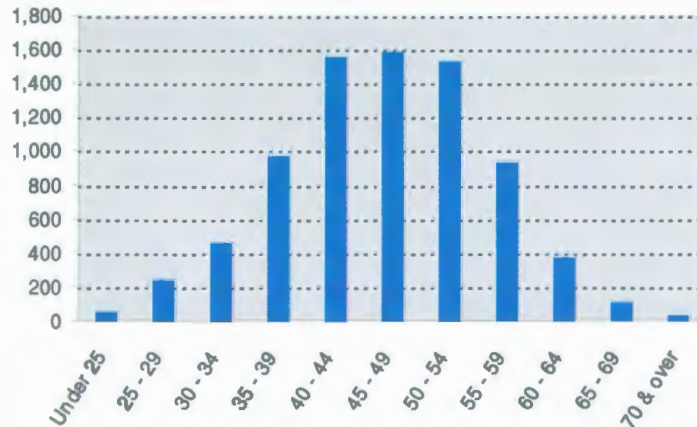
**Inactive Members**

In this year's valuation, there were 1,525 members with a vested right to a deferred or immediate vested monthly benefit or entitled to a return of their member contributions.

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

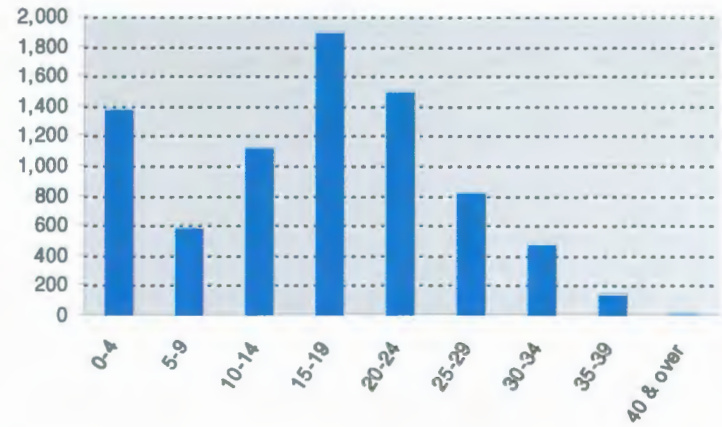
**CHART 2**

**Distribution of Active Members by Age as of June 30, 2004**



**CHART 3**

**Distribution of Active Members by Years of Service as of June 30, 2004**



**SECTION 2: Valuation Results for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

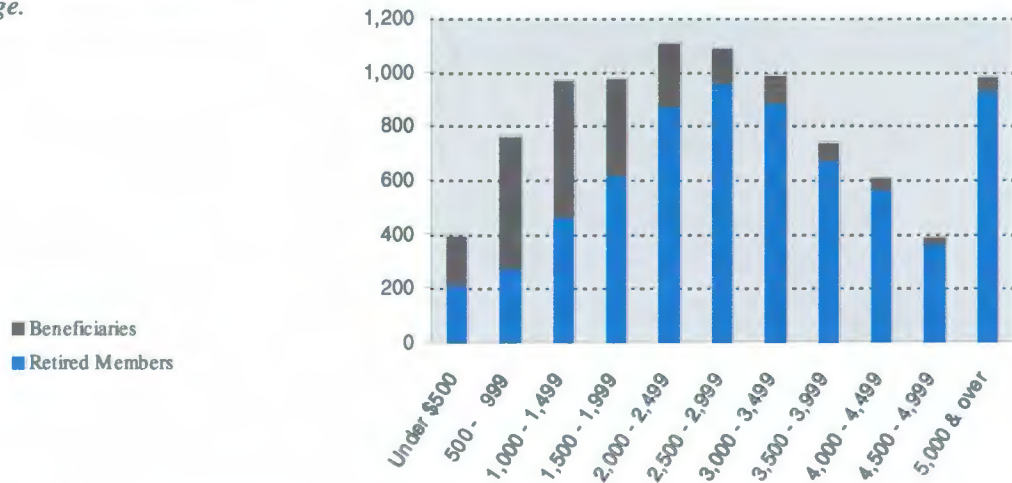
**Retired Participants and Beneficiaries**

As of June 30, 2004, 6,745 retired participants and 2,228 beneficiaries were receiving total monthly benefits of \$25,857,076. For comparison, in the previous valuation, there were 6,932 retired participants and 2,229 beneficiaries receiving monthly benefits of \$25,299,559.

*These graphs show a distribution of the current retired participants and beneficiaries based on their monthly amount and age.*

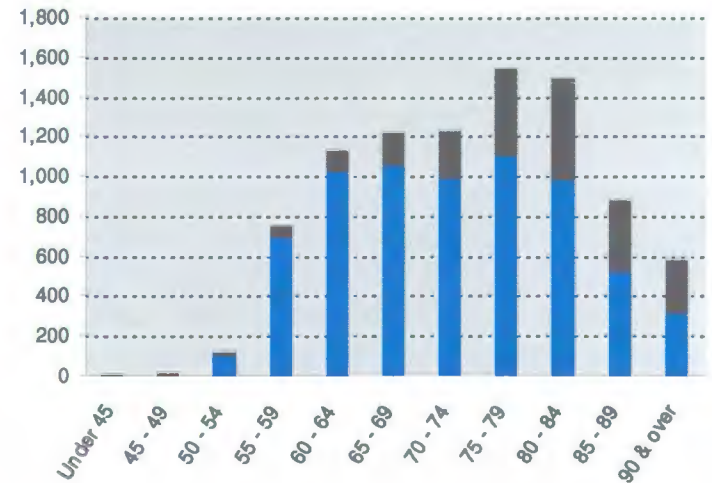
**CHART 4**

**Distribution of Retired Participants and Beneficiaries by Monthly Amount as of June 30, 2004**



**CHART 5**

**Distribution of Retired Participants and Beneficiaries by Type and by Age as of June 30, 2004**



**SECTION 2: Valuation Results for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

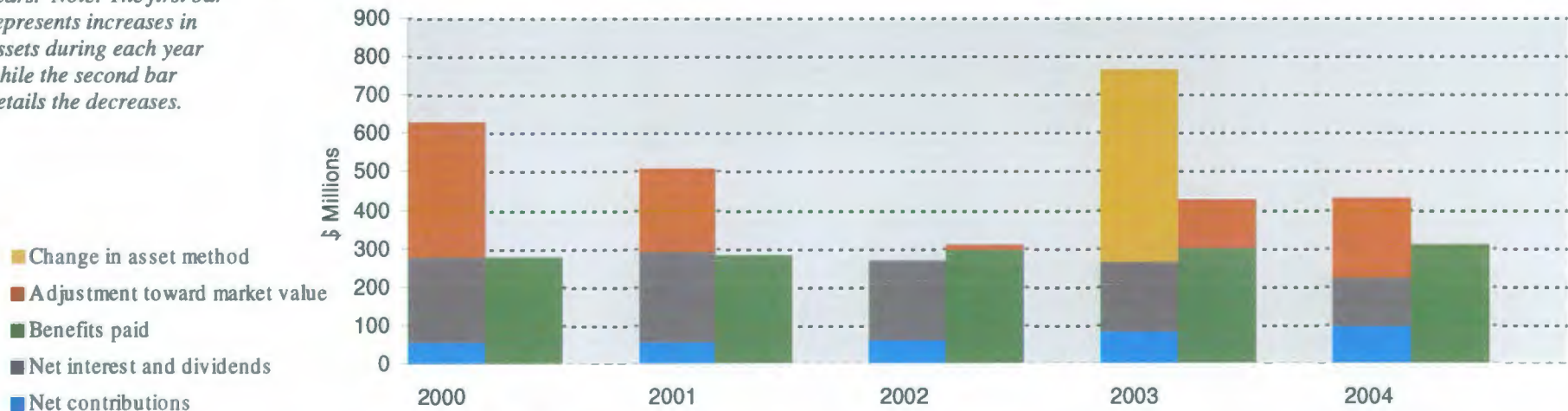
**B. FINANCIAL INFORMATION**

Retirement plan funding anticipates that, over the long term, both net 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. Additional financial information, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits D, E and F.

*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 June 30, 2000 – 2004**



**SECTION 2: Valuation Results for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board 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 has no immediate effect on the actuarial value.

Please note that as instructed by Plan staff, we have included all but \$61.0 million (approximately 1% of the end of year market value of assets) in the General Reserve and Reserve for Investments Gains and Losses as valuation assets.

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

**CHART 7**  
**Determination of Actuarial Value of Assets as of June 30, 2004**

1	Market value of assets, June 30, 2004			\$ 5,961,400,238
2	Calculation of Unrecognized Return	<u>Original</u>	<u>Unrecognized</u>	
		<u>Amount*</u>	<u>Return**</u>	
	(a) Year ended June 30, 2004	\$178,199,134	\$142,559,307	
	(b) Year ended June 30, 2003	-334,674,490	-200,804,694	
	(c) Year ended June 30, 2002	<u>-731,938,750</u>	<u>-292,775,500</u>	
	(d) Total Unrecognized Return			-351,020,887
3	Gross actuarial value: (1) - (2d)			6,312,421,125
4	Portion of General Reserve and Reserve for Investment Gains and Losses not included as valuation asset			61,000,000
5	Net actuarial value as of June 30, 2004: (3) - (4)			<u>\$6,251,421,125</u>
6	Net actuarial value as a percentage of market value: (5) / (1)			104.9%

\*Total return minus expected return on a market value basis

\*\*Recognition at 20% per year over 5 years

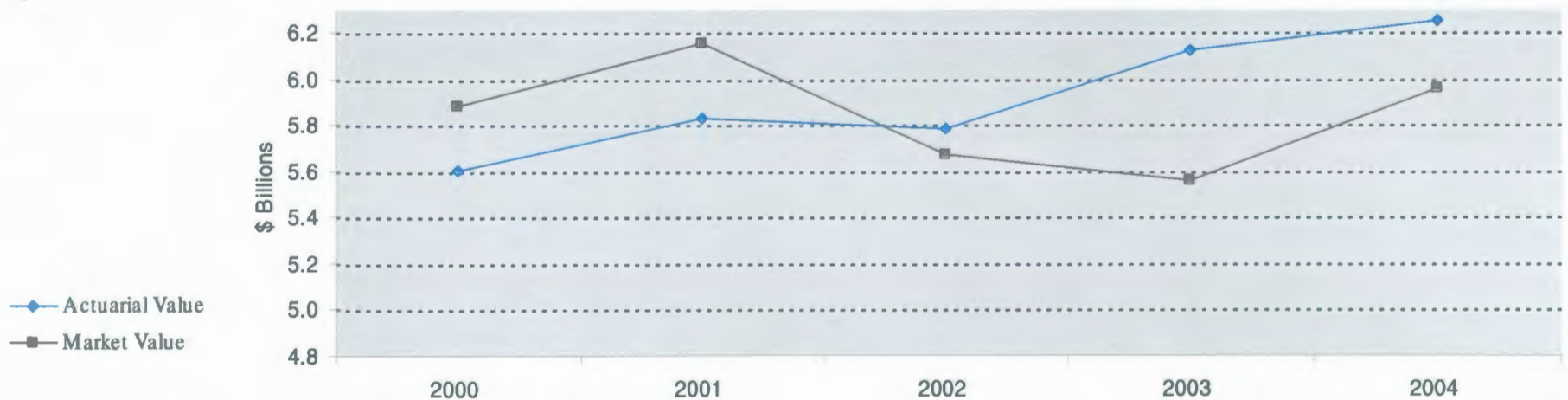
**SECTION 2: Valuation Results for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

Both the actuarial value and market value of assets are representations of the LADWP's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets. The actuarial asset value is significant because the LADWP's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability (or surplus) is an important element in determining the contribution requirement.

*This chart shows the change in the actuarial value of assets versus the market value over the past five years.*

**CHART 8**

**Actuarial Value of Assets vs. Market Value of Assets as of June 30, 2000 – 2004**



**SECTION 2: Valuation Results for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

**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 components of the total loss of (\$269,775,964) are shown below. The net experience variation from individual sources other than investments was 1.9% of the actuarial accrued liability. 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 June 30, 2004**

1. Net gain/(loss) from investments*	-\$149,504,841
2. Net gain/(loss) from salaries	-57,263,133
3. Net gain/(loss) from other experience	<u>-63,007,990</u>
4. Net experience gain/(loss): (1) + (2)	<u>-\$269,775,964</u>

\* Details in Chart 10

**SECTION 2: Valuation Results for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

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**Investment Rate of Return**

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the LADWP's investment policy. For valuation purposes, the assumed rate of return on the actuarial value of assets is 8.00%. The actual rate of return on an actuarial basis for the 2004 plan year was 5.52%.

Since the actual return for the year was less than the assumed return, the LADWP experienced an actuarial loss during the year ended June 30, 2004 with regard to its investments.

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

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**CHART 10**

**Actuarial Value Investment Experience for Year Ended June 30, 2004**

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1. Actual return	\$332,391,378
2. Average value of assets	6,023,702,735
3. Actual rate of return: (1) ÷ (2)	5.52%
4. Assumed rate of return	8.00%
5. Expected return: (2) x (4)	\$481,896,219
6. Actuarial gain/(loss): (1) - (5)	<u>-\$149,504,841</u>

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**SECTION 2: Valuation Results for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

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 basis compared to the market value investment return for the last five years.

Based upon this experience and future expectations, we have maintained the assumed rate of return of 8.00%.

**CHART 11**

**Investment Return – Actuarial Value vs. Market Value: 2000 - 2004**

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Change in Asset Method		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
2000	\$222,306,427	4.32%	\$351,743,541	6.84%	--	--	\$574,049,968	11.22%	\$ 22,463,396	0.39%
2001	232,814,492	4.24%	217,489,958	3.96%	--	--	450,304,450	8.20%	492,327,362	8.52%
2002	206,326,546	3.61%	-14,327,506	-0.25%	--	--	191,999,040	3.36%	-251,053,638	-4.16%
2003	182,004,368	3.20%	-127,029,513	-2.23%	\$503,018,121	8.85%	557,992,976	9.82%	107,504,970	1.93%
2004	<u>126,468,819</u>	2.10%	<u>205,922,559</u>	3.42%	--	--	<u>332,391,378</u>	5.52%	<u>611,980,245</u>	11.22%
Total	\$969,920,652		\$633,799,039		\$503,018,121		\$2,106,737,812		\$983,222,335	

*Note: Each year's yield is weighted by the average asset value in that year.*

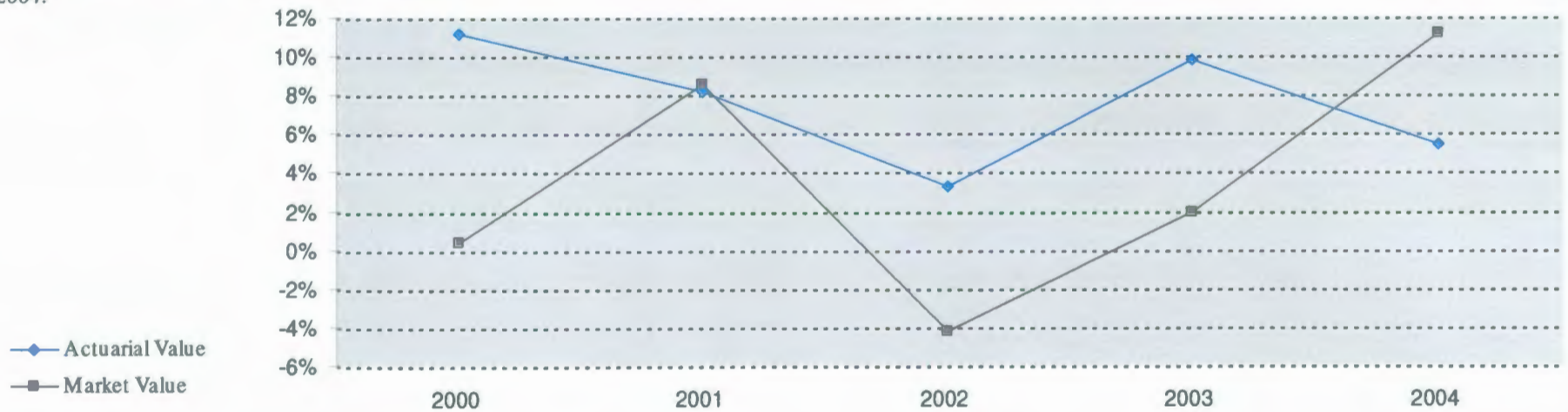


SECTION 2: Valuation Results for The Water and Power Employees' Retirement Plan of the City of Los Angeles

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 2000 - 2004 .s 2000 - 2004.*

**CHART 12**  
**Market and Actuarial Rates of Return for Years Ended June 30, 2000 - 2004**



**SECTION 2: Valuation Results for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

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**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:

- the extent of 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 June 30, 2004 amounted to (\$120,271,123) which is 1.9% of the actuarial accrued liability.

This loss is primarily due to salary increases higher than was expected.

**SECTION 2: Valuation Results for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

**D. REQUIRED CONTRIBUTION**

The required Department contribution is made up of (a) normal cost and (b) amortization of the unfunded or overfunded actuarial accrued liability. The Plan is said to be fully funded when the assets exceed the actuarial accrued liability. In prior years, the Department was funding the normal cost as a percentage of pay offset by the dollar amount of a net amortization credit. This year the Plan has an unfunded liability which is amortized over various periods. This produces a net amortization charge of \$12,230,620.

With only this amortization payment it would take over 40 years to pay off the unfunded actuarial accrued liability. Therefore, we are recommending that the bases be combined into a single base and amortized over 15 years, consistent with the current policy. The amortization charge would then be \$18,432,327.

Even under the current funding policy, the Department's required contribution rate increased as a percentage of pay. This was primarily the result of the investment return being less than assumed, higher than expected of salary increases for active members and other unfavorable actuarial experience.

*The chart compares this valuation's recommended contribution with the prior valuation.*

**CHART 13  
Required Contribution**

Year Beginning July 1:	2004		2003	
	Amount	% of Payroll	Amount	% of Payroll
1. Total normal cost	\$95,837,510	16.49%	\$87,003,918	16.48%
2. Expected employee contributions	<u>-32,913,691</u>	<u>-5.66%</u>	<u>-29,525,739</u>	<u>-5.59%</u>
3. Employer normal cost: (1) + (2)	\$62,923,819	10.83%	\$57,478,179	10.89%
4. Actuarial accrued liability	6,421,813,922		6,042,086,785	
5. Actuarial value of assets	<u>6,251,421,125</u>		<u>6,128,375,723</u>	
6. Unfunded/(overfunded) actuarial accrued liability: (4) - (5)	\$170,392,797		-\$86,288,938	
7. Amortization of projected unfunded/(overfunded) actuarial accrued liability				
a. Under current policy (all bases amortized separately)	\$12,230,620	2.10%	-\$14,579,489	-2.76%
b. Under recommended policy (single base amortized over 15 years)	18,432,327	3.17%	--	--
8. Total required contribution: (3) + (7a), adjusted for timing*	<u>78,160,617</u>	<u>13.45%</u>	<u>44,614,638</u>	<u>8.45%</u>
9. Employer match (110% of (2)), adjusted for timing*	37,653,262	6.48%	32,478,313	6.15%
10. Greater of employer match (9) or total required contribution (8)	<u>\$78,160,617</u>	<u>13.45%</u>	<u>\$44,614,638</u>	<u>8.45%</u>
11. Recommended contribution: (3) + (7b), adjusted for timing*	\$84,610,392	14.56%	--	--
12. Projected compensation	\$581,038,783		\$527,787,469	

\*Required and recommended contributions are assumed to be paid at the middle of every year.

**SECTION 2: Valuation Results for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

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The contribution rates as of July 1, 2004 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

**Reconciliation of Required Contribution**

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

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

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**CHART 14**

**Reconciliation of Required Contribution from July 1, 2003 to July 1, 2004**

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<b>Required Contribution as of July 1, 2003</b>	8.45%
Effect of gains and losses on salary experience	1.11%
Effect of contributions more than recommended contribution	-0.42%
Effect of investment (gain)/loss	2.89%
Effect of other gains and losses on accrued liability	1.42%
<b>Total change</b>	<u>5.00%</u>
<b>Required Contribution as of July 1, 2004</b>	13.45%

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**SECTION 2: Valuation Results for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

**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.

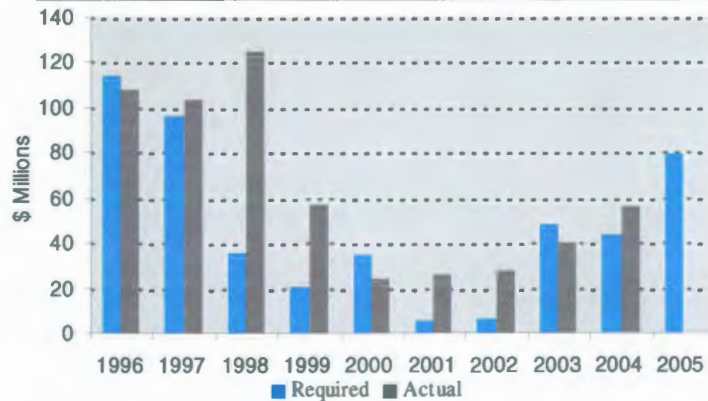
Critical information to GASB is the historical comparison of the GASB required contribution to the actual contributions. This comparison demonstrates whether a plan is being funded on an actuarially sound basis and in accordance with the GASB funding requirements. Chart 15 below presents a graphical representation of this information for the Plan.

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

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

*These graphs show key GASB factors.*

**CHART 15**  
**Required Versus Actual Contributions**



**CHART 16**  
**Funded Ratio**



**SECTION 3: Supplemental Information for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

**EXHIBIT A  
Table of Plan Coverage**

<b>Category</b>	<b>Year Ended June 30</b>		<b>Change From Prior Year</b>
	<b>2004</b>	<b>2003</b>	
<b>Active members in valuation:</b>			
Number	7,893	7,731	2.1%
Average age	46.9	46.3	N/A
Average service	16.8	16.3	N/A
Projected total compensation	\$581,038,783	\$527,787,469	10.1%
Projected average compensation	73,614	68,269	7.8%
Account balances	542,056,027	483,480,002	12.1%
<b>Vested terminated members:</b>			
Number	1,525	1,445	5.5%
Average age	47.7	47.2	N/A
Average member account balances	\$32,670	\$31,503	3.7%
<b>Retired members:</b>			
Number in pay status	6,745	6,932	-2.7%
Average age	72.2	71.9	N/A
Average monthly benefit	\$3,232	\$3,100	4.3%
<b>Beneficiaries:</b>			
Number in pay status	2,228	2,229	0.0%
Average age	78.9	78.7	N/A
Average monthly benefit	\$1,822	\$1,708	6.7%

**SECTION 3: Supplemental Information for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

**EXHIBIT B**

**Members in Active Service as of June 30, 2004  
By Age, Years of Service, and Projected Average Compensation**

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	--	--	--	--	--	--	--	--
	\$56,741	\$56,741	--	--	--	--	--	--	--	--
25 - 29	244	209	35	--	--	--	--	--	--	--
	58,692	58,582	\$59,352	--	--	--	--	--	--	--
30 - 34	460	266	121	69	4	--	--	--	--	--
	61,902	58,279	62,465	\$74,896	\$61,666	--	--	--	--	--
35 - 39	975	275	146	315	235	4	--	--	--	--
	69,393	58,539	64,952	78,052	73,365	\$62,361	--	--	--	--
40 - 44	1,562	217	118	301	625	293	7	1	--	--
	73,479	60,903	66,921	72,109	76,336	80,703	\$77,705	\$57,274	--	--
45 - 49	1,596	158	72	203	413	580	159	11	--	--
	76,594	63,456	69,509	71,960	74,367	82,771	81,536	83,730	--	--
50 - 54	1,538	114	42	119	324	344	373	213	9	--
	76,904	66,024	67,586	73,994	72,836	77,432	82,018	81,921	\$92,333	--
55 - 59	935	59	27	65	172	183	199	159	70	1
	77,959	72,401	75,872	69,463	73,023	75,631	75,486	86,365	97,507	\$76,741
60 - 64	382	18	12	37	83	64	61	55	46	6
	77,662	86,117	89,738	70,198	67,281	72,547	77,860	80,112	96,085	106,590
65 - 69	110	2	5	11	31	20	16	15	8	2
	68,221	56,407	57,769	61,119	61,346	73,767	74,010	67,615	80,128	106,934
70 & over	36	1	1	2	6	3	2	14	4	3
	58,449	42,873	55,374	80,129	63,685	78,522	58,307	29,458	89,112	114,171
<b>Total</b>	<b>7,893</b>	<b>1,374</b>	<b>579</b>	<b>1,122</b>	<b>1,893</b>	<b>1,491</b>	<b>817</b>	<b>468</b>	<b>137</b>	<b>12</b>
	<b>\$73,614</b>	<b>\$60,925</b>	<b>\$66,197</b>	<b>\$73,812</b>	<b>\$73,924</b>	<b>\$79,633</b>	<b>\$79,771</b>	<b>\$81,180</b>	<b>\$95,429</b>	<b>\$106,055</b>

**SECTION 3: Supplemental Information for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

**EXHIBIT C**

**Reconciliation of Member Data**

	<b>Active Members</b>	<b>Vested Former Members</b>	<b>Pensioners</b>	<b>Beneficiaries</b>	<b>Total</b>
Number as of July 1, 2003	7,731	1,445	6,932	2,229	18,337
New members	427	N/A	N/A	N/A	427
Terminations – with vested rights	-123	123	0	0	0
Retirements	-94	-15	109	N/A	0
Return to work	0	-44	0	N/A	-44
Died with beneficiary	-8	-1	-114	123	0
Died without beneficiary	0	0	-184	-138	-322
Rehired	39	0	0	N/A	39
Data adjustments	0	51	2	14	67
Contribution refunds	<u>-79</u>	<u>-34</u>	<u>0</u>	<u>0</u>	<u>-113</u>
Number as of July 1, 2004	7,893	1,525	6,745	2,228	18,391



**SECTION 3: Supplemental Information for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

**EXHIBIT D**

**Summary Statement of Income and Expenses on an Actuarial Value Basis**

	Year Ended June 30, 2004	Year Ended June 30, 2003
<b>Contribution income:</b>		
Employer contributions	\$55,804,924	\$40,560,882
Employee contributions	38,045,999	36,490,767
Other contributions	<u>2,452,293</u>	<u>2,623,157</u>
Net contribution income	\$96,303,216	\$79,674,806
<b>Investment income:</b>		
Interest, dividends and other income	\$130,311,380	\$184,616,510
Adjustment toward market value	205,922,559	-127,029,513
Less investment and administrative fees	<u>-3,842,561</u>	<u>-2,612,142</u>
Net investment income	332,391,378	54,974,855
<b>Total income available for benefits</b>	<b>\$428,694,594</b>	<b>\$134,649,661</b>
<b>Less benefit payments:</b>		
Retirement benefits paid	-\$302,063,849	-\$295,587,105
Refund of members' contributions	<u>-3,585,343</u>	<u>-3,967,902</u>
Net benefit payments	-\$305,649,192	-\$299,555,007
<b>Change in actuarial asset method</b>	<b>\$ 0</b>	<b>\$503,018,121</b>
<b>Change in reserve for future benefits</b>	<b>\$123,045,402</b>	<b>\$338,112,775</b>

**SECTION 3: Supplemental Information for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

**EXHIBIT E**

**Table of Financial Information**

	Year Ended June 30, 2004	Year Ended June 30, 2003
<b>Cash equivalents</b>	\$561,545	\$120,659,649
<b>Accounts receivable:</b>		
Accrued investment income	\$25,383,421	\$32,249,120
Other	4,686,071	11,000,796
Securities lending - collateral	<u>104,913,701</u>	<u>445,260,999</u>
Total accounts receivable	134,983,193	488,510,915
<b>Investments:</b>		
Fixed income	\$1,183,263,850	\$1,390,992,908
Equities	3,872,738,548	3,065,296,752
Other assets	<u>876,826,520</u>	<u>947,050,540</u>
Total investments at market value	<u>5,932,828,918</u>	<u>5,403,340,200</u>
<b>Total assets</b>	<b>\$6,068,373,656</b>	<b>\$6,012,510,764</b>
<b>Less accounts payable:</b>		
Department of Water and Power	\$149,483	-\$7,770,046
Accounts payable	-1,910,234	-713,750
Security lending - collateral	<u>-104,913,701</u>	<u>-445,260,999</u>
Total accounts payable	-\$106,923,418	-\$453,744,795
<b>Net assets at market value</b>	<b><u>\$5,961,400,238</u></b>	<b><u>\$5,558,765,969</u></b>
<b>Net assets at actuarial value</b>	<b><u>\$6,251,421,125</u></b>	<b><u>\$6,128,375,723</u></b>

**SECTION 3: Supplemental Information for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

**EXHIBIT F**

**Development of the Fund Through June 30, 2004**

<b>Year Ended June 30</b>	<b>Employer Contributions</b>	<b>Employee Contributions</b>	<b>Other Contributions</b>	<b>Net Investment Return*</b>	<b>Benefit Payments</b>	<b>Actuarial Value of Assets at End of Year</b>
2000	\$26,128,536	\$24,426,465	\$2,561,645	\$574,049,968	\$275,403,607	\$5,605,856,078
2001	25,763,218	27,688,883	2,406,582	450,304,450	278,744,629	5,833,274,582
2002	27,241,801	30,002,271	2,214,752	191,999,040	294,469,498	5,790,262,948
2003	40,560,882	36,490,767	2,623,157	557,992,976	299,555,007	6,128,375,723
2004	55,804,924	38,045,999	2,452,293	332,391,378	305,649,192	6,251,421,125

*\* Net of investment fees and administrative expenses. Includes a change in asset method of \$503 million for 2003.*

**SECTION 3: Supplemental Information for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

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**EXHIBIT G**

**Development of Unfunded/(Overfunded) Actuarial Accrued Liability for Year Ended June 30, 2004**

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1. Unfunded/(overfunded) actuarial accrued liability at beginning of year		-	\$86,288,938
2. Normal cost at beginning of year			87,003,918
3. Total contributions			-96,303,216
4. Interest			
(a) For whole year on (1) + (2)		\$57,198	
(b) For half year on (3)		<u>-3,852,129</u>	
(c) Total interest			<u>-3,794,931</u>
5. Expected unfunded/(overfunded) actuarial accrued liability			-99,383,167
6. Changes due to:			
(a) (Gain)/loss		\$269,775,964	
(b) Total changes			<u>269,775,964</u>
7. Unfunded/(overfunded) actuarial accrued liability at end of year			<u>\$170,392,797</u>

**SECTION 3: Supplemental Information for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

**EXHIBIT H**

**Table of Amortization Bases**

<b>Type</b>	<b>Date Established</b>	<b>Initial Years</b>	<b>Initial Amount</b>	<b>Annual Payment *</b>	<b>Years Remaining</b>	<b>Outstanding Balance</b>
Initial base	07/01/2000	15	-\$522,896,000	-\$56,564,539	11.00	-\$436,117,197
Experience gain	07/01/2001	15	-23,373,868	-2,528,480	12.00	-20,579,208
Experience loss	07/01/2002	15	214,187,988	23,169,894	13.00	197,780,020
Change in assumptions	07/01/2002	15	1,844,794	199,562	13.00	1,703,473
Plan amendment	07/01/2002	15	213,581,253	23,104,260	13.00	197,219,763
Experience loss	07/01/2003	15	484,897,697	52,454,053	14.00	467,039,136
Change in asset method	07/01/2003	15	-503,018,121	-54,414,239	14.00	-484,492,193
Experience loss	07/01/2004	15	247,839,003	<u>26,810,109</u>	15.00	<u>247,839,003</u>
<b>Total</b>				<b>\$12,230,620</b>		<b>\$170,392,797</b>

\* *Level dollar amount. If bases are combined into a single amortization base and amortized over 15 years, the total outstanding balance would be unchanged; however, the annual payment would be \$18,432,327.*

**SECTION 3: Supplemental Information for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

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**EXHIBIT I**

**Section 415 Limitations**

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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 limit indexed for inflation. That limit is \$165,000 for 2004. 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 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.

Contribution 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 Water and Power Employees' Retirement Plan of the City of Los Angeles**

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**EXHIBIT J**

**Definitions of Pension Terms**

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

**Assumptions or Actuarial Assumptions:**

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

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

**Normal Cost:**

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

**Actuarial Accrued Liability For Actives:**

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

**Actuarial Accrued Liability For Pensioners:**

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

**Unfunded (Overfunded) Actuarial Accrued Liability:**

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

**SECTION 3: Supplemental Information for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

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**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 market gains and losses to avoid significant swings in the value of assets from one year to the next.



**SECTION 3: Supplemental Information for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

**EXHIBIT K**

**Actuarial Balance Sheet**

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

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

**Actuarial Balance Sheet**

**Assets**

1. Total actuarial value of assets
2. Present value of future contribution by members
3. Present value of future Department contributions for:
  - (a) entry age normal cost
  - (b) unfunded actuarial accrued liability
4. Total current and future assets

June 30, 2004

June 30, 2003

\$6,251,421,125	\$6,128,375,723
312,753,563	287,686,382
605,250,347	566,280,572
170,392,797	(86,288,938)
\$7,339,817,832	\$6,896,053,739

**Liabilities**

5. Present value of benefits already granted:
6. Present value of benefits to be granted:
7. Total liabilities

June 30, 2004

June 30, 2003

\$3,546,778,348	\$3,503,126,411
\$3,793,039,484	\$3,392,927,328
\$7,339,817,832	\$6,896,053,739

**SECTION 3: Supplemental Information for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

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**EXHIBIT L**

**Reserves and Designated Balances**

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	June 30, 2004	June 30, 2003
1. Reserve for retirement allowance for retired members	\$3,607,116,305	\$3,521,712,710
2. Contribution accounts:		
(a) members (excluding additional contributions)	624,801,663	562,002,102
(b) Department of Water and Power	(619,997,826)	(544,306,611)
3. General Reserve and Reserve for Investment Gains and Losses*	<u>1,313,916,635</u>	<u>137,293,088</u>
4. Total	<u>\$4,925,836,777</u>	<u>\$3,676,701,289</u>

\*Out of the total General Reserve and Reserve for Investment Gains and Losses, \$61,000,000 is not included as valuation assets as of June 30, 2004.

**SECTION 3: Supplemental Information for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

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**EXHIBIT M**

**Adjusted Reserves**

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Each year the Retirement Board adjusts its retired reserves to agree with the value calculated during the valuation. The following table presents the required transfers.

<u>Adjusted Reserves</u>	<u>June 30, 2004</u>	<u>June 30, 2003</u>
1. Retired reserve balance	\$3,607,116,305	\$3,521,712,710
2. Actuarially computed present value	3,546,778,348	3,503,126,411
3. Actuarial gain (loss): (1) – (2)	60,337,957	18,586,299
4. Transfer from (to) DWP contribution accounts from retired reserves:	(60,337,957)	(18,586,299)

**SECTION 4: Reporting Information for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

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**EXHIBIT I**

**Summary of Actuarial Valuation Results**

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The valuation was made with respect to the following data supplied to us:

1. Retired participants as of the valuation date (including 2,228 beneficiaries in pay status)	8,973
2. Members inactive during year ended June 30, 2004 with vested rights	1,525
3. Members active during the year ended June 30, 2004	7,893

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The actuarial factors as of the valuation date are as follows:

1. Total normal cost		\$95,837,510
2. Present value of future benefits		7,339,817,832
3. Present value of future normal costs		918,003,910
4. Actuarial accrued liability		6,421,813,922
Retired participants and beneficiaries	\$3,546,778,348	
Inactive members with vested rights	104,627,204	
Active members	2,770,408,370	
5. Actuarial value of assets (\$5,961,400,238 at market value as reported by Retirement Office)		6,251,421,125
6. Unfunded actuarial accrued liability		\$170,392,797

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**SECTION 4: Reporting Information for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

**EXHIBIT I (continued)**

**Summary of Actuarial Valuation Results**

The determination of the required and recommended contributions is as follows:

	<b>Dollar Amount</b>	<b>% of Payroll</b>
1. Total normal cost	\$ 95,837,510	16.49%
2. Expected employee contributions	-32,913,601	-5.66%
3. Employer normal cost: (1) + (2)	62,923,819	10.83%
4. Amortization of unfunded/(overfunded) actuarial accrued liability		
a. Under current policy (all bases amortized separately)	12,230,620	2.10%
b. Under recommended policy (single base amortized over 15 years)	18,432,327	3.17%
5. Total required contribution: (3) + (4a), adjusted for timing*	78,160,617	13.45%
6. Employer match (110% of (2)), adjusted for timing*	37,653,262	6.48%
7. Greater of employer match (6) or total required contribution (5)	78,160,617	13.45%
8. Recommended contribution: (3) + (4b), adjusted for timing*	84,610,392	14.56%
9. Projected payroll	581,038,783	

*\*Required and recommended contributions are assumed to be paid at the middle of every year.*

SECTION 4: Reporting Information for The Water and Power Employees' Retirement Plan of the City of Los Angeles

EXHIBIT II

Supplementary Information Required by the GASB – Schedule of Employer Contributions

Plan Year Ended June 30	Annual Required Contribution	Annual Pension Cost	Actual Contributions	Actual Contributions / Annual Required Contributions	Actual Contributions / Annual Pension Cost
1996	\$111,231,502	\$113,839,086	\$107,839,613	97.0%	94.7%
1997	93,776,790	96,210,507	103,836,661	110.7%	107.9%
1998	31,514,506	35,516,124	124,470,502	395.0%	350.5%
1999	0	20,198,833	57,458,271	--	284.5%
2000	0	34,578,361	24,426,465	--	70.6%
2001	0	5,378,281	25,763,218	--	479.0%
2002	0	6,132,578	27,241,801	--	444.2%
2003	40,910,299	47,823,973	40,560,882	99.1%	84.8%
2004	44,128,205	50,773,126	55,804,924	126.5%	109.9%
2005	79,200,711	86,026,697	--	--	--

**SECTION 4: Reporting Information for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

**EXHIBIT III**

**Supplementary Information Required by the GASB – Schedule of Funding Progress**

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets (a)</b>	<b>Actuarial Accrued Liability (AAL) (b)</b>	<b>Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)</b>	<b>Funded Ratio (a) / (b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL as a Percentage of Covered Payroll* [(b) - (a) / (c)]</b>
07/01/1995	\$3,066,000,000	\$3,501,000,000	\$435,000,000	87.57%	\$469,000,000	92.75%
07/01/1996	3,399,925,821	3,698,581,230	298,655,409	91.93%	431,000,000	69.29%
07/01/1997	3,850,530,272	3,811,880,519	-38,649,753	101.01%	430,000,000	0.00%
07/01/1998	4,513,684,692	4,339,885,313	-173,799,379	104.00%	431,000,000	0.00%
07/01/1999	5,254,093,071	4,911,443,303	-342,649,768	106.98%	355,000,000	0.00%
07/01/2000	5,605,856,078	5,082,960,078	-522,896,000	110.29%	368,000,000	0.00%
07/01/2001	5,833,274,582	5,306,262,736	-527,011,846	109.93%	403,265,472	0.00%
07/01/2002	5,790,262,948	5,714,524,649	-75,738,299	101.33%	430,397,884	0.00%
07/01/2003	6,128,375,723	6,042,086,785	-86,288,938	101.43%	527,787,469	0.00%
07/01/2004	6,251,421,125	6,421,813,922	170,392,797	97.35%	581,038,783	29.33%

\* Not less than zero

SECTION 4: Reporting Information for The Water and Power Employees' Retirement Plan of the City of Los Angeles

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EXHIBIT IV

Supplementary Information Required by the GASB

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Valuation Date	July 1, 2004
Actuarial Cost Method	Entry Age Normal Cost Method
Amortization Method	Level dollar amortization
Remaining Amortization Period	The June 30, 2000 surplus Actuarial Accrued Liability is amortized over the fifteen-year period commencing July 1, 2000. Any subsequent changes in Actuarial Accrued Liability are amortized over separate fifteen-year periods.
Asset Valuation Method	The market value of assets less unrecognized returns in each of the last five years (but not before July 1, 2001). Unrecognized return is equal to the difference between the actual and the expected returns on a market value basis and is recognized over a five year period.
Actuarial Assumptions:	
Investment Rate of Return	8.00%
Projected Salary Increases	5.50%
Cost of Living Adjustments	3.00%
Membership of the Plan	
Retirees and Beneficiaries receiving benefits	8,973
Terminated plan members entitled to, but not yet receiving benefits	1,525
Active plan members	<u>7,893</u>
Total	18,391

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**SECTION 4: Reporting Information for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

**EXHIBIT V**

**Development of the Net Pension Obligation and the Annual Pension Cost Pursuant to GASB 27**

Plan Year Ended June 30	Employer Annual Required Contribution (a)	Employer Amount Contributed* (b)	Interest on NPO (c)	ARC Adjustment (h) / (e) (d)	Amortization Factor (e)	Pension Cost (a) + (c) - (d) (f)	Change in NPO (f) - (b) (g)	NPO Balance NPO + (g) (h)
1996	\$111,231,502	\$107,839,613	-\$2,027,405	-\$4,634,989	5.9677	\$113,839,086	\$5,999,473	-\$21,660,579
1997	93,776,790	103,836,661	-1,572,594	-4,006,311	5.4066	96,210,507	-7,626,154	-29,286,733
1998	31,514,506	124,470,502	-2,098,917	-6,100,535	4.8007	35,516,124	-88,954,378	-118,241,111
1999	0	57,458,271	-8,318,592	-28,517,425	4.1463	20,198,833	-37,259,438	-155,500,549
2000	0	24,426,465	-10,631,644	-45,210,005	3.4395	34,578,361	10,151,896	-145,348,653
2001	0	25,763,218	-10,973,809	-16,352,090	8.8887	5,378,281	-20,384,937	-165,733,590
2002	0	27,241,801	-12,512,869	-18,645,447	8.8887	6,132,578	-21,109,223	-186,842,813
2003	40,910,299	40,560,882	-14,106,614	-21,020,288	8.8887	47,823,973	7,263,091	-179,579,722
2004	44,128,205	55,804,924	-13,558,251	-20,203,172	8.8887	50,773,126	5,031,798	-184,611,520
2005	79,200,711**	78,160,617*	-13,938,151	-20,769,262	8.8887	86,026,697	7,866,080	-176,745,440

\*The amount indicated for June 30, 2005 assumes the actual employer contribution for the year is equal to the contribution requirement under the Board's current funding policy.

\*\*ARC for year end June 30, 2005 is calculated by taking the greater of the contribution requirement determined under the Board's current funding policy and an amount based on the GASB requirement that the aggregate UAAL contribution be no less than an amount sufficient to amortize the total UAAL over a 40 year period. That minimum ARC is determined as follows:

	Dollar Amount	% of Payroll
1. Employer Normal Cost	\$62,923,819	10.83%
2. Amortization of unfunded actuarial accrued liability over 40 years	13,230,711	2.28%
3. Total minimum ARC contributions (1) + (2), adjusted for timing	79,200,711	13.63%
4. Projected payroll	581,038,783	

**SECTION 4: Reporting Information for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

**EXHIBIT VI  
Actuarial Assumptions and Actuarial Cost Method**

**Mortality Rates:**

*After Service Retirement  
and Pre-retirement:*

1983 Group Annuity Mortality Table, with ages set back one year.

*After Disability Retirement*

1983 Group Annuity Mortality Table, with ages set back one year.

**Termination Rates before Retirement:**

Age	Rate (%)							
	Mortality		Disability		Ordinary Withdrawal*		Vested Withdrawal*	
	Male	Female	Male	Female	Male	Female	Male	Female
25	0.044	0.024	0.006	0.000	5.728	6.689	0.888	1.035
30	0.057	0.032	0.012	0.016	4.296	6.211	0.700	1.011
35	0.079	0.044	0.012	0.036	2.920	5.260	0.563	1.017
40	0.113	0.062	0.018	0.072	2.000	4.182	0.463	0.968
45	0.193	0.092	0.030	0.102	1.144	3.097	0.325	0.878
50	0.351	0.151	0.054	0.138	0.639	1.981	0.188	0.582
55	0.566	0.232	0.126	0.168	0.360	0.755	0.088	0.184
60	0.838	0.382	0.240	0.000	0.070	0.052	0.050	0.038
65	1.387	0.639	0.000	0.000	0.070	0.000	0.000	0.000

\* *Withdrawal rates are zero for members expected to retire.*

**SECTION 4: Reporting Information for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

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<b>Retirement Rates:</b>	<b>Age</b>	<b>Retirement Probability Under 30 Years of Service</b>	<b>Retirement Probability Over 30 Years of Service</b>
	50	0.00%	60.00%
	51	0.00	15.00
	52	0.00	20.00
	53	0.00	5.00
	54	0.00	5.00
	55	5.00	25.00
	56	4.00	10.00
	57	1.00	10.00
	58	1.00	10.00
	59	2.00	10.00
	60	2.00	10.00
	61	3.00	5.00
	62	3.00	5.00
	63	3.00	20.00
	64	3.00	10.00
	65	100.00	100.00

**50/30 Open Window:** Rates included in the above retirement rates (for eligible members through September 30, 2005).

**Retirement Age and Benefit for Inactive Vested Participants:** Assume an immediate refund of employee normal contribution account plus department matching contribution account.

**Exclusion of Inactive Vested:** All inactive participants are included in the valuation.

**Definition of Active Members:** First day of biweekly payroll following employment for new department employees or immediately following transfer from other city department.

**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/Domestic Partner:** 85% of male participants; 60% of female participants.

**Age of Spouse:** Female spouses 4 years younger than their spouses.

**SECTION 4: Reporting Information for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

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<b>Future Benefit Accruals:</b>	1.0 year of service per year.
<b>Other Government Service:</b>	(a) 30% of the employees with less than 10 years of service will purchase an average of four years of service. (b) 41.25% of the employees with 10 years of service or more will purchase an average of four years of service.
<b>Consumer Price Index:</b>	Increase of 4.0% per year; benefit increases due to CPI subject to 3.0% maximum.
<b>Employee Contribution and Matching Account Crediting Rate:</b>	8.00%
<b>Net Investment Return:</b>	8.00%
<b>Salary Increases:</b>	5.50%
<b>Actuarial Value of Assets:</b>	The market value of assets less unrecognized returns in each of the last five years (but not before July 1, 2001). Unrecognized return is equal to the difference between the actual and expected returns on a market value basis and is recognized over a five year period.
<b>Actuarial Cost Method:</b>	Entry Age Normal Actuarial Cost Method. Entry Age equals attained age less years of service. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by salary, as if the current benefit accrual rate had always been in effect.

**SECTION 4: Reporting Information for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

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**Funding Policy:**

The Department of Water and Power makes contributions equal to the Normal Cost adjusted by amount to amortize any Surplus or Unfunded Actuarial Accrued Liability. Both the Normal Cost and the Actuarial Accrued Liability are determined under the Entry Age Normal cost method. The June 30, 2000 Surplus Actuarial Liability is amortized over the fifteen year period commencing July 1, 2000. Any subsequent change in Surplus or Unfunded Actuarial Accrued Liability are amortized over separate fifteen year periods. All amortization amounts are determined in equal dollar amounts over the amortization period. The Board may, by resolution, adopt a separate period of not more than thirty years to amortize the change in Surplus or Unfunded Actuarial Accrued Liability resulting from an unusual event, plan amendment or change in assumptions or methods. Finally, the Department of Water and Power contribution is not less than the matching contribution of 110% of member contributions.

**Changes in Assumptions:**

There have been no changes in actuarial assumptions since the last valuation.

**SECTION 4: Reporting Information for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

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**EXHIBIT VII**

**Summary of Plan Provisions**

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

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**Plan Year:** July 1 through June 30

**Census Date:** March 31

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**Formula Retirement Benefit:**

*Age & Service Requirement*

Age 60 with 5 years of service

Age 55 with 10 years of service in the last 12 years

Any age with 30 year of service; or

Receiving permanent total disability benefits from the Plan.

Note: To be eligible, the employee must have worked or been paid disability four of the last five years immediately preceding eligibility to retire, or while eligible to retire.

*Amount*

The greater of 2.1% of the Monthly Salary Base or \$9.50 per year of service. For those age 55 or older with 30 or more years of service the factor is 2.3% of the Monthly Salary Base.

*Monthly Salary Base*

Equivalent of monthly average salary of highest continuous 26 biweekly payroll periods (one year).

*Cost of Living benefit*

Based on changes to Los Angeles area consumer price index to a maximum of 3% per year.

*Death after retirement*

50% of retiree's unmodified allowance continued to eligible spouse or domestic partner (reduced if difference in ages is greater than five years).

**SECTION 4: Reporting Information for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

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Defined benefit paid monthly for life. If the money purchase annuity amount exceeds the monthly amount of the formula retirement benefit and the retiree meets the eligibility requirements for the formula retirement benefit, the amount of the money purchase annuity is paid and the cost-of-living and death after retirement continuance features of the formula retirement benefit are also paid.

**Sample Early Retirement**

**Reduction Factors:** The early retirement factor is determined by the attained age on the effective date of retirement. Every three months of attained age will affect the factor

<b>Attained Age at Actual Retirement</b>	<b>Exact Age</b>	<b>+3 Months</b>	<b>+6 Months</b>	<b>+9 Months</b>
48	.7150	.7225	.7300	.7375
49	.7450	.7525	.7600	.7675
50	.7750	.7825	.7900	.7975
51	.8050	.8125	.8200	.8275
52	.8350	.8425	.8500	.8575
53	.8650	.8725	.8800	.8875
54	.8950	.9025	.9100	.9175
55	.9250	.92875	.9325	.93625
56	.9400	.94375	.9475	.95125
57	.9550	.95875	.9625	.96625
58	.9700	.97375	.9775	.98125
59	.9850	.98875	.9925	.99625
60 & Over	1.0000			

The factor is 1.0000 for those retiring at age 55 or later with at least 30 years of service or those at age 50 or later with at least 30 years of service who retire before September 30, 2005.

**SECTION 4: Reporting Information for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

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**Member Normal Contributions:**

If an employee became a plan member after June 1, 1984, the member normal contribution rate is 6%.

If an employee became a plan member before June 1, 1984 or transferred from CERS with an entry age contribution rate, sample rates by entry age are as follows:

<u>Entry Age</u>	<u>Rate</u>
20	2.601%
25	3.102%
30	3.611%
35	4.161%
40	4.742%
45	5.381%
50	6.042%
55	6.762%
59	7.332%

**Department Current Service Contributions:**

The Department of Water and Power makes contributions that are a minimum of 110% of employee contributions.

**Disability:**

Disability benefits are paid from the Disability Fund. However, if a member is receiving permanent and total disability benefits, he may elect to retire. Other than a nominal amount, no service credit during disability is earned for the 2.1% formula; however, credit is earned during disability toward the \$9.50 minimum formula.



**SECTION 4: Reporting Information for The Water and Power Employees' Retirement Plan of the City of Los Angeles**

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**Deferred Withdrawal Retirement Benefit (Vested):**

<i>Age &amp; Service Requirement</i>	Age 60 with one-year contributing membership; or Age 55 with 10-years of contributing membership in the 12 years prior to separation from service.
<i>Amount</i>	Value of employee normal contribution account plus Department matching contribution (called current service contribution) account at retirement date

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**Death Before Retirement:**

Refund of employee contributions with interest. On the death of a member who is eligible for service retirement but who has not yet retired or who has 25 years of service, the member's spouse may elect a monthly allowance payable during the spouse's lifetime in lieu of return of the member's total accumulated contributions. The monthly allowance payable to the surviving spouse is the amount the spouse would have received had the member retired on the day before the member's death and elected a full joint and survivor allowance.

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**Withdrawal of Contributions Benefit (Ordinary Withdrawal):**

Refund of employee contributions with interest.

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**Money Purchase Annuity:**

A monthly lifetime benefit equal in value to the employee normal contribution account plus Department matching contribution (called current service contribution) account at retirement date.

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**Changes in Plan Provisions:** There have been no changes in plan provisions since the last valuation.

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