

**IOWA PUBLIC EMPLOYEES'
RETIREMENT SYSTEM**

**Actuarial Valuation Report
as of June 30, 2001**

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

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November 15, 2001

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
Gregg 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, 2001. An actuarial valuation is prepared annually to determine the remaining amortization period given the current contribution rate, benefit structure, membership and funded status of the System.

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 public safety occupations and their employers contribute at actuarially determined rates, as required by law. Assuming all of the current actuarial assumptions are met in the future, the statutory contribution rate of 9.45% will fund the current benefit structure and amortize the unfunded actuarial liability over 39 years.

In preparing our report we relied, without audit, on information (some oral and some written) supplied by the System's staff. This information includes, but is not limited to, statutory provisions, member data and financial information.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted principles and practices which are consistent with the principles prescribed by the Actuarial Standards Board (ASB) and the Code of Professional Conduct and Qualification Standards for Public Statements of Actuarial Opinion of the American Academy of Actuaries.

We hereby further certify that all costs, liabilities, rates of interest and other factors for the System have been determined on the basis of actuarial assumptions and methods which are internally consistent, individually reasonable (taking into account the experience of the Plan and reasonable expectations of future experience) and which, in combination, offer our best estimate of anticipated experience under the Plan. Nevertheless, the emerging costs will vary from those presented in this report to the extent actual experience differs from that projected by the actuarial assumptions.



Actuarial computations presented in this report are for purposes of evaluating the funding the System and for reporting under accounting standards. Determinations for purposes other than this may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

Respectfully Submitted,

MILLIMAN USA, Inc.

I, Patrice A. Beckham am a member of the American Academy of Actuaries and a Fellow of the Society of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Sincerely,

Patrice A. Beckham, F.S.A.
Principal

I, Brent A. Banister am a member of the American Academy of Actuaries and an Associate of the Society of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Sincerely,

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

SECTION I

EXECUTIVE SUMMARY

Introduction

This report presents the results of the June 30, 2001 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, 2001 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, 2001, and
- to analyze and report on trends in System contributions, assets, and liabilities over the past several years.

The actuarial assumptions and benefit provisions reflected in this report are unchanged from last year's report. However, one significant change occurred with respect to the member data upon which the valuation is based. Due to time constraints, the membership data in prior years was gathered as of March 31 and the salary and service for active members were projected to June 30, the valuation date. Based on detailed discussions last winter of the System's database, employer reporting requirements/timing, and membership processing, it was decided that the data for the June 30 valuation could be improved by using the actual final quarter data, expanding the data provided and capturing the actual status of members on the valuation date rather than on the date the file was created. This change in the approach to gathering the valuation data was first implemented with the 2001 valuation and impacted the demographic experience captured in this valuation as compared to prior years. Its impact is also reflected in the actuarial gain/loss for the year ended June 30, 2001.

There are two Special Service groups within IPERS (whose members are engaged in public safety occupations) for whom the contribution and benefit structure differs from that of the general membership. In the past, there was no separate accounting of the assets attributable to these groups. Beginning in fiscal year 2001, separate accounting was implemented and the valuation for these two special groups was performed on the same basis as the general membership and is included in the valuation report.

The actuarial valuation results provide a "snapshot" view of the System's financial condition on June 30, 2001. The valuation results reflect net unfavorable experience for the past plan year as demonstrated by an unfunded actuarial liability that was higher than expected based on the actuarial assumptions. The unfavorable experience was the net impact of an experience gain on the actuarial value of assets and an experience loss on liabilities, largely due to the change in the dataset used for the valuation.

The experience loss resulted in an increase in amount of the unfunded actuarial liability (UAL). Although in comparison to total liabilities this increase is not large, it does represent a large percentage increase in the UAL. The System's normal cost rate this year is 8.93%, which represents a small and insignificant reduction from the normal cost rate in the 2000 valuation of 8.95%. With the normal cost rate at its current level, only a small part of the total contribution rate is available to fund the UAL. As a result, it is projected that 39 years will be required to fully

amortize the UAL, if all actuarial assumptions are met. This determination is highly leveraged because of the small annual payment amount and significant changes in the years to amortize are not unexpected, especially when the prior amortization period was over 15 years. The determination of the years to amortize that is reflected in this report is based on one possible scenario. Although this is the expected result based on current actuarial assumptions, the actual amortization period will ultimately be determined by the experience of the System in the future.

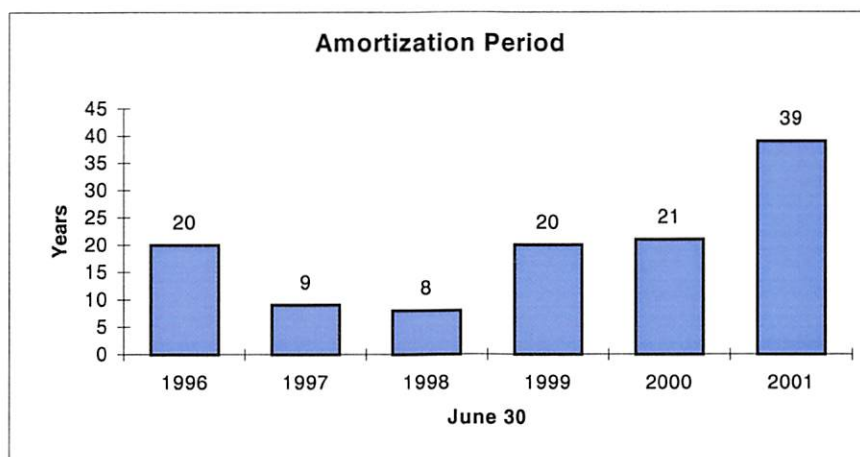
In 1998, legislation was passed to create the Favorable Experience Dividend (FED) reserve. The law provides that a portion of the favorable actuarial experience, if any, in subsequent years may be transferred to the FED reserve. Legislation passed in 2000 capped the FED reserve at ten years of expected payouts at the maximum level. Based on the results of the June 30, 2001 valuation, favorable actuarial experience did not occur for the System and, therefore, there is no transfer to the FED reserve. The current FED reserve is projected to be sufficient to make the maximum potential payment of 3% times years retired for the next 7 years, plus a reduced payment in the eighth year, if all assumptions are met in future years.

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 Special Service groups contribute at an actuarially determined rate). The valuation is performed to determine whether the contribution rate for the general membership will be sufficient to fund the future benefits expected to be paid by the System within the guidelines established in IPERS' funding policy (which defines "fully funded" status as an amortization period no greater than 30 years). The statutory contribution rate is first applied to fund the normal cost rate. The remaining contribution rate is used to amortize the unfunded actuarial liability (UAL) as a level percentage of payroll, which determines the amortization period. As a result, the remaining amortization period varies with each actuarial valuation. The current valuation results indicate that the statutory contribution rate results in an amortization period of 39 years.

Because the normal cost rate for the general membership (8.93%) is so close to the statutory contribution rate of 9.45%, the payment toward the UAL is very small. As a result, even though the System is very well funded, a relatively small change in the UAL may cause a significant change in the years to amortize. Overall unfavorable experience for year end 2001 resulted in an increase in the UAL. This increased the years to amortize (from 21 as of June 30, 2000 to 39 as of June 30, 2001).

The following graph shows the remaining amortization period as reported in prior valuations.



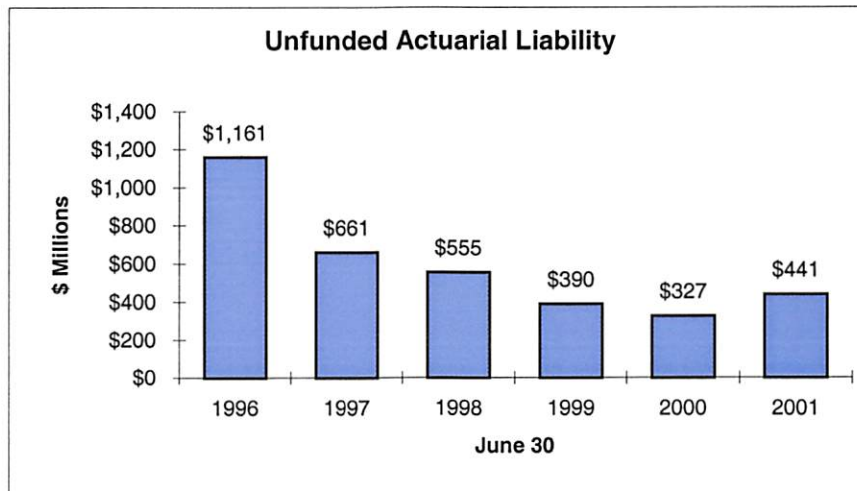
Experience

Numerous factors contributed to the change in the Systems' asset, liabilities and remaining amortization period for the unfunded actuarial liability between June 30, 2000 and June 30, 2001. The components are examined in the following discussion.

Actuarial gains (or losses) result from actual experience that is more (or less) favorable than anticipated based on the actuarial assumptions. These "experience" (or actuarial) gains or losses are reflected in the UAL and are measured as the difference between the expected unfunded actuarial liability and the actual unfunded actuarial liability, taking into account any changes due to assumption or benefit provision changes. Overall, the System experienced a net actuarial loss of \$136 million (see page 22 for a detailed development). The change in the unfunded actuarial liability between June 30, 2000 and 2001 is shown below (in millions):

Unfunded Actuarial Liability, June 30, 2000	\$	327
• Expected change in UAL	-	22
• Investment experience	-	81
• Liability and other experience	+	217
• Benefit enhancements	+	0
• Change in actuarial assumptions	+	0
Unfunded Actuarial Liability before FED transfer, June 30, 2001	\$	441
• FED Transfer	+	0
Unfunded Actuarial Liability after FED transfer, June 30, 2001	\$	441

The following graph summarizes the unfunded actuarial liability for IPERS since 1996.



Assets

As of June 30, 2001, the System had total funds of \$15.4 billion, when measured on a market value basis, excluding the Favorable Experience Dividend (FED) reserve account. This was a decrease of \$1.1 billion from the prior year. The components of this change are shown below:

	Market Value (\$M)
Net Assets, June 30, 2000	\$ 16,474
• Employer and Member Contributions	+ 451
• Benefit Payments and Refunds	- 620
• Administrative Expenses	- 7
• Investment Income (Based on 7.5% assumption)	+ 1,236
• Investment Gain/(Loss)	- 2,176
Net Assets, June 30, 2001 Before FED Transfer	\$ 15,358
• FED Transfer Payable January 15, 2002	- 0
Net Assets, June 30, 2001 After FED Transfer	\$ 15,358

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, 2000 to June 30, 2001 (which also excludes the FED reserve account) is shown below:

	Actuarial Value (\$M)
Actuarial Assets, June 30, 2000	\$ 14,145
• Employer and Member Contributions	+ 451
• Benefit Payments and Refunds	- 620
• Investment Income (Based on 7.5% assumption)	+ 1,055
• Investment Gain/(Loss)	+ 81
Actuarial Assets, June 30, 2001 Before FED Transfer	\$ 15,112
• FED Transfer Payable January 15, 2002	- 0
Actuarial Assets, June 30, 2001 After FED Transfer	\$ 15,112

The dollar-weighted rate of return, net of investment and administrative expenses, measured on the actuarial value of assets was 8.06%. A comparison of asset values on both the market and actuarial basis is shown below:

	June 30		
	<u>2001</u>	<u>2000</u>	<u>1999</u>
Market Value of Assets	15,358	16,474	14,814
Actuarial Value of Assets	15,112	14,145	12,664
Actuarial Value/Market Value	98.4%	85.9%	85.5%

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.

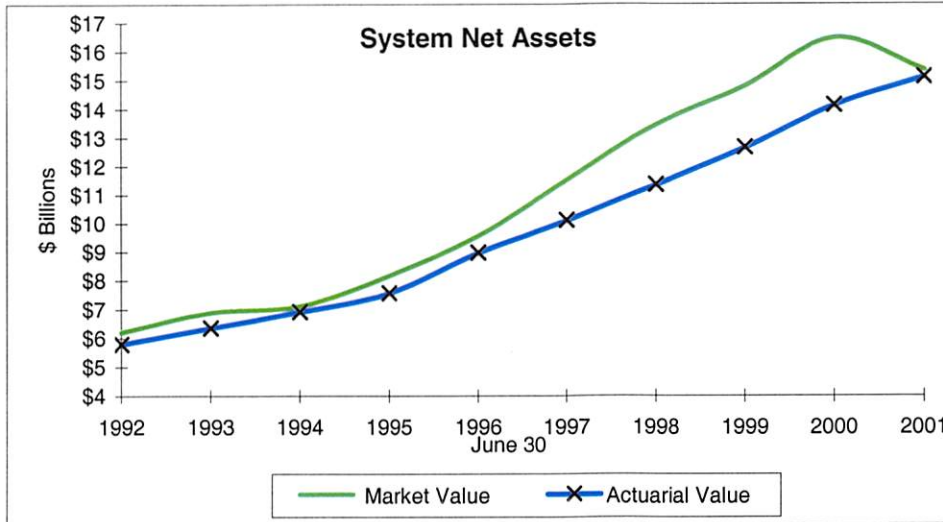
Each liability measurement discussed above is used for a different purpose. Therefore, the relative importance of the measurement will depend on the perspective of the person using the information. From an actuarial viewpoint, the actuarial balance sheet liability and the actuarial accrued liability 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, 2001 and June 30, 2000 are summarized below:

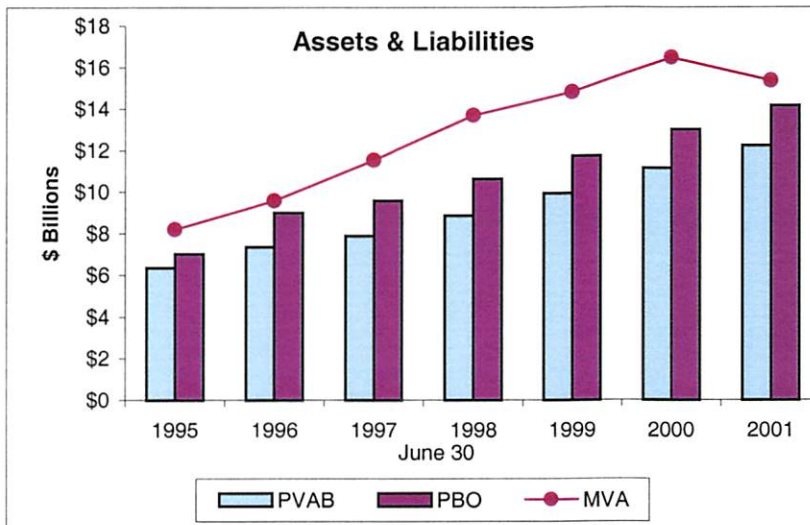
	June 30	
	<u>2001</u>	<u>2000</u>
Actuarial Balance Sheet Liability (PVFB)	\$19,314	\$17,948
Actuarial Accrued Liability	15,553	14,472
PBO	14,157	12,993
Present Value of Accrued Benefits (PVAB)	12,233	11,142

Comparison of Major Valuation Results

The major findings of the 2001 valuation compared with prior valuation results are summarized and compared on the following pages.

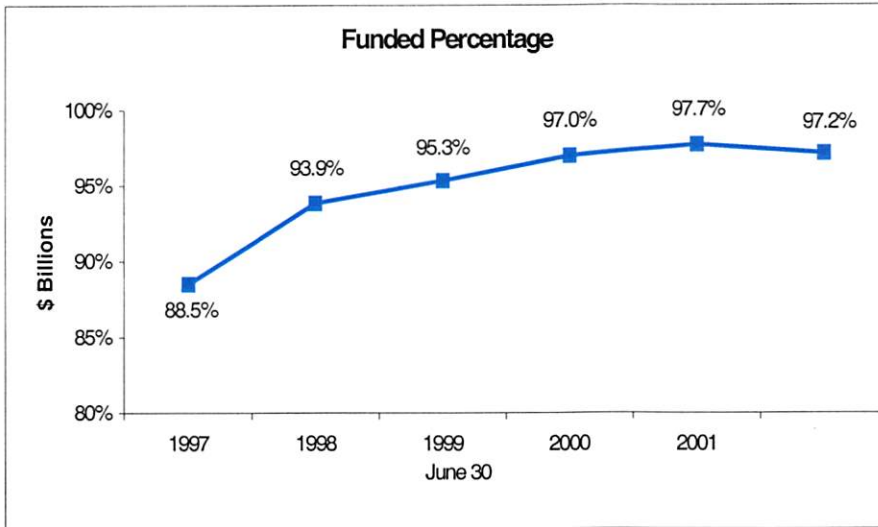


The market performance in the last year has effectively eliminated the surplus of market value over the actuarial value of assets.

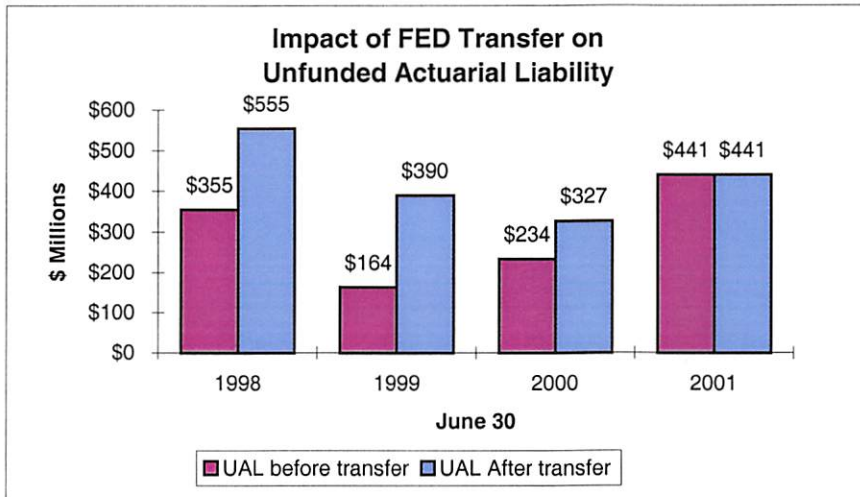


System liabilities have increased each year, which is to be expected as additional service is earned. Due to recent market performance, the difference between assets and liabilities has declined.

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



Over the past few years the funded ratio for IPERS has increased, largely due to investment performance in excess of the actuarial rate.



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. When such transfer occurs, there is an increase in the unfunded actuarial liability.

SUMMARY

Although this valuation report for the System indicates that the current statutory contribution rate is not expected to pay off the unfunded actuarial liability (UAL) within the 30 year period which defines "fully funded" status in IPERS' Funding Policy, the System is still very well funded. The UAL is expected to be paid off in 39 years. Earlier in this executive summary, the highly leveraged status of the UAL payment was discussed. This is a critical point in understanding the valuation results and the volatility of the amortization period as measured from year to year. Because the normal cost rate for the general membership (8.93%) is so close to the statutory contribution rate (9.45%), a very small part of the total contribution is available to pay off the unfunded actuarial liability. As a result, increases in the amount of the UAL will have a dramatic impact on the amortization period, particularly when the prior amortization period was greater than 15 years. Furthermore, changes in the normal cost rate in the future will also impact the amount of the total contribution rate available to finance the UAL and the resulting remaining amortization period.

When considering the financing of the UAL, it is important to analyze the UAL in terms of the total actuarial liability. Although the UAL for the general membership is \$497 million, the actuarial liability for the group is over \$15 billion. Based on the current benefit structure and the current membership, it is expected to take 39 years to amortize the unfunded actuarial liability, if all actuarial assumptions are exactly met. Many things will occur to impact this measurement (positively or negatively) in the future, including but not limited to investment return, actual experience related to demographic assumptions, changes in the demographic composition of the group and the size of the active membership.

The unfunded actuarial liability (UAL) for the total System increased from \$327 million to \$441 million. The funded percentage, measured as the ratio of actuarial value of assets to actuarial liability, is 97.2%, still indicating a very strong funded status, down only 0.5% from the 2000 valuation.

Based on the valuation results, Milliman USA believes that IPERS is a well funded System. Although funding concerns are understandable given the valuation results, it must be remembered that the funding horizon for IPERS' is very long term and many factors will impact the funding during that time frame. The funding policy adopted by IPERS anticipated the possibility of the amortization period exceeding 30 years and it provides criteria for determining when it is appropriate to consider changes to the contribution rate. Based on these criteria, a change in the contribution rate need not yet be considered as a result of this valuation report.

In concluding this executive summary, on the following page we present comparative statistics and actuarial information on both the June 30, 2001 and June 30, 2000 valuations. All figures shown include the general membership and the two special service groups.

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

	June 30, 2001*	June 30, 2000	% Chg
SYSTEM MEMBERSHIP			
1. Active Membership			
- Number of Members	154,610	153,039	1.0
- Projected Payroll for Fiscal Year	\$4,691M	\$4,443M	5.6
- Average Salary	\$30,341	\$29,032	4.5
2. Inactive Membership			
- Number Not in Pay Status	96,105	93,122	3.2
- Number of Retirees/Beneficiaries	68,703	65,712	4.6
- Average Annual Benefit	\$8,221	\$7,830	5.0
ASSETS AND LIABILITIES			
1. Net Assets (excluding FED reserve)			
- Market Value	\$15,358M	\$16,474M	-6.8
- Actuarial Value	15,112M	14,145M	6.8
2. Projected Liabilities			
- Retired Members	\$5,448M	\$4,906M	11.0
- Inactive Members	407M	369M	10.3
- Active Members	13,459M	12,673M	6.2
- Total Liability	19,314M	17,948M	7.6
3. Actuarial Liability	\$15,553M	\$14,472M	7.5
4. Unfunded Actuarial Liability	\$441M	\$327M	37.5
5. Funded Ratio (Actuarial Value Assets/Actuarial Liability)	97.16%	97.74%	-0.6
SYSTEM CONTRIBUTIONS			
Required Contribution Rate**	9.45%	9.45%	0.0
Years Required to Amortize Unfunded Actuarial Liability	39 years	21 years	85.7

M = (\$)Millions

* These membership figures are based on June 30 data.

** Contribution for certain special groups (3.6% of the membership) are not fixed at 9.45% but are actuarially determined 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.

Information regarding the actuarial and market values of System assets as of June 30, 2001 is presented on the following pages:

<u>Page</u>	<u>Contents</u>
12	Analysis of Net Assets
13	Graph of Asset Allocation
14	Summary of Fund Activity – Market Value
15	Actuarial Value of Net Assets
16	Historical Comparison (Actuarial and Market)
17	Summary of Favorable Experience Dividend Reserve

EXHIBIT 1

ANALYSIS OF NET ASSETS AT MARKET VALUES

(\$ Millions)

	June 30, 2001		June 30, 2000	
	<u>Amount</u>	<u>% of Total</u>	Amount	<u>% of Total</u>
Cash & Equivalents	\$114	0.7%	\$50	0.3%
Fixed Assets, Receivables and Payables	(1,039)	(6.5)	(1,269)	(7.4)
Domestic Equity	4,588	28.8	4,914	28.7
International Equity	2,245	14.1	2,443	14.3
Global Fixed Income	6,479	40.7	7,003	40.9
Tactical Asset Funds	813	5.1	888	5.2
Real Estate Funds	885	5.6	686	4.0
Private Equity/Debt	1,189	7.5	1,891	11.0
Collateral Pool	655	4.1	534	3.1
TOTAL ASSETS	\$15,929	100.0%	\$17,140	100.0%
FED Reserve (Before current year transfer)	571		558	
Net Retirement System Assets	\$15,358		\$16,582	
Allocation of Net Assets:				
General Membership	\$ 14,745			
Sheriffs/Deputies	224			
Other Protection Occupations	389			
Total Net Assets	<u>\$ 15,358</u>			

EXHIBIT 2

Allocation of IPERS Investments

As of June 30, 2001
(% Of Market Value by Type)

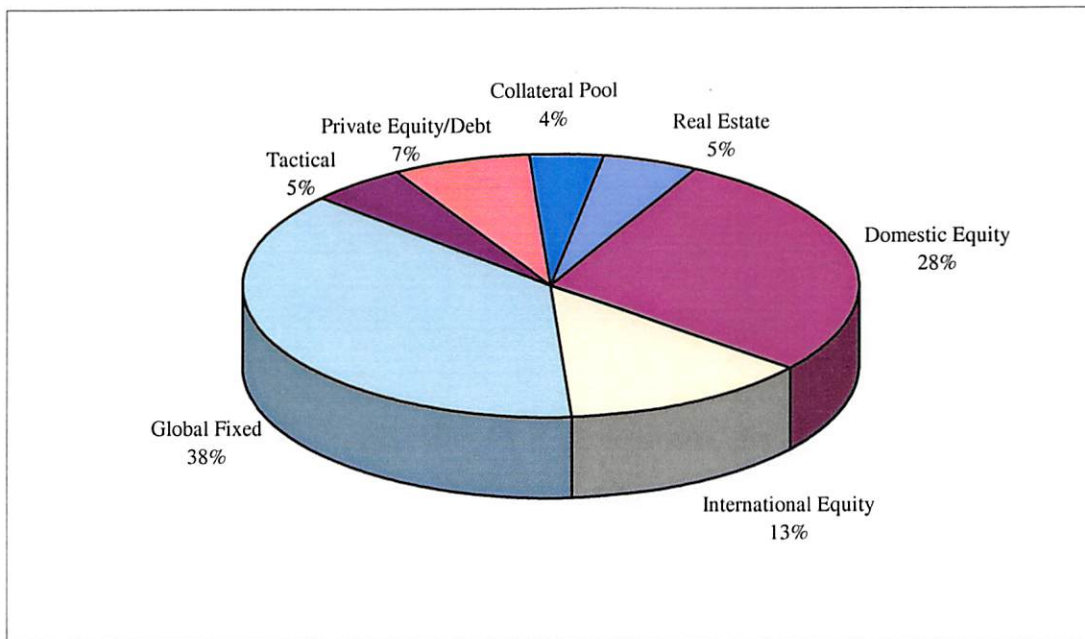


EXHIBIT 3
SUMMARY OF FUND ACTIVITY
(Market Value)

	General Membership	Special Service Group 1 *	Special Service Group 2 **	FED Reserve	Total
NET RETIREMENT SYSTEM					
ASSETS ON JUNE 30, 2000	15,950,820,422	230,835,928	400,300,334	558,274,504	17,140,231,188
REVENUE					
FED Transfer ***	(70,202,066)	(3,184,728)	(7,783,453)	81,170,247	-
Employer contributions	250,536,636	5,458,699	12,319,759	-	268,315,094
Member contributions	167,024,423	3,639,133	8,213,173	-	178,876,729
Service purchase	3,493,546	108,636	245,182	-	3,847,364
Investment income	(902,546,036)	(8,533,267)	(14,776,315)	(20,672,821)	(946,528,439)
Total Revenue	<u>(\$551,693,497)</u>	<u>(\$2,511,527)</u>	<u>(\$1,781,654)</u>	<u>\$60,497,426</u>	<u>(\$495,489,252)</u>
DISBURSEMENTS					
Benefit payments	568,392,359	3,285,965	6,361,979	46,219,145	624,259,448
Member and employer refunds	38,922,725	656,475	2,494,625	-	42,073,825
Administrative expense	7,108,261	40,681	115,505	-	7,264,447
Investment expense	39,432,089	600,618	1,039,368	1,524,974	42,597,049
Total Expenses	<u>\$653,855,434</u>	<u>\$4,583,739</u>	<u>\$10,011,477</u>	<u>\$47,744,119</u>	<u>716,194,769</u>
NET RETIREMENT SYSTEM					
ASSETS ON JUNE 30, 2001	\$14,745,271,491	\$223,740,662	\$388,507,203	\$571,027,811	\$15,928,547,167
DISTRIBUTION TO FAVORABLE					
EXPERIENCE DIVIDEND RESERVE	\$0	\$0	\$0	\$0	\$0
ADJUSTED ASSETS					
ON JUNE 30, 2001	\$14,745,271,491	\$223,740,662	\$388,507,203	\$571,027,811	\$15,928,547,167

* Includes Sheriffs, Deputies and Airport Firefighters

** Includes all other public safety members

*** Adjusted to correct investment income for the previous year

EXHIBIT 4
ACTUARIAL VALUE OF NET ASSETS

	General Membership	Special Service Group 1 *	Special Service Group 2 **	Total
1. Actuarial Value of Assets as of June 30, 2000	\$13,612,628,306	\$195,474,871	\$337,038,358	\$14,145,141,535
2. Actual Receipts/Disbursements				
a. Contributions	421,054,605	9,206,468	20,778,114	451,039,187
b. Benefit Payments and Refunds	607,315,084	3,942,440	8,856,604	620,114,128
c. Net Change	(186,260,479)	5,264,028	11,921,510	(169,074,941)
3. Expected Value of Assets as of June 30, 2001 [(1) x 1.075] + [(2c) x (1.075) ⁻⁵]	14,440,456,454	215,593,347	374,676,719	15,030,726,520
4. Market Value of Assets as of June 30, 2001	14,745,271,491	223,740,662	388,507,203	15,357,519,356
5. Difference Between Market and Expected Values (4) - (3)	304,815,037	8,147,315	13,830,484	326,792,836
6. Actuarial Value of Assets as of June 30, 2001 (3) + [(5) x 25%]	14,516,660,213	217,630,176	378,134,340	15,112,424,729
7. Adjustment for Transfer to the Favorable Experience Dividend Reserve Account	0	0	0	0
8. Actuarial Value of Assets for June 30, 2001 Actuarial Valuation	\$14,516,660,213	\$217,630,176	\$378,134,340	\$15,112,424,729

* Includes Sheriffs, Deputies and Airport Firefighters

** Includes all other public safety members

EXHIBIT 5 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>
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
2001 **	15,112,424,729	15,357,519,356

Values are for combined general membership and special service groups but exclude the Favorable Experience Dividend Reserve Account.

*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, if any, to the Favorable Experience Dividend Reserve Account.

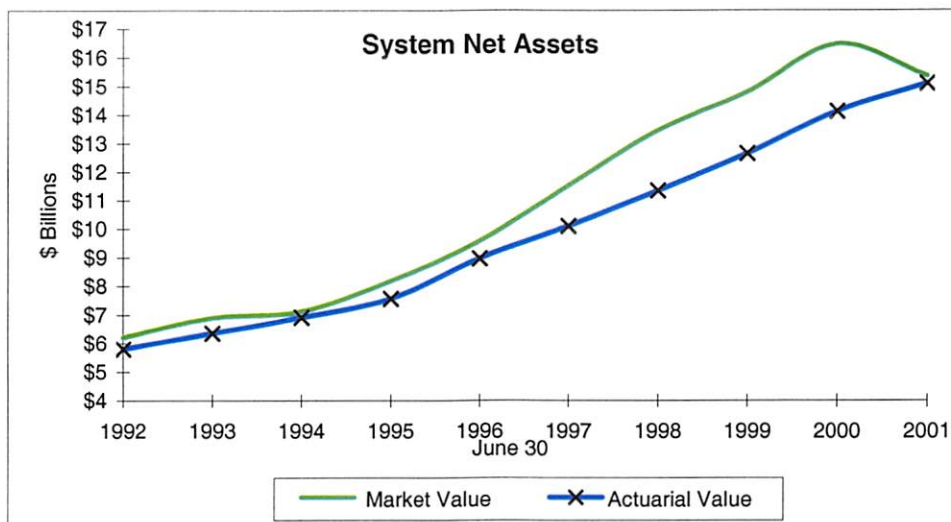


EXHIBIT 6

SUMMARY OF FAVORABLE EXPERIENCE DIVIDEND RESERVE

Market Value of FED Reserve as of June 30, 2001	\$	571,027,811
Transfer Payable on January 15, 2002 Based on June 30, 2001 Results	\$	0
Total Value of FED Reserve as of June 30, 2001	\$	571,027,811

Payments to retirees from the FED reserve account are not a guaranteed benefit. The System Administration determines each year whether payments will be made and the percentage multiplier factor to be used for each year of retirement, up to the maximum 3% allowed by law. Factors considered by the Administration in this determination include, but are not limited to, the current value of the FED reserve account, past year payments from the reserve, and the likelihood of future credits to and payments from the reserve.

Based on the June 30, 2001 balance in the FED reserve and assuming a 7.5% rate of return on the market value of assets in the future, that all other assumptions are exactly met, and that the Administration determines the maximum payments will be made, the FED reserve is projected to be sufficient to make payments through 2009.

Estimated Potential Payments (in millions) from the FED on January 31 *

2002	\$57.7
2003	71.3
2004	86.4
2005	103.3
2006	121.9
2007	142.4
2008	164.8
2009 **	27.2

* Based on the maximum payment of 3% for each year since retirement

** Payment is equal to the remaining FED reserve balance.

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 liability (UAL)**. If contributions exceed the normal cost for the year, after allowing for interest on the previous balance of the UAL, 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 liability and on the portion of it that is unfunded.

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

On the following pages we have summarized, as of June 30, 2001, the actuarial liability. It is important to note that the actuarial liability differs from the present value of accrued benefits (PVAB) and the pension benefit obligation (PBO). The actuarial 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.

The tables in this section present System liabilities as follows:

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

EXHIBIT 6 PRESENT VALUE OF FUTURE BENEFITS

The actuarial present value of future benefits represents the value of benefits expected to ultimately be earned by members of the System as of the valuation date.

	General Membership	Special Service Group 1 *	Special Service Group 2 **	Total
Present Value of Future Benefits:				
Active Members				
Retirement benefits	\$11,263,655,916	\$127,500,118	\$242,128,332	\$11,633,284,366
Death benefits	254,318,762	11,105,241	19,610,288	285,034,291
Termination benefits	838,776,573	33,816,009	60,592,991	933,185,573
Disability benefits	374,518,025	77,697,490	154,906,799	607,122,314
Inactive Members				
Vested members	373,722,048	5,659,075	6,743,198	386,124,321
Nonvested members	20,115,183	67,795	297,660	20,480,638
Retired Members and Beneficiaries	<u>5,344,310,283</u>	<u>39,117,383</u>	<u>64,977,950</u>	<u>5,448,405,616</u>
Total Present Value of Future Benefits	\$18,469,416,790	\$294,963,111	\$549,257,218	\$19,313,637,119

* Includes Sheriffs, Deputies and Airport Firefighters

** Includes all other public safety members

EXHIBIT 7
UNFUNDED ACTUARIAL ACCRUED LIABILITY
as of June 30, 2001

	General Membership	Special Services Group 1 *	Special Services Group 2 **	Total
1. Present Value of Future Benefits	\$18,469,416,790	\$294,963,111	\$549,257,218	\$19,313,637,119
2. Present Value of Future Normal Costs	3,455,551,113	89,915,436	214,791,266	3,760,257,815
3. Actuarial Accrued Liability (1) - (2)	15,013,865,677	205,047,675	334,465,952	15,553,379,304
4. Actuarial Value of Net Assets	14,516,660,213	217,630,176	378,134,340	15,112,424,729
5. Unfunded Actuarial Accrued Liability (3) - (4)	497,205,464	(12,582,501)	(43,668,388)	440,954,575

* Includes Sheriffs, Deputies and Airport Firefighters

** Includes all other public safety members

EXHIBIT 8
DEVELOPMENT OF AMOUNT TO BE TRANSFERRED TO
THE FAVORABLE EXPERIENCE DIVIDEND RESERVE
as of June 30, 2001

1. June 30, 2000 Unfunded Accrued Liability	\$ 326,509,222
2. Normal Cost as of June 30, 2000	388,612,494
3. Employer and Member Contributions *	447,191,823
4. Change due to benefit enhancements and assumption changes	0
5. Expected Unfunded Accrued Liability as of June 30, 2001 $[(1)+(2)] * 1.075 - [(3) * (1.075)^5] + (4)$	305,097,494
6. Actual Unfunded Accrued Liability as of June 30, 2001	440,954,575
7. (Gain)/loss (6)-(5)	135,857,081
8. Portion of gain to transfer to FED	N/A
9. Amount of Actuarial Value of Assets to transfer to FED	\$ 0
10. Market value of FED transfer	\$ 0

* Does not include service purchases

EXHIBIT 9
PRESENT VALUE OF ACCRUED BENEFITS
as of June 30, 2001

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.

	General Membership	Special Services Group 1 *	Special Services Group 2 **	Total
1. Present value of vested accrued benefits for active plan members	\$ 6,012,985,578	\$ 126,071,296	\$ 195,308,008	\$ 6,334,364,882
Present value of vested benefits being paid to plan retirees and beneficiaries	5,344,310,283	39,117,383	64,977,950	5,448,405,616
Present value of vested benefits to terminated plan members not yet in pay status (deferred vested)	373,722,048	5,659,075	6,743,198	386,124,321
Accumulated employee account balance of nonvested inactive members	<u>20,115,183</u>	<u>67,795</u>	<u>297,660</u>	<u>20,480,638</u>
Total present value of vested accrued benefits	\$11,751,133,092	\$ 170,915,549	\$ 267,326,816	\$ 12,189,375,457
2. Present value of nonvested accrued benefits	39,403,232	567,883	3,841,140	43,812,255
3. Total present value of all accrued benefits	\$11,790,536,324	\$ 171,483,432	\$ 271,167,956	\$ 12,233,187,712

* Includes Sheriffs, Deputies and Airport Firefighters

** Includes all other public safety members

EXHIBIT 10 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 for the System in total as determined for both this year and last year is summarized below:

Pension Benefit Obligation	June 30, 2001	June 30, 2000
Retired Members and Beneficiaries	\$ 5,448,405,616	\$ 4,906,082,319
Terminated Vested Members	386,124,321	350,543,027
Nonvested Members	20,480,638	18,332,535
Active Members		
-Accumulated employee contributions with interest	2,519,313,788	2,382,209,851
-Employer-financed vested portion	5,673,219,621	5,246,536,533
-Employer-financed non-vested portion	109,723,615	89,213,512
-Total	8,302,257,024	7,717,959,896
 Total System Obligation	 14,157,267,599	 12,992,917,777
 Net Assets Available for Benefits	 \$15,928,547,167	 \$16,473,516,141
 Unfunded Pension Benefit Obligation	 (1,771,279,568)	 (3,480,598,364)
 Funded Percentage	 112.51%	 126.79%

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
28	Calculation of Contribution Rates for Special Services Groups

EXHIBIT 11
ACTUARIAL BALANCE SHEET
as of June 30, 2001

	General Membership	Special Services Group 1 *	Special Services Group 2 **	Total
<u>ASSETS</u>				
Actuarial value of assets	\$14,516,660,213	\$217,630,176	\$378,134,340	\$15,112,424,729
Present value of future normal costs	3,455,551,113	89,915,436	214,791,266	3,760,257,815
Present value of future contributions to amortize unfunded actuarial liability	497,205,464	(12,582,501)	(43,668,388)	440,954,575
Total Net Assets	\$18,469,416,790	\$294,963,111	\$549,257,218	\$19,313,637,119
<u>LIABILITIES</u>				
Present Value of Future Benefits:				
Retired Members and Beneficiaries	\$5,344,310,283	\$39,117,383	\$64,977,950	\$5,448,405,616
Active Members	12,731,269,276	250,118,858	477,238,410	13,458,626,544
Inactive Members	393,837,231	5,726,870	7,040,858	406,604,959
Total Liabilities	\$18,469,416,790	\$294,963,111	\$549,257,218	\$19,313,637,119

EXHIBIT 12 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 expected benefits 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 liability as a level percentage of payroll, which determines the period necessary to amortize the unfunded actuarial liability. According to IPERS funding policy, the System is considered to be "fully funded" if the amortization period does not exceed 30 years.

	General Membership
1. (a) Normal Cost	\$ 388,998,300
(b) Covered Payroll for Members Under Assumed Retirement Age	\$4,357,429,633
(c) Normal Cost Rate (a) / (b)	8.93%
2. Unfunded Actuarial Liability at Valuation Date	\$ 497,205,464
3. Contribution Toward Unfunded Actuarial Liability (UAL)	0.52%
4. Expected Payroll for FYE June 30, 2002	\$4,455,380,787
5. UAL Contribution Adjusted to Mid-year (3) x (4) / (1.075) ⁵	\$ 22,345,184
6. Amortization Factor (2) / (5)	22.25112
7. Amortization Period Necessary to Finance UAL as a Level Percent of Payroll at Contribution Rate Shown in (3)*	39 years

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

EXHIBIT 13 CALCULATION OF CONTRIBUTION RATES FOR SPECIAL SERVICES GROUPS

The actuarial cost method used to determine the actuarial contribution rate to be paid by the members and the employers to support the expected benefits 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 payment to amortize the unfunded actuarial liability is determined as a level percentage of payroll, with an amortization period of 30 years.

	Special Services Group 1 *	Special Services Group 2 **
1. (a) Normal Cost	\$ 9,106,282	\$ 21,946,117
(b) Covered Payroll for Members Under Assumed Retirement Age	\$ 62,939,285	\$ 131,063,772
(c) Normal Cost Rate (a) / (b)	14.47%	16.74%
2. Unfunded Actuarial Liability at Valuation Date	\$(12,582,501)	\$ (43,668,388)
3. Amortization Period to Fund the UAL as a Level Percent of Payroll	30 years	30 years
4. Amortization Factor	19.33574	19.33574
5. UAL Contribution Adjusted to Mid-year (2) / (3) * (1.075) ⁻⁵	\$ (674,700)	\$ (2,341,589)
6. Expected Payroll for FYE June 30, 2002	\$ 64,344,564	\$ 133,914,265
7. Contribution Rate Toward the UAL (5) / (6)	-1.05%	-1.75%
8. Total Contribution Rate Effective July 1, 2002 (1c) + (7)	13.42%	15.00%
Employer Contribution Rate (60%)	8.05%	9.00%
Employee Contribution Rate (40%)	5.37%	6.00%

* Includes Sheriffs, Deputies and Airport Firefighters

** Includes all other public safety members

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>
30	Summary of Membership
31	Schedule of Funding Progress
32	Schedule of Employer Contributions

**EXHIBIT 14
SUMMARY OF MEMBERSHIP**

	<u>June 30, 2001</u>	<u>June 30, 2000</u>
Active Employees:		
Vested	114,278	113,741
Not yet vested	<u>40,332</u>	<u>39,298</u>
Total active employees *	154,610	153,039
Retirees and beneficiaries currently receiving benefits:	68,703	65,712
Terminated employees entitled to benefits but not yet receiving them:	32,650	31,219

*Excludes retired/reemployed members

EXHIBIT 15
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 Liability (AL)* (b)	Unfunded AL (UAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (P/R) (c)	UAL as a Percentage of Covered P/R [(b-a)/c]
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%
6/30/01	15,112,424,729	15,553,379,304	440,954,575	97.16%	4,551,432,690	9.69%

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

Actuarial Assumptions: See Appendix C

Actuarial cost method: Entry age normal cost method

Amortization method: Open period, level percent of pay

Asset valuation method: Expected value +25% of difference between market and expected value

Investment Rate of Return: 7.5%

Inflation Rate: 3.5% for prices, 4.0% for wages

Salary Increases: 4.0 - 10.0% varying by age

EXHIBIT 16
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
6/30/93	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
6/30/01	4,551.43	268.32	5.90	5.90	100.00

In general, employer contribution as a percentage of covered payroll will exceed the normal statutory rate of 5.75% because of higher contribution rates for employees of certain law enforcement, fire safety, and protection occupations.

APPENDIX A

**SUMMARY STATISTICS ON
SYSTEM MEMBERSHIP**

APPENDIX A
SUMMARY STATISTICS ON SYSTEM MEMBERSHIP

TABLE OF CONTENTS

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SUMMARY OF ACTIVE MEMBERS

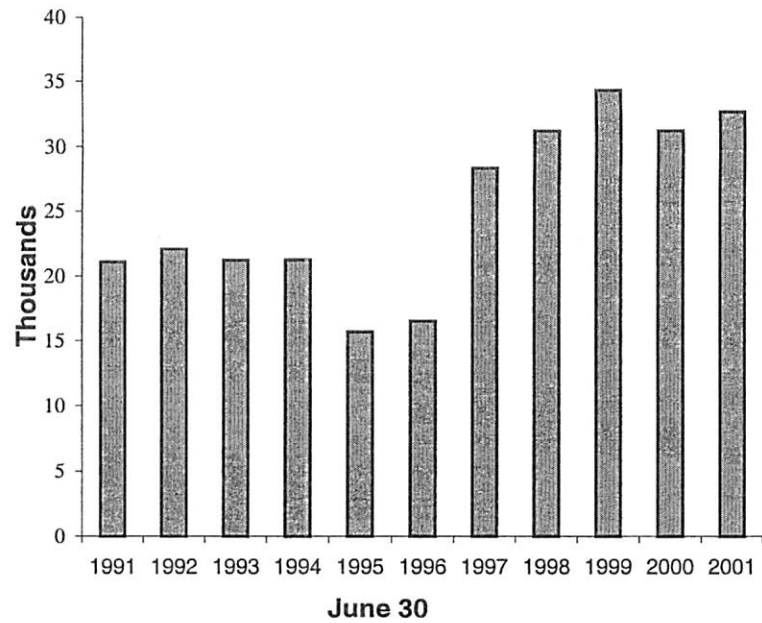
The data we received for the June 30, 2001 valuation contained information as of June 30, 2001.

	General	Special Service Groups		Total	6/30/00	Percent Change
	Membership	Group 1	Group 2	6/30/01		
Total Employees	149,005	1,470	4,135	154,610	153,039	1.0
Projected Covered Payroll* (millions)	\$4,493	\$64	\$134	\$4,691	\$4,443	5.6
Average Age	45.2	41.1	40.6	45.0	44.8	0.4
Average Entry Age	33.6	27.0	30.9	33.5	33.2	0.9
Average Earnings*	\$30,153	\$43,537	\$32,406	\$30,341	\$29,032	4.5
Retired Reemployed	4,873	1	12	4,886	5,050	-3.2

*Payroll figures as of July 1 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

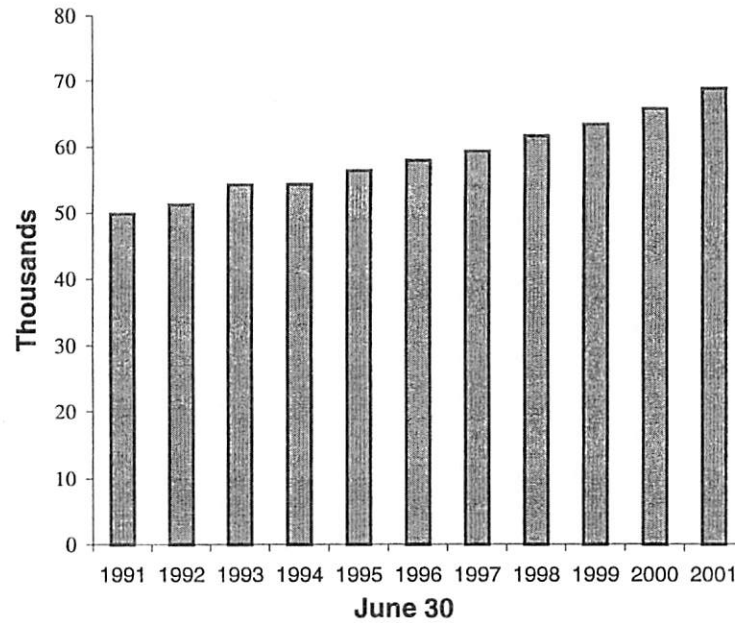
SUMMARY OF INACTIVE VESTED MEMBERS

General Membership	Special Services		Total		% Change
	Group 1	Group 2	6/30/01	6/30/00	
32,389	66	195	32,650	31,219	4.6%



SUMMARY OF RETIRED MEMBERS AND BENEFICIARIES

General Membership	Special Services		Total		
	Group 1	Group 2	6/30/01	6/30/00	%
					Change
67,987	235	481	68,703	65,712	4.6%



AGE AND SERVICE DISTRIBUTION AS OF JUNE 30, 2001 FOR ACTIVE MEMBERS

Males and Females

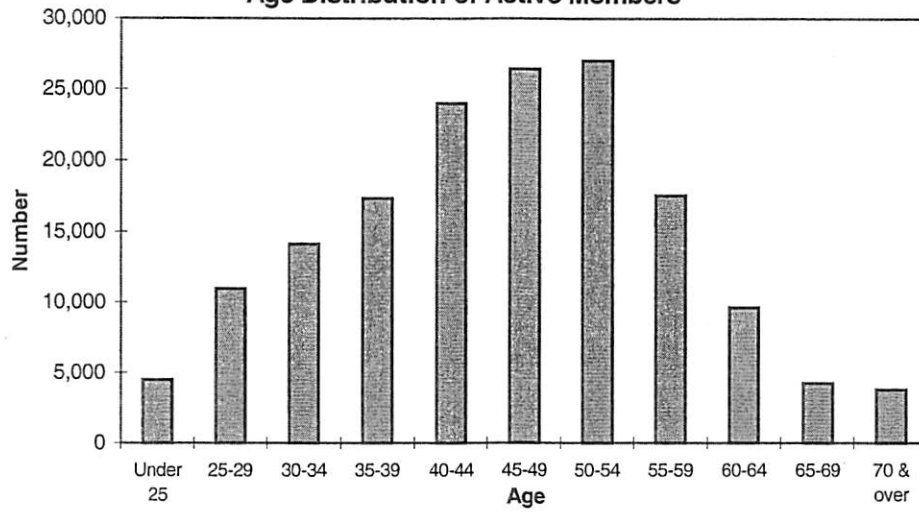
Age	<i>Years of Service</i>																				Total			
	<u>Under 1</u>		<u>1 to 4</u>		<u>5 to 9</u>		<u>10 to 14</u>		<u>15 to 19</u>		<u>20 to 24</u>		<u>25 to 29</u>		<u>30 to 34</u>		<u>35 to 39</u>		<u>40 and over</u>					
	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary		
Under 25	176	1,562	4,253	17,587	78	19,574	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	4,507	16,996
25-29	130	1,363	8,521	24,144	2,288	28,785	24	28,871	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	10,963	24,853
30-34	94	1,042	6,693	22,843	5,684	30,943	1,621	34,301	27	32,968	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	14,119	27,293
35-39	120	2,070	6,717	20,178	4,396	28,224	4,210	36,041	1,746	36,861	140	32,391	0	NA	0	NA	0	NA	0	NA	0	NA	17,329	27,727
40-44	433	411	7,204	19,160	5,328	25,018	4,046	33,023	3,955	39,451	2,830	38,195	188	35,565	0	NA	0	NA	0	NA	0	NA	23,984	28,182
45-49	72	1,660	5,416	20,126	4,921	24,593	4,468	30,318	3,452	36,634	4,923	41,340	3,043	41,927	107	39,490	0	NA	0	NA	0	NA	26,402	31,338
50-54	56	2,233	3,914	20,733	3,760	24,728	4,097	30,380	3,640	34,636	3,654	39,068	5,226	45,107	2,593	45,441	68	38,669	0	NA	0	NA	27,008	34,202
55-59	167	29,458	2,606	18,812	2,149	22,903	2,282	28,346	2,221	31,749	2,423	34,494	2,302	41,030	2,603	48,196	742	47,507	24	46,989	17,519	33,006		
60-64	180	27,004	2,087	16,362	1,328	17,765	1,121	25,229	1,162	30,033	1,161	30,588	1,110	34,266	732	44,248	544	50,060	191	47,973	9,616	27,882		
65-69	112	25,722	1,856	12,832	841	11,565	426	18,067	296	23,029	254	24,337	221	26,574	134	35,018	49	48,615	62	49,432	4,251	17,203		
70 & over	185	8,448	2,452	9,535	909	9,224	141	11,189	38	18,166	24	21,621	20	16,308	12	33,121	4	32,116	13	50,189	3,798	9,905		
Totals	1,725	8,954	51,719	19,867	31,682	25,426	22,436	31,370	16,537	35,480	15,409	37,945	12,110	42,005	6,181	46,107	1,407	48,062	290	48,303	159,496	28,835		

AGE AND SERVICE DISTRIBUTION AS OF JUNE 30, 2001 FOR ACTIVE MEMBERS

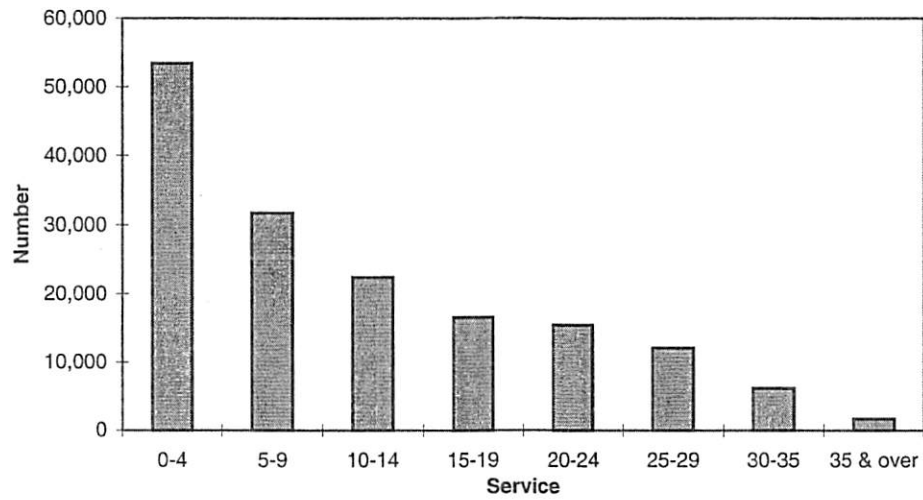
Males and Females

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>		<u>Total</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	176	102	4,253	798	78	3,082	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	4,507	810		
25-29	130	138	8,521	1,844	2,288	5,729	24	9,135	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	10,963	2,650		
30-34	94	114	6,693	1,789	5,684	7,476	1,621	14,227	27	18,289	0	NA	0	NA	0	NA	0	NA	0	NA	14,119	5,527		
35-39	120	116	6,717	1,533	4,396	6,801	4,210	16,268	1,746	23,304	140	27,144	0	NA	0	NA	0	NA	0	NA	17,329	8,840		
40-44	433	78	7,204	1,447	5,328	5,748	4,046	14,585	3,955	25,634	2,830	33,278	188	37,835	0	NA	0	NA	0	NA	23,984	12,624		
45-49	72	116	5,416	1,554	4,921	5,804	4,468	13,180	3,452	23,664	4,923	37,145	3,043	45,339	107	50,303	0	NA	0	NA	26,402	19,081		
50-54	56	129	3,914	1,616	3,760	5,917	4,097	13,316	3,640	22,347	3,654	34,910	5,226	50,611	2,593	58,912	68	59,033	0	NA	27,008	26,411		
55-59	167	711	2,606	1,300	2,149	5,488	2,282	12,783	2,221	20,561	2,423	30,567	2,302	45,443	2,603	62,621	742	68,802	24	63,366	17,519	27,649		
60-64	180	284	2,087	880	1,328	4,278	1,121	11,499	1,162	19,790	1,161	27,172	1,110	38,073	732	55,769	544	72,176	191	77,348	9,616	22,059		
65-69	112	158	1,856	581	841	2,807	426	8,447	296	14,664	254	21,274	221	27,959	134	41,259	49	64,857	62	80,386	4,251	8,626		
70 & over	185	52	2,452	650	909	2,221	141	4,956	38	10,510	24	17,477	20	15,221	12	22,594	4	34,615	13	51,376	3,798	1,717		
Totals	1,725	178	51,719	1,439	31,682	5,966	22,436	13,843	16,537	22,918	15,409	33,736	12,110	46,484	6,181	59,499	1,407	69,400	290	75,676	159,496	15,823		

Age Distribution of Active Members



Service Distribution of Active Members

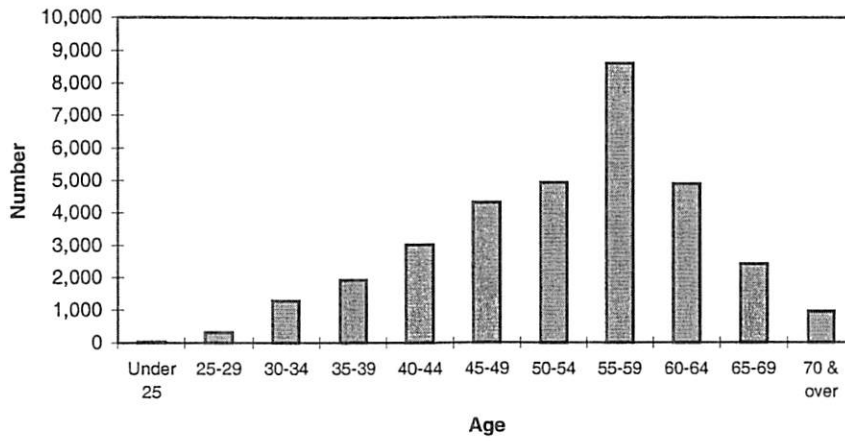


AGE AND SERVICE DISTRIBUTION AS OF JUNE 30, 2001 FOR INACTIVE VESTED MEMBERS

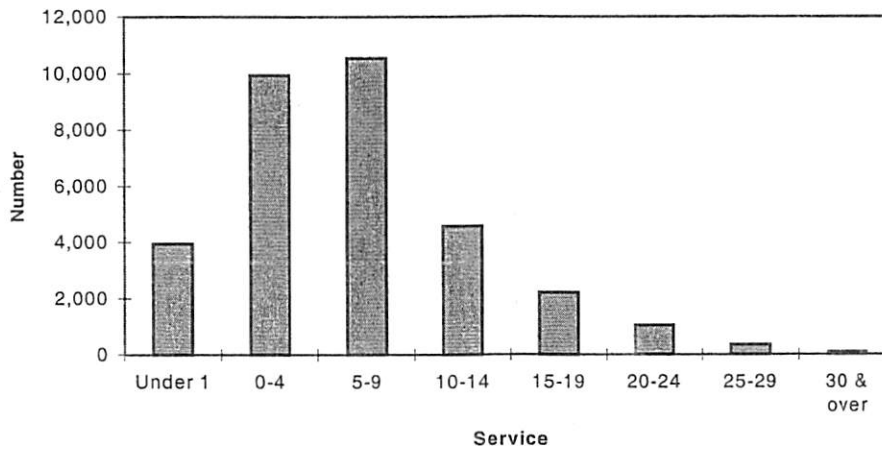
Males and Females

Age	Years of Service																						Total	
	Under 1		1 to 4		5 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39		40 and over		Total			
	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	0	NA	13	2,298	16	1,989	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	29	2,117
25-29	0	NA	118	3,294	189	4,005	1	3,848	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	308	3,732
30-34	0	NA	221	3,397	990	6,018	71	11,523	4	4,650	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	1,286	5,868
35-39	0	NA	212	3,579	1,296	6,316	363	14,880	50	19,090	3	8,754	0	NA	0	NA	0	NA	0	NA	0	NA	1,924	7,986
40-44	0	NA	262	3,311	1,649	6,353	753	14,387	289	23,575	61	26,512	2	33,676	0	NA	0	NA	0	NA	0	NA	3,016	10,171
45-49	0	NA	336	3,702	2,036	6,816	1,076	15,191	546	23,651	275	34,160	38	47,538	3	52,462	0	NA	0	NA	0	NA	4,310	12,932
50-54	0	NA	297	3,702	2,073	7,063	1,169	15,850	759	26,480	402	36,405	201	49,293	30	56,553	0	NA	0	NA	0	NA	4,931	16,347
55-59	1,850	29	4,042	520	1,311	7,123	709	15,094	369	24,482	206	37,093	78	49,290	32	61,257	2	73,045	0	NA	0	NA	8,599	5,212
60-64	1,085	43	2,509	501	687	6,234	342	14,219	155	23,862	68	32,525	31	41,566	4	46,085	4	86,719	2	66,803	4,887	3,747		
65-69	708	37	1,381	447	227	3,363	54	12,135	21	20,087	16	27,040	1	52,065	1	52,689	1	96,531	0	NA	2,410	1,294		
70 & over	296	89	543	365	61	2,331	30	5,067	10	9,824	9	25,347	1	59,129	0	NA	0	NA	0	NA	0	NA	950	952
Totals	3,939	39	9,934	938	10,535	6,498	4,568	14,952	2,203	24,535	1,040	34,794	352	48,369	70	57,875	7	84,214	2	66,803	32,650	7,911		

Age Distribution of Inactive Vested Members



Service Distribution of Inactive Vested Members



ANALYSIS OF RETIREES AND BENEFICIARIES

Males and Females

Number of Members and Beneficiaries

<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>Period Certain Beneficiary</u>	<u>Total</u>
Under 40	0	14	3	0	4	7	2	1	31
40 to 44	0	35	6	5	11	10	6	2	75
45 to 49	0	49	13	21	35	28	4	5	155
50 to 54	0	106	30	32	69	59	24	17	337
55 to 59	0	1,051	621	450	769	85	544	17	3,537
60 to 64	0	2,674	1,635	1,142	1,862	181	1,387	40	8,921
65 to 69	0	4,313	2,659	1,425	2,856	291	1,768	62	13,374
70 to 74	0	4,625	3,407	1,296	2,344	446	1,575	52	13,745
75 to 79	1	4,453	2,712	1,102	1,524	523	1,400	37	11,752
80 to 84	1	4,050	1,295	705	798	359	1,546	22	8,776
85 to 89	6	2,694	413	450	207	166	979	12	4,927
90 to 94	15	1,394	128	253	51	77	418	4	2,340
95 to 99	7	389	48	101	12	18	60	2	637
100 & over	8	37	24	19	3	5	0	0	96
Totals	38	25,884	12,994	7,001	10,545	2,255	9,713	273	68,703

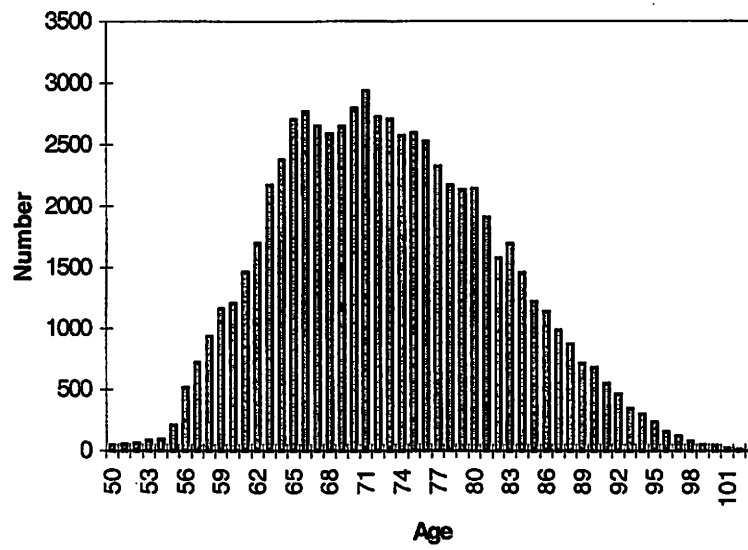
ANALYSIS OF RETIREES AND BENEFICIARIES
Males and Females

Average Annual Benefits of Members and Beneficiaries*

<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>Period Certain Beneficiary</u>
Under 40	0	5,988	3,581	0	3,469	3,380	2,185	2,213
40 to 44	0	5,610	6,638	4,841	6,917	7,216	5,702	1,751
45 to 49	0	7,144	10,045	6,134	7,958	7,207	5,611	5,926
50 to 54	0	7,582	11,789	8,418	9,249	9,413	10,395	5,664
55 to 59	0	11,470	13,217	14,999	15,979	10,191	15,787	10,496
60 to 64	0	11,600	12,736	13,234	17,267	10,078	14,692	8,898
65 to 69	0	9,218	9,991	9,402	14,139	9,153	11,110	6,021
70 to 74	0	6,549	7,372	6,383	9,611	6,244	6,644	5,450
75 to 79	1,290	4,969	5,907	4,671	6,965	4,939	4,726	6,434
80 to 84	1,115	4,405	5,123	4,292	5,684	4,271	4,232	4,778
85 to 89	1,277	3,658	4,193	3,412	4,741	3,055	3,594	7,298
90 to 94	1,249	3,329	3,468	3,681	3,667	2,962	3,352	3,588
95 to 99	1,399	3,586	4,226	4,188	4,126	2,707	3,821	19,604
100 & over	1,558	3,474	4,053	4,017	5,097	2,850	0	0
Totals	1,344	6,589	8,187	7,870	11,829	6,167	7,999	6,619

* Averages based on data reported by the System as of June 30, 2001 and exclude dividend payments.

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.

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, deputies, or airport firefighters 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 other special service groups receive 60% of FAS after completion of 23 years of service (grading down to 22 years next two year) plus an additional 1% (1.5% beginning in two years) of FAS for each additional year up to a total of 30.</p>
Early Retirement	<p>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.</p>

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%.

Death Benefits:

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.

Special service members killed in the line of duty are entitled to an additional lump sum payment of \$100,000.

Disability Benefits:

An annuity, payable immediately, equal to the Normal Retirement Benefit.

For special service 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.

Source of Funds:

General Membership:

Member Contributions	3.7% of covered pay.
Employer Contributions	5.75% of covered pay.

Sheriffs and Deputies:

Member Contributions	Actuarially determined.
Employer Contributions	Actuarially determined.

Protection Occupation:

Member Contributions	Actuarially determined.
Employer Contributions	Actuarially determined.

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.

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

	<u>General Members</u>	<u>Special Services</u>
Males:	GAM 94 Male, set forward one year	GAM 83 Male
Females:	95% of GAM 94 Female, set back 1 year	GAM 83 Female
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)	Same as healthy members set forward 6 years
Beneficiaries:	Same as members	Same as members

Rates of Disablement

<u>Age</u>	Annual Rate Per 1,000 Members		
	<u>Males</u>	<u>Females</u>	<u>Special Services</u>
27	0.2%	0.2%	0.2%
32	0.2%	0.2%	0.2%
37	0.4%	0.3%	0.4%
42	0.7%	0.5%	0.7%
47	1.4%	0.9%	1.3%
52	3.3%	2.2%	2.35%
57	6.3%	3.9%	5.2%
62	9.0%	6.2%	9.8%

Rates of Termination of Employment

General Membership

		Annual Rate of Withdrawals Per 1,000 Members					
<u>Males:</u>							
<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	
<u>Females:</u>							
<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	

Special Services

Age	Annual Rate of Withdrawals Per 1,000 Members
22	100
27	60
32	35
37	21
42	25
47	22
52	22
55+	22

Rate of Election of Return of Contributions by Vested Members

<u>Age</u>	Annual Rate Per 1,000 Members General Membership	
	<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

Special services members are assumed to elect a return of contributions at the same rate as general members who are 10 years older.

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 to general members:

<u>Age</u>	<u>Assumed Retirement Rate</u>
55-59	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>	<u>Special Services</u>
55	20%	10%	20%
56	20	10	16
57-59	20	20	16
60	25	25	18
61	35	35	28
62	50	50	40
63	35	40	20
64	35	40	35
65	30	50	100
66	20	25	100
67-68	15	20	100
70+	100	100	100

Terminated vested members are assumed to retire at age 62 (55 for special services).

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

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.

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.

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

The difference between actuarial accrued liability and the valuation assets. Sometimes referred to as "unfunded accrued liability" or "unfunded liability".

Most retirement systems have unfunded actuarial accrued liability. They arise anytime new benefits are added and anytime an actuarial loss is realized.

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.