

**IOWA PUBLIC EMPLOYEES'
RETIREMENT SYSTEM**

**Actuarial Valuation Report
as of June 30, 2000**

**ACTUARIAL VALUATION OF THE IOWA PUBLIC EMPLOYEES'
RETIREMENT SYSTEM**

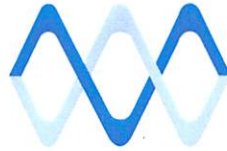
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- B. Summary of Plan Provisions
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November 27, 2000

Iowa Public Employees' Retirement System
7401 Register Drive
Des Moines, IA 50321

Re: Iowa Public Employees' Retirement System

To: Mollie Anderson, Director of the Department of Personnel
Greg Cusack, Chief Benefits Officer
Kathy Comito, Chief Investment Officer
Greg Schochenmaier, General Counsel
Leon Schwartz, Chief Operations Officer

We have performed an actuarial valuation of the Iowa Public Employees' Retirement System (System) as of June 30, 2000. An actuarial valuation is prepared annually to determine the contribution rate necessary to fund the benefits being credited for membership service and to amortize the System's unfunded actuarial accrued liability within the parameters set out in IPERS funding policy.

The member and employer contribution rates are established by law. The combined employee and employer rate for the majority of the System's members is 9.45%. Certain employees in protection occupation classifications and their employers contribute at slightly higher rates as required by law. Based on the System's funding policy and the current actuarial assumptions, the statutory 9.45% contribution rate is sufficient to fund the current benefit structure and to amortize the unfunded actuarial accrued liability over 21 years.

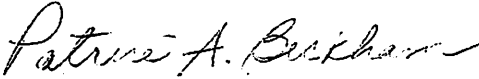
Actuarial assumptions are needed to estimate future economic and demographic experience of the System, which affect future System benefit payments and investment earnings. Any deviation between actual and expected future experience will result in corresponding changes in the on-going costs of the System. The demographic actuarial assumptions were developed both from the experience of the System and from standard actuarial sources. We believe the actuarial assumptions used in the valuation are reasonable, as related to the experience of the System.

In performing the valuation, we have relied upon membership and financial data reported to us by the System. We did not verify the accuracy of the information, but did review it for reasonableness in relation to the data submitted for previous years.

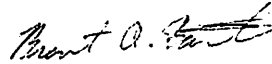
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This report has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with principles prescribed by the Actuarial Standards Board (ASB) and the Code of the Professional Conduct and Qualifications Standards for Public Statements of Actuarial Opinion of the American Academy of Actuaries.

Respectfully Submitted,
MILLIMAN & ROBERTSON, INC.



Patrice A. Beckham, F.S.A., M.A.A.A.
Consulting Actuary



Brent A. Banister, A.S.A., M.A.A.A.
Associate Actuary

SECTION I

EXECUTIVE SUMMARY

Introduction

This report presents the results of the June 30, 2000 actuarial valuation of the Iowa Public Employees' Retirement System (IPERS). The primary purposes of performing the valuation are as follows:

- to certify that the contribution rate to be paid by the members and employers for the Fiscal Year beginning July 1, 2000 is sufficient to fund the benefits expected to be paid to members and meets the criteria set out in the funding policy established by IPERS,
- to disclose various asset and liability measures as of June 30, 2000, and
- to analyze and report on trends in System contributions, assets, and liabilities over the past several years.

The actuarial assumptions are unchanged from last year. However, the report reflects several changes in benefit provisions from the 1999 report. Legislation passed in 2000 provided for several different benefit enhancements. Certain changes were effective regardless of the valuation results (non-contingent enhancements), but two provisions were to be effective only when the actuarial valuation indicated such enhancements could be enacted within the existing statutory contribution rates (contingent enhancements). The results of this valuation indicate that both of the contingent benefit enhancements can be absorbed within the current contribution structure without violating IPERS' funding policy. The enhancements included in this valuation are:

- Change in the determination of final average earnings for higher paid members to use a high 6 year average for 2000 and 2001 (rather than high 7) and increase in the default standard from \$55,000 to \$65,000 for calendar year 2000 and \$75,000 for calendar year 2001.
- Cost of living adjustment paid to pre-July 1990 retirees is based on 100% of the change in the Consumer Price Index (rather than 80% in the prior law). The 3% maximum annual increase limitation was retained. The actuarial assumption for postretirement increases for this group had always been the maximum of 3%, so this change had no cost impact.
- Cap the Favorable Experience Dividend Reserve Fund at 10 years of maximum payouts. This did not have an impact on the valuation results for the current year, but has the potential to impact future valuations.
- Improvement of the death benefit for active members to provide the greater of the current death benefit or the present value of the member's accrued benefit (contingent enhancement).
- Use of the Rule of 88 as a "normal retirement date" for purposes of calculating any applicable early retirement reduction (contingent enhancement).

Section I
Executive Summary

Other changes were provided by the legislation passed in 2000, but they did not have a direct impact on valuation results. In addition, several benefit enhancements were passed to provide parity for members in the Protection Occupation groups (about 3.3% of the total membership). The impact of those benefit enhancements will be reflected in the separate cost report prepared for those groups. The changes for the Protection Occupation groups did not impact the general membership valuation results shown in this report.

The actuarial valuation results provide a "snapshot" view of the System's financial condition on June 30, 2000. The valuation results reflect overall favorable experience for the past plan year as demonstrated by an unfunded actuarial liability, prior to the adjustment for the impact of the change in plan provisions and the FED transfer, that was lower than expected based on our assumptions. The favorable experience was the net impact of a significant actuarial gain on the actuarial value of assets and an experience loss on liabilities. Several factors contributed to the experience loss, the most significant of which were:

- Active members pending distribution not included in the previous actuarial valuation
- Salary increases greater than that which was expected
- Service purchases completed during April through November of 1999 under the old (non-actuarial cost) basis
- Members included in the actuarial valuation for the first time this year (new entrants)

The impact of the change in plan provisions (death benefit and Rule of 88 as normal retirement date for early retirement factors) and the FED transfer was to increase unfunded actuarial liability by \$204 million and extend the years to amortize from 5 to 21.

In 1998, legislation was passed to create the Favorable Experience Dividend (FED) reserve account with initial funding of \$200 million (on an actuarial value of assets basis). The law provides that a portion of the favorable experience in subsequent years may be transferred to the FED reserve. Legislation passed in 2000 capped the FED reserve at ten years of expected payouts at the maximum level. This limitation did not impact the amount transferred to the FED for the 2000 valuation. Based on the results of the June 30, 2000 valuation, \$93.1 million was transferred to the FED reserve. When the current year's transfer is included, the FED reserve is projected to provide nine (9) years of payouts at the maximum level of 3% per year retired (if all assumptions are met in the future).

A summary of the impact of IPERS' funding due to the change in benefit provisions (that were dependent upon valuation results) and the FED transfer is shown below:

Valuation Results	Before FED Transfer	After \$93M FED Transfer	After \$111M Contingent Benefit Changes
Actuarial Liability	\$14,361M	\$14,361M	\$14,472M
Actuarial Value of Assets	14,238M	14,145M	14,145M
Unfunded Actuarial Liability (UAL)	123M	216M	327M
Normal Cost Rate	8.84%	8.84%	8.95%
Years to Amortize UAL	5	10	21

Section I Executive Summary

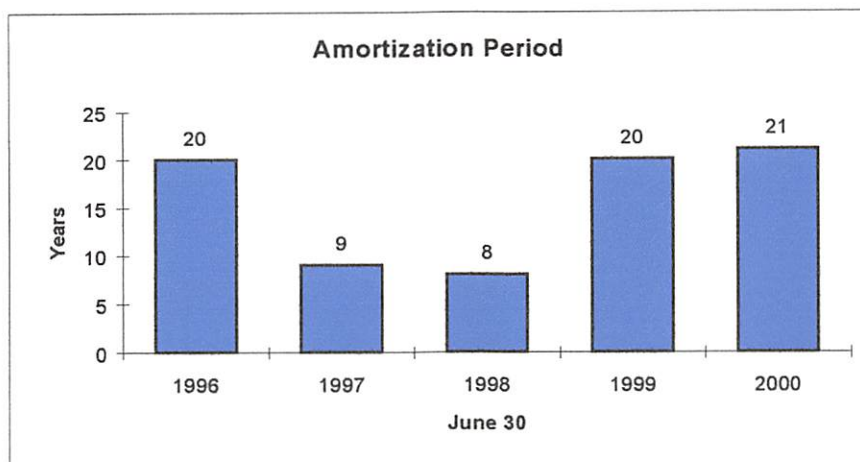
Contribution Rate

The Iowa statutes provide that most IPERS members shall contribute 3.7% of pay and employers shall contribute 5.75%, for a total of 9.45%. The valuation is performed to determine whether that rate will be sufficient to fund the future benefits expected to be paid by the System within the guidelines established in IPERS' funding policy (which sets a maximum unfunded actuarial liability amortization period of 30 years). The statutory rate is first applied to fund the normal cost rate. The remaining contribution rate is used to amortize the unfunded actuarial accrued liability as a level percentage of payroll. As a result, the remaining amortization period varies with each valuation.

The normal cost rate for the June 30, 2000 actuarial valuation, after recognizing all benefit enhancements, is 8.95%. IPERS' funding policy sets out several safeguards for the System's funding which includes a maximum normal cost rate of 8.95%. Since the normal cost rate is currently at the maximum in the funding policy, no benefit enhancements could be enacted without an offsetting increase in the contribution rate.

The current valuation results indicate the statutory rate results in an amortization period of 21 years.

The following graph illustrates the remaining amortization period for the last five valuations. Prior to 1996, a different actuarial cost method was used which did not directly calculate an actuarial liability so comparable statistics are not available.



Section I
Executive Summary

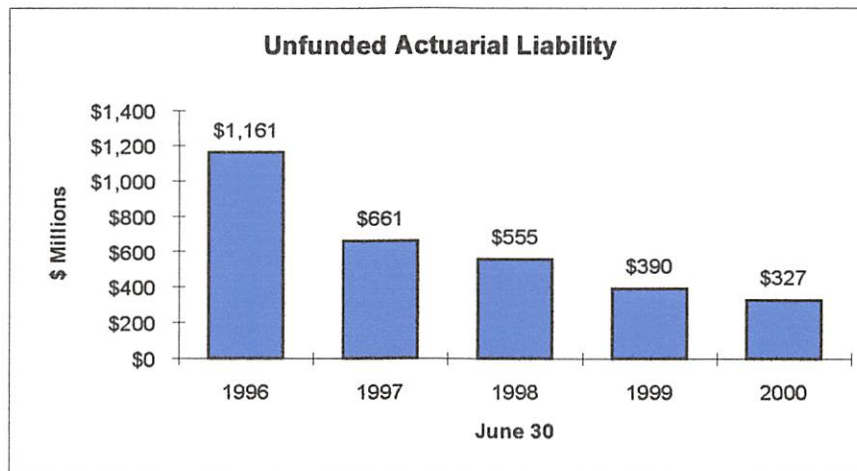
Experience

Numerous factors contributed to the change in the Systems' asset, liabilities and remaining amortization period for the unfunded actuarial liability between the June 30, 1999 and June 30, 2000 valuation reports. The components are examined in the following discussion.

Actuarial gains/losses result from actual experience that is more/less favorable than anticipated based on the actuarial assumptions. These "experience" (or actuarial) gains/losses are reflected in the UAL and are measured as the difference between the expected unfunded actuarial liability (UAL) and the actual unfunded actuarial liability, taking into account changes due to assumption or benefit provision changes. Overall, the System experienced a net actuarial gain of \$266 million (see page 21 for a detailed development). The change in the unfunded actuarial liability as reported in the June 30, 1999 and June 30, 2000 valuation reports is shown below (in millions):

Unfunded Actuarial Liability, June 30, 1999	\$	390
• Expected change in UAL due to amortization payment	-	32
• Investment gain	-	781
• Liability (gain)/loss from actual experience	+	515
• Non-contingent benefit enhancements	+	31
• Change in actuarial assumptions	+	0
Unfunded Actuarial Liability before FED transfer, June 30, 2000	\$	123
• FED Transfer	+	93
Unfunded Actuarial Liability after FED transfer, June 30, 2000	\$	216
• Contingent benefit enhancements (death benefit and early retirement factors from Rule of 88)	+	111
Unfunded Actuarial Liability after FED transfer and all benefit enhancements, June 30, 2000	\$	327

The following summarizes the unfunded actuarial liability for IPERS over the last five valuations. Prior to that time, a different actuarial cost method was used which did not directly calculate an actuarial liability. Therefore, comparable statistics for years prior to 1996 are not available.



Section I
Executive Summary

Assets

As of June 30, 2000, the System had total funds of \$16.5 billion, when measured on a market value basis, excluding the Favorable Experience Dividend (FED) reserve account. This was an increase of \$1.7 billion from the prior year. The components of this change are shown below in millions:

	Market Value
Net Assets, June 30, 1999	\$ 14,814
• Employer and Member Contributions	+ 429
• Benefit Payments	- 581
• Administrative Expenses	- 6
• Investment Income (Expected)	+ 1,105
• Net Investment Gain/(Loss)	+ 821
Net Assets, June 30, 2000 Before FED Transfer	\$ 16,582
• FED Transfer	- 108
Net Assets, June 30, 2000 After FED Transfer	\$ 16,474

The market value of assets is not used directly in the calculation of the contribution rate and amortization period. The actuarial value of assets is equal to the expected asset value based on the assumed interest rate (7.5%) plus 25% of the difference between the actual market value and the expected asset value.

The change in the actuarial value of assets from June 30, 1999 to June 30, 2000 is shown below in millions:

	Actuarial Value
Actuarial Assets, June 30, 1999	\$ 12,664
• Employer and Member Contributions	+ 429
• Benefit Payments	- 581
• Investment Income (Expected)	+ 945
• Investment Gain/(Loss)	+ 781
Actuarial Assets, June 30, 2000 Before FED Transfer	\$ 14,238
• FED Transfer	- 93
Actuarial Assets, June 30, 2000 After FED Transfer	\$ 14,145

The dollar-weighted rate of return measured on the actuarial value of assets was 13.7%. A comparison of asset values on both the market and actuarial basis is shown below:

	June 30		
	<u>2000</u>	<u>1999</u>	<u>1998</u>
Market Value of Assets	16,474	14,814	13,464
Actuarial Value of Assets	14,145	12,664	11,546
Actuarial Value/Market Value	85.9%	85.5%	85.8%

Section I Executive Summary
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Liabilities

There are four different measurements of liabilities discussed in this section.

- **Actuarial Balance Sheet Liability** is the present value of all future benefits (PVFB) expected to be paid from the System to current members (retired, active and deferred vested). This liability is calculated based on both future payroll projections and service credits to retirement or other separation from service.
- **Actuarial Accrued Liability** is the portion of the present value of future benefits (actuarial balance sheet liability) that will not be paid by future normal costs. It is also defined as the portion of the actuarial balance sheet liability allocated to service before the valuation date by the actuarial cost method.
- **Projected Benefit Obligation (PBO)** was previously used for financial reporting purposes under GASB No. 5 (since superseded by GASB 25) and is provided here for comparative purposes only. It represents the present value of benefits based on future payroll projections but only reflecting service credits as of the valuation date. This measure of the funded status of the plan does not directly impact the contribution rate or amortization period. It is not uncommon for the PBO to exceed the actuarial value of assets, since the PBO reflects future assumed salary increases.
- **Present Value of Accrued Benefits (PVAB)** is used only for informational purposes. It does not directly impact the contribution rate or amortization period for the System. This liability represents the present value of benefits earned to date, based on service and salary as of the valuation date. The PVAB can be used as a measure of the funded status of the System since it more closely represents the amount required to pay all accrued benefits if the fund were to liquidate on the measurement date. In a well-funded System, the expectation would be that the assets would be equal to or exceed the PVAB.

Each liability measurement discussed above is used for a different purpose. Therefore, the relative importance of the measurement will depend on the perspective of the person using the information.

From an actuarial viewpoint, the actuarial balance sheet liability and the actuarial accrued liability are the most critical because, along with the actuarial value of assets, they ultimately determine whether the statutory contribution rate for the System is sufficient to fund the current benefit structure, within the parameters set out in IPERS' funding policy. The other liability figures are valuable because they provide useful comparisons of assets and liabilities.

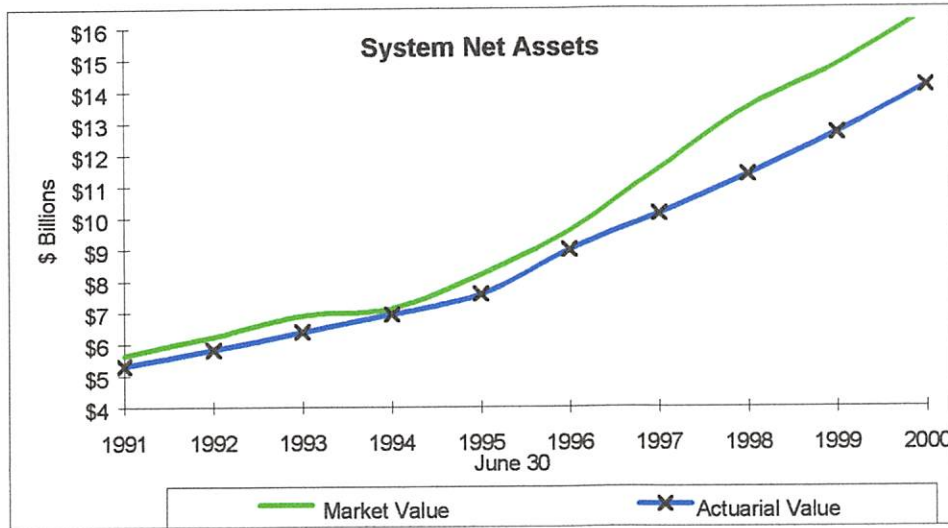
The System liabilities (in millions) as of June 30, 2000 and June 30, 1999 are summarized below. The change in the plan provisions and the transfer of part of the favorable experience to the FED limits the direct comparison of these numbers.

	June 30	
	<u>2000</u>	<u>1999</u>
Actuarial Balance Sheet Liability (PVFB)	\$17,948	\$16,316
Actuarial Accrued Liability	14,472	13,054
PBO	12,993	11,733
Present Value of Accrued Benefits (PVAB)	11,142	9,935

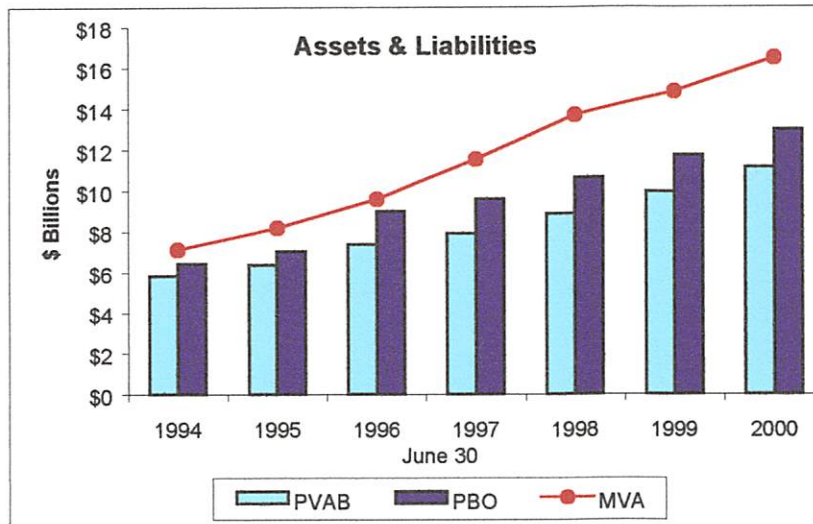
Section I Executive Summary

Comparison of Major Valuation Results

The major findings of the 2000 valuation compared with prior valuation results are summarized and compared on the following pages.



The market value of assets exceeds the actuarial value due to investment performance in excess of the actuarial assumption.

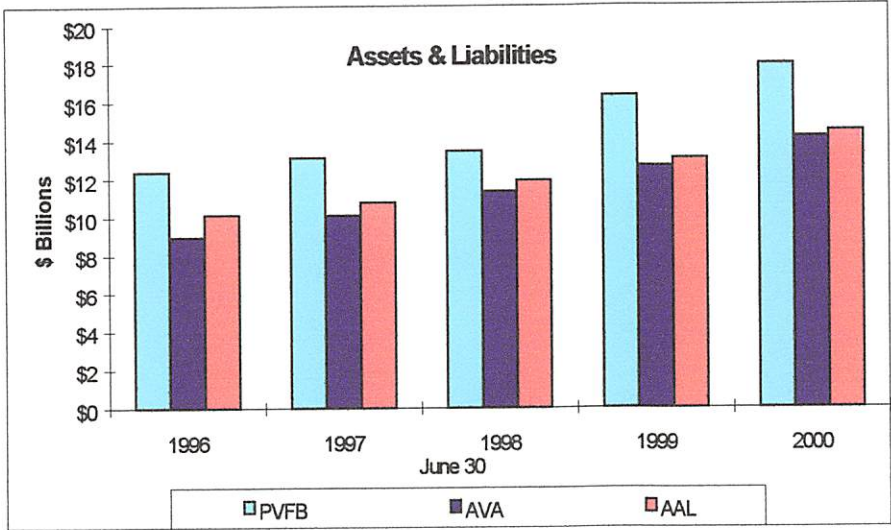


System liabilities have increased each year, which is to be expected as additional service is earned.

The difference between the market value of assets and the PVAB and PBO has grown in the past 6 years, largely due to favorable investment experience.

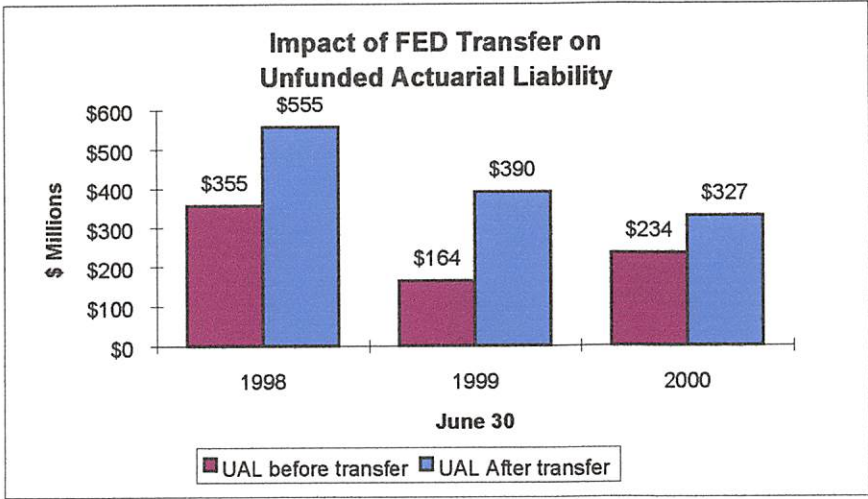
PVAB = Present Value of Accrued Benefits
PBO = Projected Benefit Obligation
MVA = Market Value of Assets

**Section I
Executive Summary**



Historical information for the AAL before 1996 is not appropriate to disclose since the aggregate cost method (which does not develop an actuarial accrued liability) was used in those years.

PVFB = Present Value of Future Benefits (Actuarial Balance Sheet Liabilities)
 AAL = Actuarial Accrued Liability
 AVA = Actuarial Value of Assets



The law provides for a portion of the favorable experience to be used to fund the FED Reserve. The amount transferred is dependent upon the funded status of IPERS. The FED transfer results in an increase in the unfunded actuarial liability.

Section I
Executive Summary

SUMMARY

IPERS continues to be funded on an actuarially sound basis. Based on the current benefit structure, the unfunded actuarial accrued liability will be amortized in 21 years, if all actuarial assumptions are met. This 21 year period is determined assuming a 7.5% return on the actuarial value of assets rather than a 7.5% return on the market value of assets.

The funded ratio (the actuarial value of assets divided by the actuarial liability) for the System increased slightly from 97.0% in 1999 to 97.7% in 2000, despite the enactment of several benefit enhancements and a transfer of assets to the FED reserve. The normal cost also increased to 8.95% as a result of the benefit changes. As a result, the contribution available to pay off the unfunded actuarial liability is 0.50% (9.45% - 8.95%). Although the System has a relatively small unfunded actuarial liability (UAL), the amount of contributions available to pay it off is very small. Therefore, the amortization period is 21 years. It is to be expected that small changes in the UAL may cause dramatic changes in the amortization period.

The net result of all changes (experience, FED transfer, and benefit enhancements) was a decrease in the unfunded actuarial liability (UAL) from \$390 million to \$327 million. The funded percentage, measured as the ratio of actuarial value of assets to actuarial accrued liability, is 97.7%, indicating a strong funded status.

Based on the valuation results, IPERS is well funded, both in the present and for the long term, and compares favorably with other major public retirement systems. In concluding this executive summary, on the following page we present comparative statistics and actuarial information on both the June 30, 2000 and June 30, 1999 valuations.

**Section I
Executive Summary**

**IOWA PUBLIC EMPLOYEES' RETIREMENT SYSTEM
PRINCIPAL RESULTS**

	June 30, 2000*	June 30, 1999*	% Chg
SYSTEM MEMBERSHIP			
1. Active Membership			
- Number of Participants	153,039	152,440	0.4
- Projected Payroll for Fiscal Year	4,443M	4,165M	6.7
- Average Salary	29,032	27,322	6.3
2. Inactive Membership			
- Number Not in Pay Status	93,122	94,853	-1.8
- Number of Retirees/Beneficiaries	65,712	63,396	3.7
- Average Annual Benefit	7,830	7,309	7.1
ASSETS AND LIABILITIES			
1. Net Assets (after FED transfer)			
- Market Value	\$16,474M	\$14,814M	11.2
- Actuarial Value	14,145M	12,664M	11.7
2. Projected Liabilities			
- Retired Members	4,906M	4,415M	11.1
- Inactive Members	369M	342M	7.9
- Active Members	12,673M	11,559M	9.6
- Total Liability	17,948M	16,316M	10.0
3. Actuarial Accrued Liability	14,472M	13,054M	10.9
4. Unfunded Actuarial Accrued Liability	327M	390M	-16.2
5. Funded Ratio (Actuarial Value Assets/Actuarial Accrued Liability)	97.74%	97.02%	0.8
SYSTEM CONTRIBUTIONS			
Required Contribution Rate**	9.45%	9.45%	0.0
Years Required to Amortize Unfunded Actuarial Liability	21 years	20 years	

M = (\$)Millions

* These membership figures are based on March 31 data.

** Contribution for certain special groups (3.3% of the membership) are not fixed at 9.45% but are actuarially determined separately each year.

SECTION II
SYSTEM ASSETS

SECTION II

SYSTEM ASSETS

In this section, the values assigned to the assets held by the System are presented. These assets are valued on two different bases: the market value and the actuarial value.

Market Value of Net Assets

For certain accounting statement purposes, System assets are valued at current market rates. These values represent the "snapshot" or "cash-out" value of System assets as of the valuation date. In addition, the market value of assets provides a reference point to compare to various liability calculations.

Actuarial Value of Net Assets

The market value of assets, representing a "cash-out" value of System assets, may not necessarily be the best measure of the System's ongoing ability to meet its obligations.

To arrive at a suitable value for the actuarial valuation, a technique for determining the actuarial value of assets is used which dampens volatility in the market value while still indirectly recognizing market value. The specific technique follows:

- Step 1:** Determine the expected value of plan assets at the current valuation date using the actuarial assumption for investment return and the actual receipts and disbursements of the fund for the previous 12 months.
- Step 2:** Subtract the expected value determined in Step 1 from the total market value of the Fund at the current valuation date.
- Step 3:** Multiply the difference between market and expected values determined in Step 2 by 25%.
- Step 4:** Add the expected value of Step 1 and the product of Step 3 to determine the actuarial value of assets.

Section II System Assets

Information regarding the actuarial and market values of System assets as of June 30, 2000 is presented on the following pages:

<u>Page</u>	<u>Contents</u>
13	Analysis of Net Assets
14	Graph of Asset Allocation
15	Summary of Fund Activity – Market Value
16	Summary of Fund Activity - FED
17	Actuarial Value of Net Assets
18	Historical Comparison (Actuarial and Market)

**Section II
System Assets**

ANALYSIS OF NET ASSETS AT MARKET VALUES

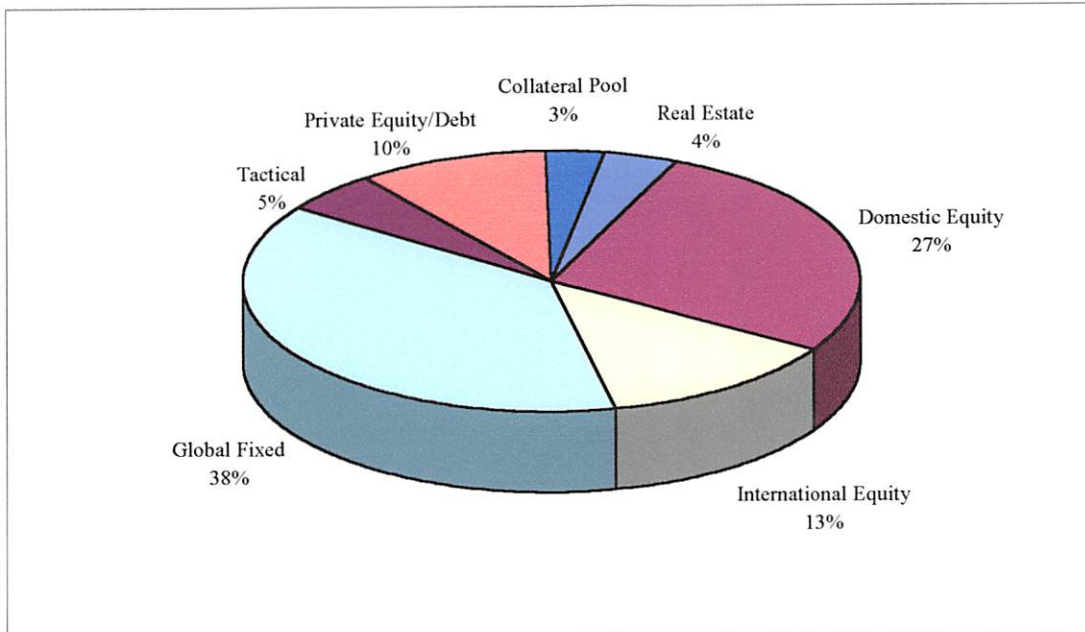
(\$ Millions)

	June 30, 2000		June 30, 1999	
	<u>Amount</u>	<u>% of Total</u>	Amount	<u>% of Total</u>
Cash & Equivalents	\$50	0.3%	\$69	0.5%
Fixed Assets, Receivables and Payables	(1,269)	(7.4)	(1,318)	(8.2)
Domestic Equity	4,914	28.7	5,410	35.3
International Equity	2,443	14.3	1,654	10.8
Global Fixed Income	7,003	40.9	5,914	38.6
Tactical Asset Funds	888	5.2	1,232	8.0
Real Estate Funds	686	4.0	586	3.8
Private Equity/Debt	1,891	11.0	1,181	7.7
Collateral Pool	534	3.1	597	3.9
TOTAL ASSETS	\$17,140	100.0%	\$15,325	100.0%
FED Reserve (Before current year transfer)	558		246	
Net Retirement System Assets	\$16,582		\$15,079	

**Section II
System Assets**

**Allocation of IPERS
Investments**

**As of June 30, 2000
(% Of Market Value by Type)**



Section II System Assets

SUMMARY OF FUND ACTIVITY
 (Market Value)

NET RETIREMENT SYSTEM ASSETS ON JUNE 30, 1999	\$14,814,311,451
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REVENUE

Employer Contributions	253,271,051
Member Contributions	168,847,367
Service Purchase	7,295,195
Investment income	1,955,664,618

Total Revenue	\$2,385,078,231
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DISBURSEMENTS

Benefit payments	514,949,693
Member and employer refunds	65,608,628
Administrative expense	5,865,985
Investment expense	31,008,690

Total Expenses	\$617,432,996
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NET RETIREMENT SYSTEM ASSETS ON JUNE 30, 2000	\$16,581,956,686
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DISTRIBUTION TO FAVORABLE EXPERIENCE DIVIDEND RESERVE	\$108,440,545
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ADJUSTED NET RETIREMENT SYSTEM ASSETS ON JUNE 30, 2000	\$16,473,516,141
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**Section II
System Assets**

SUMMARY OF FUND ACTIVITY
(Favorable Experience Dividend Fund)

FED RESERVE ASSETS ON JUNE 30, 1999	\$246,370,642
REVENUE	
Transfer from Retirement System	264,908,935
Investment income	<u>65,792,449</u>
Total Revenue	\$330,701,384
DISBURSEMENTS	
Benefit payments	<u>18,797,522</u>
Total Expenses	\$18,797,522
FED RESERVE ASSETS ON JUNE 30, 2000	\$558,274,504

**Section II
System Assets**

ACTUARIAL VALUE OF NET ASSETS

1. Actuarial Value of Assets as of June 30, 1999	\$12,664,031,437
2. Actual Receipts/Disbursements	
a. Contributions	429,413,613
b. Benefit Payments	580,558,321
c. Net Change	(151,144,708)
3. Expected Value of Assets as of June 30, 2000 [(1) x 1.075] + [(2c) x (1 + .075/2)]	13,457,021,160
4. Market Value of Assets as of June 30, 2000	16,581,956,686
5. Difference Between Market and Expected Values (4) - (3)	3,124,935,526
6. Actuarial Value of Assets as of June 30, 2000 (3) + [(5) x 25%]	14,238,255,042
7. Adjustment for Transfer to the Favorable Experience Dividend Reserve Account	(93,113,507)
8. Actuarial Value of Assets for June 30, 2000 Actuarial Valuation	\$14,145,141,535

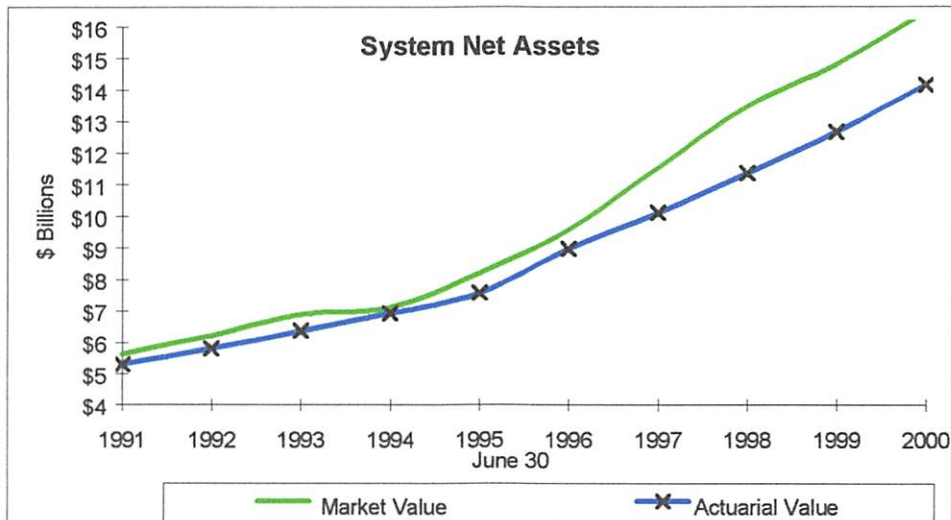
**Section II
System Assets**

HISTORICAL COMPARISON (ACTUARIAL AND MARKET)

<u>Value As of June 30</u>	<u>Actuarial Value of Net Assets</u>	<u>Market Value of Net Assets</u>
1991	5,304,320,455	5,638,657,050
1992	5,805,210,929	6,225,257,155
1993	6,365,169,296	6,899,590,868
1994	6,926,678,212	7,126,124,256
1995	7,574,159,776	8,199,217,051
1996 *	8,975,396,251	9,587,104,982
1997	10,112,976,077	11,533,968,923
1998 **	11,352,674,142	13,463,899,832
1999 **	12,664,031,437	14,814,311,451
2000 **	14,145,141,535	16,473,516,141

*In order to implement the new asset valuation method, the June 30, 1995 actuarial value of assets was revised to the actual market value on that date.

**Reflects reduction for transfers to the Favorable Experience Dividend Reserve Account.



SECTION III
SYSTEM LIABILITIES

SECTION III

SYSTEM LIABILITIES

A fundamental principle in financing the liabilities of a retirement program is that the cost of its benefits should be related to the period in which benefits are earned, rather than to the period of benefit distribution. There are several methods that are used to allocate the cost of benefits to members' working lifetimes. These mathematical techniques are called actuarial cost methods.

The method used for this valuation is referred to as the "entry age normal" actuarial cost method. Under this method, a contribution that is a level percent of pay is determined for each member, which if paid from date of hire to retirement date, will finance all future benefit payments. The level percent of pay which is developed is called the "**normal cost**" rate. The sum of the individual normal cost dollar amounts is divided by covered payroll to determine the normal cost rate for the System.

The actuarial accrued liability is that portion of the total liability or present value of future benefits (PVFB) that will not be paid by future normal costs. The difference between this liability and the actuarial value of assets as of the same date is referred to as the **unfunded actuarial accrued liability (UAAL)**. If contributions exceed the normal cost for the year, after allowing for interest on the previous balance of the UAAL, this liability will be reduced. Benefit improvements, experience gains and losses, and changes in actuarial assumptions or procedures will also have an effect on the total actuarial accrued liability and on the portion of it that is unfunded.

Once the amount of the UAAL has been calculated, the period over which the current statutory contribution rate (less the normal cost rate) will amortize the UAAL is determined.

On the following pages we have summarized, as of June 30, 2000, the actuarial accrued liability. It is important to note that the actuarial accrued liability differs from the present value of accrued benefits (PVAB) and the pension benefit obligation (PBO). The actuarial accrued liability is determined for funding purposes and includes some element of future pay increases and service credits. The PVAB represents the value of the benefits accrued as of the valuation date, assuming each member terminates employment at that time. As a result, there are no projections of future salary increases and service credits in these figures. Finally, the PBO value differs from the PVAB value in that while service accruals are similarly frozen, anticipated future salary increases are reflected.

Section III System Liabilities

The tables in this section present System liabilities as follows:

<u>Page</u>	<u>Contents</u>
21	Development of FED Transfer
22	Unfunded Actuarial Accrued Liability
23	Present Value of Accrued Benefits
24	Pension Benefit Obligation

**Section III
System Liabilities**

**DEVELOPMENT OF AMOUNT TO BE TRANSFERRED TO
THE FAVORABLE EXPERIENCE DIVIDEND RESERVE
as of June 30, 2000**

1. June 30, 1999 Unfunded Accrued Liability	\$ 389,624,316
2. Normal Cost	357,949,053
3. Contributions	429,413,613
4. Increase due to benefit enhancements passed by the Legislature not contingent on valuation results	30,721,926
5. Expected Unfunded Accrued Liability as of June 30, 2000 [(1)+(2)] * 1.075 - [(3) * 1.0375] + (4)	388,846,674
6. Actual Unfunded Accrued Liability as of June 30, 2000	122,808,082
7. (Gain)/loss (6)-(5)	(266,038,592)
8. Portion of gain to transfer to FED	35%
9. Amount of Actuarial Value of Assets to transfer to FED	\$ 93,113,507
10. Market value of FED transfer	\$ 108,440,545

**Section III
System Liabilities**

**UNFUNDED ACTUARIAL ACCRUED LIABILITY
as of June 30, 2000**

1. Present Value of Future Benefits	
a. Liability for Retired Members and Beneficiaries	\$4,906,082,319
b. Inactive Members Liability	368,875,562
c. Active Members Liability	<u>12,672,649,660</u>
d. Total System Liability	17,947,607,541
2. Present Value of Future Normal Costs	3,475,956,784
3. Actuarial Accrued Liability (1) - (2)	14,471,650,757
4. Actuarial Value of Net Assets	14,145,141,535
5. Unfunded Actuarial Accrued Liability (3) - (4)	326,509,222

**Section III
System Liabilities**

PRESENT VALUE OF ACCRUED BENEFITS

The actuarial present value of accrued benefits represents the value of benefits earned as of the valuation date, based on service and salary to date. This is equivalent to assuming each member terminates employment on the valuation date.

Present Value of Accrued Benefits (as of June 30, 2000)

1. Present value of vested accrued benefits for active plan members	\$ 5,829,397,540
Present value of vested benefits being paid to plan retirees and beneficiaries	4,906,082,319
Present value of vested benefits to terminated plan members not yet in pay status (deferred vested)	350,543,027
Accumulated employee account balance of nonvested inactive members	<u>18,332,535</u>
Total present value of vested accrued benefits	\$11,104,355,421
2. Present value of nonvested accrued benefits	37,246,902
3. Total present value of all accrued benefits	\$11,141,602,323

**Section III
System Liabilities**

PENSION BENEFIT OBLIGATION

One measurement commonly used and, in fact required before GASB No. 25, for evaluating the funded status of retirement systems is the "pension benefit obligation" as set forth in GASB Statement No. 5. This value is that portion of the actuarial present value of all projected pension benefits, adjusted for the effects of projected salary increases, estimated to be payable in the future as a result of employee service to date under the projected unit credit actuarial cost method. This measurement is independent of the actuarial funding method used to determine contributions to the System.

The pension benefit obligation as determined for both this year and last year is summarized below:

	June 30, 2000	June 30, 1999
Pension Benefit Obligation		
Retired Members and Beneficiaries	\$ 4,906,082,319	\$ 4,414,919,917
Deferred Vested Members	350,543,027	327,288,222
Nonvested Members	18,332,535	14,282,956
Active Members		
-Accumulated employee contributions with interest	2,382,209,851	2,155,591,553
-Employer-financed vested portion	5,246,536,533	4,741,358,945
-Employer-financed non-vested portion	89,213,512	79,454,133
-Total	7,717,959,896	6,976,404,631
Total System Obligation	12,992,917,777	11,732,895,726
Net Assets Available for Benefits	\$16,473,516,141	\$14,814,311,451
Unfunded Pension Benefit Obligation	(3,480,598,364)	(3,081,415,725)
Funded Percentage	126.79%	126.26%

SECTION IV
SYSTEM CONTRIBUTIONS

SECTION IV

SYSTEM CONTRIBUTIONS

Under the funding method described in Appendix C, the contribution rate consists of two elements: the normal cost rate and the contribution rate to amortize the unfunded actuarial accrued liability as a level percent of payroll. The unfunded actuarial accrued liability represents the difference between the portion of the present value of future benefits allocated to service credited prior to the valuation date by the actuarial cost method and the actuarial value of assets as of that date.

In the following pages, we present information on System contributions as follows:

<u>Page</u>	<u>Contents</u>
26	Actuarial Balance Sheet
27	Analysis of Contribution Rate

Section IV
System Contributions

ACTUARIAL BALANCE SHEET
June 30, 2000

ASSETS

Actuarial value of assets	\$14,145,141,535
Present value of future normal costs	3,475,956,784
Present value of future contributions to amortize unfunded actuarial accrued liability	326,509,222
Total Net Assets	\$17,947,607,541

LIABILITIES

Present Value of Future IPERS Benefits:

<u>Retired Members and Beneficiaries</u>	
Annuity benefits being paid and contingent payments upon death	\$4,906,082,319
<u>Active Members</u>	
Retirement benefits	11,176,512,405
Death benefits	257,857,577
Termination benefits	858,739,651
Disability benefits	379,540,027
<u>Inactive Members</u>	
Retirement allowances & death benefits for vested members	350,543,027
Accumulated employee account balances for nonvested members	18,332,535
Total Liabilities	\$17,947,607,541

Section IV
System Contributions

ANALYSIS OF CONTRIBUTION RATE

The actuarial cost method used to determine the required level of annual contributions by the members and the employers to support the benefits for all service to retirement is the Entry Age Normal Cost Method. Under this method, the total cost is comprised of the normal cost rate and the unfunded actuarial liability payment. The statutory contribution rate is first applied to the normal cost rate. The remaining contribution is used to amortize the unfunded actuarial accrued liability as a level percentage of payroll, which determines the period necessary to amortize the unfunded actuarial liability. According to IPERS funding policy, the amortization period shall never exceed 30 years.

1. Statutory Total Contribution Rate		9.45%
2. (a) Normal Cost	\$ 388,612,494	
(b) Covered Payroll for Members Under Assumed Retirement Age	\$ 4,343,800,389	
(c) Normal Cost Rate (a) / (b)		8.95%
3. Contribution Toward Unfunded Actuarial Accrued Liability (UAAL)		0.50%
4. Expected Payroll for FYE June 30, 2001		\$4,442,680,055
5. Dollar amount of Contribution Toward Unfunded Accrued Liability, Adjusted to Mid-year (3) x (4) / 1.0375		\$ 21,410,506
6. Unfunded Actuarial Accrued Liability at Valuation Date		\$ 326,509,222
7. Amortization Factor (6) / (5)		15.24995
8. Amortization Period Necessary to Finance UAAL as a Level Percent of Payroll at Contribution Rate Shown in (3)		21 years *

* This assumes all actuarial assumptions are met in the future.

SECTION V
ACCOUNTING INFORMATION

SECTION V

PLAN ACCOUNTING INFORMATION

Historically, Government Accounting Standards Board (GASB) Statement No. 5, "Disclosure of Pension Information by Public Employee Retirement Systems and State and Local Government Employers", required the disclosure of the funded status of the Plan on an annual basis using the pension benefit obligation (PBO).

In an effort to enhance the understandability and usefulness of the pension information that is included in the financial reports of pension plans for state and local governments, the Governmental Accounting Standards Board (GASB) issued Statement No. 25 - Financial Reporting for Defined Benefit Pension Plans. This Statement, along with GASB Statement No. 27, supersede GASB Statement No. 5.

GASB Statement No. 25, effective for fiscal years beginning after June 15, 1996, establishes financial reporting standards for defined benefit pension plans. In addition to two required statements regarding plan assets, the statement requires two schedules and accompanying notes disclosing information relative to the funded status of the plan and historical contribution patterns.

- The Schedule of Funding Progress provides information about whether the financial strength of the Plan is improving or deteriorating over time.
- The Schedule of Employer Contributions provides historical information about the annual required contribution (ARC) and the percentage of the ARC that was actually contributed.

<u>Page</u>	<u>Contents</u>
29	Summary of Membership
30	Schedule of Funding Progress
31	Schedule of Employer Contributions

Section V
Plan Accounting Information

SUMMARY OF MEMBERSHIP

	<u>June 30, 2000</u>	<u>June 30, 1999</u>
Active Employees:		
Vested	113,741	112,504
Not yet vested	<u>39,298</u>	<u>39,936</u>
Total active employees *	153,039	152,440
Retirees and beneficiaries currently receiving benefits:	65,712	63,396
Terminated employees entitled to benefits but not yet receiving them:	31,219	34,332

*Excludes retired/reemployed members

Section V
Plan Accounting Information

IOWA PUBLIC EMPLOYEES' RETIREMENT SYSTEM
SCHEDULE OF FUNDING PROGRESS

In accordance with Statement No. 25 of the Governmental Accounting Standards Board

Actuarial Valuation Date	Net Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL)* (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (P/R) (c)	UAAL as a Percentage of Covered P/R [(b-a)/c]
6/30/94	\$ 6,926,678,212	-	-	0.00%	\$ 3,175,877,083	0.00%
6/30/95	7,574,159,776	-	-	0.00%	3,352,992,969	0.00%
6/30/96	8,975,396,251	10,136,356,814	1,160,960,563	88.55%	3,463,455,913	33.52%
6/30/97	10,112,976,077	10,774,216,472	661,240,395	94.12%	3,640,257,177	18.16%
6/30/98	11,352,674,142	11,907,220,417	554,546,275	95.34%	3,908,471,056	14.19%
6/30/99	12,664,031,437	13,053,655,753	389,624,316	97.02%	4,086,572,426	9.53%
6/30/00	14,145,141,535	14,471,650,757	326,509,222	97.74%	4,365,451,325	7.48%

*Prior to 6/30/96, the aggregate cost method was used which does not generate an actuarial accrued liability.

Actuarial Assumptions: See Appendix C

Actuarial cost method: Entry age normal cost method

Amortization method: Open period, level percent of pay

Section V
Plan Accounting Information

IOWA PUBLIC EMPLOYEES' RETIREMENT SYSTEM
SCHEDULE OF EMPLOYER CONTRIBUTIONS

(All dollar amounts in millions)

Fiscal Year Ending	Covered Employee Payroll	Actual Employer Contributions	Actual Employer Contribution %	Required Contribution (ARC) %	Percentage of ARC Contribution
6/30/92	\$2,857.10	\$169.10	5.92 %	5.13 %	115.40 %
6/30/93	3,019.40	176.40	5.84	5.27	110.75
6/30/94	3,175.90	183.50	5.78	4.97	116.37
6/30/95	3,353.00	196.70	5.87	4.75	123.50
6/30/96	3,463.50	204.90	5.92	5.11	115.85
6/30/97	3,640.30	215.00	5.91	5.91	100.00
6/30/98	3,908.50	227.80	5.83	5.83	100.00
6/30/99	4,086.57	246.23	6.03	6.03	100.00
6/30/00	4,365.45	253.27	5.80	5.80	100.00

APPENDIX A

**SUMMARY STATISTICS ON
SYSTEM MEMBERSHIP**

APPENDIX A

SUMMARY STATISTICS ON SYSTEM MEMBERSHIP

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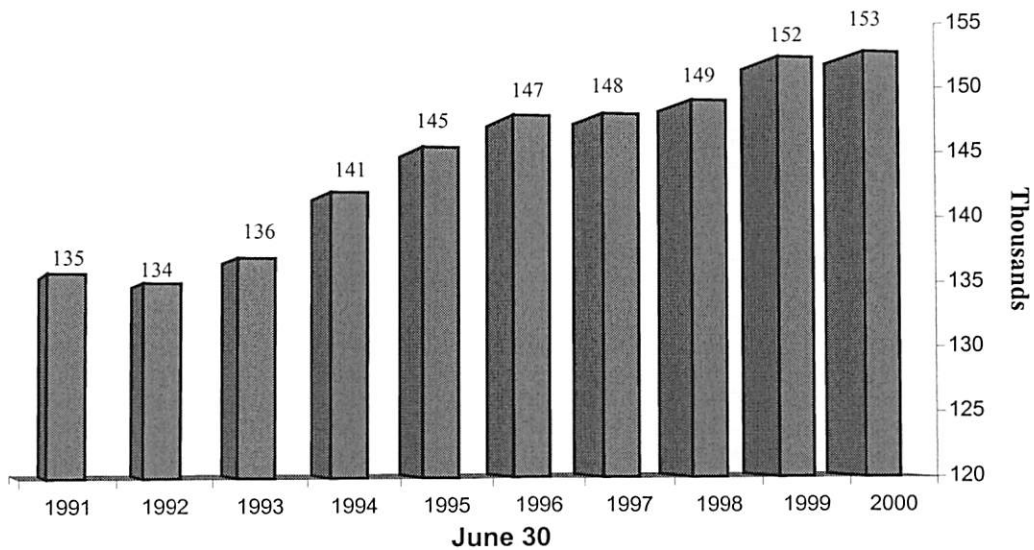
Appendix A
Summary Statistics on System Membership

SUMMARY OF ACTIVE MEMBERSHIP DATA

The data we received for the June 30, 2000 valuation contained information as of March 31, 2000 for anyone that had not been paid out as of early October. (Initially, new retirees during the June to September period were missing, but we were provided with reconstructed data records for this group.) In order to produce results comparable to valuations in which the data is prepared in early June, we received additional information regarding those who had been paid out, whether as a refund, a death benefit, or an actuarial equivalent of a small benefit. These payouts were added back in to the liabilities for inactive vested and nonvested members.

	6/30/2000	6/30/1999	Change	Percent Change
Total Employees	153,039	152,440	599	0.4
Projected Covered Payroll* (millions)	\$4,443	\$4,165	\$278	6.7
Average Age	44.8	44.8	0.0	0.0
Average Entry Age	33.2	33.4	-0.2	-0.6
Average Earnings*	\$29,032	\$27,322	\$1,710	6.3
Retired Re-employed	5,050	4,853	197	4.1

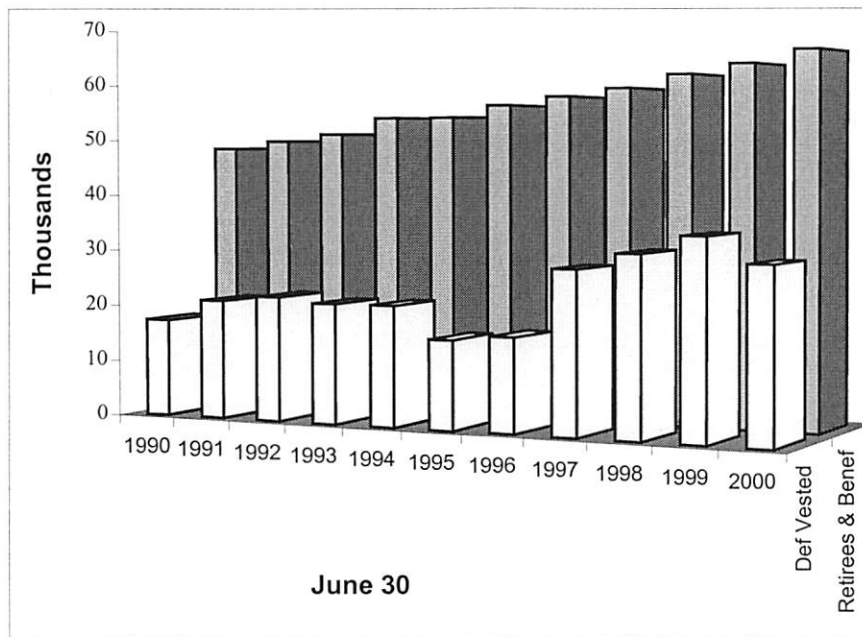
*Payroll figures as of June 30 are actual amounts paid during the first quarter of the calendar year, increased by an assumed salary increase factor for a quarter of a year, annualized and projected for the fiscal year



Appendix A
Summary Statistics on System Membership

SUMMARY OF INACTIVE MEMBERSHIP DATA

	6/30/00	6/30/99	Change	% Change
Retirees and Beneficiaries	65,712	63,396	2,316	3.7%
Deferred Vested Members	31,219	34,332	-3,113	-9.1%



Appendix A
Summary Statistics on System Membership

AGE AND SERVICE DISTRIBUTION AS OF JUNE 30, 2000 FOR ACTIVE PARTICIPANTS
Males and Females

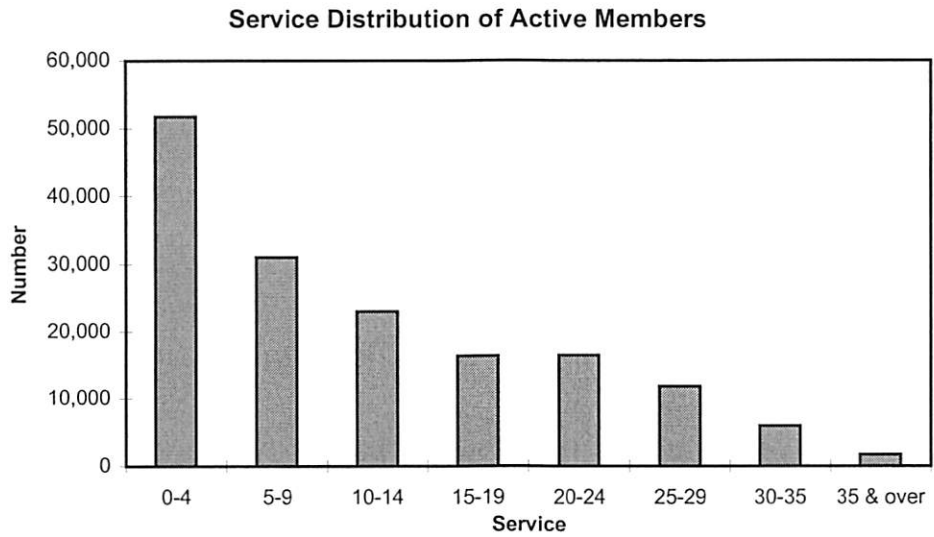
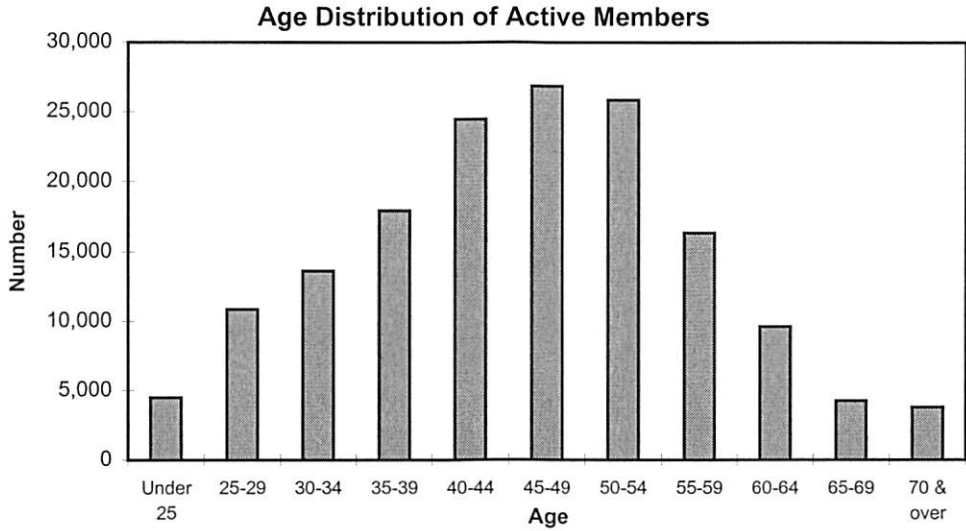
Age	<u>Under 1</u>		<u>1 to 4</u>		<u>5 to 9</u>		<u>10 to 14</u>		<u>15 to 19</u>		<u>20 to 24</u>		<u>25 to 29</u>		<u>30 to 34</u>		<u>35 to 39</u>		<u>40 and over</u>		<u>Total</u>	
	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary
Under 25	12	7,596	4,391	15,629	76	18,904	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	4,479	15,663.
25-29	5	15,955	8,410	22,376	2,395	27,307	32	28,561	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	10,842	23,480
30-34	4	12,188	6,489	20,970	5,381	29,518	1,712	32,718	31	26,352	0	NA	0	NA	0	NA	0	NA	0	NA	13,617	25,834
35-39	8	17,941	6,856	18,752	4,487	26,229	4,373	34,017	1,991	34,893	203	31,751	0	NA	0	NA	0	NA	0	NA	17,918	26,290
40-44	5	11,874	7,619	17,453	5,284	23,662	4,221	31,497	3,983	37,585	3,156	36,631	198	33,671	0	NA	0	NA	0	NA	24,466	27,098
45-49	5	6,501	5,287	19,031	4,912	23,495	4,634	29,398	3,509	34,736	5,292	40,033	3,102	40,855	107	36,317	0	NA	0	NA	26,848	30,418
50-54	1	21,148	3,620	19,432	3,612	23,206	4,066	28,970	3,395	33,118	3,780	37,008	4,973	43,643	2,356	43,721	61	34,585	0	NA	25,864	32,727
55-59	9	9,678	2,272	17,596	1,999	20,992	2,206	26,931	2,039	30,221	2,457	32,390	2,134	39,564	2,555	46,024	672	45,593	38	39,902	16,381	31,550
60-64	6	6,198	2,140	16,705	1,240	16,766	1,172	24,005	1,100	27,664	1,242	28,199	1,122	33,029	808	41,589	576	47,937	219	46,311	9,625	26,865
65-69	40	9,692	1,881	12,622	799	10,991	455	18,441	289	21,664	282	23,197	213	26,974	138	34,096	63	42,161	93	44,399	4,253	16,774
70 & over	452	4,118	2,284	9,332	863	9,351	105	14,083	29	21,322	26	16,552	11	17,607	14	36,623	5	25,879	7	77,143	3,796	9,260
Totals	547	5,209	51,249	18,462	31,048	24,067	22,976	30,034	16,366	33,805	16,438	36,219	11,753	40,659	5,978	44,046	1,377	45,857	357	45,735	158,089	27,551

Appendix A
Summary Statistics on System Membership

AGE AND SERVICE DISTRIBUTION AS OF JUNE 30, 2000 FOR ACTIVE PARTICIPANTS
Males and Females

Age	<i>Years of Service</i>																						Total	
	<u>Under 1</u>		<u>1 to 4</u>		<u>5 to 9</u>		<u>10 to 14</u>		<u>15 to 19</u>		<u>20 to 24</u>		<u>25 to 29</u>		<u>30 to 34</u>		<u>35 to 39</u>		<u>40 and over</u>					
	No.	Avg. EE Bal.	No.	Avg. EE Bal.	No.	Avg. EE Bal.	No.	Avg. EE Bal.	No.	Avg. EE Bal.	No.	Avg. EE Bal.	No.	Avg. EE Bal.	No.	Avg. EE Bal.	No.	Avg. EE Bal.	No.	Avg. EE Bal.	No.	Avg. EE Bal.		
Under 25	12	69	4,391	630	76	2,979	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	4,479	668
25-29	5	185	8,410	1,589	2,395	5,305	32	9,582	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	10,842	2,433
30-34	4	111	6,489	1,495	5,381	7,091	1,712	13,385	31	15,971	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	13,617	5,234
35-39	8	163	6,856	1,308	4,487	6,238	4,373	15,180	1,991	21,891	203	26,208	0	NA	0	NA	0	NA	0	NA	0	NA	17,918	8,497
40-44	5	102	7,619	1,184	5,284	5,377	4,221	13,726	3,983	24,187	3,156	31,495	198	35,105	0	NA	0	NA	0	NA	0	NA	24,466	12,182
45-49	5	50	5,287	1,352	4,912	5,404	4,634	12,465	3,509	22,278	5,292	35,139	3,102	43,434	107	45,137	0	NA	0	NA	0	NA	26,848	18,443
50-54	1	195	3,620	1,395	3,612	5,467	4,066	12,373	3,395	21,001	3,780	32,640	4,973	48,014	2,356	55,952	61	52,814	0	NA	0	NA	25,864	24,884
55-59	9	49	2,272	1,118	1,999	4,903	2,206	11,720	2,039	19,537	2,457	28,055	2,134	43,279	2,555	59,736	672	65,867	38	63,782	16,381	26,777		
60-64	6	11	2,140	697	1,240	3,909	1,172	10,526	1,100	18,182	1,242	25,282	1,122	36,200	808	52,985	576	68,508	219	73,755	9,625	21,727		
65-69	40	105	1,881	442	799	2,588	455	8,483	289	13,992	282	20,606	213	28,527	138	41,203	63	57,580	93	70,081	4,253	9,059		
70 & over	452	592	2,284	534	863	2,154	105	6,556	29	13,674	26	13,869	11	19,894	14	30,007	5	51,294	7	85,397	3,796	1,655		
Totals	547	506	51,249	1,212	31,048	5,551	22,976	12,985	16,366	21,640	16,438	31,668	11,753	44,221	5,978	56,573	1,377	65,961	357	71,964	158,089	15,070		

Appendix A
Summary Statistics on System Membership



Appendix A
Summary Statistics on System Membership

AGE AND SERVICE DISTRIBUTION AS OF JUNE 30, 2000 FOR DEFERRED VESTED PARTICIPANTS

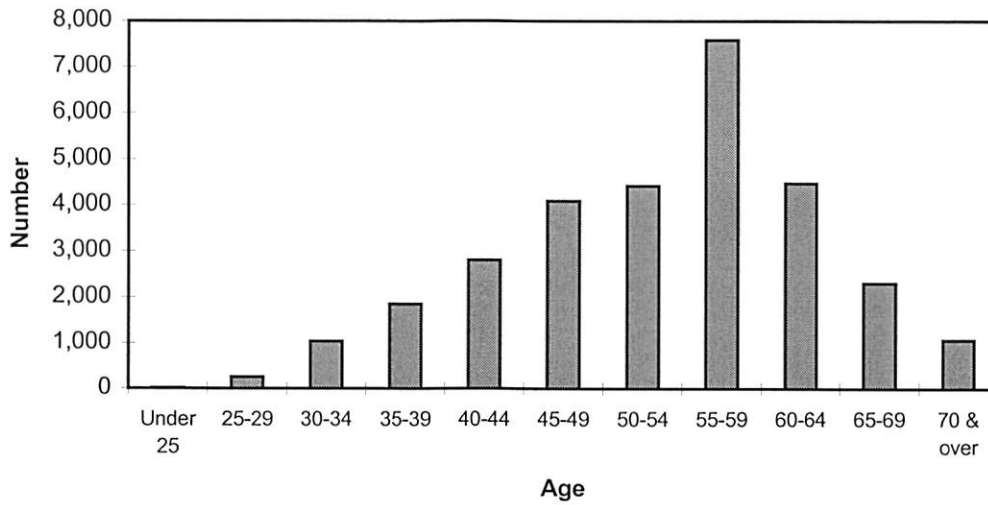
Males and Females

Age	<i>Years of Service</i>																				<i>Total</i>			
	<u>Under 1</u>		<u>1 to 4</u>		<u>5 to 9</u>		<u>10 to 14</u>		<u>15 to 19</u>		<u>20 to 24</u>		<u>25 to 29</u>		<u>30 to 34</u>		<u>35 to 39</u>		<u>40 and over</u>		No.	Avg.		
	No.	Avg. EE Bal.	No.	Avg. EE Bal.	No.	Avg. EE Bal.	No.	Avg. EE Bal.	No.	Avg. EE Bal.	No.	Avg. EE Bal.	No.	Avg. EE Bal.	No.	Avg. EE Bal.	No.	Avg. EE Bal.	No.	EE Bal.	EE Bal.			
Under 25	1	2,237	10	1,798	7	2,588	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	18	2,130
25-29	0	NA	89	3,109	168	4,040	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	257	3,718
30-34	0	NA	196	3,367	793	5,802	45	11,128	4	4,348	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	1,038	5,568
35-39	0	NA	197	3,413	1,220	6,289	369	13,623	57	19,375	5	16,544	0	NA	0	NA	0	NA	0	NA	0	NA	1,848	7,878
40-44	0	NA	254	3,196	1,523	6,356	697	13,992	278	22,340	60	27,663	0	NA	0	NA	0	NA	0	NA	0	NA	2,812	9,998
45-49	0	NA	317	3,639	1,915	6,818	1,030	14,917	555	23,542	238	32,884	35	44,683	0	NA	0	NA	0	NA	0	NA	4,090	12,722
50-54	0	NA	278	3,484	1,861	7,105	1,049	15,202	654	25,311	376	35,220	177	46,491	24	54,583	1	51,975	0	NA	0	NA	4,420	15,730
55-59	1,671	30	3,516	481	1,132	6,676	657	14,594	332	23,617	176	33,475	74	47,314	32	56,267	2	53,422	0	NA	0	NA	7,592	5,009
60-64	1,039	50	2,283	453	605	5,764	292	13,730	152	22,277	72	32,645	24	43,066	6	50,318	3	77,820	0	NA	0	NA	4,476	3,550
65-69	713	40	1,320	413	186	4,023	55	11,578	20	19,858	15	27,247	2	44,237	1	30,687	1	27,855	0	NA	0	NA	2,313	1,259
70 & over	379	80	570	346	70	3,021	32	4,887	9	3,934	6	20,082	0	NA	0	NA	0	NA	0	NA	0	NA	1,066	705
Totals	3,803	43	9,030	889	9,480	6,428	4,226	14,430	2,061	23,586	948	33,315	312	46,205	63	54,653	7	60,019	0	NA	0	NA	29,930	7,638

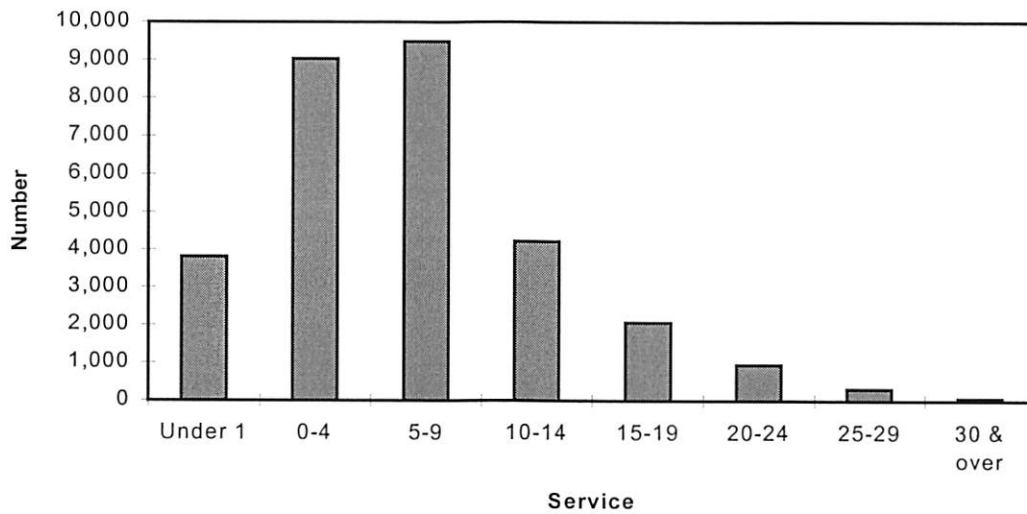
Count excludes members who took a refund or AE payment from April to October, 2000 and who were not included in individual records provided to the Actuary.

Appendix A
Summary Statistics on System Membership

Age Distribution of Deferred Vested Members



Service Distribution of Deferred Vested Members



Appendix A
Summary Statistics on System Membership

ANALYSIS OF RETIREES AND BENEFICIARIES

Males and Females

Number of Participants

<u>Age</u>	<u>Chapt 97</u>	<u>Option 1</u>	<u>Option 2</u>	<u>Option 3</u>	<u>Option 4</u>	<u>Contingent Beneficiary</u>	<u>Option 5</u>	<u>Per Cert Beneficiary</u>	<u>Total</u>
Under 40	0	12	2	2	4	7	0	2	29
40 to 44	0	30	6	4	11	11	6	3	71
45 to 49	0	48	8	13	29	18	8	2	126
50 to 54	0	99	24	21	73	49	17	15	298
55 to 59	0	872	446	356	566	68	446	17	2,771
60 to 64	0	2,517	1,553	974	1,789	160	1,285	40	8,318
65 to 69	0	4,151	2,609	1,272	2,678	289	1,662	63	12,724
70 to 74	0	4,655	3,373	1,252	2,195	413	1,497	48	13,433
75 to 79	1	4,582	2,526	1,081	1,486	461	1,464	40	11,641
80 to 84	4	4,014	1,063	694	681	295	1,586	23	8,360
85 to 89	9	2,755	396	427	181	153	1,013	10	4,944
90 to 94	15	1,396	108	267	52	75	372	0	2,285
95 to 99	9	362	59	110	13	20	40	1	614
100 & over	8	28	33	18	0	10	1	0	98
Totals	46	25,521	12,206	6,491	9,758	2,029	9,397	264	65,712

Appendix A
Summary Statistics on System Membership

ANALYSIS OF RETIREES AND BENEFICIARIES

Males and Females

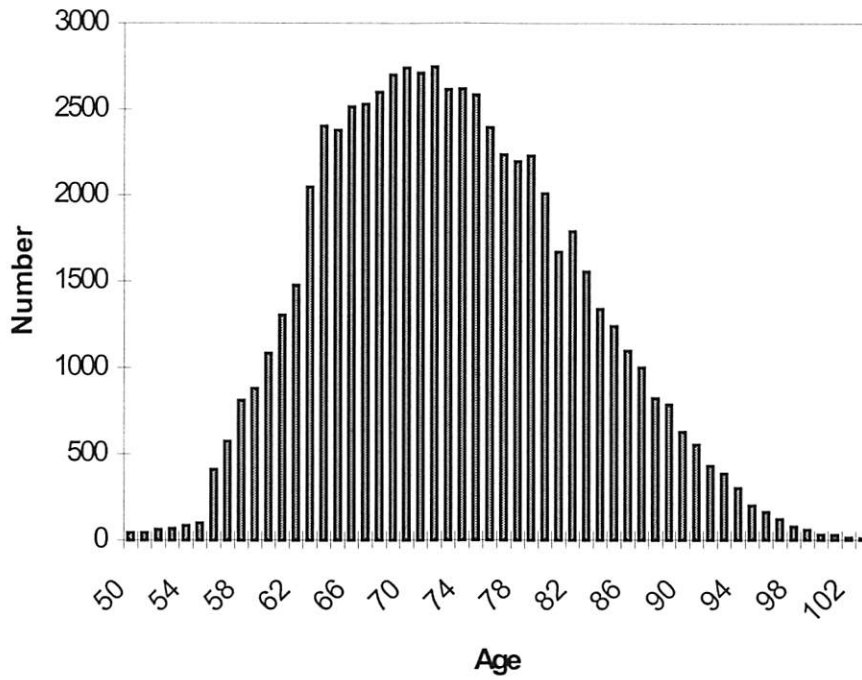
Average Annual Benefits of Participants *

<u>Age</u>	<u>Chapt 97</u>	<u>Option 1</u>	<u>Option 2</u>	<u>Option 3</u>	<u>Option 4</u>	<u>Contingent Beneficiary</u>	<u>Option 5</u>	<u>Per Cert Beneficiary</u>
Under 40	0	5,232	3,057	2,235	3,469	3,830	0	2,724
40 to 44	0	5,687	3,058	8,015	7,086	5,575	5,702	3,298
45 to 49	0	6,862	9,662	7,229	8,217	5,121	8,624	6,951
50 to 54	0	7,292	9,170	9,137	8,717	9,076	9,122	5,435
55 to 59	0	10,211	11,572	13,474	15,759	10,308	14,446	10,229
60 to 64	0	10,804	12,192	12,328	16,504	8,858	14,060	5,853
65 to 69	0	8,535	9,615	8,674	13,193	8,036	10,110	6,056
70 to 74	0	6,181	7,083	5,963	8,831	6,396	6,107	5,148
75 to 79	1,290	4,843	5,694	4,625	6,565	4,759	4,577	6,648
80 to 84	1,272	4,215	4,986	4,108	5,419	4,082	4,100	5,604
85 to 89	1,227	3,524	3,945	3,316	4,201	2,915	3,455	7,598
90 to 94	1,346	3,387	3,495	3,818	3,937	2,845	3,439	0
95 to 99	1,826	3,506	4,182	4,342	4,478	2,746	3,978	347
100 & over	1,310	3,474	4,136	4,545	0	3,035	499	0
Totals	1,403	6,132	7,816	7,159	11,129	5,840	7,328	6,131

* Averages based on data reported by the System as of June 30, 2000 and exclude dividend payments.

Appendix A
Summary Statistics on System Membership

Age Distribution of Retirees & Beneficiaries



APPENDIX B
SUMMARY OF PLAN PROVISIONS

Appendix B
Summary of Plan Provisions

**IOWA PUBLIC EMPLOYEES'
RETIREMENT SYSTEM**

Chapter 97B of the Iowa code sets out the IPERS provisions, which are briefly summarized as follows:

Participation: In general, the System covers people in non-federal public employment within the State of Iowa. Exceptions to this are set out in the law. A notable exception are those covered by another public system in Iowa (such as judges, state patrol, and policemen and firemen in cities having civil service), employees of the Regents' institutions, and employees of the community colleges who elect alternative coverage under TIAA. Membership is mandatory if a person is in covered employment.

Final Average Salary: The average of covered salaries for the highest paid three years of the member's service.

Provided however, for retirements between 1997 and 2002 (for certain retirees), the following provisions apply:

If 3 Year Average Wage <u>Exceeds</u>	<u>Date of Retirement</u>	<u>Final Average Salary</u>
\$48,000	1997	Average of four highest years, or \$48,000 if greater
\$52,000	1998	Average of five highest years, or \$52,000 if greater
\$55,000	1999	Average of six highest years, or \$55,000 if greater
\$65,000	2000	Average of six highest years, or \$65,000 if greater
\$75,000	2001	Average of six highest years, or \$75,000 if greater

Effective January 1, 1997, the covered wage ceiling is lifted. It continues to apply to salary for all years prior to 1997.

Appendix B Summary of Plan Provisions

Age and Service Requirements for Benefits:

Normal Retirement	Earliest of the first day of the month of the member's 65th birthday, age 62 with 20 years of service or Rule of 88 (age plus service equals/exceeds 88), with a minimum age 55. Age 55 for sheriffs, deputies and protection occupation members.
Early Retirement	First day of any month starting with the month of the member's 55th birthday but preceding the normal retirement date.
Late Retirement	After normal retirement date.
Deferred Vested Benefit	Before age 55 with at least four years of service.
Death Benefit	Upon death of a member before benefits have started.

Retirement Benefits:

Normal Retirement	<p>An annual annuity equal to 2% of Final Average Salary (FAS) for each year of service up to 30 years plus 1% of FAS for each of the next 5 years of service. Maximum years of service recognized for benefit accrual purposes is 35.</p> <p>Members who are sheriffs or deputies receive 60% of FAS after completion of 22 years of service, plus an additional 1.5% of FAS for years of service greater than 22 but not more than 30. Members of the protection occupation groups receive 60% of FAS after completion of 24 years of service (grading down to 22 years over the next two years) plus an additional 1% (1.5% beginning in three years) of FAS for each additional year up to a total of 30.</p>
Early Retirement	An annuity, payable at the normal retirement date, determined in the same manner as for normal retirement. A reduction of .25% per month is applied for each month the benefit commences prior to normal retirement age.

Appendix B Summary of Plan Provisions

Late Retirement	An annuity, payable after covered employment ends, determined as for normal retirement.
Form of Annuity:	The base form, or normal form, is a life annuity with a guaranteed return of employee contributions. Optional forms include a straight life annuity, a ten year certain and life thereafter annuity, and joint and survivor annuities (with 25%, 50% or 100% to the surviving joint annuitant).
Termination Benefits:	
Before age 55, with less than four years of service	A refund of the members contributions under the plan with interest.
Before age 55 with four or more years of service	At the member's election either (1) a refund of the employee's contributions under the plan with interest plus a portion (years of service divided by 30) of the employer's contributions with interest, or (2) a deferred retirement income determined as for normal retirement. Payments can begin with normal or early retirement.
NOTE:	A person eligible for, and receiving, federal social security disability may begin IPERS benefits, unreduced, at any age.
Post-retirement Benefit Increases:	Annual dividends are paid to those retired prior to July 1990. Effective with the November 2000 dividend payment, the dividend will be adjusted by the least of the following percentages: (1) the change in the CPI, (2) percentage certified to by the actuary as affordable by the System, and (3) 3%.

Appendix B Summary of Plan Provisions

Death Benefits:	<p>A lump sum equal to the greater of 1) the member's contributions with interest, plus 1/30 of the member's salary times years of membership service (up to 30) and 2) the present value of the member's accrued benefit. The beneficiary may optionally elect to receive an actuarially equivalent lifetime annuity.</p> <p>Protection occupation members killed in the line of duty are entitled to an additional lump sum payment of \$100,000.</p>	
Disability Benefits:	<p>An annuity, payable immediately, equal to the Normal Retirement Benefit.</p> <p>For protection occupation members, the benefit is the greater of the Normal Retirement Benefit and either 50% (for ordinary disability) or 60% (for in-service disability) of Final Average Earnings.</p>	
Source of Funds:		
General Membership:	Member Contributions	3.7% of covered pay.
	Employer Contributions	5.75% of covered pay.
Sheriffs and Deputies:	Member Contributions*	Not yet determined.
	Employer Contributions*	Not yet determined.
Protection Occupation:	Member Contributions*	Not yet determined.
	Employer Contributions*	Not yet determined.

*Actuarial contribution rates which are determined every year.

APPENDIX C

ACTUARIAL METHOD AND ASSUMPTIONS

Appendix C Actuarial Method and Assumptions

Sound financing of any retirement system requires that benefits accruing to its members shall be paid for during their active working lifetime so that when a member (or his beneficiary) becomes entitled to a benefit, the monies necessary to provide such benefit shall be on hand. In this way, the cost of benefits for present active members will not become a liability to future taxpayers.

The principal purpose of an actuarial valuation is to calculate, on the basis of certain assumptions, the present value of benefits that are payable in the future from the system to present members (and their beneficiaries) and the present value of future contributions to be made by the members and their employers. Having calculated such present values, the level of annual contribution to the system required to fund (or pay for) the benefits, in accordance with the above stated principle of sound financing, may be determined.

The assumptions and methods used in the actuarial valuation and the resulting liabilities are presented in this Section II.

PART A - VALUATION ASSUMPTIONS

Retirement System contribution requirements and actuarial present values are calculated by applying experience assumptions to the benefit provisions and census (member) information of the Retirement System, using the actuarial cost method.

The principal areas of risk which require experience assumptions about future activities of the Retirement System are:

- long-term rates of investment return to be generated by the assets of the system
- patterns of pay increases to members
- rates of mortality among members, retirants and beneficiaries
- rates of withdrawal of active members
- rates of disability among active members
- the age patterns of actual retirements

In making a valuation, the monetary effect of each assumption is calculated for as long as a present member survives -- a period of time which can be as long as a century.

Actual experience of the Retirement System will not coincide exactly with assumed experience. Each valuation provides a complete recalculation of assumed future experience and takes into account all past differences between assumed and actual experiences. The result is a continual series of adjustments (usually small) to the computed contribution rate, or alternatively to the amortization period for the unfunded actuarial accrued liability.

Appendix C
Actuarial Method and Assumptions

From time to time, one or more of the assumptions are modified to reflect experience trends (but not random or temporary year to year fluctuations). A complete review of the actuarial assumptions was completed in 1999, based on experience from 1993-98.

Rate of Investment Return

7.50% per annum, compounded annually, net of expenses.

Rates of Mortality

Active and Inactive Members

Males:	GAM 94 Male, set forward one year
Females:	95% of GAM 94 Female, set back 1 year
Disabled Members:	Annual rates are the greater of 3% and 2.5% plus the corresponding non-disabled rate (no set forward or set back applied)
Beneficiaries:	Same as members

Rates of Disablement

<u>Age</u>	<u>Annual Rate Per 1,000 Members</u>	
	<u>Males</u>	<u>Females</u>
27	0.2%	0.2%
32	0.2%	0.2%
37	0.4%	0.3%
42	0.7%	0.5%
47	1.4%	0.9%
52	3.3%	2.2%
57	6.3%	3.9%
62	9.0%	6.2%

Appendix C
Actuarial Method and Assumptions

Rates of Termination of Employment

		Annual Rate of Withdrawals Per 1,000 Members					
Males:							
<u>Age</u>	<u>Years 0-1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Years 4-6</u>	<u>Years 7-8</u>	<u>Years 9+</u>	
22	330.0	275.0	220.0	99.0	88.0	66.0	
27	231.0	165.0	121.0	99.0	88.0	66.0	
32	198.0	165.0	110.0	74.8	55.0	39.0	
37	195.8	159.5	110.0	74.8	49.5	33.0	
42	195.8	143.0	110.0	74.8	49.5	25.3	
47	195.8	143.0	99.0	74.8	49.5	19.8	
52	176.0	110.0	77.0	74.8	49.5	19.8	
55+	165.0	110.0	55.0	74.8	49.5	19.8	
Females:							
<u>Age</u>	<u>Years 0-1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Years 4-6</u>	<u>Years 7-8</u>	<u>Years 9+</u>	
22	330.0	308.0	220.0	110.0	99.0	55.0	
27	275.0	220.0	169.4	110.0	99.0	55.0	
32	247.5	220.0	154.0	105.5	72.0	49.5	
37	198.0	158.4	143.0	105.5	66.0	36.3	
42	198.0	157.3	121.0	88.0	61.0	30.8	
47	198.0	143.0	121.0	82.5	49.5	25.3	
52	198.0	143.0	121.0	82.5	49.5	25.3	
55+	198.0	143.0	121.0	82.5	49.5	25.3	

Rate of Election of Return of Contributions by Vested Members

<u>Age</u>	Annual Rate Per 1,000 Members	
	<u>Males</u>	<u>Females</u>
25	1,000	1,000
30	900	800
35	800	700
40	600	500
45	300	150
50	150	150
55	0	0

Appendix C
Actuarial Method and Assumptions

Rates of Salary Increase

Annual Rate of Increase Per 1,000 Members (%)

<u>Age</u>	<u>Years 0-1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Years 4-5</u>	<u>Years 6-7</u>	<u>Years 8-10</u>	<u>Years 11-15</u>	<u>Years 16-20</u>	<u>Years 21+</u>
22	18.5	12.5	8.5	8.0	7.5	6.0	5.5	5.0	4.9
27	15.5	10.0	8.3	7.0	6.5	6.0	5.5	5.0	4.9
32	14.8	9.8	8.0	7.0	6.5	6.0	5.5	5.0	4.9
37	14.7	9.8	8.0	7.0	6.3	6.0	5.5	5.0	4.9
42	14.7	9.2	8.0	7.0	6.2	6.0	5.5	4.9	4.9
47	14.2	9.0	8.0	7.0	6.2	5.5	5.2	4.8	4.2
52	13.3	8.3	6.9	7.0	6.2	5.5	5.0	4.5	4.2
57	12.5	7.7	6.9	7.0	5.7	5.5	4.6	4.5	4.2
57	10.9	7.1	6.7	6.0	4.5	4.5	4.5	4.5	4.0

Payroll Growth: 4.0% per year

Retirement Rates

Upon meeting the requirements for early retirement (but not for unreduced benefits), the following rates apply:

<u>Age</u>	<u>Assumed Retirement Rate</u>
55	5%
58	5
60	10
61	15
62	25
63-64	20

Upon reaching the requirements for unreduced retirement, the following rates apply:

<u>Age</u>	<u>Assumed Retirement Rates</u>	
	<u>1st Year Eligible</u>	<u>After 1st Year</u>
55-56	20%	10%
59	20	20
60	25	25
61	35	35
62	50	50
63	35	40
64	35	40
65	30	50
66	20	25
67-68	15	20
70+	100	100

Terminated vested members are assumed to retire at age 62.

Appendix C
Actuarial Method and Assumptions

Age of Spouses for Joint and Survivor Retirees

The male spouse is assumed to be three years older than the female.

Rate of Crediting Interest on Contribution Balances

5.5% per annum, compounded annually

Rate of Inflation

3.5% per annum

Payroll Growth Assumption

4.0% per annum

Appendix C

Actuarial Method and Assumptions

ACTUARIAL COST METHOD

The actuarial cost method is a procedure for allocating the actuarial present value of pension plan benefits and expenses to time periods. The method used for the valuation is known as the entry age normal actuarial cost method. Under this method, a total contribution rate is determined which consists of two parts: (i) the normal cost rate and (ii) the unfunded actuarial accrued liability (UAAL) rate. The entry age normal cost method has the following characteristics:

- (i) The annual normal costs for each individual active member are sufficient to accumulate the value of the member's pension at time of retirement.
- (ii) Each annual normal cost is a constant percentage of the member's year by year projected compensation.

The entry age normal actuarial cost method allocates the actuarial present value of each member's projected benefits on a level basis over the member's compensation between the entry age of the member and the assumed exit ages.

The portion of the actuarial present value allocated to the valuation year is called the normal cost. The portion of the actuarial present value not provided for by the actuarial present value of future normal costs is called the actuarial accrued liability. Deducting the actuarial value of assets from the actuarial accrued liability determines the unfunded actuarial accrued liability (UAAL). The difference between the statutory contribution rate (9.45%) and the normal cost rate is used to finance the UAAL and the number of years necessary to finance the unfunded actuarial accrued liability as a level percent of member payroll is determined.

Appendix C Actuarial Method and Assumptions

DEFINITION OF TERMS

Actuarial Accrued Liability	The difference between the actuarial present value of system benefits and the actuarial value of future normal costs. Also referred to as “accrued liability” or “actuarial liability.”
Actuarial Assumptions	Estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.
Accrued Service	Service credited under the system that was rendered before the date of the actuarial valuation.
Actuarial Equivalent	A single amount or series of amounts of equal actuarial value to another single amount or series of amounts, computed on the basis of appropriate actuarial assumptions.
Actuarial Cost Method	A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of retirement system benefits between future normal cost and actuarial accrued liability. Sometimes referred to as the “actuarial funding method.”
Experience Gain(Loss)	The difference between actual experience and actuarial assumptions anticipated experience during the period between two actuarial valuation dates.
Actuarial Present Value	The amount of funds currently required to provide a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest and by probabilities of payment.

Appendix C Actuarial Method and Assumptions

Amortization	Paying off an interest-discounted amount with periodic payments of interest and principal, as opposed to paying off with lump sum payment.
Normal Cost	The actuarial present value of retirement system benefits allocated to the current year by the actuarial cost method.
Unfunded Actuarial Accrued Liability	<p>The difference between actuarial accrued liability and the valuation assets. Sometimes referred to as “unfunded accrued liability” or “unfunded liability”.</p> <p>Most retirement systems have unfunded actuarial accrued liability. They arise anytime new benefits are added and anytime an actuarial loss is realized.</p> <p>The existence of unfunded actuarial accrued liability is not in itself bad, any more than a mortgage on a house is bad. Unfunded actuarial accrued liability does not represent a debt that is payable today. What is important is the ability to amortize the unfunded actuarial accrued liability and make payments to finance it. Also of importance are trends in the amount or duration of payment.</p>