IOWA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Actuarial Valuation Report as of June 30, 2005



ACTUARIAL VALUATION OF THE IOWA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

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November 18, 2005

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

Re: Iowa Public Employees' Retirement System

Dear Board Members:

We have performed an actuarial valuation of the Iowa Public Employees' Retirement System (System) as of June 30, 2005 for determining contribution rates effective July 1, 2006. The major findings of the valuation are contained in this report. The benefit provisions and assumptions remain unchanged from those used in last year's valuation.

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. In our examination of these data, we have found them reasonably consistent and comparable with data used for other purposes. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised. We note that subsequent to providing the data, IPERS staff determined that 436 individuals from two employers were missing a final quarter of wages and that many were incorrectly classified as inactive rather than active. We do not believe this would have any material impact on the results of this report.

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 actuarial principles and practices which are consistent with Actuarial Standards of Practice, 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. The Investment Board has the final decision regarding the appropriateness of the assumptions and adopted them as of the dates indicated in Appendix C.

Investment Board November 18, 2005 Page 2



We also hereby certify that the assumptions and methods used for determining the funding requirements used in the preparation of the disclosure information under GASB Statement 25 meet the parameters imposed by the Statement.

Certain retirees in IPERS receive an annual dividend payment each November. Section 97B.49F of the Iowa Code provides that, for members who retired prior to July 1, 1990, the dividend shall be adjusted each year by the lesser of:

- (1) The percentage increase in the Consumer Price Index as published by the Bureau of Labor Statistics for the 12 months ending June 30 of that year,
- (2) The percentage amount that may be paid without requiring an increase in the employer/employee contribution rate, as certified by the actuary, or
- (3) Three percent.

Based on the June 30, 2005 actuarial valuation, no increase in the dividend for the pre-July 1990 retirees may be paid without an increase in the statutory contribution rate of 9.45%.

Actuarial computations presented in this report are for purposes of determining the actuarial contribution rates for funding the System. Determinations for purposes other than this may be significantly different from the results contained in this report. Any third party recipient of Milliman's work product who desires professional guidance beyond the scope of this report should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs. Any distribution of this report must be in its entirety including this cover letter, unless prior written consent from Milliman is obtained.

We would like to express our appreciation to IPERS' Staff, who gave substantial assistance in supplying the data on which this report is based.

We, Patrice A. Beckham, F.S.A., and Brent A. Banister, F.S.A., are members of the American Academy of Actuaries and Fellows of the Society of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

We respectfully submit the following report and look forward to discussing it with you.

MILLIMAN, Inc.

Sincerely,

Patrice Beckham

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

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Brent A. Banister, F.S.A. Actuary

SECTION I

EXECUTIVE SUMMARY

INTRODUCTION

This report presents the results of the June 30, 2005 actuarial valuation of the Iowa Public Employees' Retirement System (IPERS). The primary purposes of performing the valuation are as follows:

- to evaluate the sufficiency of the statutory contribution rate structure to fund the benefits expected to be paid to members in the future and to determine if the Plan's funding meets the criteria set out in the Funding Policy established by IPERS,
- to evaluate the funded status of the System and disclose various asset and liability measures as of June 30, 2005, and
- to analyze and report on trends in System contributions, assets, and liabilities over the past several years.

The benefit provisions, actuarial assumptions and actuarial methods reflected in this report are unchanged from last year's report.

The actuarial valuation results provide a "snapshot" view of the System's financial condition on June 30, 2005. The results reflect net favorable experience for the past plan year as demonstrated by an unfunded actuarial liability (UAL) that was lower than expected, based on actuarial assumptions. The UAL on June 30, 2005 for all membership groups covered by IPERS (Regular members and Special Services Groups) is \$2.289 billion as compared to an expected UAL of \$2.321 billion. The favorable experience was the sum of an experience gain of \$89 million on the actuarial value of assets and an experience loss of \$57 million on System liabilities.

The normal cost rate represents the portion of the ultimate cost of benefits to be received which is allocated to the current year of service worked by active members. The normal cost rate for the regular membership increased from 9.09% in the 2004 valuation report to 9.12% in the 2005 valuation. Although the entry age cost method develops a normal cost rate that is expected to be relatively level, it will fluctuate from year to year depending on the demographic composition of the active members. Recent experience indicates that the average age of new entrants coming into the System is older than the average entry age of the current membership. Given the current demographic profile of IPERS membership (in particular the baby boomers), the normal cost rate is expected to increase over time. This occurs because members with a lower normal cost rate (younger hire age) leave active status and are replaced by members with a higher normal cost rate (older hire age). 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 in the previous three valuations, the amortization period is infinite (the UAL cannot be amortized with the current contribution rate if all assumptions are met in the future). This is analogous to a mortgage or loan where the payment is not large enough to pay the interest on the outstanding debt. Consequently, the amount of the debt increases each year. In such a situation, even if all actuarial assumptions are met in future years, the current statutory contribution rate of 9.45% will not be sufficient to provide all of the future benefits promised to current members. This situation is not an immediate threat but represents a long term challenge which must be addressed.



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, 2005 valuation, favorable actuarial experience occurred for the System. However, because the amortization period is infinite, IPERS administrative rules dictate that no portion of the gain is to be transferred to the FED reserve. Given expected payout levels of 1.07% per year of service (the current rate) and no future transfers to the reserve, the current FED reserve is projected to be sufficient to make payments for the next nine years (including the January 2006 payment), plus a reduced payment in the tenth year, if all assumptions are met in future years. See Exhibit 5 for more detail. The FED calculations are based on pure market value of assets so past investment experience is fully reflected in each valuation. As a result, there is the potential for the remaining years of payment to change dramatically from year to year.

EXPERIENCE FOR LAST PLAN YEAR

Numerous factors contributed to the change in the Systems' assets, liabilities and remaining amortization period for the unfunded actuarial liability between June 30, 2004 and June 30, 2005. The components are examined in the following discussion.

ASSETS

As of June 30, 2005, the System (including Special Service groups) had total assets of \$18.2 billion, when measured on a market value basis, **excluding the Favorable Experience Dividend (FED) reserve account**. This was an increase of \$1.5 billion from the prior year. The components of this change are shown below:

	Market Value (\$M)		
Net Assets, June 30, 2004	\$	16,726	
Employer and Member Contributions	+	525	
Benefit Payments and Refunds	-	874	
• Expected Investment Income* (Based on 7.5% assumption)	+	1,242	
Actuarial Gain/(Loss) on Investment Return	+	605	
Net Assets, June 30, 2005 Before FED Transfer		18,224	
• FED Transfer Payable January 15, 2005	-	0	
Net Assets, June 30, 2005 After FED Transfer	\$	18,224	

*net of expenses

On a market value basis, the rate of return was 11.25% as reported by IPERS. 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 of 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, 2004 to June 30, 2005 (which also excludes the FED reserve account) is shown below:

	Actuari	al Value (\$M)
Actuarial Assets, June 30, 2004	\$	16,952
• Employer and Member Contributions	+	525
Benefit Payments and Refunds	-	874
• Expected Investment Income* (Based on 7.5% assumption)	+	1,259
• Investment Gain/(Loss)	+	89
Actuarial Assets, June 30, 2005 Before FED Transfer		17,951
• FED Transfer Payable January 15, 2005	-	0
Actuarial Assets, June 30, 2005 After FED Transfer	\$	17,951

*net of expenses

The dollar-weighted rate of return, net of investment and administrative expenses, measured on the actuarial value of assets was 8.04%. Due to the use of an asset smoothing method, there is currently \$273 million of deferred actuarial investment gain that has not yet been recognized in the valuation process. Absent investment returns below the 7.5% assumption in the next few years, the deferred actuarial investment gain will gradually be reflected in the actuarial value of assets. As this occurs through the smoothing method, the valuation results will reflect an actuarial gain on investment experience, which will contribute toward a decrease in the unfunded actuarial liability.

The summary of market and actuarial value of assets by group as of June 30, 2005 is shown below:

(\$Millions excluding FED Reserve)	Regular <u>Membership</u>	Special <u>Services 1</u>	Special <u>Services 2</u>	<u>Total</u>
Actuarial Value	\$17,107	\$284	\$560	\$17,951
Market Value	\$17,361	\$290	\$573	\$18,224
Difference	(\$254)	(\$6)	(\$13)	(\$273)
Actuarial/Market Value	99%	98%	98%	99%

A historical comparison of asset values on both the market and actuarial basis is shown below:

(\$Millions excluding FED Reserve)			June 30		
	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>
Actuarial Value of Assets	\$15,112	\$15,613	\$16,120	\$16,952	\$17,951
Market Value of Assets	\$15,358	\$14,388	\$14,916	\$16,726	\$18,224
Deferred (Gain)/Loss	(\$246)	\$1,225	\$1,204	\$226	(\$273)
Actuarial Value/Market Value	98%	109%	108%	101%	99%

Strong market returns in the last two years eliminated the sizeable deferred actuarial investment losses that were present in the 2002 and 2003 valuations and resulted in a deferred gain. Absent returns under 7.5%, this gain will be recognized over the next few years.



LIABILITIES

The actuarial liability is that portion of the present value of future benefits that will not be paid by future normal costs. The difference between this liability and the actuarial value of assets at the same date is called the unfunded actuarial liability (UAL). The dollar amount of unfunded actuarial liability is reduced if the contributions to the System exceed the normal cost for the year plus interest on the prior year's UAL.

(\$Millions)	Regular <u>Membership</u>	Special <u>Services 1</u>	Special <u>Services 2</u>	<u>Total</u>
Actuarial Liability	\$19,417	\$294	\$529	\$20,240
Actuarial Value of Assets	17,107	284	560	17,951
Unfunded Actuarial Liability	2,310	10	(31)	2,289

The unfunded actuarial liability by group is shown as of June 30, 2005 below:

See Exhibits 7 and 8 in Section III of the report for the detailed development of the unfunded actuarial liability for the System.

Actuarial gains (losses) result from actual experience that is more (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 gain of \$32 million (see Exhibit 8 for a detailed development).

The actuarial gain may be explained by considering the separate experience of assets and liabilities. As noted in the previous section, assets had an \$89 million dollar gain when measured on an actuarial value basis. The liability loss is \$57 million (or about 0.2% of total actuarial liability) and arises from demographic experience less favorable than anticipated by the actuarial assumptions.

The change in the unfunded actuarial liability between June 30, 2004 and 2005 is shown below (in millions):

Unfunded Actuarial Liability, June 30, 2004	\$	2,176
• Expected increase from amortization method	+	42
• Expected increase from contributions below actuarial rate	+	103
Investment experience	+	(89)
Liability and other experience	+	57
Benefit enhancements	+	0
Change in actuarial assumptions	+	0
Unfunded Actuarial Liability <u>before</u> FED transfer, June 30, 2005	\$	2,289
• FED Transfer	+	0
Unfunded Actuarial Liability <u>after</u> FED transfer, June 30, 2005	\$	2,289



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There are three 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 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.
- **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 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.

	June 30			
(\$ Millions)	<u>2005</u>	<u>2004</u>		
Actuarial Balance Sheet Liability (PVFB)	\$24,574	\$23,356		
Actuarial Liability	\$20,240	\$19,128		
Present Value of Accrued Benefits (PVAB)	\$16,399	\$15,378		

The System liabilities as of June 30, 2005 and June 30, 2004 are summarized below:

CONTRIBUTION RATE

This valuation sets the contribution rates effective July 1, 2006. The Iowa statutes provide that most IPERS members (regular members who represent 96% of total active members) shall contribute 3.7% of pay and employers shall contribute 5.75%, for a total of 9.45%. The remaining 4% of the active members, the Special Services groups, contribute at an actuarially determined rate that changes each year. See Exhibits 11 and 12 for development of these rates which are summarized in the following table:

	Actuarial <u>Rate</u>	Statutory <u>Rate</u>	<u>Shortfall</u>
Regular Membership	11.49%	9.45%	2.04%
Special Services 1 (Sheriffs and Deputies)	16.74%	16.74%	0.00%
Special Services 2 (All others)	15.20%	15.20%	0.00%



IPERS adopted its Funding Policy in 1996 (see Appendix D for a copy of the Funding Policy). The purpose of the Funding Policy is to provide a basis for the evaluation of the System's funded status and to provide a set of safeguards to help ensure the financial solvency of the System. The Funding Policy defines the term "fully funded" to mean the current actuarial value of assets plus the present value of future expected contributions is equal to or greater than the present value of future benefit payments. There is an additional requirement that the amortization period not exceed 30 years in order for the System to be "fully funded".

One of the purposes of the actuarial valuation is to determine whether the contribution rate for the regular membership will be sufficient to fund the future benefits expected to be paid by the System within the guidelines established in IPERS' Funding Policy. 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 in turn determines the amortization period. As a result, the remaining amortization period varies with each actuarial valuation. Because the normal cost rate for the regular membership (9.12%) is so close to the statutory contribution rate of 9.45%, the remaining 0.33% of payroll available for payment toward the UAL is very small. Based on the current UAL amount and amortization payment, the amortization period is infinite. In order for the System to be "fully funded" in the current valuation (the amortization period to be 30 years), the resulting contribution rate would increase by 2.04% to 11.49% of payroll. This rate is determined based on the snapshot of the System taken on the valuation date, June 30, 2005, and applies only for the fiscal year beginning July 1, 2006. The rate necessary for the System to continue to be "fully funded" in future years will change each year as the deferred actuarial investment experience is recognized and other experience (both investment and demographic) impacts the System. The Asset/Liability Study completed in 2003 indicated that, in order to reach a 30 year amortization of the UAL by 2014 (and not to exceed that limit thereafter), a contribution rate of 13.25% effective July 1, 2005 would be necessary. Due to the stochastic modeling used, this is probably a better long term estimate of the level of contributions necessary to fund the System in accordance with the Funding Policy.

When the current actuarial value of assets plus the present value of future expected contributions are not equal to the present value of future benefits for the current membership, the System is not in "actuarial balance". IPERS' Funding Policy provides a set of criteria to assist in deciding whether an increase in the contribution rate should be considered. If either of the following occurs in at least three of any five consecutive years, the Funding Policy recommends a contribution increase be considered:

- (1) the normal cost rate is within 0.50% of the statutory contribution rate of 9.45% (which occurred in the 2002, 2003, 2004, and 2005 valuations).
- (2) the amortization period exceeds 29 years (which occurred in the 2001, 2002, 2003, 2004, and 2005 valuations).

Based on the criteria in the Funding Policy, consideration should be given to increasing the statutory contribution rate. The Asset/Liability Study completed in September 2003 confirmed the long term funding concerns for IPERS. Based on capital market assumptions developed by Wilshire Associates, stochastic modeling was performed over a thirty year period. The results indicated that, absent changes in benefits or contributions, there is about a 75% probability that the System's funded ratio would steadily decline and the actuarial contribution rate (based on 30 year amortization of any UAL) would steadily increase. While the most recent year's asset returns exceeded the assumed rate, the long-term situation has not changed materially.

The fact that the System is not in actuarial balance does not create an immediate funding concern for the System. System assets are sufficient to make future projected benefit payments for many years. The shortfall between assets and liabilities that is indicated by this year's valuation is a long term funding issue. However, as the results of the Asset/Liability Study indicated, neither time nor optimistic investment returns are likely to resolve the long term funding issues. It is in the System's best interest for changes in contributions or benefits to be made sooner instead of later. Furthermore, making the changes earlier allows them to be less severe and less costly.



COMPARISON OF MAJOR VALUATION RESULTS

The major findings of the 2005 valuation compared with prior valuation results are summarized and compared on the following pages.



Investment return in excess of the actuarial assumption for FY2004 and FY2005 has resulted in a deferred investment gain. Currently the market value exceeds the actuarial value of assets by \$273 million. Absent investment losses in the next few years, the deferred gain will flow through to the actuarial value of assets.



Over the years, the normal cost rate has increased due to assumption changes, benefit improvements and demographic changes. As a result, the UAL payment has been reduced to a small part of the total contribution rate.





The unfunded actuarial liability reflects both asset and liability experience as well as changes in actuarial assumptions or benefit enhancements. The increases in 2002 through 2004 were the result of experience losses on assets and liabilities coupled with assumption changes in 2002. Even with the experience gain in 2005, there is an increase in the UAL largely due to contributions less than the actuarial required rate.



The amortization period reflects the size of the UAL as well as the decrease in the UAL payment due to increases in the normal cost rate. Since the 2002 valuation, the years to amortize have been infinite.



The funded ratio for **IPERS** increased prior to 2000 primarily as a result of strong asset returns. Since then, investment returns of below the 7.5% assumed rate on the actuarial value of assets and actual contributions less than the actuarial rate have been factors reducing the funded ratio.





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 a transfer occurs, there is an increase in the unfunded liability. actuarial No transfer has occurred in the last five years.

SUMMARY

IPERS, like many retirement plans in the United States (both public and private) is still feeling the impact of three years of record low market returns in 2001, 2002 and 2003. This, coupled with negative demographic experience and a change in actuarial assumptions in 2002 that increased liabilities, significantly increased the unfunded actuarial liability (UAL) of the System. For most members, IPERS is funded by a fixed (statutory) contribution rate of 9.45%. Given the small (0.33%) difference between the 9.45% statutory rate and the 9.12% normal cost rate (cost allocated to the current year of service worked by active members), the unfunded actuarial liability cannot be amortized. With slightly favorable net experience, the System remains nearly 90% funded. If the contribution rate were determined in this year's valuation with an amortization period of 30 years (which is the requirement in IPERS' Funding Policy for the System to be "fully funded"), the contribution rate would be 11.49% of payroll. This rate is determined based on the snapshot of the System taken on the valuation date, June 30, 2005, and applies only for the fiscal year beginning July 1, 2006. The rate necessary for the System to continue to be "fully funded" in future years will change each year as the deferred actuarial investment experience is recognized and as other experience (both investment and demographic) impacts the System. The Asset/Liability Study completed in 2003 indicated that, in order to reach a 30 year amortization of the UAL by 2014 (and not to exceed that limit thereafter), an estimated contribution rate of 13.25%, effective July 1, 2005, would be necessary. This is a better long term estimate of the level of contributions necessary to fund the System in accordance with the Funding Policy than the actuarial rate from the current valuation.

The System faces challenges similar to other large retirement systems. Like most large Systems, IPERS uses an asset smoothing method. This methodology delays recognition of investment gains and losses on a fair (market) value basis. If there is a net deferred actuarial investment gain, the actuarial value of assets will be less than the fair market value and the funded status will improve in the future if experience follows the assumptions. On the other hand, if there is a net deferred actuarial investment loss, the actuarial value of assets will be greater than the fair market value, and the funded status will decline over time if experience follows the assumptions. Due to strong investment returns for FY2004 and FY2005, the current deferred actuarial investment gain for IPERS is \$273 million. This reverses the situation faced in the past few years of having deferred investment losses. However, even with the deferred gain, the small portion of the total contribution rate that is available to pay off the unfunded actuarial liability makes it nearly impossible for the System to pay off the UAL over any reasonable time period without an increase in future contributions.



We conclude this executive summary by providing certain historical and comparative information for the System. The following page reflects recent historical impacts on IPERS' unfunded actuarial liability. The final page of this executive summary presents comparative statistics and actuarial information on both the June 30, 2005 and June 30, 2004 valuations. All figures shown include the regular membership and the two Special Services Groups.



SUMMARY OF HISTORICAL CHANGE IN **IPERS UNFUNDED ACTUARIAL LIABILITY**

<u>(\$Millions)</u>	<u>1996-97</u>	<u>1997-98</u>	<u>1998-99</u>	<u>1999-2000</u>	<u>2000-01</u>	<u>2001-02</u>	<u>2002-03</u>	<u>2003-04</u>	<u>2004-05</u>
Unfunded Actuarial Liability (BOY ¹)	1,161	661	555	390	327	441	1,255	1,867	2,176
 Expected Change From Amortization Method Contributions less than Actuarial Rate 	(1)	(43)	(37)	(32)	(22)	3	24 61	36 87	42 103
• Investment Experience	(474)	(716)	(730)	(781)	(81)	409	402	75	(89)
• Liability and Other Experience	(25)	118	(211)	515	217	258	125	82	57
Benefit Enhancements	0	342	0	142	0	3	0	29	0
• Change in Assumptions	0	0	587	0	0	141	0	0	0
• FED Transfer	0	193	226	93	0	0	0	0	0
Unfunded Actuarial Liability (EOY ²)	661	555	390	327	441	1,255	1,867	2,176	2,289
Amortization Years	9	8	20	21	39	*	*	*	*

*Infinite

1 = Beginning of Year 2 = End of Year



IOWA PUBLIC EMPLOYEES' RETIREMENT SYSTEM PRINCIPAL RESULTS

	June 30, 2005	June 30, 2004	% Chg
SYSTEM MEMBERSHIP			
1. Active Membership	-		
- Number of Members			
(excluding Retired/Reemployed)	160,876	160,003	0.5
- Projected Payroll for Upcoming Fiscal Year	\$5,480M	\$5,293M	3.5
- Average Salary	\$34,066	\$33,082	3.0
2. Inactive Membership			
- Number Not in Pay Status	65,482	103,129	-36.5 *
- Number of Retirees/Beneficiaries	79,419	76,782	3.4
- Average Annual Benefit	\$10,215	\$9,787	4.4
ASSETS AND LIABILITIES			
1. Net Assets (excluding FED reserve)			
- Market Value	\$18,224M	\$16,726M	9.0
- Actuarial Value	17,951M	16,952M	5.9
2. Projected Liabilities			
- Retired Members	\$7,841M	\$7,255M	8.1
- Inactive Members	456M	439M	3.9
- Active Members	16,277M	15,662M	3.9
- Total Liability	24,574M	23,356M	5.2
3. Actuarial Liability	\$20,240M	\$19,128M	5.8
4. Unfunded Actuarial Liability	\$2,289M	\$2,176M	5.2
5. Funded Ratio			
(Actuarial Value Assets/Actuarial Liability)	88.69%	88.62%	0.1
SYSTEM CONTRIBUTIONS			
Statutory Contribution Rate**	9.45%	9.45%	0.0
Years Required to Amortize Unfunded	Infinite	Infinite	N/A
Actuarial Liability			
Actuarially Required Contribution Rate (ARC)	11.49%	11.42%	0.6

M = (\$)Millions

* Law changes in 97B.48 allowed mandatory distributions to members who were inactive more than five years and whose account value was less than \$3,000.

** Contribution for certain special groups (4% 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 <u>ongoing</u> 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, 2005 is presented on the following pages:

<u>Page</u>	<u>Contents</u>
15	Analysis of Net Assets
16	Summary of Fund Activity – Market Value
17	Actuarial Value of Net Assets
18	Historical Comparison (Actuarial and Market)
19	Summary of Favorable Experience Dividend Reserve



ANALYSIS OF NET ASSETS AT MARKET VALUES

	<u>(\$ Millions)</u>			
	June 30, 2	June 30, 2005		, 2004
	<u>Amount</u>	% of <u>Total</u>	<u>Amount</u>	% of <u>Total</u>
Cash & Equivalents	\$104	0.6%	\$68	0.4%
Capital Assets, Receivables and Payables	(2,327)	(12.4)	(2,461)	(14.3)
Domestic Equity	6,248	33.3	5,893	34.2
International Equity	2,724	14.5	2,688	15.6
Global Fixed Income	7,662	40.8	7,230	41.9
Real Estate Funds	1,233	6.6	1,045	6.1
Private Equity/Debt	1,176	6.2	1,050	6.1
Collateral Pool	1,947	10.4	1,737	10.1
TOTAL ASSETS	\$18,767	100.0%	\$17,250	100.0%
FED Reserve (Before current year transfer)	543		524	
Current Year FED Transfer Payable	0		0	
Net Retirement System Assets	\$18,224		\$16,726	
Allocation of Net Assets:	¢ 17.261			
Regular Membership Special Services Group 1	\$ 17,361 290			
Special Services Group 2	573			
Total Net Assets	\$ 18,224			



EXHIBIT 2 SUMMARY OF FUND ACTIVITY

(Market Value)

	Regular Membership	Special Service Group 1 *	Special Service Group 2 **	FED Reserve	Total
NET RETIREMENT SYSTEM					
ASSETS ON JUNE 30, 2004	\$15,962,094,082	\$258,554,481	\$505,579,290	\$523,688,998	\$17,249,916,851
REVENUE					
FED Transfer	0	0	0	0	0
Employer contributions	289,220,242	6,236,770	15,385,375	0	310,842,387
Member contributions	186,103,253	6,236,452	10,267,507	0	202,607,212
Service purchase	10,814,666	102,329	300,251	0	11,217,246
Investment income	1,814,599,263	29,898,918	58,722,119	58,095,385	1,961,315,685
Total Revenue	\$2,300,737,424	\$42,474,469	\$84,675,252	\$58,095,385	\$2,485,982,530
DISBURSEMENTS					
Benefit payments	810,415,553	7,635,432	13,328,425	37,178,186	868,557,596
Member and employer refunds	38,460,403	2,103,170	2,549,885	0	43,113,458
Administrative expense	8,034,996	44,361	135,546	0	8,214,903
Investment expense	45,135,305	743,689	1,460,620	1,445,031	48,784,645
Total Expenses	\$902,046,257	\$10,526,652	\$17,474,476	\$38,623,217	\$968,670,602
NET RETIREMENT SYSTEM					
ASSETS ON JUNE 30, 2005	\$17,360,785,249	\$290,502,298	\$572,780,066	\$543,161,166	\$18,767,228,779
DISTRIBUTION TO FED					
ON JANUARY 2006	\$0	\$0	\$0	\$0	\$0
ADJUSTED ASSETS ON JUNE 30, 2005	\$17,360,785,249	\$290,502,298	\$572,780,066	\$543,161,166	\$18,767,228,779

* Includes Sheriffs and Deputies

** Includes all other public safety members



ACTUARIAL VALUE OF NET ASSETS

	Regular Membership	Special Service Group 1 *	Special Service Group 2 **	Total
1. Actuarial Value of Assets as of June 30, 2004	\$16,184,631,766	\$259,707,670	\$507,603,103	\$16,951,942,539
2. Actual Receipts/Disbursements				
a. Contributions	486,138,161	12,575,551	25,953,133	524,666,845
b. Benefit Payments and Refunds	848,875,956	9,738,602	15,878,310	874,492,868
c. Net Change	(362,737,795)	2,836,949	10,074,823	(349,826,023)
3. Expected Value of Assets as of June 30, 2005 [(1) x 1.075] + [(2c) x (1.075) ^{.5}]	17,022,384,598	282,127,157	556,119,135	17,860,630,890
4. Market Value of Assets as of June 30, 2005 Before Transfers	17,360,785,249	290,502,298	572,780,066	18,224,067,613
5. Difference Between Market and Expected Values(4) - (3)	338,400,651	8,375,141	16,660,931	363,436,723
 6. Actuarial Value of Assets as of June 30, 2005 (3) + [(5) x 25%] 	17,106,984,761	284,220,942	560,284,368	17,951,490,071
7. Adjustment for Transfer to the Favorable Experience Dividend Reserve Account	0	0	0	0
8. Actuarial Value of Assets for June 30, 2005 Actuarial Valuation	\$17,106,984,761	\$284,220,942	\$560,284,368	\$17,951,490,071
 * Includes Sheriffs and Deputies ** Includes all other public safety members 				



EXHIBIT 4 HISTORICAL COMPARISON (ACTUARIAL AND MARKET)

Value as o	f Actuarial Value	Market Value	
June 30	of Net Assets (AVA	of Net Assets (MVA)	AVA/MVA
1996 [;]	* 8,975,396,251	9,587,104,982	94%
1997	10,112,976,077	11,533,968,923	88%
1998 [;]	** 11,352,674,142	13,463,899,832	84%
1999 [;]	** 12,664,031,437	14,814,311,451	85%
2000 *	** 14,145,141,535	16,473,516,141	86%
2001	15,112,424,729	15,357,519,356	98%
2002	15,613,114,099	14,387,799,637	109%
2003	16,120,476,011	14,915,941,546	108%
2004	16,951,942,539	16,726,227,853	101%
2005	17,951,490,071	18,224,067,613	99%

Values are for combined regular 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 to the Favorable Experience Dividend Reserve Account.





SUMMARY OF FAVORABLE EXPERIENCE DIVIDEND RESERVE

Market Value of FED Reserve as of June 30, 2005	\$ 543,161,166
Transfer to FED Payable on January 15, 2006 Based on June 30, 2005 Valuation Results	\$ 0
Total Value of FED Reserve as of June 30, 2005	\$ 543,161,166

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, the likelihood of future credits to and payments from the reserve, and distributions paid as a dividend under 97B.49F(1).

Based on the June 30, 2005 balance in the FED reserve and assuming (1) a 7.5% rate of return on the market value of assets in the future and (2) all other assumptions are exactly met, the FED reserve is projected to be sufficient to make payments through the dates shown below.

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

	<u>Maximum*</u>	Expected**
2006	\$122.8	\$43.8
2007	144.2	51.4
2008	167.6	59.8
2009	193.1	68.9
2010	12.2 ***	78.8
2011	-	89.5
2012	-	101.0
2013	-	113.3
2014	-	126.5
2015	-	80.0 ***
2016	_	-

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

** Based on 1.07% 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 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 that is developed is called the "**normal cost**". 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 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, 2005, various measurements of liability. It is important to note that the actuarial liability differs from the present value of accrued benefits (PVAB). 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.

The tables in this section present System liabilities as follows:

Page	<u>Contents</u>
22	Present Value of Future Benefits
23	Unfunded Actuarial Liability
24	Development of FED Transfer
25	Present Value of Accrued Benefits



PRESENT VALUE OF FUTURE BENEFITS as of June 30, 2005

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

	Regular Membership	Special Service Group 1 *	Special Service Group 2 **	Total
Present Value of Future Benefits:				
Active Members				
Retirement benefits	\$13,819,239,260	\$214,362,640	\$300,420,115	\$14,334,022,015
Death benefits	189,122,364	4,155,301	13,929,824	207,207,489
Termination benefits	901,118,589	31,510,283	99,732,565	1,032,361,437
Disability benefits	426,718,207	60,236,059	216,468,022	703,422,288
Inactive Members				
Vested members	411,818,603	6,747,640	12,541,248	431,107,491
Nonvested members	23,759,156	139,032	508,090	24,406,278
Retired Members and Beneficiaries	7,642,618,806	72,956,480	125,700,967	7,841,276,253
Total Present Value of Future Benefits	\$23,414,394,985	\$390,107,435	\$769,300,831	\$24,573,803,251

* Includes Sheriffs and Deputies

** Includes all other public safety members



UNFUNDED ACTUARIAL LIABILITY as of June 30, 2005

	Regular Membership	Special Services Group 1 *	Special Services Group 2 **	Total
1. Present Value of Future Benefits	\$23,414,394,985	\$390,107,435	\$769,300,831	\$24,573,803,251
2. Present Value of Future Normal Costs	3,997,835,959	95,923,293	239,945,332	4,333,704,584
3. Actuarial Liability (1) - (2)	19,416,559,026	294,184,142	529,355,499	20,240,098,667
4. Actuarial Value of Net Assets	17,106,984,761	284,220,942	560,284,368	17,951,490,071
5. Unfunded Actuarial Liability (3) - (4)	2,309,574,265	9,963,200	(30,928,869)	2,288,608,596

* Includes Sheriffs and Deputies

** Includes all other public safety members



DEVELOPMENT OF AMOUNT TO BE TRANSFERRED TO THE FAVORABLE EXPERIENCE DIVIDEND RESERVE Based on the June 30, 2005 Actuarial Valuation

1. June 30, 2004 Unfunded Actuarial Liability	\$ 2,176,468,067
2. Normal Cost as of June 30, 2004	477,614,151
3. Employer and Member Contributions *	513,449,599
4. Increase due to assumption changes	0
5. Increase due to plan amendments	0
6. Expected Unfunded Actuarial Liability as of June 30, 2005 [(1) + (2)] * 1.075 - [(3) * (1.075) ⁻⁵] + (4) + (5)	2,320,782,509
7. Actual Unfunded Actuarial Liability as of June 30, 2005	2,288,608,596
8. (Gain)/loss (7)-(6)	(32,173,913)
9. Portion of gain to transfer to FED	N/A
10. Amount of Actuarial Value of Assets to transfer to FED	\$ 0
11. Market value of FED transfer	\$ 0
* Does not include service purchases	



PRESENT VALUE OF ACCRUED BENEFITS as of June 30, 2005

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.

		Regular Membership		Special Services Group 1 *		Special Services Group 2 **		Total	
1. Present value of vested accrued benefits									
for active plan members	\$	7,571,563,981	\$	173,903,899	\$	315,870,614	\$	8,061,338,494	
Present value of vested benefits being									
paid to plan retirees and beneficiaries		7,642,618,806		72,956,480		125,700,967		7,841,276,253	
Present value of vested benefits to									
status (deferred vested)		411,818,603		6,747,640		12,541,248		431,107,491	
Accumulated employee account balance of									
nonvested inactive members		23,759,156		139,032		508,090		24,406,278	
Total present value of vested accrued benefits	\$	15,649,760,546	\$	253,747,051	\$	454,620,919	\$	16,358,128,516	
2. Present value of nonvested accrued benefits		38,474,409		667,850		2,142,245		41,284,504	
3. Total present value of all accrued benefits	\$	15,688,234,955	\$	254,414,901	\$	456,763,164	\$	16,399,413,020	

* Includes Sheriffs and Deputies

** Includes all other public safety members



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 liability as a level percent of payroll. The unfunded actuarial 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:

Page	Contents
28	Actuarial Balance Sheet
29	Analysis of Contribution Rate
30	Calculation of Contribution Rates for Special Services Groups



ACTUARIAL BALANCE SHEET as of June 30, 2005

	Regular Membership	Special Services Group 1 *	Special Services Group 2 **	Total
ASSETS	-	•		
Actuarial value of assets	\$17,106,984,761	\$284,220,942	\$560,284,368	\$17,951,490,071
Present value of future normal costs	3,997,835,959	95,923,293	239,945,332	4,333,704,584
Present value of future contributions to amortize unfunded actuarial liability	2,309,574,265	9,963,200	(30,928,869)	2,288,608,596
Total Net Assets	\$23,414,394,985	\$390,107,435	\$769,300,831	\$24,573,803,251
<u>LIABILITIES</u>				
Present Value of Future Benefits:				
Retired Members and Beneficiaries	\$7,642,618,806	\$72,956,480	\$125,700,967	\$7,841,276,253
Active Members	15,336,198,420	310,264,283	630,550,526	16,277,013,229
Inactive Members	435,577,759	6,886,672	13,049,338	455,513,769
Total Liabilities	\$23,414,394,985	\$390,107,435	\$769,300,831	\$24,573,803,251

* Includes Sheriffs and Deputies

** Includes all other public safety members



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 payment of 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.

The contribution rate developed in this exhibit is based on the June 30, 2005 actuarial valuation and applies to the fiscal year beginning July 1, 2006.

	Re	egular Membership)
 (a) Normal Cost, Adjusted to Mid-year (b) Expected Payroll for Members 	\$	473,457,981	
Under Assumed Retirement Age (c) Normal Cost Rate	\$	5,191,477,691	
(a) / (b)		9.12%	
2. Unfunded Actuarial Liability at Valuation Date	\$	2,309,574,265	
3. Contribution Toward Unfunded			
Actuarial Liability (UAL)		0.33%	
4. Expected Payroll for			
FYE 2006	\$	5,231,010,355	
5. UAL Contribution Adjusted to Mid-year			
(3) x (4) / $(1.075)^{.5}$	\$	16,649,273	
6. Amortization Factor			
(2) / (5)		138.71923	
7. Amortization Period Necessary to Finance			
UAL as a Level Percent of Payroll at			
Contribution Rate Shown in (3)*	Can	not be amortized	
8. Contribution Rate to Amortize UAL Over 30 Years*		11.49%	

* Assuming all actuarial assumptions are met in the future.



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 plus 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.

The contribution rate developed in this exhibit is based on the June 30, 2005 actuarial valuation and applies to the fiscal year beginning July 1, 2006.

	Special Services Group 1 *		Special Services Group 2 **	
 (a) Normal Cost, Adjusted to Mid-year (b) Expected Payroll for Members 	\$ 11,780,311	\$	27,997,396	
Under Assumed Retirement Age (c) Normal Cost Rate	\$ 73,432,206	\$	173,233,770	
(a) / (b)	16.04%		16.16%	
2. Unfunded Actuarial Liability at Valuation Date	\$ 9,963,200	\$	(30,928,869)	
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 $[(2) / (4)] \times (1.075)^5$	\$ 534,247	\$	(1,658,469)	
6. Expected Payroll for FYE 2006	\$ 75,991,917	\$	173,347,521	
7. Contribution Rate Toward the UAL(5) / (6)	0.70%		-0.96%	
8. Total Contribution Rate Effective July 1, 2006 (1c) + (7)	16.74%		15.20%	
Employer Contribution Rate Employee Contribution Rate	8.370% 8.370%	(50%) (50%)	9.120% 6.080%	(60%) (40%)
* Includes Sheriffs and Deputies				

** Includes all other public safety members



SECTION V

PLAN 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, supersedes 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.

Page	<u>Contents</u>
32	Summary of Membership
33	Schedule of Funding Progress
34	Schedule of Employer Contributions



SUMMARY OF MEMBERSHIP

	<u>June 30, 2005</u>	<u>June 30, 2004</u>
Active Employees:		
Vested	124,031	122,460
Not yet vested	36,845	37,543
Total active employees *	160,876	160,003
Retirees and beneficiaries currently receiving benefits:	79,419	76,782
Inactive vested members entitled to benefits		
but not yet receiving them:	26,919	** 35,788

*Excludes retired/reemployed members

** Law changes in 97B.48 allowed mandatory distributions to members who were inactive more than five years and whose account value was less than \$3,000.



IOWA PUBLIC EMPLOYEES' RETIREMENT SYSTEM SCHEDULE OF FUNDING PROGRESS

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

	Net Actuarial		Unfunded			UAL as a
Actuarial	Value of	Actuarial	AL	Funded	Covered	Percentage of
Valuation	Assets	Liability (AL)	(UAL)	Ratio	Payroll (P/R)	Covered P/R
Date	<u>(a)</u>	<u>(b)</u>	<u>(b-a)</u>	<u>(a/b)</u>	<u>(c)</u>	<u>[(b-a)/c]</u>
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	93.86%	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%	4,550,180,113	9.69%
6/30/02	15,613,114,099	16,868,559,185	1,255,445,086	92.56%	4,743,576,424	26.47%
6/30/03	16,120,476,011	17,987,374,960	1,866,898,949	89.62%	4,881,100,238	38.25%
6/30/04	16,951,942,539	19,128,410,606	2,176,468,067	88.62%	5,072,027,906	42.91%
6/30/05	17,951,490,071	20,240,098,667	2,288,608,596	88.69%	5,236,860,886	43.70%

Actuarial Assumptions: See Appendix C



IOWA PUBLIC EMPLOYEES' RETIREMENT SYSTEM SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ending	iscal Actuarially Zear Required Inding Contributions	
6/30/98	\$227,772,773	100.0%
6/30/99	244,933,066	100.0%
6/30/00	253,271,051	100.0%
6/30/01	268,315,094	100.0%
6/30/02	278,682,745	100.0%
6/30/03	289,772,054	99.2%
6/30/04	328,760,242	90.9% *
6/30/05	363,181,025	85.6% *

*Numbers are reported in aggregate for the total System membership. The corresponding numbers for 6/30/04 and 6/30/05 for each group are 90.3% and 84.7% for the regular membership and 100.0% for both years for both Special Services Group 1 and 2.



APPENDIX A

SUMMARY STATISTICS ON SYSTEM MEMBERSHIP



APPENDIX A

SUMMARY STATISTICS ON SYSTEM MEMBERSHIP

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SUMMARY OF ACTIVE MEMBERS

The data we received for the June 30, 2005 valuation contained information as of June 30, 2005.

	Regular	Special Ser	vice Groups	Total	Total	Percent
	Membership	Group 1	Group 2	6/30/2005	6/30/2004	Change
Total Employees	155,139	1,470	4,267	160,876	160,003	0.5
Projected Covered						
Payroll* (millions)	\$5,231	\$76	\$173	\$5,480	\$5,293	3.5
Average Age	45.7	41.2	42.1	45.6	45.4	0.4
Average Entry Age	34.0	26.9	30.7	33.8	33.8	0.0
Average Earnings*	\$33,718	\$51,695	\$40,625	\$34,066	\$33,082	3.0
Retired Reemployed	6,560	4	28	6,592	6,438	2.4

*Payroll figures as of June 30 are actual amounts paid during the prior fiscal year, increased by the assumed salary increase factor for the upcoming fiscal year.





SUMMARY OF INACTIVE VESTED MEMBERS

Regular	Specia	I Services	Total	Total	
Membership	Group 1	Group 2	6/30/2005	6/30/2004	% Change
26,531	80	308	26,919	35,788	-24.8%*



* Law changes in 97B.48 allowed mandatory distributions to members who were inactive more than five years and whose account value was less than \$3,000.



SUMMARY OF RETIRED MEMBERS AND BENEFICIARIES

Regular	Special Services		Total	Total	
Membership	Group 1	Group 2	6/30/2005	6/30/2004	% Change
78,402	309	708	79,419	76,782	3.4%





AGE AND SERVICE DISTRIBUTION AS OF JUNE 30, 2005 FOR ACTIVE MEMBERS* Males and Females - Regular Membership

									Years	s of Se	rvice									
	<u>0 t</u>	<u>o 4</u>	<u>5 t</u>	<u>o 9</u>	<u>10 t</u>	<u>o 14</u>	<u>15 t</u>	<u>o 19</u>	<u>20 t</u>	<u>o 24</u>	<u>25 t</u>	<u>o 29</u>	<u>30 t</u>	<u>o 34</u>	<u>35 t</u>	<u>o 39</u>	<u>40 an</u>	d over	Tot	<u>al</u>
Age	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	5,691	12,848	128	20,642	0	NA	0	NA	5,819	13,020										
25-29	8,726	23,205	2,941	31,313	38	28,203	0	NA	0	NA	11,705	25,258								
30-34	5,122	22,769	5,870	34,202	1,670	37,438	26	37,033	0	NA	0	NA	0	NA	0	NA	0	NA	12,688	30,018
35-39	5,322	20,035	4,900	31,759	4,057	40,362	1,333	42,871	23	33,864	0	NA	0	NA	0	NA	0	NA	15,635	30,951
40-44	5,635	18,668	5,590	27,512	3,446	35,054	3,672	43,769	1,713	43,898	168	40,301	0	NA	0	NA	0	NA	20,224	30,779
45-49	4,783	19,376	5,640	26,127	4,063	31,884	3,498	40,432	3,497	47,298	2,785	45,009	183	41,038	0	NA	0	NA	24,449	33,100
50-54	3,858	19,919	4,401	27,013	3,875	30,767	3,892	36,905	3,037	43,303	4,766	48,964	2,865	49,379	91	44,467	0	NA	26,785	36,176
55-59	3,545	17,071	3,024	26,547	2,781	30,085	3,261	36,095	2,719	40,870	3,118	45,539	3,542	53,724	1,035	51,947	25	42,134	23,050	36,460
60-64	3,028	11,377	1,733	21,165	1,350	26,156	1,452	32,589	1,253	36,181	1,325	38,574	762	46,462	619	54,532	165	50,246	11,687	28,036
65-69	2,391	7,251	1,243	12,095	502	17,577	378	26,601	257	31,381	232	29,440	146	37,147	87	41,521	69	59,781	5,305	14,949
70 & over	2,365	9,335	1,500	8,703	348	9,155	68	20,025	23	23,010	13	24,284	17	24,444	8	27,022	10	45,518	4,352	9,562
Totals	50,466	17,991	36,970	27,487	22,130	32,892	17,580	38,699	12,522	42,960	12,407	45,598	7,515	50,634	1,840	51,845	269	51,762	161,699	30,463

*Including retired/reemployed members (see A-2)



AGE AND SERVICE DISTRIBUTION AS OF JUNE 30, 2005 FOR ACTIVE MEMBERS* Males and Females - Special Services Group 1

									Years	of Sei	rvice									
	<u>0 t</u>	<u>o 4</u>	<u>5 t</u>	<u>o 9</u>	<u>10 t</u>	<u>o 14</u>	<u>15 t</u>	<u>o 19</u>	<u>20 t</u>	<u>o 24</u>	<u>25 t</u>	<u>o 29</u>	<u>30 t</u>	<u>o 34</u>	<u>35 t</u>	<u>o 39</u>	<u>40 an</u>	<u>d over</u>	<u>To</u>	tal
Age	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	24	32,576	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	24	32,576
25-29	89	38,218	81	43,548	1	38,662	0	NA	0	NA	171	40,745								
30-34	47	36,621	117	45,458	57	45,517	0	NA	0	NA	221	43,594								
35-39	35	37,571	62	45,905	98	48,652	55	48,216	0	NA	0	NA	0	NA	0	NA	0	NA	250	46,323
40-44	6	43,790	39	45,650	54	49,579	87	50,287	42	54,362	1	74,165	0	NA	0	NA	0	NA	229	50,012
45-49	7	36,596	24	43,657	25	48,810	50	48,249	57	49,007	85	53,037	1	49,829	0	NA	0	NA	249	49,350
50-54	5	52,665	7	46,907	13	45,393	31	47,403	39	50,805	68	52,552	43	58,614	1	58,959	0	NA	207	52,104
55-59	2	24,087	2	48,302	10	35,440	13	46,941	14	51,128	26	52,646	24	53,826	4	56,225	1	40,596	96	49,493
60-64	5	29,226	0	NA	1	43,777	3	39,769	4	41,166	2	54,164	7	59,555	2	59,119	0	NA	24	46,555
65-69	0	NA	0	NA	0	NA	1	50,649	1	50,108	0	NA	0	NA	0	NA	1	49,588	3	50,115
70 & over	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA
Totals	220	37,254	332	45,016	259	47,439	240	48,704	157	50,882	182	52,929	75	57,052	7	57,442	2	45,092	1,474	47,157

*Including retired/reemployed members (see A-2)



AGE AND SERVICE DISTRIBUTION AS OF JUNE 30, 2005 FOR ACTIVE MEMBERS* Males and Females - Special Service Group 2

									Years	of Sei	rvice									
	<u>0 t</u>	<u>o 4</u>	<u>5 t</u>	<u>o 9</u>	<u>10 t</u>	<u>o 14</u>	<u>15 t</u>	<u>o 19</u>	<u>20 t</u>	<u>o 24</u>	<u>25 t</u>	to 29	<u>30 t</u>	<u>o 34</u>	<u>35 t</u>	<u>o 39</u>	<u>40 an</u>	d over	<u>To</u>	tal
Age	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	137	21,809	2	21,310	0	NA	0	NA	139	21,802										
25-29	256	26,394	165	35,577	4	44,204	0	NA	0	NA	425	30,127								
30-34	187	22,702	287	39,226	96	42,462	1	44,445	0	NA	0	NA	0	NA	0	NA	0	NA	571	34,368
35-39	133	23,480	232	38,013	182	42,239	95	45,254	2	39,417	0	NA	0	NA	0	NA	0	NA	644	37,279
40-44	102	24,331	199	37,371	114	41,243	165	45,294	85	47,529	11	47,157	0	NA	0	NA	0	NA	676	39,427
45-49	65	26,426	142	35,825	100	41,711	104	46,135	149	48,245	95	50,078	3	51,379	0	NA	0	NA	658	42,362
50-54	62	26,289	111	39,109	75	43,673	63	45,228	118	47,352	117	47,821	63	52,746	3	48,607	0	NA	612	43,705
55-59	42	28,693	80	41,621	54	36,528	51	45,725	68	47,026	47	49,189	52	51,638	7	56,591	1	58,195	402	43,504
60-64	19	19,845	32	36,608	25	39,118	15	46,864	21	45,577	13	46,496	5	59,496	5	41,387	0	NA	135	39,225
65-69	5	11,667	5	30,120	6	27,444	5	42,351	6	36,174	1	54,482	1	50,364	0	NA	0	NA	29	31,284
70 & over	4	26,718	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	4	26,718
Totals	1,012	24,397	1,255	37,854	656	41,470	499	45,513	449	47,365	284	48,739	124	52,501	15	49,926	1	58,195	4,295	38,309

*Including retired/reemployed members (see A-2)





















									Years	of Sei	rvice									
	<u>0 to</u>	<u>3</u> .	<u>4 t</u>	<u>o 9</u>	<u>10 t</u>	<u>o 14</u>	<u>15 t</u>	<u>o 19</u>	<u>20 t</u>	<u>o 24</u>	<u>25 t</u>	<u>o 29</u>	<u>30 t</u>	<u>o 34</u>	<u>35 t</u>	<u>o 39</u>	<u>40 an</u>	<u>d over</u>	Tot	tal
Age	No.	Avg. Hi-3	No.	A∨g. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3										
Under 25	0	NA	27	10,791	0	NA	0	NA	27	1,755										
25-29	0	NA	379	20,653	0	NA	0	NA	379	3,943										
30-34	0	NA	1,257	23,497	53	11,365	0	NA	0	NA	1,310	5,883								
35-39	0	NA	1,686	21,450	319	14,099	22	34,739	0	NA	0	NA	0	NA	0	NA	0	NA	2,027	7,583
40-44	0	NA	2,085	18,265	605	15,151	191	31,589	40	29,280	1	31,177	0	NA	0	NA	0	NA	2,922	9,280
45-49	0	NA	2,565	16,117	1,019	14,578	447	29,549	193	33,550	44	39,327	3	34,792	0	NA	0	NA	4,271	11,791
50-54	0	NA	2,794	16,161	1,378	15,775	758	26,268	382	31,884	181	38,942	49	40,211	1	24,180	0	NA	5,543	15,683
55-59	2,549	7,119	1,754	15,326	790	16,374	423	23,505	219	29,024	90	35,474	34	38,795	4	32,829	0	NA	5,863	9,139
60-64	1,218	6,105	702	13,393	279	15,023	133	20,009	45	22,535	28	28,512	8	35,446	4	32,093	0	NA	2,417	6,713
65-69	634	4,597	234	9,060	84	12,655	22	13,057	9	17,717	9	16,645	1	27,750	1	22,376	0	NA	994	3,435
70 & over	663	2,867	81	4,640	18	7,885	10	13,018	4	15,724	2	6,405	0	NA	0	NA	0	NA	778	1,352
Totals	5,064	6,003	13,564	17,486	4,545	15,224	2,006	26,390	892	30,738	355	36,518	95	39,001	10	30,625	0	NA	26,531	9,925

AGE AND SERVICE DISTRIBUTION AS OF JUNE 30, 2005 FOR INACTIVE VESTED MEMBERS

Males and Females - Regular Membership



AGE AND SERVICE DISTRIBUTION AS OF JUNE 30, 2005 FOR INACTIVE VESTED MEMBERS Males and Females - Special Services Group 1

									Years	of Sei	rvice									
	<u>0 t</u>	<u>53</u>	<u>4 t</u>	<u>o 9</u>	<u>10 t</u>	<u>o 14</u>	<u>15 t</u>	<u>o 19</u>	<u>20 t</u>	<u>o 24</u>	<u>25 t</u>	<u>o 29</u>	<u>30 t</u>	<u>o 34</u>	<u>35 t</u>	to <u>39</u>	<u>40 an</u>	<u>d over</u>	<u>To</u>	tal
Age	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3
Under 25	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA
25-29	0	NA	2	36,993	0	NA	0	NA	2	10,089										
30-34	0	NA	8	36,846	2	22,591	0	NA	0	NA	10	13,309								
35-39	0	NA	6	32,461	3	25,981	1	48,732	0	NA	0	NA	0	NA	0	NA	0	NA	10	21,204
40-44	0	NA	3	30,923	4	32,317	4	44,228	0	NA	0	NA	0	NA	0	NA	0	NA	11	39,057
45-49	0	NA	4	27,888	4	31,978	4	36,732	6	33,484	1	46,003	0	NA	0	NA	0	NA	19	44,933
50-54	0	NA	4	21,646	1	38,122	8	25,473	4	39,878	6	50,683	0	NA	0	NA	0	NA	23	58,414
55-59	1	1,138	0	NA	1	44,015	0	NA	0	NA	2	22,055								
60-64	0	NA	2	11,304	0	NA	0	NA	2	9,910										
65-69	1	28,597	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	1	3,395
70 & over	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA
Totals	2	14,868	29	30,242	15	30,829	17	33,903	10	36,041	7	50,014	0	NA	0	NA	0	NA	80	38,245

AGE AND SERVICE DISTRIBUTION AS OF JUNE 30, 2005 FOR INACTIVE VESTED MEMBERS Males and Females - Special Services Group 2

									Years	of Sei	rvice									
	<u>0 t</u>	<u>o 3</u>	<u>4 t</u>	<u>o 9</u>	<u>10 t</u>	<u>o 14</u>	<u>15 t</u>	<u>o 19</u>	<u>20 t</u>	<u>o 24</u>	<u>25 t</u>	<u>o 29</u>	<u>30 t</u>	<u>o 34</u>	<u>35 t</u>	to 39	<u>40 an</u>	<u>d over</u>	<u>To</u>	tal
Age	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3
Under 25	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA
25-29	0	NA	20	23,633	0	NA	0	NA	20	7,850										
30-34	0	NA	40	23,915	1	4,982	0	NA	0	NA	41	9,103								
35-39	0	NA	35	21,151	9	24,705	1	40,033	0	NA	0	NA	0	NA	0	NA	0	NA	45	13,395
40-44	0	NA	38	15,196	16	23,820	6	32,880	2	35,944	0	NA	0	NA	0	NA	0	NA	62	16,685
45-49	0	NA	28	16,720	12	20,235	4	29,924	3	36,959	1	52,424	1	79,927	0	NA	0	NA	49	19,190
50-54	0	NA	20	15,512	8	24,490	9	37,120	9	33,086	3	36,593	3	53,114	0	NA	0	NA	52	33,661
55-59	8	13,014	8	10,285	6	13,772	0	NA	3	25,958	0	NA	0	NA	0	NA	0	NA	25	11,396
60-64	5	16,871	5	12,765	0	NA	0	NA	1	41,239	0	NA	0	NA	0	NA	0	NA	11	8,469
65-69	1	180	0	NA	0	NA	0	NA	0	NA	1	4,015	0	NA	0	NA	0	NA	2	14,863
70 & over	1	2,756	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	1	79
Totals	15	12,760	194	18,925	52	21,727	20	34,554	18	33,314	5	33,244	4	59,817	0	NA	0	NA	308	17,098



Age Distribution of Inactive Vested Members Regular Membership

Service Distribution of Inactive Vested Members Regular Membership







Service Distribution of Inactive Vested Members Special Services Group 1







Age Distribution of Inactive Vested Members Special Services Group 2

Service Distribution of Inactive Vested Members Special Services Group 2





ANALYSIS OF RETIREES AND BENEFICIARIES

Males and Females - Regular Membership

				Number of M	lembers and	Beneficiaries					Average
						Contingent			Period		Annual
<u>Age</u>	<u>Chapt 97</u>	Option 1	Option 2	Option 3	Option 4	Beneficiary	Option 5	Option 6	<u>Certain</u>	<u>Total</u>	<u>Benefit</u>
Under 40	0	5	2	0	1	22	3	3	13	49	\$ 6,483
40 to 44	0	20	4	1	7	10	4	5	9	60	6,295
45 to 49	0	64	14	12	22	32	11	10	3	168	7,340
50 to 54	0	122	37	41	49	76	14	41	10	390	9,450
55 to 59	0	1,472	1,240	883	437	155	675	1,191	16	6,069	16,633
60 to 64	0	2,861	2,142	1,582	1,341	216	1,397	1,417	37	10,993	16,115
65 to 69	0	4,302	3,003	1,968	2,385	378	1,930	843	53	14,862	13,038
70 to 74	0	4,560	3,083	1,620	2,652	505	1,849	160	59	14,488	9,427
75 to 79	0	4,188	3,154	1,223	1,885	625	1,399	9	26	12,509	6,753
80 to 84	0	3,673	2,167	918	1,122	573	1,180	1	15	9,649	5,277
85 to 89	4	2,727	784	467	423	304	1,046	0	2	5,757	4,466
90 to 94	5	1,437	205	230	80	101	470	0	0	2,528	3,594
95 to 99	5	465	42	86	13	26	122	0	0	759	3,434
100 & up	2	75	12	21	1	6	4	0	0	121	3,428
Counts	16	25,971	15,889	9,052	10,418	3,029	10,104	3,680	243	78,402	\$10,041
% of Total	0.0%	33.1%	20.3%	11.5%	13.3%	3.9%	12.9%	4.7%	0.3%	100.0%	



ANALYSIS OF RETIREES AND BENEFICIARIES

Males and Females - Special Services Group 1

				Number of M	embers and	Beneficiaries					Average			
	Age Chapt 97 Option 1 Option 2 Option 3 Option 4 Beneficiary Option 5 Option 6 Certain Total Age Age nder 40 0 1 0 0 0 1 0 0 2 0 0 0 2 0 0 0 2 0 0 0 2 0 0 0 2 0 0 0 1 0 0 0 2 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 0 0 0 1 0 0 0 0 1 0 0 0 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 0													
<u>Age</u>	<u>Chapt 97</u>	Option 1	Option 2	Option 3	Option 4	Beneficiary	Option 5	Option 6	<u>Certain</u>	<u>Total</u>	<u>Benefit</u>			
Under 40	0	1	0	0	0	1	0	0	0	2	\$22,065			
40 to 44	0	0	0	0	0	1	0	0	0	1	68,619			
45 to 49	0	0	0	0	1	2	0	0	0	3	15,505			
50 to 54	0	2	3	0	1	0	0	5	0	11	25,123			
55 to 59	0	23	5	3	13	2	9	27	0	82	27,565			
60 to 64	0	22	10	6	25	3	5	15	0	86	24,949			
65 to 69	0	10	5	7	28	5	6	10	0	71	20,037			
70 to 74	0	8	6	1	15	4	2	1	1	38	15,707			
75 to 79	0	3	2	0	3	4	0	0	0	12	13,172			
80 to 84	0	0	0	0	0	3	0	0	0	3	7,007			
85 to 89	0	0	0	0	0	0	0	0	0	0	NA			
90 to 94	0	0	0	0	0	0	0	0	0	0	NA			
95 to 99	0	0	0	0	0	0	0	0	0	0	NA			
100 & up	0	0	0	0	0	0	0	0	0	0	NA			
Counts	0	69	31	17	86	25	22	58	1	309	\$22,642			
% of Total	0.0%	22.3%	10.0%	5.5%	27.8%	8.1%	7.1%	18.8%	0.3%	100.0%				

ANALYSIS OF RETIREES AND BENEFICIARIES

Males and Females - Special Services Group 2

				Number of M	lembers and	Beneficiaries					Average
						Contingent			Period		Annual
<u>Age</u>	<u>Chapt 97</u>	Option 1	Option 2	Option 3	Option 4	Beneficiary	Option 5	Option 6	<u>Certain</u>	<u>Total</u>	<u>Benefit</u>
Under 40	0	2	0	0	1	0	0	1	0	4	\$ 7,459
40 to 44	0	3	0	1	0	1	0	0	0	5	11,515
45 to 49	0	3	1	5	4	1	0	5	0	19	17,015
50 to 54	0	5	2	0	4	2	0	4	0	17	18,976
55 to 59	0	33	16	13	33	3	8	53	0	159	22,694
60 to 64	0	48	29	12	35	6	14	23	2	169	18,210
65 to 69	0	47	22	12	71	7	16	22	0	197	15,696
70 to 74	0	31	7	3	46	5	8	1	1	102	12,983
75 to 79	0	9	3	0	8	7	1	0	0	28	11,279
80 to 84	0	1	0	0	0	2	3	0	0	6	8,856
85 to 89	0	0	0	0	0	2	0	0	0	2	8,905
90 to 94	0	0	0	0	0	0	0	0	0	0	NA
95 to 99	0	0	0	0	0	0	0	0	0	0	NA
100 & up	0	0	0	0	0	0	0	0	0	0	NA
Counts	0	182	80	46	202	36	50	109	3	708	\$17,263
% of Total	0.0%	25.7%	11.3%	6.5%	28.5%	5.1%	7.1%	15.4%	0.4%	100.0%	















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.

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 50 with 22 year of service or age 55 for Special Services Group 1 (phased in from July 1, 2004 through July 1, 2008). Age 55 for Special Services Group 2 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.
Inactive Vested Benefit	Before age 55 with at least four years of service.
Pre-retirement Death Benefit	Upon death of a member before benefits have started.
Disability Benefit	Upon meeting requirements to be vested.
Retirement Benefits:	
Normal Retirement	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.



	Members of the Special Services Groups 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.
Early Retirement	An annuity, 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.
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 straight life annuity with a fixed lump sum death benefit, a ten year certain and life thereafter annuity, joint and survivor annuities (with 25%, 50%, 75% or 100% to the surviving joint annuitant), and joint and survivor annuities with a pop-up.
Termination Benefits:	
Before age 55, with less than four years of service	A refund of the member's contributions with interest.
Before age 55 with four or more years of service	At the member's election either:
	(1) a refund of the member's contributions under the plan with interest plus a portion (years of service divided by 30 for regular members, 22 for special services members) of the employer's contributions with interest, or
	(2) a deferred benefit determined in the same manner as for normal retirement. Payments can begin at normal or early retirement.
NOTE: A person eligible for, an disability benefits may	nd receiving, federal social security or railroad retirement 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%.



Pre-retirement Death Benefits:	A lump sum equal to the greater of 1) the member's contributions with interest, plus 1/30 (1/22 for special services) of the member's salary times years of membership service up to 30 (22 for special services), 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 up to \$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:	
Regular Membership:	Member Contributions3.7% of covered pay.Employer Contributions5.75% of covered pay.
Special Services Group 1:	Actuarially determined. Members contribute 50% and employers contribute 50%.
Special Services Group 2:	Actuarially determined. Members contribute 40% and employers contribute 60%.



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APPENDIX C

ACTUARIAL METHODS AND ASSUMPTIONS



APPENDIX C

ACTUARIAL METHODS 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.

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 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 2002, based on experience from 1998-2001.



Rate of Investment Return (effective June 30, 1996)

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

Rates of Mortality (effective June 30, 2002)

	<u>Regula</u>	r Membership	Special Services
Males:	Inactive Lives:	RP-2000 Healthy Annuitant Table,	RP-2000 Healthy Annuitant
		Set Forward One Year	Table Set Forward Three Years
	Active Lives:	RP-2000 Employee Table,	RP-2000 Employee Table
		Set Forward One Year	Set Forward Three Years
Females:	Inactive Lives:	RP-2000 Healthy Annuitant Table,	RP-2000 Healthy Annuitant Table
		Set Back Two Years	No Age Adjustment
	Active Lives:	RP-2000 Employee Table,	RP-2000 Employee Table
		Set Back Two Years	No Age Adjustment
	The RP-2000 Ta	bles are used with generational mortality	7
Disabled Members:	Annual rates are the greater of 3% or 2.5% plus the corresponding non-disabled rate (based on GAM 94 for males, 95% of GAM 94 for females)		Same as healthy members set forward 6 years
Beneficiaries:	Same as members		Same as members

For Special Services active members, 5% of deaths are assumed to be service related.

Rates of Disablement (effective June 30, 1999)

		Annual Rate	9
		Per 1,000 Memb	Ders
Age	Males	Females	Special Services
27	0.2	0.2	2.3
32	0.2	0.2	2.3
37	0.4	0.3	3.7
42	0.7	0.5	7.0
47	1.4	0.9	13.0
52	3.3	2.2	29.3
57	6.3	3.9	52.0
62	9.0	6.2	97.5



Regular Membership

	Annual Rate of Withdrawals Per 1,000 Members					
Males:						
Age	Years 0-1	Year 2	Year 3	Years 4-6	<u>Years 7-8</u>	Years 9+
22	330.0	250.0	165.0	165.0	110.0	66.0
27	231.0	145.0	121.0	99.0	88.0	66.0
32	198.0	145.0	110.0	74.8	55.0	38.5
37	195.8	140.0	110.0	74.8	49.5	33.0
42	195.8	140.0	110.0	74.8	49.5	25.3
47	195.8	130.0	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:						
Age	<u>Years 0-1</u>	Year 2	Year 3	<u>Years 4-6</u>	<u>Years 7-8</u>	Years 9+
22	330.0	250.0	220.0	220.0	165.0	55.0
27	275.0	170.0	140.0	110.0	99.0	55.0
32	247.5	170.0	140.0	104.5	71.5	49.5
37	198.0	150.0	110.0	104.5	66.0	36.3
42	198.0	150.0	110.0	88.0	60.5	30.8
47	198.0	130.0	110.0	82.5	49.5	25.3
52	198.0	130.0	110.0	82.5	49.5	25.3
55+	198.0	130.0	110.0	82.5	49.5	25.3

Special Services

	Annual Rate of	
	Withdrawals Per 1,000	
Age	Members	
22	90	
27	70	
32	35	
37	35	
42	35	
47	35	
52	30	



Special
Services
47%
35%
15%
5%
0%
0%

Rates of Salary Increase (effective June 30, 1999)

			Annual	Rate of In	crease Per	1,000 Men	nbers (%)		
Age	Years 0-1	Year 2	Year 3	Years 4-5	Years 6-7	Years 8-10	Years 11-15	Years 16-20	Years 21+
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
62	10.9	7.1	6.7	5.0	4.5	4.5	4.5	4.5	4.0

Retirement Rates (effective June 30, 2002)

Upon meeting the requirements for early retirement, the following rates apply to regular members:

Age	Assumed Retirement Rate
55-59	5%
60	10
61	15
62	25
63-64	20



	Assumed Retirement Rates				
	1st Year	After	Special		
Age	<u>Eligible</u>	<u>1st Year</u>	Services		
55	20%	10%	15%		
56	20%	10%	10%		
57-59	20%	20%	10%		
60	25%	25%	10%		
61	35%	30%	20%		
62	50%	40%	35%		
63	35%	30%	20%		
64	35%	35%	35%		
65	30%	45%	100%		
66	20%	20%	100%		
67-68	15%	15%	100%		
69	15%	35%	100%		
70+	100%	100%	100%		

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

Special Services Group 1 ages 50 to 55: 30%

Terminated vested members are assumed to retire at age 62 (55 for Special Services). For regular membership, retired re-employed members are assumed to retire at a rate of 25% per year until age 80 when all are assumed to retire.

Rate of Crediting Interest on Contribution Balances (effective June 30, 2002)

4.25% per annum, compounded annually

Rate of Inflation (effective June 30, 1999)

3.5% per annum

Payroll Growth Assumption (effective June 30, 1999)

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 liability (UAL) 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 liability (UAL). For regular members, the difference between the statutory contribution rate (9.45%) and the normal cost rate is used to finance the UAL and the number of years necessary to finance the unfunded actuarial accrued liability as a level percent of member payroll is determined. For special services members, the contribution rate is the sum of the normal cost rate and the rate required to amortize the UAL or surplus over 30 year.



DEFINITION OF TERMS

Actuarial 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 accrued 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 Liability

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

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

The existence of unfunded actuarial liability is not in itself bad, any more than a mortgage on a house is bad. Unfunded actuarial liability does not represent a debt that is payable today. What is important is the ability to amortize the unfunded actuarial liability and make payments to finance it. Also of importance are trends in the amount or duration of payment.



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APPENDIX D

IPERS Funding Policy



APPENDIX D

IPERS FUNDING POLICY

This policy was developed by joint action of IPERS' management team and the System's actuarial consultant, and adopted by IPERS management in 1996.

Purpose

This funding policy is intended to provide a measure of the funded status of the Iowa Public Employees' Retirement System (System) on a long-term basis and to provide a set of safeguards as guidelines to help ensure the financial solvency of the System.

Recognizing that the System and its environment are not static, periodic review of this policy shall be conducted to ensure its continuing validity.

Primary Goal

The primary funding goal of the System is to be funded on an actuarially sound basis over the long term by maintaining actuarial contribution rates, given the maximum amortization period, which are equal to or less than the statutory contribution rates.

Definition of "Fully Funded"

The term "fully funded" is used to describe the situation in which the assets are equal to or greater than the liabilities. The focus of IPERS is to define assets and liabilities on a long term basis; therefore, the IPERS funding policy defines the term "fully funded," as well as the terms "actuarially sound" and "financial solvency," to mean that the current actuarial value of assets along with the future expected contributions will be sufficient to provide the benefits promised to members for both accrued and expected future service (as set forth in Iowa code Chapter 97B) within the parameters established in this funding policy. The minimum standards for the System to be considered fully funded is that the normal cost rate plus the amortization payment on the unfunded actuarial liability may not exceed the statutory combined contribution rate. In determining the amortization payment, the amortization period shall never exceed 30 years.

Safeguards for System to Remain Fully Funded

The following safeguards are established to ensure that IPERS continues to be funded on an actuarially sound basis over the long term, so that adequate funds will accumulate to provide all benefits promised to members.

1. The **normal cost rate** (the level percentage of salary required to pay the cost of retirement benefits that are allocated to the current year of service), based on the actuarial cost method used to determine the annual funding requirements for the System, shall not exceed the statutory combined employee/employer contribution rate minus 0.5%.



- 2. Given the statutory combined employer/employee contribution rate, the amortization period for the unfunded liability as reported in the annual valuation shall not exceed 24 years.
- 3. Any change in the benefit structure of IPERS that results in an increase in the normal cost rate and/or the unfunded actuarial liability, and/or any distribution to eligible members, should not be considered unless (a) the amortization period reported in the last actuarial valuation report is 20 years or less, and either (b) the amortization period has been less than the maximum (24 years) for at least three consecutive years or (c) the amortization period has been less than ten years for at least two consecutive years, subject to the additional constraint that any distribution does not prevent the amortization period of the prior period from declining.
- 4. Consideration should be given to increasing the statutory contribution rate if either of the following occur at least three years in any five consecutive year period:
 - The normal cost rate exceeds the standard set in item (1) above
 - The amortization period exceeds the standard set in item (2) above by more than 5 years.

