PUBLIC EMPLOYEES' RETIREMENT SYSTEM of the STATE OF MONTANA

ACTUARIAL VALUATION as of June 30, 2007

Prepared by

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October 5, 2007

Retirement Board
Public Employees' Retirement Administration
State of Montana

Dear Members of the Board:

At your request, we have performed an actuarial valuation of the Montana Public Employees' Retirement System as of June 30, 2007. Details about the actuarial valuation are contained in the following report. This report reflects the benefit provisions and contribution rates in effect on the valuation date.

Actuarial computations presented in this report are for purposes of analyzing the sufficiency of future contributions. Actuarial computations under GASB Statement No. 25 are for purposes of fulfilling financial accounting requirements. The computations in this report have been made on a basis consistent with our understanding of the Retirement Board's funding policies and GASB Statement No. 25. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, different determinations may be needed for other purposes.

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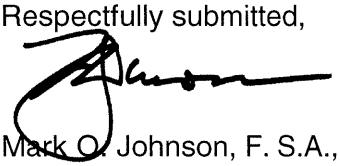
Respectfully submitted,



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SECTION 1
SCOPE OF THE REPORT

This report presents the results of our actuarial valuation of the System as of June 30, 2007. Actuarial computations presented in this report are for purposes of analyzing the sufficiency of future contributions.

In reading the Actuarial Certification in Section 2, please pay particular attention to the guidelines employed in the preparation of this report. We also comment on the sources and reliability of both the data and the actuarial assumptions upon which our findings depend. Those comments are the basis for our certification that this report is complete and accurate to the best of our knowledge and belief.

A summary of the findings resulting from this valuation is presented in Section 3 of the report and the underlying calculations are summarized in more detail in Section 4.

All of the calculations of the valuation were carried out using certain assumptions as to the future experience of the System in matters affecting the actuarial cost. Appendix A summarizes the most important of these assumptions and describes the actuarial methods used to calculate costs.

Appendix B outlines the benefit provisions of the System.

The membership data which were supplied to us are summarized in Appendix C.

SECTION 2
ACTUARIAL CERTIFICATION

To the best of our knowledge and belief, this report is complete and accurate and contains sufficient information to fully and fairly disclose the funded condition of the Public Employees' Retirement System as of June 30, 2007.

In preparing the valuation, we relied upon the financial information, membership data, and benefit provisions furnished by the System. Although we did not audit this data, we compared the data for this and the prior valuation and tested for reasonableness. Based on these tests, we believe the data to be sufficiently accurate for the purposes of our calculations. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

The Retirement Board has sole authority to determine the actuarial assumptions and methods used for the valuation of the System. The Board adopted all of the actuarial methods and assumptions used in the 2007 valuation.

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

The actuarial valuation was prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the applicable Standards of Practice adopted by the Actuarial Standards Board of the American Academy of Actuaries. In addition, the assumptions and methods used meet the parameters set for disclosures by Governmental Accounting Standards Board Statement No. 25.

The undersigned are independent actuaries, Fellows of the Society of Actuaries, Members of the American Academy of Actuaries, Enrolled Actuaries, and experienced in performing valuations for large public employee retirement systems.

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SECTION 3
SUMMARY OF FINDINGS AND ANALYSIS OF THE FUNDING LEVEL

The costs of a retirement system are not determined by the actuary. The ultimate costs of a system are determined by adding all of the benefits and expenses that are paid, and subtracting all investment earnings. These costs cannot be determined exactly until the last member or beneficiary has received the final benefit payment due.

The purpose of an actuarial valuation is to provide a timely best estimate of the ultimate costs in order to allocate them to the appropriate generation of members and taxpayers. The ideal goal is for contributions to remain essentially a constant percentage of covered payroll as long as the assumptions and methods reflect the emerging experience of the system and its members with reasonable accuracy.

Membership Data

We have developed the following comparisons between the membership in this and the prior actuarial valuations:

	June 30, 2007	June 30, 2006
Number of Members		
Retirees and Beneficiaries	16,137	15,654
Vested Terminated	2,576	2,530
Non-vested Terminated*	6,401	7,178
Active	27,977	27,962
Total Membership	53,091	53,324

* Includes 5 members with a zero account balance in 2006 and 3 members with a zero account balance in 2007.

More detailed membership statistics are shown in Appendix C.

Determination of Normal Cost

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

The following chart shows the Normal Cost from the 2006 valuation compared to the Normal Cost in this valuation. **TABLE 1** provides more details on the Normal Cost.

	2007 Actuarial Valuation	2006 Actuarial Valuation
Normal Cost Rate		
Service Retirement	9.21%	9.15%
Disability Retirement	0.32	.32
Death	0.54	.54
Withdrawal	2.15	2.16
Total Normal Cost Rate	**12.22%**	**12.17%**

The Normal Cost Rate for this group of active members is expected to remain fairly stable as long as the benefits are not amended, experience emerges as assumed, and the actuarial assumptions are not changed. The Normal Cost Rate for members eligible after July 1, 2007 is expected to be 10.99% of payroll. The average Normal Cost Rate is expected to decline over the next generation of active members.

Determination of the Actuarial Liability

The next step in the actuarial valuation process is to project all future benefit payments from the System for current members and retirees. The level of benefits currently being paid is known, but assumptions are needed to estimate how long they will be paid, and the amount and timing of the payment of future benefits for active and inactive members who are not currently receiving payments.

The summation of the discounted values of all of the projected benefit payments for all current members, at the assumed rate of return, is called the **Actuarial Present Value of Projected Benefits**. Details are shown in **TABLE 2** and summarized below.

($000)	2007 Actuarial Valuation	2006 Actuarial Valuation
Actuarial Present Value of Projected Benefits		
Retired Members	$ 1,916,574	$ 1,767,477
Inactive Members	134,533	128,361
Active Members	3,026,268	2,860,478
Total PVPB	**$ 5,077,375**	**$ 4,756,316**

The **Actuarial Present Value of Future Normal Costs** is the value of all remaining Normal Costs expected to be received over the future working lifetime of current active members. The Actuarial Present Value of Future Normal Costs is subtracted from the Actuarial Present Value of Projected Benefits to arrive at the **Actuarial Liability,** the assets that would exist if the current Normal Cost Rate had been paid for all members since entry into the System, and if all actuarial assumptions had been realized. The following is a summary from **TABLE 2**.

($000)	2007 Actuarial Valuation	2006 Actuarial Valuation
Actuarial Present Value of:		
Projected Benefits	$ 5,077,375	$ 4,756,316
Future Normal Costs	876,124	837,003
Actuarial Liability	**$ 4,201,251**	**$ 3,919,313**

Development of Actuarial Value of Assets

The next step in the valuation process is to calculate the **Actuarial Value of Assets** that will be used to determine the funding status of the System. The market value of assets was reported to us as of June 30, 2007. Details from the System's financial statements are contained in **TABLE 3** and **TABLE 4**.

Because the underlying calculations in the actuarial valuation are long-term in nature, it is advantageous to smooth out short-term fluctuations in the market value of assets. The asset smoothing method projects an Expected Value of Assets using the assumed rate of investment return, then recognizes the difference between the Expected Value and the Market Value over a four-year period. The calculation of the Actuarial Value of Assets is shown in **TABLE 5** and summarized below.

($000)	Gain or (Loss)	Reserve Factor	Smoothing Reserve	Value of Assets
Market Value on June 30, 2007				$ 4,102,060
2004-05	$ 1,317	25%	$ 329	
2005-06	32,120	50%	16,060	
2006-07	347,249	75%	260,437	
Smoothing Reserve			$ 276,826	(276,826)
Actuarial Value of Assets (Market Value less Smoothing Reserve)				**$ 3,825,234**

Due to the asset smoothing method, there is $276.8 million of net investment gains that have not yet been recognized (the difference between the Actuarial and Market Value of Assets). The current positive balance of the Smoothing Reserve will gradually be reflected in the Actuarial Value of Assets.

The Actuarial Value of Assets is less than the Market Value of Assets by less than 7%. **TABLE 6** shows a brief history of the difference between the Actuarial and Market Values of Assets. The table also shows an estimated rate of return for the last seven years on both bases.

Unfunded Actuarial Liability

The **Unfunded Actuarial Liability** is the excess of the Actuarial Liability over the Actuarial Value of Assets, which represents a liability that must be funded over time. Contributions in excess of the Normal Cost are used to amortize the Unfunded Actuarial Liability. An **Actuarial Surplus** exists if the Actuarial Value of Assets exceeds the Actuarial Liability. The calculation of the Unfunded Actuarial Liability or Actuarial Surplus is shown in **TABLE 7** and summarized below.

($000)	2007 Actuarial Valuation	2006 Actuarial Valuation
Actuarial Liability	$ 4,201,251	$ 3,919,313
Actuarial Value of Assets	3,825,234	3,459,084
Unfunded Actuarial Liability	**$ 376,017**	**$ 460,229**
Funded Ratio	**91%**	**88%**

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

Actuarial Gains and Losses

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

TABLE 8 shows the Actuarial Liability as of June 30, 2006, and the elements to project that figure forward to June 30, 2007: the Normal Cost, less benefits paid, plus a charge for interest at the assumed rate of 8% per year.

The same table shows the Actuarial Value of Assets as of June 30, 2006, and the elements to project that figure forward to June 30, 2007: the net cash flow (contributions less benefits), plus a credit for interest at the assumed rate of 8%.

The following is a summary of the actuarial gains or losses during the one-year period.

	($000)
Unfunded Actuarial Liability	
Actual as of June 30, 2006	$ 460,229
Expected as of June 30, 2007	$ 471,389
Actual as of June 30, 2007	376,017
Actuarial (Gain) or Loss	**$ (95,372)**
(Gain) or Loss by Source	
Investment Gain	$ (136,012)
Liability Loss	40,640
Net from All Sources	$ (95,372)

Plan Choice Rate

The Plan Choice Rate is shown in **TABLE 9-B**. The Plan Choice Rate is updated in even numbered years' actuarial valuations.

The Plan Choice Rate will be adjusted, if necessary, when the results of the June 30, 2008 Actuarial Valuations have been published.

The current employer contribution rate for members of the Defined Contribution Retirement Plan (DCRP) and the Optional Retirement Plan (ORP) who would have been in PERS is determined as follows:

(Percent of Salary)	DCRP	ORP
Member Account in DCRP or ORP	4.19%	4.49%
Long-term Disability Plan (DCRP only)	0.30	0.00
Education Fund	0.04	0.04
Plan Choice Rate to DBRP (PCR)	2.37	2.37
Additional PCR Contribution		
2007	0.135	0.135
2009 (if needed)	0.135	0.135
Total Contribution Rate	**7.170%**	**7.170%**

The Plan Choice Rate (PCR) is the percent of the employer contribution allocated to the Defined Benefit Retirement Plan for members who choose the Defined Contribution Retirement Plan or the Optional Retirement Plan. The PCR is required by statute and actuarially determined to maintain the financial stability of the Defined Benefit Retirement Plan (DBRP).

The Legislature did not want the cost of the DBRP to increase due to the elections of members to join the alternative programs. The enabling legislation appropriately established the PCR to provide a mechanism to prevent the costs of the DBRP from increasing solely due to the transfer of members to the other plans.

Without the PCR, there are two reasons the DBRP costs could potentially increase; one is the financing of the Unfunded Actuarial Liability (UAL) at the time of the transfers, and the other is the potential for an increase in the Normal Cost Rate.

1. If there is an Unfunded Actuarial Liability in the DBRP at the time of the transfers, the simple fact that there will be fewer members in the DBRP to spread the amortization of the UAL will increase the rate of DBRP pay necessary to amortize the UAL. The PCR provides that the amortization of the DBRP UAL at the time of the transfer will be financed over the sum of payroll of the DBRP and DCRP members. This method ensures a continuation of the amortization schedule that was in place just prior to the transfers.

   The legislation provided a starting point for this element of the PCR equal to 2.37% of the payroll of DCRP members and the ORP members who would have been in the DBRP.

2. Compared to the members who remain in the DBRP, if the transferring DCRP and ORP members are, on average, either younger at the time of hire, or have a shorter career, the DBRP Normal Cost Rate could increase. The DBRP membership will become, on average, more expensive because the average length of service at retirement will be longer or the career over which the benefit can be financed will be shorter. The dollar amount of the increase in the DBRP Normal Cost will be financed as a percentage of DCRP and ORP payroll. In other words, the DCRP and ORP members will be funding any increase in the Normal Cost of the DBRP due to their election not to participate in the DBRP.

   The legislature did not provide a starting point for this element of the PCR because it depends on the demographics of those who elect the alternative programs.

Unfunded Actuarial Liability: **TABLE 9-A** shows the development of the Unfunded Actuarial Liability of the DBRP that is allocated to the members of the alternative programs. The Unfunded Actuarial Liability as of June 30, 2006 was brought forward to June 30, 2007.

	($000)
Unfunded Actuarial Liability	
PCR-UAL as of June 30, 2006	**$ 18,754**
Adjustments as of June 30, 2007	
Assumed Earnings at 8%	1,500
PCR Contributions with 8% Earnings	(1,918)
Recognition of Prior Investment Losses	0
PCR-UAL as of June 30, 2007	**$ 18,336**

Normal Cost Rate: The statute calls for the members of the alternative programs who could have been in the DBRP to finance the increase in the Normal Cost Rate associated with their transfer. **TABLE 9-B** shows that the Normal Cost Rate for the DBRP would have been 12.22% had the alternative program options not existed. The Normal Cost Rate in this valuation for the DBRP members is 12.22% of salaries. Since the Normal Cost Rate for the DBRP is equal to the Normal Cost Rate that the DBRP would have had if the alternative programs did not exist as

of June 30, 2007, the Normal Cost Rate assigned to the Plan Choice Rate as of June 30, 2007, the PCT-NCR, is 0.00% of payroll for the alternative programs.

Amortization Test: The current PCR, less the PCR-NCR, will be available to amortize the remaining PCR-UAL. The initial amortization period was set at 12.75 years as of June 30, 1998. The amortization period will decline by one year each biennium, but the PCR will not change unless the amortization period is more than 10 years different that the scheduled amortization period.

	Amortization of PCR-UAL		
	Baseline	Acceptable Range	
1998 Valuation	12.75	2.75	22.75
2000 Valuation	11.75	1.75	21.75
2002 Valuation	10.75	0.75	20.75
2004 Valuation	9.75	n/a *	19.75
2006 Valuation	8.75	n/a *	18.75

* *Assumes immediate amortization of PCR UAL.*
Lower end only applies after 2002 if the PCR UAL is fully amortized.

Calculation of the PCR: For this display, we have used the acceptable range for the 2006 Valuation. The PCR, after being reduced for the PCR Normal Cost Rate, must be sufficient to amortize the PCR Unfunded Actuarial Liability over 18.75 years. If not, the PCR is increased such that the amortization period is reduced to 18.75 years. If the PCR will amortize the PCR-UAL over less than 18.75 years, it is not adjusted.

The following table shows that the PCR contributions available will amortize the PCR-UAL over a period of 11.75 years. This is inside the statutory corridor, so the PCR would not need to be increased if this were an even year valuation.

PCR – UAL as of June 30, 2007 ($000)	$	18,336
PCR Available for Amortization		
Current PCR Amortization Rate		2.505%
Less, PCR – Normal Cost Rate		0.000%
PCR Available for Amortization – 2007		2.505%
– 2009		2.640%

Years to Amortize PCR – UAL from June 30, 2007	11.75 Years*
Maximum Years to Amortize PCR – UAL	18.75 Years

* This does not reflect the sunset provisions of HB 131. Without the additional contributions under HB 131 the amortization period for the PCR-UAL would be 13.28 years

Current PCR is Sufficient

Calculation of Contribution Rate

The statutory funding rate is tested in the valuation to determine if it is sufficient to cover the Normal Cost Rate plus an amortization payment for the Unfunded Actuarial Liability, if any, over no more than 30 years. The calculations are shown in **TABLE 10** and summarized below.

	2007 Actuarial Valuation	2006 Actuarial Valuation
Statutory Funding Rate	13.935%	13.80%
Transfer to Education Fund	(0.040)	(0.04)
Normal Cost Rate	(12.220)	(12.17)
Available for Amortization – 2007	**1.675%**	**1.59%**
– 2009	**1.810%**	
Unfunded Actuarial Liability of DBRP	$ 376,017	$ 460,229
Less, Funded by PCR	(18,336)	(18,754)
Net UAL for DBRP Funding	**$ 357,681**	**$ 441,475**
Years to Amortize	**21.9**	**Does Not Amortize**

The amortization period shown above does not reflect the sunset provisions for the additional contributions under HB 131. Without the additional contributions effective July 1, 2007 and July 1, 2009, the amortization period for the Unfunded Actuarial Liability would be 25.3 years. If, as of any actuarial valuation date, the amortization period calculated without any of the additional contributions effective July 1, 2007 or July 1, 2009 is less than 25 years, the additional contributions will cease effective on July 1 immediately following the actuarial valuation.

The projected amortization of the Unfunded Actuarial Liability without the additional contributions under HB 131 is shown on a year-by-year basis in **TABLE 11**. The average Normal Cost Rate is expected to decline as new members join the System due to the fact the GABA will be lower for them. Therefore, the amount of the available amortization is expected to increase over time.

Disclosure Information - GASB No. 25

The disclosure of the Schedule of Funding Progress and the Solvency Test calculated in accordance with Statement No. 25 of the Governmental Accounting Standards Board are shown in **TABLES 12 and 13**.

Summary of Key Valuation Results

	2007 Valuation	2006 Valuation	Percentage Change
1. Total Membership			
A. Active Members	27,977	27,962	0.1%
B. Vested Terminated Members	2,576	2,530	1.8%
C. Non-vested Terminated Members	6,401	7,178	-10.8%
D. Retired Members and Beneficiaries	16,137	15,654	3.1%
E. Total Membership	53,091	53,324	-0.4%
2. Annual Salaries			
A. Annual Total *($Thousands)*	$ 943,286	$ 892,825	5.7%
B. Annual Average per Active Member	$ 33,716	$ 31,930	5.6%
3. Average Annual Allowance Payable			
A. Service Retirement	$ 11,058	$ 10,500	5.3%
B. Disability Retirement	$ 7,654	$ 7,465	2.5%
C. Survivors & Beneficiaries	$ 8,235	$ 7,902	4.2%
D. All Payees	$ 10,547	$ 10,029	5.2%
4. Actuarial Liability *($Thousands)*			
A. Active Members	$ 2,150,144	$ 2,023,475	6.3%
B. Inactive Members	134,533	128,361	4.8%
C. Retired Members and Beneficiaries	1,916,574	1,767,477	8.4%
D. Total	$ 4,201,251	$ 3,919,313	7.2%
5. Value of System Assets *($Thousands)*			
A. Fair Value	$ 4,102,060	$ 3,519,815	16.5%
B. Smoothing Reserve	(276,826)	(60,731)	355.8%
C Actuarial Value	$ 3,825,234	$ 3,459,084	10.6%
D. Ratio of Actuarial Value to Fair Value	*93%*	*98%*	
6. Funded Status			
A. Unfunded Actuarial Liability *($Thousands)*	$ 376,017	$ 460,229	-18.3%
B. Less, PCR-UAL	$ (18,336)	$ (18,754)	-2.2%
C. Net Unfunded Actuarial Liability	$ 357,681	$ 441,475	-19.0%
D. Funded Ratio *(5C ÷ 4D)*	91%	88%	
E. Net Funded Ratio *(5C ÷ (4D+6B))*	91%	89%	
7. Contribution Rates *(percent of salaries)*			
A. Statutory Funding Rate	13.935%	13.80%	1.0%
B. Less, Transfer to DB Ed Fund	(0.040)%	(0.04)%	0%
C. Net Statutory Contribution Rate	13.895%	13.76%	1.0%
D. Normal Cost Rate	12.220%[1]	12.17%	0.4%
E. Available for Amortization of UAL *(7C – 7D)*	1.675%	1.59%	5.3%
F. Available 2009, if needed	1.810%		
G. Period to Amortize	21.9[2]	Does not amortize	
H. Projected 30-Year Level Funding Rate	13.540%	14.77%	-8.3%
I. Projected Shortfall (Surplus) *(7H – 7C)*	(0.355)	1.01%	-135.1%

[1] Projected to be 10.99% of payroll for members eligible after July 1, 2007. The average Normal Cost Rate is expected to decline over the next generation of active members.

[2] Does not reflect sunset provisions of additional contributions under HB 131. Without the additional contributions under HB 131 the amortization period would be 25.3 years.

SECTION 4
ACTUARIAL VALUATION RESULTS

The following tables document the findings of the actuarial valuation.

TABLE 1
NORMAL COSTS

	2007 Actuarial Valuation	2006 Actuarial Valuation
Normal Cost Rate		
Service Retirement	9.21%	9.15%
Disability Retirement	0.32	.32
Death	0.54	.54
Withdrawal	2.15	2.16
Total Normal Cost Rate*	**12.22%**	**12.17%**
Annual Normal Cost ($000)	$ 117,707	$ 111,009
Present Value of Future Normal Costs ($000)	**$ 876,124**	**$ 837,003**

*Projected to be 10.99% of payroll for members eligible after July 1, 2007. The average Normal Cost Rate is expected to decline over the next generation of active members.

TABLE 2
SUMMARY OF ACTUARIAL REQUIREMENTS

($000)	2007 Actuarial Valuation	2006 Actuarial Valuation
Retired Members		
Service Retirement	$ 1,703,559	$ 1,564,199
Disability Retirement	64,806	63,865
Beneficiaries	148,209	139,413
Retired Member Total	1,916,574	1,767,477
Inactive Members	134,533	128,361
Active Members		
Service Retirement	2,672,694	2,518,650
Disability Retirement	61,389	59,769
Pre-retirement Death	131,048	124,006
Withdrawal	161,137	158,053
Active Member Total	3,026,268	2,860,478
Present Value of Future Projected Benefits	**$ 5,077,375**	**$ 4,756,316**
Present Value of Future Normal Costs	876,124	837,003
Actuarial Liability	**$ 4,201,251**	**$ 3,919,313**

TABLE 3
STATEMENT OF SYSTEM ASSETS

($000)	2007	2006
Current Assets		
Cash	$ 110,919	$ 92,502
Accounts Receivable	1,147	1,226
Interest Receivable	7,988	7,173
Other Receivable	581	480
Total Current Assets	120,635	101,381
Investments, at Fair value		
Mortgages and Commercial Loans	36,861	43,097
Investment Pools	3,936,420	3,367,537
Other Investments	8,816	8,636
Total Investments	3,982,097	3,419,270
Securities Lending Collateral	202,100	67,407
Other Assets:	213	102
Total Assets	$ 4,305,045	$ 3,588,160
Liabilities		
Accounts Payable	$ 388	$ 495
Securities Lending Liability	202,100	67,407
Compensated Absences	220	233
Other	277	210
Total Liabilities	$ 202,985	$ 68,345
Net System Assets	**$ 4,102,060**	**$ 3,519,815**

TABLE 4
STATEMENT OF CHANGES IN SYSTEM ASSETS

($000)	2007
Contributions	
Employer	$ 66,527
Plan Member	69,054
Other	835
Total Contributions	136,416
Investments Income	
Net Appreciation/(Depreciation) In fair value of investments	457,602
Investment Earnings	181,401
Total Investment Income	639,003
Less Investment Expense	(9,910)
Net Investment Income	629,093
Securities Lending Income	7,545
Less Securities Lending Expense	(7,148)
Net Securities Lending Income	397
Total Net Investment Income after SLI	629,490
Total Additions	**$ 765,906**
Benefits and Expenses	
Benefit Payments	$ 166,188
Refunds to Members	12,868
Refunds to Other Plans	688
Transfers to DCRP	1,209
Transfers to ORP	211
Administrative Expense	2,447
Total Deductions	**183,611**
Accounting Adjustments	**(50)**
Net Increase in System Assets	**$ 582,245**
Net System Assets	
Beginning of the Year	$ 3,519,815
End of the Year	$ 4,102,060

TABLE 5
ACTUARIAL VALUE OF ASSETS

($000)

Fiscal Year	Cash Flow	Expected Value	Gain or (Loss)	Market Value
2003-04				$ 3,029,910
2004-05	$ (29,990)	$ 3,241,112	$ 1,317	3,242,429
2005-06	(13,585)	3,487,695	32,120	3,519,815
2006-07	(44,798)	3,754,811	347,249	4,102,060

Fiscal Year	Gain or (Loss)	Reserve Factor	Smoothing Reserve
2004-05	$ 1,317	25%	$ 329
2005-06	32,120	50%	16,060
2006-07	347,249	75%	$ 260,437
			$ 276,826

Fair Market Value on June 30, 2007	**$ 4,102,060**
Less, Asset Smoothing Reserve	(276,826)
Actuarial Value of Assets on June 30, 2007	**$ 3,825,234**

TABLE 6
HISTORY OF ACTUARIAL VALUE OF ASSETS

($000)	Market Value		Actuarial Value [1]		Ratio of
June 30	($000)	*Estimated Return* [2]	($000)	*Estimated Return* [2]	Actuarial to Market
2000	$ 2,935,779		$ 2,843,347		97%
2001	2,777,338	(5.1)%	3,043,751	7.3%	110%
2002	2,564,498	(7.3)%	3,076,781	1.4%	120%
2003	2,695,824	6.5%	3,033,210	(0.3)%	113%
2004	3,029,910	13.4%	3,047,287	1.3%	101%
2005	3,242,429	8.0%	3,179,010	5.3%	98%
2006	3,519,815	9.0%	3,459,084	9.3%	98%
2007	4,102,060	17.9%	3,825,234	12.0%	93%

Note:

[1] Asset Method adopted for 2000 valuation with retroactive calculation to June 30, 1997

[2] Estimated returns are net of all investment and administrative expenses paid by the System and assuming uniform cash flow throughout the year

TABLE 7
FUNDED STATUS

($000)	2007 Actuarial Valuation	2006 Actuarial Valuation
Actuarial Value of Assets		
Actuarial Liability	$ 4,201,251	$ 3,919,313
Actuarial Value of Assets	3,825,234	3,459,084
Unfunded Actuarial Liability	$ 376,017	$ 460,229
Funded Ratio (AVA)	**91%**	**88%**
Market Value of Assets		
Actuarial Liability	$ 4,201,251	$ 3,919,313
Market Value of Assets	4,102,060	3,519,815
Unfunded Actuarial Liability	$ 99,191	$ 399,498
Funded Ratio (MVA)	**98%**	**90%**

TABLE 8
ACTUARIAL GAINS AND LOSSES

($000)	Expected	Actual	(Gain) or Loss
2006 Actuarial Liability	$ 3,919,313		
Normal Costs	111,009		
Benefits Paid	(180,476)		
Expected Earnings at 8%	310,765		
Actuarial Liability at June 30, 2007	$ 4,160,611	$ 4,201,251	$ 40,640
2006 Actuarial Value of Assets	$ 3,459,084		
Net Cash Flow	(44,798)		
Expected Earnings at 8%	274,936		
Actuarial Value of Assets	$ 3,689,222	3,825,234	(136,012)
Unfunded Actuarial Liability as of June 30, 2007	**$ 471,389**	**$ 376,017**	**$ (95,372)**

Summary Actuarial (Gain) or Loss by Source	
Investment (Gain) or Loss	$ (136,012)
Liability (Gain) or Loss	40,640
Total Actuarial (Gain) or Loss	**$ (95,372)**

TABLE 9-A
PLAN CHOICE RATE UNFUNDED ACTUARIAL LIABILITY – JUNE 30, 2007

($000)

PCR – UAL Calculations for 2006-07			
PCR – UAL as of June 30, 2006			$ 18,754
Assumed Interest at 8% per year			1,500
Less, PCR Contributions to DBRP during 2006-07, reduced by normal cost			(1,844)
Less, Interest at 8% on PCR Contributions to DBRP during 2005-06			(74)
Recognition of Prior Investment (Gain) or Loss			
2000-01 Balance	$	0	
2001-02 Balance	$	0	
2002-03 Balance	$	0	0
PCR - Unfunded Actuarial Liability at June 30, 2007			**$ 18,336**

TABLE 9-B
PLAN CHOICE RATE

($000)

PCR - Normal Cost Rate			
Normal Cost Rate			
DBRP Members Only			12.22%
Including DCRP and ORP Members			12.22%
Difference		(A)	0.00%
Payroll as of June 30, 2007 ($000)			
DBRP Members Only		(B)	$ 969,737
DCRP and ORP Members		(C)	$ 73,013
PCR – Normal Cost Rate	(A) x (B) ÷ (C)		0.00%
PCR – UAL Amortization			
PCR – UAL as of June 30, 2007 (Table 9-A)			$ 18,336
PCR Available for Amortization			
Current PCR Amortization Rate			2.505%
Less, PCR – Normal Cost Rate			0.000%
PCR Available for Amortization – 2007			2.505%
– 2009 (if needed)			2.640%
Years to Amortize PCR – UAL from June 30, 2007			11.75 Years*
Maximum Years to Amortize PCR – UAL from June 30, 2006			18.75 Years

* This does not reflect the sunset provisions of HB 131. Without the additional contributions under HB 131 the amortization period for the PCR-UAL would be 13.28 years

Current PCR is Sufficient

TABLE 10
CALCULATION OF CONTRIBUTION RATE

	2007 Actuarial Valuation	2006 Actuarial Valuation
Statutory Funding Rate		
Members	6.900%	6.90%
Employers	6.935%	6.80%
State	0.100%	.10%
Total	13.935%	13.80%
Transfer to Education Fund	(0.400)%	(.04)%
Net Contribution to DBRP	13.895%	13.76%
Addition from Employers in 2009 if needed	0.135%	
Normal Cost Rate	12.22%[1]	12.17%
Funding Rate Available for Amortization – 2007	1.675%	1.59%
– 2009 (if needed)	1.810%	
($000) Unfunded Actuarial Liability		
DBRP (Table 7)	$ 376,017	$ 460,229
Less, PCR-UAL Funded by DCRP & ORP (Table 9-B)	(18,336)	(18,754)
Funded by DBRP	$ 357,681	$ 441,475
Years to Amortize	21.9 years[2]	Does Not Amortize
Calculated Contribution Rate		
Normal Cost Rate	12.22%	12.17%
Educational Fund	0.04	0.04
Amortization Payment Available	1.28%	1.59%
Additional Contribution for 30-year Amortization	0.00%	1.01%
Total Amortization	1.28%	2.60%
Total Calculated Rate	**13.54%**	**14.81%**

[1] Projected to be 10.99% of payroll for members eligible after July 1, 2007. The average Normal Cost Rate is expected to decline over the next generation of active members.

[2] Does not reflect sunset provisions of additional contributions under HB 131. Without the additional contributions under HB 131 the amortization period would be 25.3 years.

TABLE 11
AMORTIZATION OF UNFUNDED ACTUARIAL LIABILITY

	$ 000	In dollars			as % of Payroll				
Fiscal Year Ending June 30	UAL, Beginning of Year [1]	Total Contribution	Normal Cost	Available Amortization	Total Contribution net of DBEd[2]	Normal Cost	Available Amortization	Interest at 8%	UAL, End of Year
2008	357,681	133,436	118,182	15,254	13.760%	12.187%	1.573%	27,682	370,109
2009	370,109	139,107	122,243	16,864	13.760%	12.092%	1.668%	28,578	381,823
2010	381,823	145,019	126,541	18,478	13.760%	12.007%	1.753%	29,416	392,761
2011	392,761	151,182	131,053	20,129	13.760%	11.928%	1.832%	30,190	402,822
2012	402,822	157,607	135,764	21,843	13.760%	11.853%	1.907%	30,890	411,869
2013	411,869	164,306	140,667	23,639	13.760%	11.780%	1.980%	31,504	419,734
2014	419,734	171,289	145,781	25,508	13.760%	11.711%	2.049%	32,020	426,246
2015	426,246	178,568	151,119	27,449	13.760%	11.645%	2.115%	32,421	431,218
2016	431,218	186,158	156,706	29,452	13.760%	11.583%	2.177%	32,697	434,463
2017	434,463	194,069	162,558	31,511	13.760%	11.526%	2.234%	32,830	435,782
2018	435,782	202,317	168,684	33,633	13.760%	11.473%	2.287%	32,806	434,955
2019	434,955	210,916	175,101	35,815	13.760%	11.423%	2.337%	32,607	431,747
2020	431,747	219,880	181,821	38,059	13.760%	11.378%	2.382%	32,213	425,901
2021	425,901	229,225	188,856	40,369	13.760%	11.337%	2.423%	31,605	417,137
2022	417,137	238,967	196,216	42,751	13.760%	11.298%	2.462%	30,757	405,143
2023	405,143	249,123	203,923	45,200	13.760%	11.263%	2.497%	29,648	389,591
2024	389,591	259,710	212,002	47,708	13.760%	11.232%	2.528%	28,250	370,133
2025	370,133	270,748	220,459	50,289	13.760%	11.204%	2.556%	26,535	346,379
2026	346,379	282,255	229,308	52,947	13.760%	11.179%	2.581%	24,474	317,906
2027	317,906	294,251	238,567	55,684	13.760%	11.156%	2.604%	22,028	284,250
2028	284,250	306,756	248,256	58,500	13.760%	11.136%	2.624%	19,163	244,913
2029	244,913	319,794	258,388	61,406	13.760%	11.118%	2.642%	15,838	199,345
2030	199,345	333,385	268,973	64,412	13.760%	11.101%	2.659%	12,011	146,944
2031	146,944	347,554	280,035	67,519	13.760%	11.087%	2.673%	7,627	87,052
2032	87,052	362,325	291,591	70,734	13.760%	11.074%	2.686%	2,640	18,958
2033	18,958	377,723	303,657	74,066	13.760%	11.062%	2.698%	(3,012)	(58,120)

(1) Net of PCR-Ual, and based on the actuarial value of assets

(2) This does not reflect the additional contributions of 0.135% of payroll effective July 1, 2007 and 0.27% effective July 1, 2009

Amortization Period: 25.3 years

The amortization period with the additional contributions effective July 1, 2007 and July 1, 2009, without reflecting the sunset provisions of HB 131, would be 21.9 years

DISCLOSURE INFORMATION - GASB NO. 25

TABLE 12

SCHEDULE OF FUNDING PROGRESS
(DOLLARS IN THOUSANDS)

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Funded Ratio	Unfunded AAL (UAAL)	Covered Payroll	UAAL as a Percentage of Covered Payroll
June 30, 1994	$1,366,864	$1,625,720	84%	$258,856	$572,973	45%
June 30, 1996	1,629,707	1,826,207	89	196,500	608,592	32
June 30, 1998	2,113,314	2,298,702	92	185,388	660,579	28
June 30, 2000	2,843,347	2,273,407	125	(569,940)	725,692	(79)
June 30, 2002	3,076,781	3,077,764	100	983	808,747	0
June 30, 2004	3,047,287	3,514,085	87	466,798	832,847	56
June 30, 2005	3,179,010	3,719,998	85	540,988	847,431	64
June 30, 2006	3,459,084	3,919,313	88	460,229	880,708	52
June 30, 2007	3,825,234	4,201,251	91	376,017	907,424	41

TABLE 13

SOLVENCY TEST
(DOLLARS IN THOUSANDS)

Actuarial Valuation Date	(1) Active Member Accounts	(2) Inactive Actuarial Liability	(3) Employer Financed Active Liability	Actuarial Value of Assets	Coverage Ratios (1)	(2)	(3)
June 30, 1994	$255,261	$743,551	$626,908	$1,366,864	100%	100%	59%
June 30, 1996	307,369	768,950	749,888	1,629,706	100	100	74
June 30, 1998	360,422	949,365	988,915	2,113,314	100	100	81
June 30, 2000	572,536 [1]	1,049,012	651,859	2,843,347	100	100	187
June 30, 2002	645,403	1,366,634	1,065,727	3,076,781	100	100	100
June 30, 2004	684,607	1,640,145	1,189,333	3,047,287	100	100	61
June 30, 2005	701,851	1,756,674	1,261,473	3,179,010	100	100	57
June 30, 2006	718,260	1,895,838	1,305,215	3,459,084	100	100	65
June 30, 2007	749,000	2,051,107	1,401,143	3,825,234	100	100	73

Note:

[1] Prior to 2000, "active member accounts" included Regular Contributions without interest for active and inactive members. Beginning in 2000, "active member accounts" includes Regular and Additional Contributions with interest, and excludes all accounts of inactive members.

Appendix A

Actuarial Methods and Assumptions

This section of the report describes the actuarial methods and assumptions used in this valuation. These methods and assumptions have been chosen by the Retirement Board based on our recommendations. The Retirement Board has the sole authority to select the methods and assumptions used in this actuarial valuation. The recommendations were formed on the basis of recent experience of the System and on current expectations as to future economic conditions.

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

In our opinion, the current actuarial methods and assumptions are reasonable and appropriate for this System. The assumptions were developed in accordance with generally recognized and accepted actuarial principles and practices that are consistent with applicable Standards of Practice adopted by the American Academy of Actuaries.

Records and Data

The data used in the valuation consist of financial information and records of age, service, account balances, benefits in pay status and income of contributing members, former contributing members and their survivors. All of the data were supplied by the System and are accepted for valuation purposes without audit.

Actuarial Cost Method

A fundamental principle in financing the liabilities of a retirement program is that the cost of its benefits should be related to when they are earned, rather than when they are paid. There are a number of methods in use for making a determination.

The funding method used in this valuation is the Entry Age Cost Method. Under this method the actuarial present value of projected benefits for each individual member included in the valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages. The portion of this actuarial present value allocated to a valuation year is called the Normal Cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future Normal Costs is called the Actuarial Liability.

The excess of the Actuarial Liability over the Actuarial Value of Assets is called the Unfunded Actuarial Liability. If the Actuarial Value of Assets exceeds the Actuarial Liability, the difference is called the Actuarial Surplus.

Asset Valuation Method

Asset values were supplied by the System and were accepted without audit by us. The Actuarial Value of Assets is the market value, adjusted by a four-year recognition of gains and losses.

Investment Return

The future investment earnings of the assets of the plan are assumed to accrue at a net annual rate of 8.00%, net of all administrative and investment-related expenses.

Interest on Member Contributions

Interest on member contributions is assumed to accrue at a net annual rate of 5.00%.

Future Salaries

Estimates of future salaries are based on two types of assumptions. Rates of increase in the general wage level of the membership are directly related to inflation, while individual salary changes due to promotion and longevity, referred to as the merit scale, occur even in the absence of inflation. The assumed increase in future salaries due to general wage growth is 4.25% per year. The merit scale, assumed in addition to general wage growth, is shown in Table A-2.

Service Retirement

The assumed rates of retirement used in this valuation are shown in Table A-3.

All vested terminated members are assumed to retire when first eligible for an unreduced benefit.

Disablement

The assumed rates of disablement are illustrated in Table A-4 at specified ages. We also assume that all disabilities are permanent, and no disabled member will recover and return to work.

Mortality

The probabilities of mortality are based on the following published tables:

Healthy Retirees, Beneficiaries and Non-Retired Members

Males	1994 Male Uninsured Pensioner Table (-1)
Females	1994 Female Uninsured Pensioner Table (-1)

Disabled Retirees

Males	IRS Revenue Ruling 96-7 Male Table (-3)
Females	IRS Revenue Ruling 96-7 Female Table (+1)

These rates are illustrated in Table A-5.

Other Terminations of Employment

The assumed rates of termination, other than for retirement, death, or disability, are shown in Table A-6.

Benefits for Terminating Members

The probability of a terminating member electing a refund of the member account balance is shown in Table A-7.

Probability of Marriage

100% of all non-retired members are assumed to be married. Male spouses are assumed to be three years older than female spouses.

Changes in Actuarial Assumptions Made for this Valuation

The following method and assumptions were revised since the last valuation:

Actuarial Methods

- None

Economic Assumptions

- None

Demographic Assumptions

- None

Table A-1

Summary of Valuation Assumptions
(June 30, 2007)

I.	Economic assumptions	
	A. General wage increases	4.25%
	B. Investment return	8.00%
	C. Interest on member accounts	5.00%
II.	Demographic assumptions	
	A Individual salary increase due to promotion and longevity	Table A-2
	B. Retirement	Table A-3
	C. Disablement	Table A-4
	D. Mortality among contributing members, service retired members, and beneficiaries 1994 Uninsured Pensioner Mortality Table, with ages set back 1 year for males and ages set back 1 year for females	Table A-5
	E. Mortality among disabled members Based on the IRS Social Security Disabled Mortality Tables published in Revenue Ruling 96-7 for pre-1995 disabilities with ages set back 3 years for males and set forward 1 year for females.	Table A-5
	F. Other terminations of employment	Table A-6
	G. Probability of retaining membership in the System upon vested termination	Table A-7

Table A-2

Merit Salary Increases

Service	Annual Increase
1	6.00%
2	4.90
3	3.90
4	3.10
5	2.40
6	1.80
7	1.40
8	1.00
9	0.70
10	0.50
11-15	0.30
16-20	0.10
21 & over	0.00

Table A-3

Retirement
Annual Rates

Age	< 30 Yrs	w/ 30 Yrs	Age	< 30 Yrs	w/ 30 Yrs
Under 50	-	10%	61	15%	15%
			62	25	25
50 - 54	3%	10	63	15	15
			64	15	15
55	3	15	65	30	30
56	4	15	66	30	30
57	5	15	67	25	25
58	5	15	68	25	25
59	6	15	69	25	25
60	8	15	70 & over	100	100

Table A-4

Disablement
Annual Rates

Age	Male	Female
22	-	-
27	0.01%	0.01%
32	0.01	0.01
37	0.06	0.03
42	0.09	0.15
47	0.17	0.15
52	0.36	0.30
57	0.62	0.36
62	0.00	0.00

Table A-5

Mortality
Annual Rates

	Healthy Members		Disabled Retirees	
Age	Male	Female	Male	Female
50	0.250%	0.141%	2.085%	1.697%
55	0.428	0.224	2.587	1.976
60	0.762	0.415	3.194	2.344
65	1.391	0.819	3.933	2.828
70	2.336	1.367	4.900	3.492
75	3.661	2.192	6.468	4.710
80	6.007	3.802	8.522	6.346
85	9.636	6.557	10.971	9.015
90	14.995	11.247	14.405	13.322
95	23.194	18.352	19.372	20.176

Table A-6

Other Terminations of Employment
Annual Rates

	Male Members			Female Members		
Service	Age <30	30-39	Age>40	Age <30	30-39	Age>40
0	30%	22%	15%	30%	22%	18%
1	25	15	12	25	16	13
2	16	12	10	16	14	10
3	14	10	8	14	11	9
4	10	8	6	10	8	8
5-9	6	6	5 *	5	5	5 *
10-14	3	3	3 *	4	4	3 *
15 & over	-	2	2 *	-	2	2 *

* No other terminations of employment are assumed after attainment of age 55 with 5 years of service.

Table A-7

Probability of Electing a Refund of Member Contributions Upon Termination

Age at Termination	Non-Vested	Vested
Under 35	100%	50%
35 - 39	100	40
40 - 44	100	40
45 - 49	100	35
50 & over	100	30

Appendix B

Provisions of Governing Law

All of the calculations contained in this report are based on our understanding of the benefit and eligibility provisions of the system. The provisions used in this valuation are summarized below for reference purposes.

Normal Retirement	Eligibility:	Age 65 regardless of membership service, or Age 60 and 5 years of membership service, or 30 years of membership service regardless of age.
	Benefit:	Years of service credit, multiplied by highest average compensation (highest 36 consecutive months), multiplied by 1/56th if membership service at retirement is less than 25 years, or multiplied by 1/50th if membership service at retirement is at least 25 years.
	Normal Form:	Monthly benefit for the life of the member, with a death benefit equal to the remaining balance of the member's contribution account.
Early Retirement	Eligibility:	Age 50 and 5 years of membership service, or 25 years of membership service regardless of age.
	Benefit:	Actuarial equivalent of the accrued benefit based on retirement at age 60 or 30 years of membership service.
Disability Retirement	Eligibility:	5 years of membership service
	Benefit:	If hired on or before February 24, 1991, the greater of (a) and (b) below: (a) Years of service credit, multiplied by highest average compensation, multiplied by 90% of 1/56th (1/50th if 25 or more years of membership service) , or (b) Highest average compensation multiplied by 25%. If hired after February 24, 1991: (a) Years of service credit, multiplied by highest average compensation, multiplied by 1/56th (1/50th if 25 or more years of membership service).

Death before Retirement	Eligibility:	Prior to 5 years of membership service
	Benefit:	The sum of (a) and (b) below: (a) Return of member contributions with interest, (b) Lump sum payment of one month's salary multiplied by years of service credit, up to a maximum of six months' salary.
	Eligibility:	5 years of membership service
	Benefit:	Either the sum of (a) and (b), or (c) below: (a) Return of member contributions with interest, and (b) Lump sum payment of one month's salary multiplied by years of service credit, up to a maximum of six months' salary, or (c) Actuarial equivalent of the accrued benefit at the time of death of the member.
Termination Benefit	Eligibility:	Prior to 5 years of membership service
	Benefit:	Return of member contributions with interest.
	Eligibility:	5 years of membership service
	Benefit:	Either (a) or (b) below: (a) Return of member contributions with interest, or (b) Actuarial equivalent of the accrued benefit based on a retirement age of 60.
Benefit Adjustments	Eligibility:	Retired members and beneficiaries.
	Benefit:	An annual adjustment (GABA) of 3.0% commencing January 1st, one year after retirement. Effective July 1, 2007, an annual adjustment (GABA) of 1.5% for members hired on or after July 1, 2007, commencing January 1st, one year after retirement.

Contributions

Members:	6.90% of members' compensation
Employers:	6.90% of members' compensation (offset by 0.10% of members' compensation paid by the State for local government and school district employers).
	Effective July 1, 2007, 7.035% of members' compensation (offset by 0.10% of members' compensation paid by the State for local government employers and 0.235% for school district employers).
	Effective July 1, 2009 7.17% of members' compensation (offset by 0.10% of members' compensation paid by the State for local government employers and 0.37% for school district employers).
	The additional employer contributions effective July 1, 2007, and July 1, 2009, will terminate if an actuarial valuation shows that the amortization period for the system's unfunded actuarial liabilities fell below 25 years and terminating those additional contributions would not cause that amortization period to exceed 25 years.

Appendix C

Valuation Data

This valuation is based upon the membership of the System as of June 30, 2006. Membership data were supplied by the System and accepted for valuation purposes without audit. However, tests were performed to ensure that the data are sufficiently accurate for valuation purposes.

Table C-1 contains summaries of the data for contributing members. Values shown in the tables are the numbers of members and their total and average annual salaries.

Active Members	Annual Salaries in Millions	Average Annual Salary
27,977	$943.3	$33,716

Table C-2 presents distributions of the following:

- Members receiving service retirement benefits.
- Members receiving disability retirement benefits.
- Survivors of deceased members receiving benefits.
- Terminated vested members.

Type of Annuitant	Number	Annual Benefits in Thousands	Average Annual Benefits
Service Retirement	13,379	$ 147,938	$ 10,500
Disability Retirement	792	6,063	7,465
Survivors of Deceased Members	1,966	16,191	7,902
Total Annuitants	16,137	$ 170,192	$ 10,547

Terminated Members	Number
Vested Terminated Members	2,576
Non-Vested Terminated Members	6,401
Total Terminated Members	8,977

Table C-1

Active Members Distribution of Members and Salaries

as of June 30, 2007

Number of Members – By Age Group – DBRP Members

	Completed Years of Service												
Age	0	1	2	3 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40+	Totals
Under 25	332	106	48	39	-	-	-	-	-	-	-	-	525
25 to 29	456	279	214	232	135	1	-	-	-	-	-	-	1,317
30 to 34	461	277	214	283	421	70	1	-	-	-	-	-	1,727
35 to 39	656	260	216	294	588	332	82	-	-	-	-	-	2,428
40 to 44	453	290	244	361	708	474	385	89	2	-	-	-	3,006
45 to 49	486	389	288	501	1,025	691	702	401	222	8	-	-	4,713
50 to 54	443	334	289	484	1,069	841	785	564	505	187	2	-	5,503
55 to 59	375	255	224	353	903	782	754	590	449	309	44	-	5,038
60 to 64	164	110	119	192	505	388	419	310	245	131	78	11	2,672
65 to 69	66	57	28	64	161	120	120	74	61	21	8	6	786
70 & Over	33	18	23	30	52	32	35	15	14	2	5	3	262
Totals	3,925	2,375	1,907	2,833	5,567	3,731	3,283	2,043	1,498	658	137	20	27,977

Table C-1

Active Members Distribution of Members and Salaries

as of June 30, 2007

Annual Salaries in Thousands – By Age Group – DBRP Members

	Completed Years of Service												
Age	0	1	2	3 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40+	Totals
Under 25	7,607	2,533	1,274	1,022	-	-	-	-	-	-	-	-	12,436
25 to 29	12,067	7,678	5,955	7,624	4,541	23	-	-	-	-	-	-	37,888
30 to 34	12,493	7,714	6,729	9,293	15,474	2,620	27	-	-	-	-	-	54,350
35 to 39	17,277	6,750	6,380	9,221	21,954	14,268	3,619	-	-	-	-	-	79,469
40 to 44	11,615	7,660	6,740	10,439	24,172	19,081	17,120	3,867	103	-	-	-	100,797
45 to 49	12,541	9,271	7,351	13,925	32,864	26,195	30,462	18,365	10,081	434	-	-	161,489
50 to 54	11,862	8,167	7,914	13,656	33,339	28,968	31,631	25,844	24,943	9,237	71	-	195,632
55 to 59	10,031	6,869	5,888	9,893	27,967	26,665	28,623	24,931	21,015	16,305	2,337	-	180,524
60 to 64	4,210	2,556	3,137	4,953	14,926	12,987	15,138	12,127	11,118	6,272	3,986	569	91,979
65 to 69	1,577	842	647	1,617	4,065	3,453	3,987	2,675	2,139	1,064	368	279	22,713
70 & Over	711	223	370	538	989	871	976	448	474	86	189	134	6,009
Totals	101,991	60,263	52,385	82,181	180,291	135,131	131,583	88,257	69,873	33,398	6,951	982	943,286

Table C-1

Active Members Distribution of Members and Salaries

as of June 30, 2007

Average Annual Salary – By Age Group – DBRP Members

	Completed Years of Service												
Age	0	1	2	3 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40+	Totals
Under 25	22,913	23,894	26,550	26,194	-	-	-	-	-	-	-	-	23,687
25 to 29	26,463	27,519	27,829	32,863	33,636	23,064	-	-	-	-	-	-	28,768
30 to 34	27,100	27,849	31,443	32,837	36,756	37,428	27,129	-	-	-	-	-	31,471
35 to 39	26,337	25,963	29,536	31,362	37,336	42,975	44,132	-	-	-	-	-	32,730
40 to 44	25,640	26,415	27,621	28,917	34,141	40,255	44,468	43,448	51,606	-	-	-	33,532
45 to 49	25,805	23,832	25,526	27,795	32,062	37,908	43,393	45,797	45,412	54,240	-	-	34,265
50 to 54	26,777	24,453	27,383	28,216	31,187	34,445	40,294	45,823	49,393	49,395	35,266	-	35,550
55 to 59	26,750	26,937	26,284	28,025	30,972	34,098	37,962	42,256	46,803	52,766	53,120	-	35,832
60 to 64	25,671	23,236	26,357	25,799	29,556	33,471	36,130	39,120	45,378	47,877	51,098	51,725	34,423
65 to 69	23,893	14,778	23,113	25,265	25,249	28,771	33,228	36,154	35,070	50,649	46,033	46,520	28,898
70 & Over	21,559	12,410	16,094	17,931	19,027	27,223	27,873	29,852	33,829	42,838	37,720	44,723	22,934
Totals	25,985	25,374	27,470	29,008	32,386	36,218	40,080	43,200	46,644	50,755	50,732	49,113	33,716

Table C-1

Active Members Distribution of Members and Salaries

as of June 30, 2007

Number of Members – By Age Group – DCRP & ORP Members

	Completed Years of Service												
Age	0	1	2	3 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40+	Totals
Under 25	18	20	3	1	-	-	-	-	-	-	-	-	42
25 to 29	53	76	49	46	19	-	-	-	-	-	-	-	243
30 to 34	26	72	47	83	72	2	-	-	-	-	-	-	302
35 to 39	35	54	49	60	95	30	1	-	-	-	-	-	324
40 to 44	23	56	41	57	77	34	7	2	-	-	-	-	297
45 to 49	24	46	50	70	75	46	15	3	-	-	-	-	329
50 to 54	16	60	37	47	65	31	12	-	2	1	-	-	271
55 to 59	20	39	23	42	28	16	7	-	2	-	-	-	177
60 to 64	14	12	10	16	12	6	1	-	-	-	-	-	71
65 to 69	1	-	1	3	4	1	1	-	-	-	-	-	11
70 & Over	-	3	2	-	-	-	-	-	-	-	-	-	5
Totals	230	438	312	425	447	166	44	5	4	1	-	-	2,072

Table C-1

Active Members Distribution of Members and Salaries

as of June 30, 2007

Annual Salaries in Thousands – By Age Group – DCRP & ORP Members

	Completed Years of Service												
Age	0	1	2	3 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40+	Totals
Under 25	474	561	87	22	-	-	-	-	-	-	-	-	1,144
25 to 29	1,562	2,325	1,556	1,637	679	-	-	-	-	-	-	-	7,759
30 to 34	654	2,344	1,591	3,247	2,844	96	-	-	-	-	-	-	10,776
35 to 39	1,031	1,804	1,728	2,197	3,799	1,391	30	-	-	-	-	-	11,980
40 to 44	636	1,872	1,464	1,937	2,924	1,411	247	65	-	-	-	-	10,556
45 to 49	657	1,431	1,644	2,335	2,724	1,782	573	174	-	-	-	-	11,320
50 to 54	360	2,133	1,203	1,616	2,048	1,122	428	-	63	35	-	-	9,008
55 to 59	635	1,265	631	1,259	841	473	219	-	80	-	-	-	5,403
60 to 64	282	320	273	594	406	199	12	-	-	-	-	-	2,086
65 to 69	28	-	38	71	87	22	48	-	-	-	-	-	294
70 & Over	-	39	99	-	-	-	-	-	-	-	-	-	138
Totals	6,319	14,094	10,314	14,915	16,352	6,496	1,557	239	143	35	-	-	70,464

Table C-1

Active Members Distribution of Members and Salaries

as of June 30, 2007

Average Annual Salary – By Age Group – DCRP & ORP Members

	Completed Years of Service												
Age	0	1	2	3 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40+	Totals
Under 25	26,314	28,027	28,977	21,566	-	-	-	-	-	-	-	-	27,207
25 to 29	29,469	30,592	31,748	35,578	35,759	-	-	-	-	-	-	-	31,928
30 to 34	25,139	32,554	33,854	39,118	39,495	48,071	-	-	-	-	-	-	35,679
35 to 39	29,463	33,406	35,258	36,612	39,988	46,368	29,640	-	-	-	-	-	36,972
40 to 44	27,648	33,434	35,703	33,985	37,969	41,485	35,223	32,614	-	-	-	-	35,539
45 to 49	27,395	31,108	32,873	33,354	36,323	38,740	38,167	58,013	-	-	-	-	34,406
50 to 54	22,517	35,549	32,510	34,378	31,508	36,188	35,627	-	31,283	35,279	-	-	33,236
55 to 59	31,758	32,430	27,442	29,986	30,028	29,551	31,218	-	39,780	-	-	-	30,521
60 to 64	20,112	26,679	27,274	37,103	33,844	33,247	12,480	-	-	-	-	-	29,383
65 to 69	28,492	-	37,795	23,744	21,788	22,375	48,010	-	-	-	-	-	26,823
70 & Over	-	12,888	49,609	-	-	-	-	-	-	-	-	-	27,576
Totals	27,475	32,176	33,053	35,091	36,582	39,134	35,347	47,853	35,532	35,279	-	-	34,005

Table C-2

Distribution of Inactive Lives

Members Receiving Service Retirement Benefits as of June 30, 2007

Age	Number of Persons	Annual Benefit in Thousands	Average Annual Benefits
Under 50	18	372	20,679
50 to 54	305	5,227	17,136
55 to 59	999	17,012	17,029
60 to 64	2,034	28,476	14,000
65 to 69	2,729	32,000	11,726
70 to 74	2,326	23,895	10,273
75 to 79	2,023	18,249	9,021
80 to 84	1,452	11,787	8,118
85 to 89	1,003	7,378	7,356
90 & Over	490	3,542	7,229
Total	13,379	147,938	11,058

Members Receiving Disability Retirement Benefits as of June 30, 2007

Age	Number of Persons	Annual Benefit in Thousands	Average Annual Benefits
Under 50	38	278	7,305
50 to 54	92	753	8,186
55 to 59	153	1,265	8,267
60 to 64	150	1,155	7,697
65 to 69	118	836	7,088
70 to 74	92	572	6,219
75 to 79	65	459	7,069
80 to 84	49	377	7,687
85 to 89	25	244	9,743
90 & Over	10	124	12,357
Total	792	6,063	7,654

Table C-2

Distribution of Inactive Lives

Survivors of Deceased Members Receiving Retirement Benefits as of June 30, 2007

Age	Number of Persons	Annual Benefit in Thousands	Average Annual Benefits
Under 50	125	638	5,104
50 to 54	66	430	6,512
55 to 59	131	1,108	8,455
60 to 64	163	1,644	10,086
65 to 69	209	2,022	9,672
70 to 74	254	2,285	8,996
75 to 79	305	2,676	8,774
80 to 84	327	2,474	7,567
85 to 89	239	1,699	7,109
90 & Over	147	1,215	8,267
Total	1,966	16,191	8,235

Terminated Vested Members as of June 30, 2007

Number of Persons

Age	Number
Under 25	-
25 to 29	18
30 to 34	62
35 to 39	166
40 to 44	306
45 to 49	537
50 to 54	660
55 to 59	541
60 to 64	226
65 to 69	47
70 & Over	13
Total	2,576

Table C-3

Active Membership Data History

Valuation Date (June 30)	Active Members					
	Total Contributing Members	Annual Salaries in Thousands	Average Annual Salary	Average Age	Average Years of Service	Average Hire Age
1998	28,091	$660,588	$23,516	44.9	8.8	36.1
2000	29,500	739,831	25,079	45.4	8.8	36.6
2002	29,808	815,130	27,346	46.2	9.1	37.1
2004	28,201	831,564	29,487	47.3	9.8	37.5
2005	28,213	854,570	30,290	47.6	9.9	37.7
2006	27,962	892,825	31,930	48.0	9.9	38.1
2007	27,977	943,286	33,716	48.3	10.0	38.3

Table C-4

Retired and Inactive Membership Data History

	All Annuitants			Terminated Members	
Valuation Date (June 30)	Number	Annual Benefits in Thousands	Average Annual Benefit	Number Vested Terminated	Number Non-Vested Terminated
1998	12,924	87,115	6,741	1,653	8,474
2000	13,572	97,147	7,158	1,813	9,966
2002	14,116	115,613	8,190	2,150	10,944
2004	14,834	135,207	9,115	2,362	9,132
2005	15,220	145,150	9,537	2,418	8,153
2006	15,654	156,999	10,029	2,530	7,178
2007	16,137	170,192	10,547	2,576	6,401

Appendix D

Glossary

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

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

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

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

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

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

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

Actuarial Valuation: The determination, as of a Valuation Date, of the Normal Cost, Actuarial Liability, Actuarial Value of Assets, and related Actuarial Present Values for a retirement plan.

Actuarial Value of Assets:	The value of cash, investments and other property belonging to a pension plan, as used by the actuary for the purpose of an Actuarial Valuation.
Actuarial Equivalent:	Of equal Actuarial Present Value, determined as of a given date with each value based on the same set of Actuarial Assumptions.
Entry Age Cost Method:	An actuarial cost method under which the Actuarial Present Value of Projected Benefits of each individual included in an Actuarial Valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages. The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost. The portion of this Actuarial Present Value not provided for at a valuation date by the Actuarial Present Value of future Normal Costs is called the Actuarial Liability.
Normal Cost:	The portion of the Actuarial Present Value of Projected Benefits which is allocated to a valuation year by the Actuarial Cost Method.
Unfunded Actuarial Liability:	The excess, if any, of the Actuarial Liability over the Actuarial Value of Assets.
Valuation Date:	June 30, 2007.