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IOWA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Actuarial Valuation Report
as of June 30, 2010

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Cavanaugh Macdonald
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November 3, 2010

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

Re: June 30, 2010 Actuarial Valuation Report

Dear Board Members:

In this report are submitted the results of the annual valuation of the assets and liabilities of the Iowa Public Employees' Retirement System (System) prepared as of June 30, 2010. The purpose of this report is to provide a summary of the funded status of the System as of June 30, 2010, to provide the Annual Required Contribution (ARC) and the accounting information under Governmental Accounting Standards Board (GASB) Statement No. 25 While not verifying the data at source, the actuary performed tests for consistency and reasonableness.

The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the Entry Age Normal cost method. An asset smoothing method is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded actuarial liability that is being amortized over a 30 year period as a level percentage of pay. The assumptions recommended by the actuary and adopted by the Investment Board are, in the aggregate, reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System and meet the parameters for the disclosures under GASB Statement No 25.

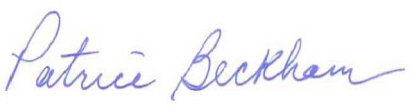
We have prepared the Schedule of Funding Progress and Trend Information for the System, which are found in Section V of the report. All historical information that references a valuation date prior to June 30, 2010 was prepared by the prior actuarial firm.

This is to certify that the independent consulting actuaries are members of the American Academy of Actuaries and have experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

Some actuarial computations presented in this report are for purposes of determining the recommended funding amounts for the System. Other actuarial computations presented in this report under GASB Statement No. 25 are for purposes of fulfilling financial accounting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the plan provisions described in Appendix B of this report, and of GASB Statement No. 25. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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



Patrice A. Beckham, FSA, EA, FCA, MAAA
Consulting Actuary

Brent A. Banister, PhD, FSA, EA, FCA, MAAA
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INTRODUCTION

This report presents the results of the June 30, 2010 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 regular 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 determine the actuarial contribution rates for the Special Service Groups (Group 1 includes sheriffs and deputies, Group 2 includes all other public safety members),
- to evaluate the funded status of the System and disclose various asset and liability measures as of June 30, 2010,
- to determine the experience of the System since the last valuation, and
- to analyze and report on trends in System contributions, assets, and liabilities over the past several years.

This is the first valuation report prepared by Cavanaugh Macdonald Consulting LLC. However, the valuation results were developed using the prior actuary's (Milliman) valuation software. Therefore, the change in actuarial firms did not impact the valuation results this year. They are comparable to last year's results other than the changes noted below.

This valuation reflects the impact of the changes in the actuarial assumptions recommended in the 2005-2009 Experience Study that were adopted by the Investment Board at their June, 2010 meeting (there were no changes in the actuarial methods). The new set of assumptions includes separate assumptions for subgroups of the regular membership (State, School and Other). Other changes made to better reflect expected experience included:

- Some adjustments were made to the retiree mortality assumption to better fit the observed experience.
- Retirement rates were modified to reflect the observed patterns of retirement, generally reflecting fewer retirements.
- Disability rates were lowered at most ages.
- Termination of employment rates were lowered, reflecting increased employee retention.
- The probability of terminating members leaving their contributions with IPERS and receiving a deferred retirement benefit were generally increased to reflect experience.
- Salary increase assumptions were modified to better reflect the observed experience. There were both increases and decreases in the rates at various durations.

The change in assumptions impacted the three membership groups differently:

- The normal cost rate for the regular membership increased by 0.50% and the unfunded actuarial liability (UAL) decreased by $137 million.
- For Special Service Group 1 (SS1), the normal cost rate increased by 0.63% and the UAL increased by $12 million.
- For Special Service Group 2 (SS2), the normal cost rate decreased by 0.06% and the UAL increased by $11 million.

The 2010 Legislature passed House File 2518 which increased the contribution rate for regular members and also changed the benefit structure for regular members. These changes, outlined below, are reflected in this valuation.

- The combined contribution rate is increased to 13.45% effective July 1, 2011.
- The System shall set the contribution rate as actuarially determined for fiscal years after 2012, but the contribution rate may not vary by more than 1.0% per year.
- The benefit structure is modified by amending the definition of final average salary to the highest five years of covered wages, increasing the years of service to be vested from four to seven, and increasing the early retirement reduction from 3% per year measured from the member's first unreduced retirement age to a 6% reduction measured from age 65.

For the Special Service groups, the legislation eliminated the 0.50% annual cap on the change in the contribution rate, which was to be effective for FY2012, and added a cancer and infectious disease presumption for in-service disability benefits, effective July 1, 2011.

The change in the benefit structure for the regular membership decreased the normal cost rate by 0.62% and the UAL by $674 million. The cancer and infectious disease presumption for the Special Service groups had no measurable impact on their valuation results because the total disability rates adopted as part of the June 2010 Experience Study were substantially lowered.

Several factors contributed to the change in the normal cost rate and actuarial liability from the 2009 to the 2010 valuation. The impact of each change is summarized in the table below:

	Normal Cost			Actuarial Liability		
	Regular	**SS1**	**SS2**	**Regular**	**SS1**	**SS2**
6/30/09 Valuation	9.97%	15.57%	15.92%	$24,733	$412	$873
Demographic Experience	+0.02%	+0.05%	-0.06%	1,159	+24	+56
Change in Assumptions	+0.50%	+0.63%	-0.06%	-137	+12	+11
Change in Benefit Structure	-0.62%	0.00%	0.00%	-674	0	0
6/30/10 Valuation	9.87%	16.25%	15.80%	$25,081	$448	$940

The actuarial valuation results provide a "snapshot" view of the System's financial condition on June 30, 2010. The results reflect net unfavorable experience for the past plan year as demonstrated by an unfunded actuarial liability (UAL) that was higher than expected, based on current actuarial assumptions. The UAL on June 30, 2010 for all membership groups covered by IPERS (Regular members and both Special Service Groups) is $4.931 billion as compared to an expected UAL of $4.450 billion. The unfavorable experience was the sum of an experience loss of $666 million on the actuarial value of assets and an experience gain of $185 million on System liabilities.

The statutory contribution rate for regular members had been 9.45% (3.70% for members and 5.75% for employers) since 1979. For several years, the valuation had indicated the 9.45% statutory contribution rate was insufficient to finance the benefits provided by IPERS. In 2006, legislation was passed that increased the statutory contribution rate 0.50% per year for four years commencing on July 1, 2007. The increase each year was shared 40% by the members and 60% by the employers. On July 1, 2010, the statutory contribution rate reached 11.45% of pay. Legislation passed in 2008 gave IPERS the authority to implement actuarially determined contribution rates for the regular membership group after fiscal year 2011. However, the contribution rate could not change by more than 0.50% in any single year. In 2010, legislation was passed that increased the contribution rate for regular members to 13.45% on July 1, 2011. In addition, the contribution rate can change by 1.0% each year. In the valuation, future increases in contribution rates are

reflected for purposes of analyzing the long term funding of the System. As indicated previously, certain calculation are performed for purposes of reporting under Governmental Accounting Standards. For this purpose, future increases in the contribution rate are not reflected, i.e. the current contribution rate of 11.45% is used.

The summary of the 2010 valuation results, which set the contribution rates for FY2012, are shown below:

Contribution Rate for FY2012			
	Regular Membership	Special Service Group 1*	Special Service Group 2**
1. Normal Cost Rate	9.87%	16.25%	15.80%
2. Amortization of UAL over 30 years	3.84%	3.41%	0.82%
3. Total Contribution Rate	13.71%	19.66%	16.62%
4. Member Contribution Rate	5.38%	9.83%	6.65%
5. Employer Contribution Rate (3) - (4)	8.33%	9.83%	9.97%
6. Statutory/Expected Contribution	8.07%	9.83%	9.97%
7. Shortfall (5) – (6)	0.26%	0.00%	0.00%
8. Years to Amortize (Based on (6))	34	30	30
9. Unfunded Actuarial Liability ($M)	$4,820	$59	$52
10. Funded Ratio	80.8%	86.8%	94.4%

* Includes Sheriffs and Deputies
** Includes all other public safety members

EXPERIENCE FOR THE 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, 2009 and June 30, 2010. The components are examined in the following discussion.

ASSETS

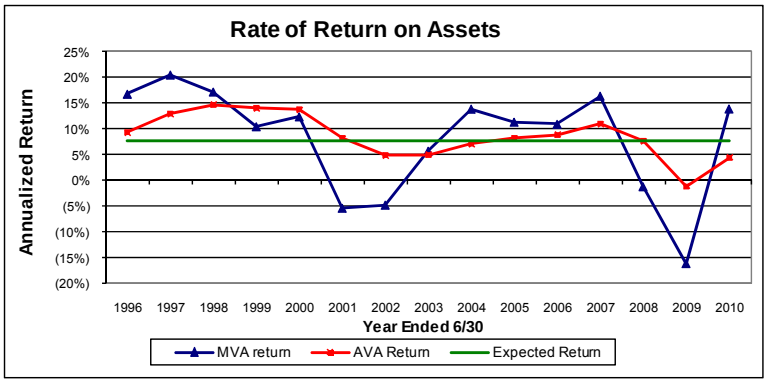
As of June 30, 2010, the System (including Special Service groups) had total assets of $19.5 billion, when measured on a market value basis, **excluding the Favorable Experience Dividend (FED) reserve account**. This was an increase of $1.9 billion from the prior year.

The market value of assets is not used directly in the calculation of the unfunded actuarial liability (UAL) and actuarial contribution rates. An asset valuation method, which smoothes the effect of market fluctuations, is used to determine the value of assets used in the valuation. This amount, called the "actuarial value of assets", is equal to the expected asset value, based on the prior year actuarial value and the assumed interest rate of 7.5%, plus 25% of the difference between the actual market value and the expected asset value. The resulting value must be no less than 80% of market value and no more than 120% of market value (referred to as a corridor). The corridor did not apply this year. The actuarial value of assets as of June 30, 2010 was $21.5 billion, an increase of $0.4 billion from the prior year. The components of change in the asset values are shown in the following table:

	Market Value ($M)		Actuarial Value ($M)	
Net Assets, June 30, 2009	$	**17,603**	$	**21,124**
• Employer and Member Contributions	+	755	+	755
• Benefit Payments and Refunds	-	1,242	-	1,242
• Expected Investment Income, net of expenses (Based on 7.5% assumption)	+	1,302	+	1,566
• Actuarial Gain/Loss on Investment Return	+	1,121	-	666
Net Assets, June 30, 2010 Before FED Transfer	$	**19,539**	$	**21,536**
• FED Transfer Payable January 15, 2010	-	0	-	0
Net Assets, June 30, 2010 After FED Transfer	$	**19,539**	**$**	**21,537**
• Application of Corridor	-	0	-	0
Final Net Assets, June 30, 2010	**$**	**19,539**	**$**	**21,537**

On a market value basis, the time-weighted rate of return was 13.82% as reported by IPERS. The dollar-weighted rate of return, net of investment and administrative expenses, measured on the actuarial value of assets was 4.3%. The strong market return helped to reduce the deferred investment loss from $3.5 billion to $2.0 billion.

Please see Exhibits 2 and 3 in Section II of this report for a summary of market and actuarial value of assets by group (Regular, Special Service 1 and Special Service 2) as of June 30, 2010.



Rates of return on the actuarial value of assets are much smoother than market value returns, illustrating the advantage of using an asset smoothing method.

There is currently $2 billion in deferred (unrecognized) investment loss. Absent favorable investment experience in future years to offset the recognition of the deferred loss, it will decrease the System's funded ratio and increase the contribution rate as it is reflected through the asset smoothing method.

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.

The unfunded actuarial liability by group is shown as of June 30, 2010 in the following table:

($Millions)	Regular Membership	Special Service 1	Special Service 2	Total*
Actuarial Liability	$25,081	$448	$940	$26,468
Actuarial Value of Assets	20,261	389	888	21,537
Unfunded Actuarial Liability	4,820	59	52	4,931
Funded Ratio	80.8%	86.8%	94.4%	81.4%

*Totals may not add due to rounding.

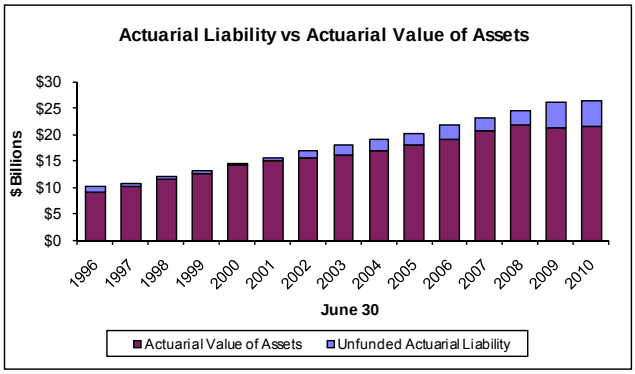
See Exhibit 7 in Section III of the report for the detailed development of the unfunded actuarial liability for each group.

Changes in the UAL occur for various reasons The net change in the UAL from 6/30/2009 to 6/30/2010 was only $36 million. The components of this net change are shown in the table below (in million):

Unfunded Actuarial Liability, June 30, 2009	$	4,895
• Expected increase from amortization method	+	95
• Expected increase from contributions below actuarial rate	+	248
• Investment experience	+	666
• Liability experience (including transfers)	-	185
• Change in actuarial assumptions	-	114
• Change in benefit provisions	-	674
Unfunded Actuarial Liability before FED transfer, June 30, 2010	$	4,931
• FED Transfer	+	0
Unfunded Actuarial Liability after FED transfer, June 30, 2010	$	4,931

As seen above, several of the components increased the UAL while others decreased it. The two most significant factors were the increase in the UAL due to the loss on the actuarial value of assets ($666 million) and the decrease in the UAL due to the change in the benefit provisions ($674 million). Without the change in the benefit provisions, the UAL would have been much higher in this year's valuation.

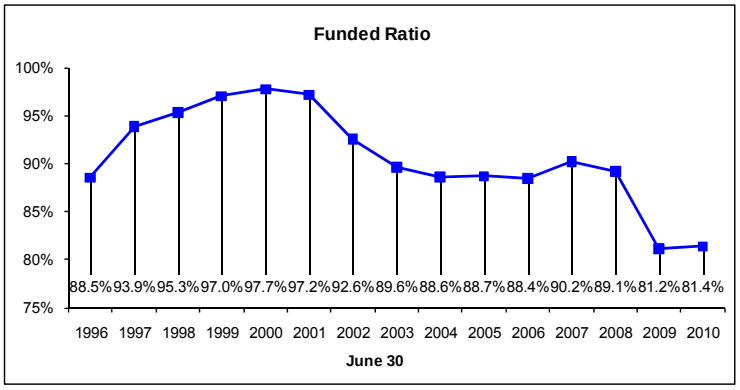
Actuarial gains (losses), which result from actual experience that is more (less) favorable than anticipated based on the actuarial assumptions, are reflected in the UAL and are measured as the difference between the expected unfunded actuarial liability and the actual unfunded actuarial liability, taking into account any changes due to assumptions, methodology or benefit provision changes. Overall, the System experienced a net actuarial loss of $481 million. The net actuarial loss may be explained by considering the separate experience of assets and liabilities. As noted earlier, assets had a $666 million loss when measured on an actuarial value basis. There was a liability gain of $185 million (or about 0.7% of total actuarial liability) which arises from demographic experience more favorable than anticipated by the actuarial assumptions. The largest component of the liability gain was due to actual salary increases for active members that were lower than expected. The increase in salaries for members who were active in both the 2009 and 2010 valuations was 4.5%, or about 1.5% lower than expected, resulting in an actuarial gain of about $250 million. This gain was partially offset by an actuarial loss due to more retirements than expected for a net liability gain of $185 million.



The dollar amount of the UAL has grown over the past several years due to numerous factors including actual versus expected experience, assumption changes, benefit changes and contributions below the actuarial rate.

An evaluation of the unfunded actuarial liability on a pure dollar basis may not provide a complete analysis since only the difference between the assets and liabilities (which are both very large numbers) is reflected. Another way to evaluate the unfunded actuarial liability and the progress made in its funding is to track the funded ratio, the ratio of the actuarial value of assets to the actuarial liability. The funded status information is shown below (in millions).

	6/30/06	6/30/07	6/30/08	6/30/09	6/30/10
Funded Ratio	88.4%	90.2%	89.1%	81.2%	81.4%
Unfunded Actuarial Liability (UAL)	$2,507	$2,266	$2,665	$4,895	$4,931



Negative investment experience in FY09 caused a significant drop in the funded ratio, which had been stable at around 90% since 2003. The funded ratio stabilized in 2010 due to a strong investment return in FY2010 coupled with changes in the actuarial assumptions and benefit reductions.

CONTRIBUTION RATE

Under the Entry Age Normal cost method, the actuarial contribution rate consists of two components:

- a "normal cost" for the portion of projected liabilities allocated by the actuarial cost method to service of members during the year following the valuation date, and
- an "unfunded actuarial liability contribution" for the excess of the portion of projected liabilities allocated to service to date over the actuarial value of assets on hand.

This valuation calculates the actuarially determined contribution rates effective July 1, 2011 for the year ending June 30, 2012. The regular members contribute according to the Schedule shown later in this section of the report. The remaining 5% of the active members, the Special Service groups, contribute at an actuarially determined rate which changes each year.

See Exhibits 10 and 11 in Section IV for development of these rates which are summarized in the following table:

Contribution Rate for FYE 2012	Regular Membership	Special Service 1	Special Service 2
1. Total Actuarial Contribution Rate	13.71%	19.66%	16.62%
2. Member Contribution Rate	5.38%	9.83%	6.65%
3. Employer Contribution Rate (1) – (2)	8.33%	9.83%	9.97%
4. Employer Statutory Contribution Rate	8.07%	9.83%	9.97%
5. Shortfall (3) – (4)	0.26%	0.00%	0.00%

In 2006, 2008 and 2010 legislation was passed that increased the statutory contribution rate for regular members as shown in the table below:

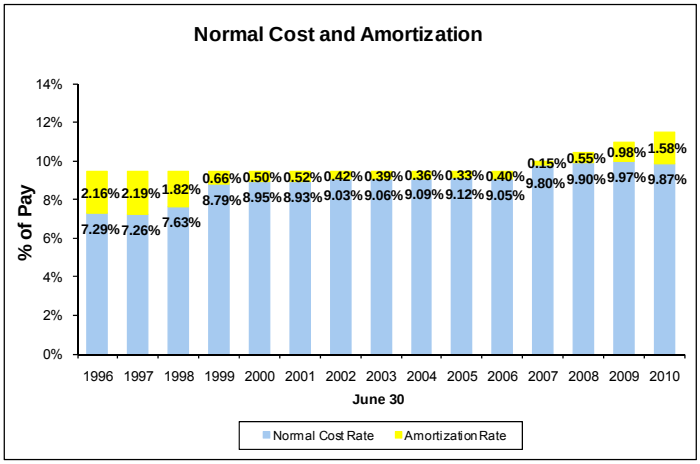
Contribution Rates

Time Period	Member	Employer	Total
Prior to 7/1/07	3.70%	5.75%	9.45%
7/1/07 – 6/30/08	3.90%	6.05%	9.95%
7/1/08 – 6/30/09	4.10%	6.35%	10.45%
7/1/09 – 6/30/10	4.30%	6.65%	10.95%
7/1/10 – 6/30/11	4.50%	6.95%	11.45%
7/1/11 – 6/30/12	5.38%	8.07%	13.45%
7/1/12 and later	Actuarially Determined*		

*May not change by more than 1.0% per year.

There were several factors that impacted the contribution rates in the 2010 valuation. Please see the table on page 2 for a detailed summary of the impact of each change.

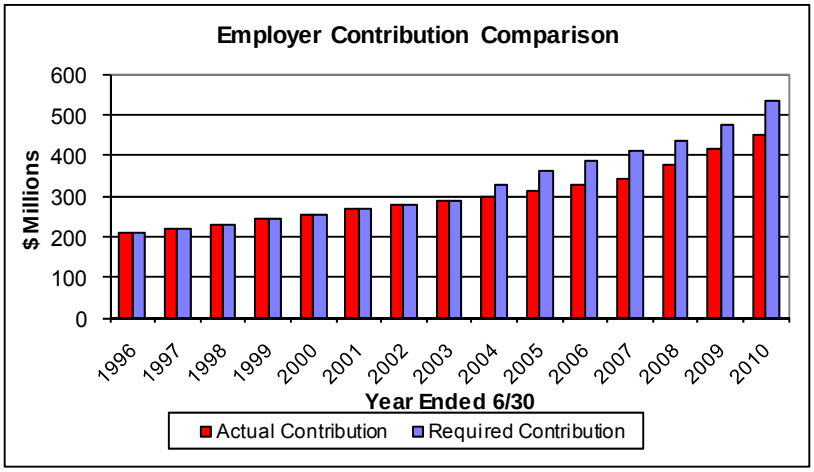
Despite the 0.50% increase in the statutory contribution rate to 11.45% for regular members this year, there is still only a small part of the total contribution rate that is available to fund the UAL. When the statutory contribution increases to 13.45% on July 1, 2011, a much higher contribution rate will be available to fund the UAL. However, given the deferred investment loss, additional increases in the actuarial contribution rate are expected. The actuarial contribution rates in years after FY2012 will be heavily dependent on future investment experience, especially that which occurs in the next few years.



This graph shows the normal cost rate and the contribution rate available to fund the UAL based on the statutory contribution rate payable in that plan year.

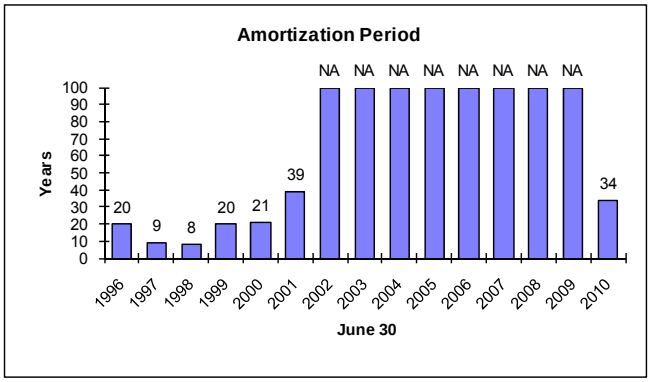
For a number of years, only a small portion of the total contribution rate was available to pay down the UAL. With recent contribution increases, that portion has increased.

The following graph shows the total actuarially required employer contribution for regular members compared to the amount actually received in the year. The actuarially required contribution equals the System's normal cost and an amortization payment of the unfunded actuarial liability over 30 years.



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".

This valuation determines the actuarial contribution rates for FY2012. Based on the projected UAL for the regular membership at June 30, 2011 and the amortization payment for FY2012, the amortization period is 34 years. In order for the System to be "fully funded" (the amortization period to be 30 years), the contribution rate would need to increase by 0.26% to 13.71% of payroll. This rate is determined based on the snapshot of the System taken on the valuation date, June 30, 2010, and applies only for the fiscal year beginning July 1, 2011. The rate necessary for the System 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 scheduled increases, beginning July 1, 2011, which raise the contribution rate to 13.45% and then allow the rate to increase 1.0% per year in the future, should permit the statutory contribution rate to converge with the actuarial rate if all assumptions are met in future years.



Based on the statutory contribution rate, the period to amortize the UAL was infinite in the 2002 to 2009 valuations. Due to the increase in the contribution rate to 13.45% in FY2012, more funds are available to finance the UAL and the years to amortize dropped to 34. Future investment experience will have a significant impact on whether the years to amortize fall below 30 in future valuations.

SUMMARY

The investment return on the market value of assets for FY2010 was 13.82%. Despite this strong return, there is still nearly $2 billion of deferred investment loss due to the use of an asset smoothing method. However, this is a significant improvement over the $3.5 billion deferred loss a year ago. The System's funded ratio remained stable at 81% which was positive as it would have been expected to decrease based on last year's valuation results. 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 FYE 2012 contribution rate would be 13.71% of payroll, as compared to the statutory FYE 2012 contribution rate of 13.45%. This rate is determined based on the snapshot of the System taken on the valuation date, June 30, 2010, and applies only for the fiscal year beginning July 1, 2011. 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. While the statutory contribution rate can vary each year, the annual change is limited to 1.0%.

As mentioned above, the System utilizes an asset smoothing method in the valuation process. While this is a common procedure for public retirement systems, it is important to identify the potential impact of the deferred investment experience. The asset smoothing method impacts only the timing of when the actual market experience is recognized in the valuation process. Despite a return of 13.82% on the market value of assets, the return on the actuarial value of assets was only 4.3%. This is due to the deferred investment experience from FY2009. If asset returns on market value are not significantly higher than 7.5% over the next few years, the $2 billion of deferred investment experience will be recognized and the actuarially required contribution rate can be expected to increase.

The key valuation results from the June 30, 2010 actuarial valuation are shown below, using both actuarial and market value of assets.

	$(M)	
Total System	Actuarial Value	Market Value
Actuarial Contribution Rate		
Regular		
Normal Cost	9.87%	9.87%
UAL Contribution	3.84%	5.37%
Total	13.71%	15.24%
UAL	$ 4,820	$ 6,705
Funded Ratio	80.8%	73.3%
SS1		
Normal Cost	16.25%	16.25%
UAL Contribution	3.41%	5.51%
Total	19.66%	21.76%
UAL	$ 59	$ 94
Funded Ratio	86.8%	78.9%
SS2		
Normal Cost	15.80%	15.80%
UAL Contribution	0.82%	2.10%
Total	16.62%	17.90%
UAL	$ 52	$ 130
Funded Ratio	94.4%	86.1%

The 2006 Legislature passed legislation that increased the statutory contribution rate from 9.45% to 11.45% over a four-year period commencing July 1, 2007. Legislation passed in 2008 provided IPERS with the authority to implement actuarially determined contribution rates for regular members, but the change in the contribution rate could not exceed 0.50% per year. The 2010 Legislature passed House File 2518 which took dramatic steps to strengthen the long term funding of IPERS by increasing the statutory contribution rate to 13.45%, effective July 1, 2011, and providing for an adjustment of up to 1.0% in the contribution rate in each successive year. The bill also made certain changes to the benefit structure for regular members, which lowered the liabilities and cost for that group. These changes, combined with the 13.82% return for FY2010, resulted in an improvement in the outlook for IPERS' long term funding.

The outlook for IPERS long term funding has significantly improved since the last valuation. The funded ratio has stabilized, the deferred investment loss decreased from $3.5 billion last year to $2.0 billion this year, and the years to amortize for the regular membership, which has been infinite for eight valuations, is now 34 years. The improvement is due to numerous factors which include:

- An investment return on the market value of assets of 13.82% for FY2010.
- A decrease in the liabilities of the System due to changes in the actuarial assumptions.
- An increase in the combined contribution rate to 13.45% for FY2012 for regular members with changes in subsequent years, not to exceed 1.0%.
- Benefit reductions for regular members that lowered the liability and normal costs.

The long-term financial health of this retirement system is heavily dependent on two key items: (1) future investment returns and (2) contributions to the System. Given the System's funded status, the deferred investment losses, and the legislative changes made in 2010 (the benefit structure and scheduled contribution rates), the long term financial health of the System has improved and we would expect the System's funded ratio to improve over the long term, assuming all actuarial assumptions are met. These changes have brought the regular membership group into actuarial balance, with a period to amortize the unfunded actuarial liability of 34 years.

We conclude this executive summary by presenting comparative statistics and actuarial information on both the June 30, 2010 and June 30, 2009 valuations. All figures shown include the regular membership and the two Special Service Groups.

SUMMARY OF HISTORICAL CHANGE IN IPERS UNFUNDED ACTUARIAL LIABILITY

($Millions)	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10
Unfunded Actuarial Liability (BOY[1])	661	555	390	327	441	1,255	1,867	2,176	2,289	2,507	2,266	2,665	4,895
• **Expected Change**													
– **From Amortization Method**	(43)	(37)	(32)	(22)	3	24	36	42	22	49	44	52	95
– **Contributions less than Actuarial Rate**						61	87	103	125	118	127	140	248
• **Investment Experience**	(716)	(730)	(781)	(81)	409	402	75	(89)	(235)	(622)	5	1,903	666
• **Liability and Other Experience**	118	(211)	515	217	258	125	82	57	242	187	214	135	(185)
• **Benefit Enhancements**	342	0	142	0	3	0	29	0	0	0	6	0	(674)
• **Change in Assumptions/Methods**	0	587	0	0	141	0	0	0	64	27	3	0	(114)
• **FED Transfer**	193	226	93	0	0	0	0	0	0	0	0	0	0
Unfunded Actuarial Liability (EOY[2])	555	390	327	441	1,255	1,867	2,176	2,289	2,507	2,266	2,665	4,895	4,931
Amortization Years	8	20	21	39	*	*	*	*	*	*	*	*	34

*Infinite
1 = Beginning of Year
2 = End of Year

IOWA PUBLIC EMPLOYEES' RETIREMENT SYSTEM
PRINCIPAL RESULTS

	June 30, 2010	June 30, 2009	% Chg
SYSTEM MEMBERSHIP			
1. Active Membership			
- Number of Members (excluding Retired/Reemployed)	165,626	167,691	(1.2)
- Projected Payroll for Upcoming Fiscal Year	$6,820M	$6,762M	0.9
- Average Salary	$41,179	$40,326	2.1
2. Inactive Membership			
- Number Not in Pay Status	65,571	66,098	(0.8)
- Number of Retirees/Beneficiaries	93,513	89,718	4.2
- Average Annual Benefit	$13,139	$12,443	5.6
ASSETS AND LIABILITIES			
1. Net Assets (excluding FED reserve)			
- Market Value	$19,539M	$17,603M	11.0
- Actuarial Value	21,537M	21,124M	2.0
2. Projected Liabilities			
- Retired Members	$11,770M	$10,623M	10.8
- Inactive Members	552M	538M	2.6
- Active Members	19,879M	20,287M	-2.0
- Total Liability	32,200M	31,449M	2.4
3. Actuarial Liability	$26,468M	$26,019M	1.7
4. Unfunded Actuarial Liability	$4,931M	$4,895M	0.7
5. Funded Ratio			
a. Actuarial Value Assets/Actuarial Liability	81.37%	81.19%	0.2
b. Market Value Assets/Actuarial Liability	73.82%	67.66%	9.1
SYSTEM CONTRIBUTIONS			
Statutory Contribution Rate*	13.45%	11.45%	17.5
Years Required to Amortize Unfunded Actuarial Liability	34	Infinite	N/A
Total Actuarial Contribution Rate	13.71%	14.12%	-2.9
Member Contribution Rate	5.38%	4.50%	19.6
Employer Contribution Rate	8.33%	9.62%	-13.4

M = ($)Millions

* Contribution rates for certain special groups (5% of the membership) are not fixed by statute but are actuarially determined each year.

SECTION II

SYSTEM ASSETS

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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 prices. These values represent the "snapshot" of the fair value of System assets as of the valuation date.

Actuarial Value of Net Assets

The market value of 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 on the prior actuarial value of assets 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.

Step 5: Verify the preliminary actuarial value of assets in Step 4 is not more than 120% of the market value of assets, nor less than 80% of the market value. If it is, adjust the actuarial value of assets so it falls within the 80% - 120% corridor.

EXHIBIT 1

ANALYSIS OF NET ASSETS AT MARKET VALUES

($ Millions)

	June 30, 2010		June 30, 2009	
	Amount	% of Total	Amount	% of Total
Cash & Equivalents	$ 209	1.1%	$ 285	1.6%
Capital Assets, Receivables and Payables	(764)	(3.8)	(1,027)	(5.7)
Domestic Equity	5,286	26.6	4,370	24.3
International Equity	2,667	13.4	2,390	13.3
Fixed Income	7,918	39.8	7,623	42.4
Real Estate	1,545	7.8	1,502	8.4
Private Equity/Debt	2,521	12.7	2,080	11.6
Securities Lending Collateral Pool	496	2.4	751	4.1
TOTAL NET ASSETS	$ 19,878	100.0%	$ 17,974	100.0%
FED Reserve (Before current year transfer)	(339)		(371)	
Current Year FED Transfer Payable	0		0	
Net Retirement System Assets	$ 19,539		$ 17,603	

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, 2009	$16,592,722,130	$312,513,806	$698,080,682	$370,724,033	$17,974,040,651
REVENUE					
Employer contributions	415,070,451	6,725,778	27,328,184	0	449,124,413
Member contributions	268,507,601	6,725,778	18,238,592	0	293,471,971
Service purchase	12,141,197	95,226	377,285	0	12,613,708
Investment income	2,319,383,249	44,112,172	100,130,607	47,082,819	2,510,708,847
Total Revenue	$3,015,102,498	$57,658,954	$146,074,668	$47,082,819	$3,265,918,939
DISBURSEMENTS					
Benefit payments	1,157,590,619	16,352,817	26,531,442	78,080,966	1,278,555,844
Member and employer refunds	36,281,484	647,024	4,541,621	0	41,470,129
Administrative expenses	8,650,702	61,991	255,543	0	8,968,236
Investment expenses	30,378,809	577,772	1,311,491	616,681	32,884,753
Total Expenses	$1,232,901,614	$17,639,604	$32,640,097	$78,697,647	$1,361,878,962
PRELIMINARY NET ASSETS ON JUNE 30, 2010	$18,374,923,014	$352,533,156	$811,515,253	$339,109,205	$19,878,080,628
TRANSFERS					
Membership changes	1,021,874	754,518	(1,776,392)	0	0
FED Reserve	0	0	0	0	0
ADJUSTED NET ASSETS ON JUNE 30, 2010	$18,375,944,888	$353,287,674	$809,738,861	$339,109,205	$19,878,080,628

* Includes Sheriffs and Deputies
** Includes all other public safety members

EXHIBIT 3

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, 2009	$19,911,266,556	$375,016,567	$837,696,819	$21,123,979,942
2. Actual Receipts/Disbursements				
a. Contributions	695,719,249	13,546,782	45,944,061	755,210,092
b. Benefit Payments and Refunds	1,193,872,103	16,999,841	31,073,063	1,241,945,007
c. Net Change	(498,152,854)	(3,453,059)	14,870,998	(486,734,915)
3. Expected Value of Assets as of June 30, 2010 [(1) x 1.075] + [(2c) x $(1.075)^{.5}$]	20,888,115,676	399,562,602	915,942,659	22,203,620,937
4. Preliminary Market Value of Assets as of June 30, 2010	18,374,923,014	352,533,156	811,515,253	19,538,971,423
5. Difference Between Market and Expected Values (4) - (3)	(2,513,192,662)	(47,029,446)	(104,427,406)	(2,664,649,514)
6. Preliminary Actuarial Value of Assets as of June 30, 2010 (3) + [(5) x 25%]	20,259,817,511	387,805,241	889,835,808	21,537,458,560
7. Transfers				
a. Membership changes	1,126,393	831,692	(1,958,085)	0
b. FED Reserve	0	0	0	0
8. Initial Actuarial Value of Assets as of June 30, 2010	$20,260,943,904	$388,636,933	$887,877,723	$21,537,458,560
9. Determination of Corridor				
a. 80% of Market Value of Assets	14,700,755,910	282,630,139	647,791,089	15,631,177,138
b. 120% of Market Value of Assets	22,051,133,866	423,945,209	971,686,633	23,446,765,708
10. Final Actuarial Value of Assets as of June 30, 2010 (8) , but not less than (9a), nor greater than (9b)	20,260,943,904	388,636,933	887,877,723	21,537,458,560

* Includes Sheriffs and Deputies

** Includes all other public safety members

EXHIBIT 4

HISTORICAL COMPARISON (ACTUARIAL AND MARKET)

Value as of June 30		Actuarial Value of Net Assets (AVA)	Market Value 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%
2006		19,144,036,519	19,847,676,903	96%
2007		20,759,628,415	22,624,387,015	92%
2008		21,857,423,183	21,844,112,206	100%
2009		21,123,979,941	17,603,316,618	120%
2010		21,537,458,560	19,538,971,423	110%

Values are for combined regular membership and Special Service groups, but exclude the Favorable Experience Dividend Reserve Account.

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

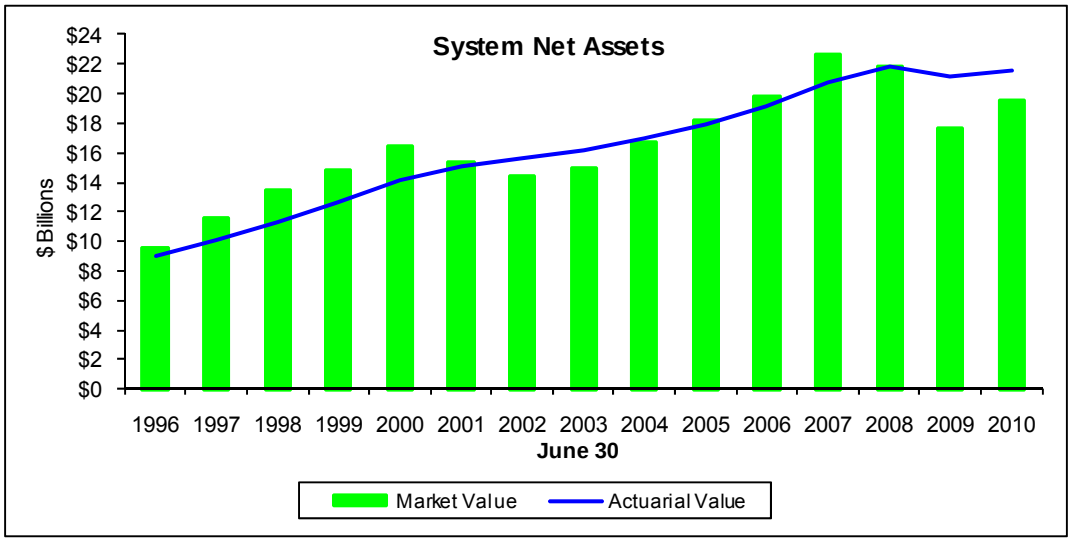

EXHIBIT 5

SUMMARY OF FAVORABLE EXPERIENCE DIVIDEND RESERVE

Market Value of FED Reserve as of June 30, 2010	$	339,109,205
Transfer to FED Payable on January 15, 2011 Based on June 30, 2010 Valuation Results	$	0
Total Value of FED Reserve as of June 30, 2010	$	339,109,205

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, 2010 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 depleted after making payments through the dates shown below.

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

	Maximum*	Expected**
2011	$247.9	$88.4
2012	113.8 ***	100.4
2013	-	113.3
2014	-	91.7 ***
2015	-	-
2016	-	-
2017	-	-
2018	-	-

* 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

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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. In general, under this method, a contribution that is a level percent of rates 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 present value of future benefits (PVFB) that will not be paid by the normal costs in future years. 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.

The UAL is projected to the following year to reflect the time lag from the valuation date to the date the contribution rates are effective and is then amortized over an open 30 year period.

Effective with the June 30, 2008 valuation, a transfer of assets is performed as of June 30th for all members whose membership group changed since the prior valuation. The purpose behind the transfer is to better match the assets and liabilities for each membership group by having both the assets and liabilities for each member reside in their current membership group. When members move between membership groups, an asset transfer for valuation purposes is made based on the funded ratio of their former group prior to the transfer. The asset transfer calculation is determined by multiplying the actuarial liability of the members transferring by the funded ratio of their former group just prior to the transfer. The asset values after the transfers and the liabilities for the members reside in their current membership group and are used to prepare the final valuation results.

A summary of the number of members who transferred is shown below:

From	To		
	Regular	**SS1**	**SS2**
Regular		12	145
SS1	2		8
SS2	94	30	

The impact on the UAL from the transfer is shown below:

Regular	**SS1**	**SS2**
$(845,159)	$266,415	$530,350

EXHIBIT 6

PRESENT VALUE OF FUTURE BENEFITS
as of June 30, 2010

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.

Present Value of Future Benefits:	Regular Membership	Special Service Group 1*	Special Service Group 2**	Total
Active Members				
Retirement benefits	$17,036,341,497	$356,006,740	$874,812,631	$18,267,160,868
Death benefits	201,167,577	4,599,777	21,823,869	227,591,223
Termination benefits	749,855,525	31,179,608	130,817,496	911,852,629
Disability benefits	416,323,885	10,787,039	44,825,131	471,936,055
Inactive Members				
Vested members	491,182,519	6,311,553	20,249,570	517,743,642
Nonvested members	33,371,976	106,775	834,156	34,312,907
Retired Members and Beneficiaries	11,293,531,095	169,436,571	306,902,663	11,769,870,329
Total Present Value of Future Benefits	$30,221,774,074	$578,428,063	$1,400,265,516	$32,200,467,653

* Includes Sheriffs and Deputies
** Includes all other public safety members

EXHIBIT 7

UNFUNDED ACTUARIAL LIABILITY
as of June 30, 2010

	Regular Membership	Special Service Group 1*	Special Service Group 2**	Total
1. Present Value of Future Benefits	$30,221,774,074	$578,428,063	$1,400,265,516	$32,200,467,653
2. Present Value of Future Normal Costs	5,141,168,260	130,800,420	460,079,323	5,732,048,003
3. Actuarial Liability (1) - (2)	$25,080,605,814	$447,627,643	$940,186,193	$26,468,419,650
4. Actuarial Value of Net Assets	20,260,943,904	388,636,933	887,877,723	21,537,458,560
5. Unfunded Actuarial Liability (3) - (4)	$4,819,661,910	$58,990,710	$52,308,470	$4,930,961,090

* Includes Sheriffs and Deputies
** Includes all other public safety members

EXHIBIT 8

CALCULATION OF ACTUARIAL (GAIN)/LOSS AND ANY TRANSFER TO THE FAVORABLE EXPERIENCE DIVIDEND RESERVE
Based on the June 30, 2010 Actuarial Valuation

The Favorable Experience Dividend (FED) reserve account was created by legislation in 1998. The main purpose of the account is to help offset the negative impact of postretirement inflation for members who retired after June 30, 1990. The law provided that a portion of the favorable actuarial experience, if any, in subsequent years would be transferred to the FED reserve. Legislation passed in 2000 capped the FED reserve at ten years of expected payouts at the maximum level. Further legislation in 2006 prohibited further transfers to the FED until the System has no remaining UAL. The System experienced a loss for the year so no transfer is to be made this year.

1. June 30, 2009 Unfunded Actuarial Liability	$	4,894,613,881
2. Normal Cost as of June 30, 2009		694,109,015
3. Employer and Member Contributions*		742,596,384
4. Change due to membership transfers		(48,394)
5. Change due to revised assumptions		(114,184,733)
6. Change due to new benefit provisions		(673,856,673)
7. Expected Unfunded Actuarial Liability as of June 30, 2010 $[(1)+(2)] * 1.075 - [(3) * (1.075)^{.5}] + (4) + (5) + (6)$		4,449,846,995
8. Actual Unfunded Actuarial Liability as of June 30, 2010		4,930,961,090
9. (Gain)/loss (8) - (7)		481,114,095
10. Portion of gain to transfer to FED		N/A
11. Amount of Actuarial Value of Assets to transfer to FED	$	0
12. Market value of FED transfer	$	0

* Does not include service purchases

SECTION IV

SYSTEM CONTRIBUTIONS

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Under the funding method described in Appendix C, the contribution rate consists of two elements: (1) the normal cost rate and (2) 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.

Legislation was passed in 2006, 2008, and 2010 that increases the statutory contribution rate for regular members as shown in the table below:

Contribution Rates

Time Period	Member	Employer	Total
Prior to 7/1/07	3.70%	5.75%	9.45%
7/1/07 – 6/30/08	3.90%	6.05%	9.95%
7/1/08 – 6/30/09	4.10%	6.35%	10.45%
7/1/09 – 6/30/10	4.30%	6.65%	10.95%
7/1/10 – 6/30/11	4.50%	6.95%	11.45%
7/1/11 – 6/30/12	5.38%	8.07%	13.45%
7/1/12 and later	Actuarially Determined*		

*May not change by more than 1.0% per year

Several factors contributed to the change in the normal cost rate and actuarial liability from the 2009 to the 2010 valuation. The impact of each change is summarized in the table below:

	Normal Cost			Actuarial Liability		
	Regular	SS1	SS2	Regular	SS1	SS2
6/30/09 Valuation	9.97%	15.57%	15.92%	$24,733	$412	$873
Demographic Experience	+0.02%	+0.05%	-0.06%	1,159	+24	+56
Change in Assumptions	+0.50%	+0.63%	-0.06%	-137	+12	+11
Change in Benefit Structure	-0.62%	0.00%	0.00%	-674	0	0
6/30/10 Valuation	9.87%	16.25%	15.80%	$25,081	$448	$940

Effective with the June 30, 2008 valuation, a transfer of assets is performed on June 30th for all split service members (those members with service in more than one membership group) whose membership group changed since the prior valuation. In addition, IPERS also transfers assets for certain split service members who have not changed groups since the last valuation. As a result, all assets and liabilities for each member reside in their current membership group. When members move between membership groups, an asset transfer for valuation purposes is made based on the funded ratio of their former group prior to the transfer. The asset transfer calculation is determined by multiplying the actuarial liability of the members transferring by the funded ratio of their former group just prior to the transfer. The asset values after the transfers and the liabilities for the members reside in their current membership group and are used to prepare the final valuation results.

EXHIBIT 9

ACTUARIAL BALANCE SHEET
as of June 30, 2010

	Regular Membership	Special Service Group 1*	Special Service Group 2**	Total
ASSETS				
Actuarial value of assets	$20,260,943,904	$388,636,933	$887,877,723	$21,537,458,560
Present value of future normal costs	5,141,168,260	130,800,420	460,079,323	5,732,048,003
Present value of future contributions to amortize unfunded actuarial liability	4,819,661,910	58,990,710	52,308,470	4,930,961,090
Total Net Assets	$30,221,774,074	$578,428,063	$1,400,265,516	$32,200,467,653
LIABILITIES				
Present Value of Future Benefits:				
Retired Members and Beneficiaries	$11,293,531,095	$169,436,571	$306,902,663	$11,769,870,329
Active Members	18,403,688,484	402,573,164	1,072,279,127	19,878,540,775
Inactive Members	524,554,495	6,418,328	21,083,726	552,056,549
Total Liabilities	$30,221,774,074	$578,428,063	$1,400,265,516	$32,200,467,653

* Includes Sheriffs and Deputies
** Includes all other public safety members

EXHIBIT 10

ANALYSIS OF CONTRIBUTION RATE FOR REGULAR MEMBERSHIP

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, 2010 actuarial valuation and applies to the fiscal year beginning July 1, 2011 and ending June 30, 2012. The statutory contribution rate for that period is 13.45% as the result of legislation passed in the 2010 session.

		Regular Membership
1. FYE 2011 Contribution Rate		11.45%
2. Normal Cost Rate		9.87%
3. Contribution Rate Applied to Fund the UAL for FYE 2011 (1) - (2)		1.58%
4. Unfunded Actuarial Liability(UAL)/Surplus on June 30, 2010	$	4,819,661,910
5. Expected Payroll for FYE 2011	$	6,810,924,513
6. Projected UAL on June 30, 2011 [(4) x 1.075] - [(3) x (5) x $1.075^{.5}$]	$	5,069,561,427
7. Amortization Period to Fund the UAL/Surplus		30 years
8. Amortization Factor (Level % of Pay)		19.33574
9. UAL Contribution Adjusted to Mid-year of FYE 2012 [(6) / (8)] x $(1.075)^{.5}$	$	271,840,290
10. Expected Payroll for FYE 2012 (5) x 1.04	$	7,083,361,494
11. UAL Contribution Rate for FYE 2012 (9) / (10)		3.84%
12. Actuarial Contribution Rate for FYE 2012 (2) + (11)		13.71%
13. Amortization Period Necessary to Finance UAL as a Level Percent of Payroll with Contribution Rate of 13.45% *		34 years

* Assuming all actuarial assumptions are met in the future.

EXHIBIT 11

CALCULATION OF CONTRIBUTION RATES FOR SPECIAL SERVICE 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/surplus payment. The payment to amortize the unfunded actuarial liability/(surplus) 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, 2010 actuarial valuation and applies to the fiscal year beginning July 1, 2011.

	Special Service Group 1*		Special Service Group 2**	
1. FYE 2011 Contribution Rate	17.88%		16.59%	
2. Normal Cost Rate	16.25%		15.80%	
3. Contribution Rate Applied to Fund the UAL (1) - (2)	1.63%		0.79%	
4. Unfunded Actuarial Liability(UAL)/Surplus on June 30, 2010	$ 58,990,710		$ 52,308,470	
5. Expected Payroll for FYE 2011	$ 93,398,089		$ 336,911,824	
6. Projected UAL on June 30, 2011 [(4) x 1.075] - [(3) x (5) x $1.075^{.5}$]	$ 61,836,567		$ 53,471,996	
7. Amortization Period to Fund the UAL/Surplus	30 years		30 years	
8. Amortization Factor (Level % of Pay)	19.33574		19.33574	
9. UAL Contribution Adjusted to Mid-year FYE 2012 [(6) / (8)] x $(1.075)^{.5}$	$ 3,315,804		$ 2,867,278	
10. Expected Payroll for FYE 2012 (5) x 1.04	$ 97,134,013		$ 350,388,297	
11. UAL Contribution Rate for FYE 2012 (9) / (10)	3.41%		0.82%	
12. Actuarial Contribution Rate for FYE 2012 (2) + (11)	19.66%		16.62%	
Employer Contribution Rate	9.83%	(50%)	9.97%	(60%)
Employee Contribution Rate	9.83%	(50%)	6.65%	(40%)

* Includes Sheriffs and Deputies

** Includes all other public safety members

SECTION V

PLAN ACCOUNTING INFORMATION

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GASB Statement No. 25, as amended by GASB Statement No. 50, 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.

EXHIBIT 12

SUMMARY OF MEMBERSHIP

	June 30, 2010	June 30, 2009
Active Employees:		
Vested	128,735	127,308
Not yet vested	36,891	40,383
Total active employees*	165,626	167,691
Retirees and beneficiaries currently receiving benefits:	93,513	89,718
Inactive vested members entitled to benefits but not yet receiving them:	28,472	28,240

*Retired/reemployed members are included in retiree counts, but not the active count. Counts are 8,347 for 2010 and 8,427 for 2009.

EXHIBIT 13

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]
6/30/05	$17,951,490,071	$20,240,098,667	$2,288,608,596	88.69%	$5,236,860,886	43.70%
6/30/06	19,144,036,519	21,651,122,419	2,507,085,900	88.42%	5,523,863,321	45.39%
6/30/07	20,759,628,415	23,026,113,782	2,266,485,367	90.16%	5,781,706,199	39.20%
6/30/08	21,857,423,183	24,522,216,589	2,664,793,406	89.13%	6,131,445,367	43.46%
6/30/09	21,123,979,941	26,018,593,823	4,894,613,882	81.19%	6,438,643,124	76.02%
6/30/10	21,537,458,560	26,468,419,650	4,930,961,090	81.37%	6,571,182,005	75.04%

EXHIBIT 14

SCHEDULE OF EMPLOYER CONTRIBUTIONS

The Actuarially Required Employer Contribution (ARC) is determined based on GASB Statement No. 25, *Financial Reporting for Defined Benefit Pension Plans*. The dollar amount of ARC is calculated by dividing the contributions paid by the regular membership for the fiscal year by the statutory contribution rate to determine covered payroll for the year. The covered payroll is then multiplied by the actuarial contribution rate including the normal cost and 30-year amortization of the UAL from the actuarial valuation two years prior (the June 30, 2008 valuation sets the ARC for FY10). The resulting dollar amount of ARC for the regular membership is added to the actual contributions paid by the Special Service 1 and the Special Service 2 employers to determine the total ARC for the fiscal year.

	Actuarially Required Contributions (ARC)				Percentage of ARC Contributed			
Fiscal Year Ending	Regular Membership	Special Service Group 1*	Special Service Group 2**	Total	Regular Membership	Special Service Group 1*	Special Service Group 2**	Total
6/30/05	341,552,685	6,236,611	15,391,729	363,181,025	84.7%	100.0%	100.0%	85.6%
6/30/06	364,424,911	6,228,675	16,888,833	387,542,419	82.7%	100.0%	100.0%	83.8%
6/30/07	387,578,925	6,577,652	17,723,013	411,879,590	82.2%	100.0%	100.0%	83.3%
6/30/08	408,882,080	6,301,171	17,644,966	432,828,217	86.4%	100.0%	100.0%	87.2%
6/30/09	441,951,764	6,365,911	24,736,688	473,054,363	86.9%	100.0%	100.0%	87.8%
6/30/10	467,839,274	6,725,778	27,328,184	501,893,236	88.7%	100.0%	100.0%	89.5%

* Includes Sheriffs and Deputies

** Includes all other public safety members

EXHIBIT 15

EXPECTED BENEFIT PAYMENTS

The following chart shows the expected benefit payments to be made over the next 20 years. These payments include those expected to be made to current retirees and beneficiaries, current active members, and current deferred vested members (included in the active values) if all actuarial assumptions are met in future years. The benefits reflected include expected refunds and death benefits as well as annuity payments.

These payouts do not include any current nonvested inactive members, any future members, or any FED payments.

Fiscal Year End	Actives at 6/30/10	Retirees at 6/30/10	Total
2011	$ 131,771,000	$ 1,226,814,000	$ 1,358,585,000
2012	266,507,000	1,207,565,000	1,474,072,000
2013	402,635,000	1,186,811,000	1,589,446,000
2014	537,127,000	1,164,835,000	1,701,962,000
2015	668,114,000	1,141,284,000	1,809,398,000
2016	799,464,000	1,116,430,000	1,915,894,000
2017	931,734,000	1,089,993,000	2,021,727,000
2018	1,067,024,000	1,061,947,000	2,128,971,000
2019	1,201,740,000	1,032,641,000	2,234,381,000
2020	1,336,318,000	1,001,775,000	2,338,093,000
2021	1,468,814,000	969,904,000	2,438,718,000
2022	1,600,027,000	937,011,000	2,537,038,000
2023	1,730,262,000	902,864,000	2,633,126,000
2024	1,857,179,000	867,510,000	2,724,689,000
2025	1,980,936,000	831,003,000	2,811,939,000
2026	2,102,912,000	793,417,000	2,896,329,000
2027	2,222,983,000	754,849,000	2,977,832,000
2028	2,339,739,000	715,420,000	3,055,159,000
2029	2,453,231,000	675,279,000	3,128,510,000
2030	2,563,417,000	634,591,000	3,198,008,000

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APPENDIX A

SUMMARY STATISTICS ON SYSTEM MEMBERSHIP

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APPENDIX A

SUMMARY STATISTICS ON SYSTEM MEMBERSHIP

TABLE OF CONTENTS

RECONCILIATION OF ACTIVE MEMBERS

Below is a summary of the changes in active members (excluding retired re-employed members) between June 30, 2009 and June 30, 2010.

	Regular	Special Service Groups		
	Membership	Group 1	Group 2	Total
6/30/2009 Starting count	158,970	1,530	7,191	167,691
New actives	11,828	50	384	12,262
Returning actives	2,290	14	100	2,404
Nonvested Terminations	(4,641)	(5)	(140)	(4,786)
Elected Refund	(2,192)	(10)	(169)	(2,371)
Vested Terminations	(3,417)	(14)	(133)	(3,564)
Total Withdrawals	(10,250)	(29)	(442)	(10,721)
Deaths	(128)	(1)	(6)	(135)
Disability Retirements	(101)	(3)	(9)	(113)
AE Benefits	(474)	(1)	(5)	(480)
Early Retirements	(1,364)	0	0	(1,364)
Unreduced Retirements	(3,560)	(37)	(206)	(3,803)
Total Retirements	(5,499)	(41)	(220)	(5,760)
Other/transfer	(123)	23	(15)	(115)
6/30/2010 Ending count	157,088	1,546	6,992	165,626

HISTORICAL SUMMARY OF MEMBERS

The following table displays selected historical data (including regular and both Special Service groups) as available.

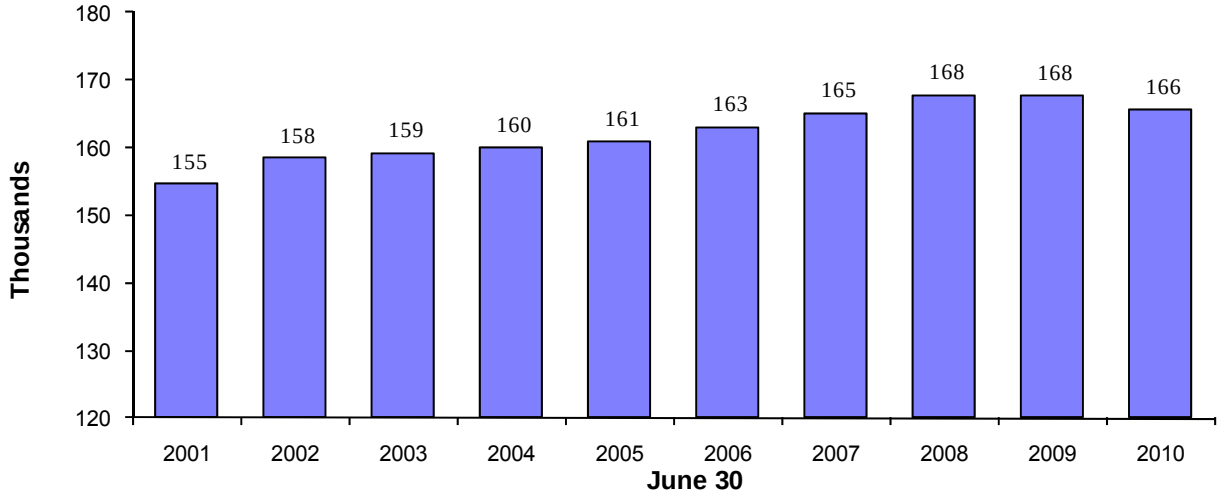
Valuation Date June 30	Total Count	Number	Average					Number			Active/Retired Ratio
			Age	Entry Age	Service	Annual Pay ($)	% Change	Retired Reemployed	Inactive Vested	Retired	
1991	206,105	135,104	43.7			21,885				49,881	2.71
1992	207,860	134,485	44.3			22,510	2.9%			51,247	2.62
1993	211,862	136,409	43.9			22,604	0.4%			54,212	2.52
1994	216,989	141,423	44.2			22,968	1.6%			54,295	2.60
1995	216,973	144,912	44.1			23,322	1.5%			56,353	2.57
1996	221,891	147,431	44.2			25,218	8.1%			57,914	2.55
1997	224,357	147,736	44.6	33.1	11.5	26,031	3.2%		28,377	59,320	2.49
1998	241,767	148,917	44.7	33.2	11.5	26,767	2.8%		31,202	61,648	2.42
1999	250,168	152,440	44.8	33.4	11.4	27,322	2.1%	4,853	34,332	63,396	2.40
2000	249,970	153,039	44.8	33.2	11.6	29,032	6.3%	5,050	31,219	65,712	2.33
2001	255,963	154,610	45.0	33.5	11.5	30,341	4.5%	4,886	32,650	68,703	2.25
2002	264,974	158,467	45.1	33.8	11.3	32,119	5.9%	5,387	34,792	71,715	2.21
2003	268,813	159,310	45.2	33.8	11.4	31,950	-0.5%	6,126	35,375	74,128	2.15
2004	272,573	160,003	45.4	33.8	11.6	33,082	3.5%	6,438	35,788	76,782	2.08
2005	267,214	160,876	45.6	33.8	11.8	34,066	3.0%	6,592	26,919	79,419	2.03
2006	271,007	163,052	45.7	34.0	11.7	35,475	4.1%	8,044	25,918	82,037	1.99
2007	276,421	165,216	45.7	34.0	11.7	36,615	3.2%	7,848	26,435	84,770	1.95
2008	282,778	167,823	45.7	34.1	11.6	38,515	5.2%	8,523	27,626	87,309	1.92
2009	294,076	167,691	46.0	34.2	11.8	40,326	4.7%	8,427	28,240	89,718	1.87
2010	287,611	165,626	46.0	34.1	11.9	41,179	2.1%	8,347	28,472	93,513	1.77

Note: Retired count includes retired reemployed members.

SUMMARY OF ACTIVE MEMBERS

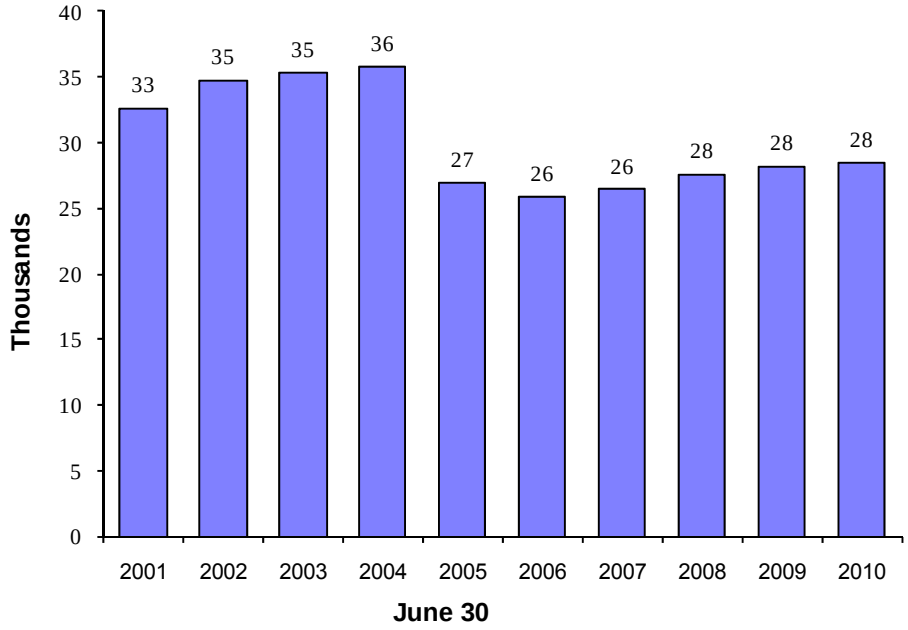
	Regular Membership	Special Service Groups Group 1	Special Service Groups Group 2	Total 6/30/2010	Total 6/30/2009	Percent Change
Total Employees	157,088	1,546	6,992	165,626	167,691	-1.2
Projected Covered Payroll* (millions)	$6,424	$93	$303	$6,820	$6,762	0.9
Average Age	46.2	41.2	41.9	46.0	46.0	0.0
Average Entry Age	34.3	26.9	31.4	34.1	34.2	-0.3
Average Earnings	$40,895	$60,413	$43,326	$41,179	$40,326	2.1
Retired Reemployed	8,170	72	105	8,347	8,427	-0.9

*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.



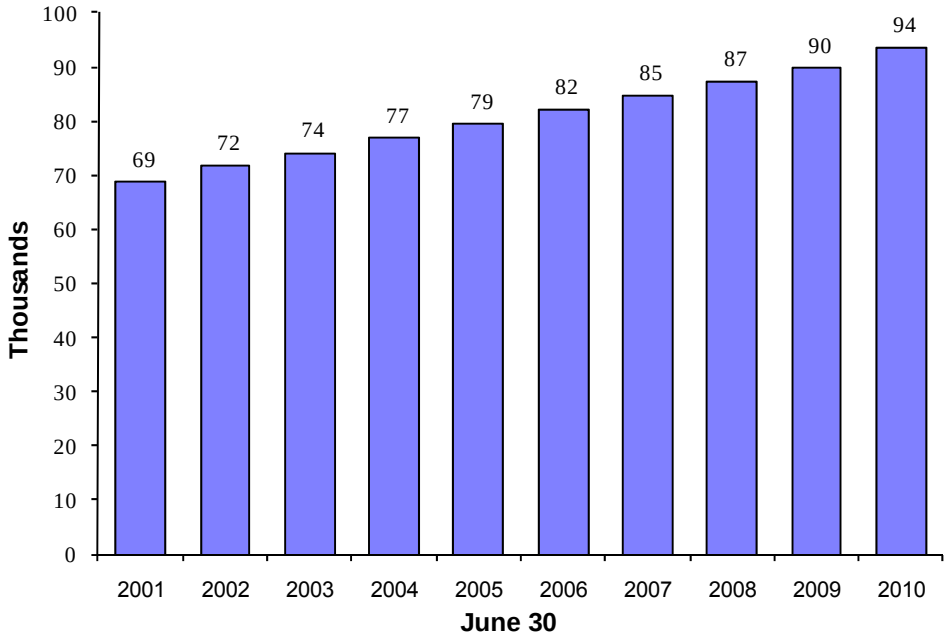
SUMMARY OF INACTIVE VESTED MEMBERS

Regular Membership	Special Service Group 1	Special Service Group 2	Total 6/30/2010	Total 6/30/2009	Percent Change
27,909	89	474	28,472	28,420	0.2%



SUMMARY OF RETIRED MEMBERS AND BENEFICIARIES

Regular Membership	Special Service Group 1	Special Service Group 2	Total 6/30/2010	Total 6/30/2009	Percent Change
91,481	616	1,416	93,513	89,718	4.2%



AGE AND SERVICE DISTRIBUTION AS OF JUNE 30, 2010 FOR ACTIVE MEMBERS*

Males and Females - Regular Membership

Years of Service

	0 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	
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	5,256	15,131	115	23,558	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	5,371	15,312
25-29	9,201	28,559	3,169	37,474	64	31,263	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	12,434	30,845
30-34	5,815	28,743	6,359	41,083	2,163	46,168	30	40,355	0	NA	0	NA	0	NA	0	NA	0	NA	14,367	36,852
35-39	5,242	27,348	3,742	39,123	4,793	49,370	1,450	52,539	23	44,859	0	NA	0	NA	0	NA	0	NA	15,250	39,580
40-44	5,158	25,180	4,171	33,667	3,948	44,744	3,680	55,046	1,231	55,941	19	45,435	0	NA	0	NA	0	NA	18,207	39,504
45-49	4,525	23,865	4,412	30,979	4,452	38,478	3,048	46,377	3,429	56,573	1,628	55,381	156	48,773	0	NA	0	NA	21,650	39,219
50-54	3,978	25,076	3,689	31,454	4,483	35,986	3,569	41,624	3,179	51,008	3,298	58,964	2,653	55,672	177	50,714	0	NA	25,026	41,515
55-59	3,774	22,319	3,010	29,878	3,444	36,072	3,269	40,165	3,337	46,757	2,574	53,571	3,588	61,078	1,454	60,389	53	51,197	24,503	42,170
60-64	3,889	15,100	2,506	24,564	2,040	34,961	1,898	38,163	2,213	45,700	1,586	50,530	1,245	55,349	1,173	65,083	363	59,444	16,913	36,193
65-69	2,364	9,424	1,509	15,002	766	24,644	466	30,838	423	40,219	266	41,929	232	43,698	139	56,684	145	65,244	6,310	21,205
70 & over	2,446	11,600	1,818	10,540	711	10,577	143	14,694	41	25,592	18	22,811	28	31,430	11	38,525	11	49,385	5,227	11,567
Totals	51,648	22,925	34,500	32,334	26,864	39,820	17,553	45,011	13,876	50,538	9,389	54,860	7,902	57,502	2,954	61,417	572	59,957	165,258	36,584

*Including retired/reemployed members

AGE AND SERVICE DISTRIBUTION AS OF JUNE 30, 2010 FOR ACTIVE MEMBERS*

Males and Females - Special Service Group 1

	Years of Service																			
	0 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	
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	35	37,971	1	43,128	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	36	38,115
25-29	92	45,300	76	50,578	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	168	47,687
30-34	50	45,410	110	53,371	89	56,718	2	46,048	0	NA	0	NA	0	NA	0	NA	0	NA	251	52,914
35-39	23	39,383	57	53,367	115	56,041	56	58,267	0	NA	0	NA	0	NA	0	NA	0	NA	251	54,404
40-44	16	43,255	39	55,102	58	59,267	91	60,598	55	59,411	0	NA	0	NA	0	NA	0	NA	259	58,149
45-49	7	53,676	8	57,129	37	57,002	53	61,065	83	62,719	41	67,946	1	108,634	0	NA	0	NA	230	62,080
50-54	9	26,324	5	60,500	22	57,210	23	59,720	45	60,335	46	60,902	51	67,383	1	66,471	0	NA	202	60,352
55-59	24	19,915	6	51,333	2	54,778	10	57,917	25	58,667	21	63,193	26	63,515	18	68,625	0	NA	132	54,205
60-64	24	19,706	6	37,415	1	63,000	4	46,871	9	59,960	6	61,013	7	58,812	5	59,833	1	49,505	63	41,492
65-69	4	12,507	10	27,566	0	NA	0	NA	0	NA	1	38,945	1	67,428	1	51,084	0	NA	17	28,420
70 & over	5	18,301	4	11,952	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	9	15,480
Totals	289	38,305	322	51,442	324	57,007	239	59,607	217	60,805	115	63,647	86	65,996	25	66,079	1	49,505	1,618	54,538

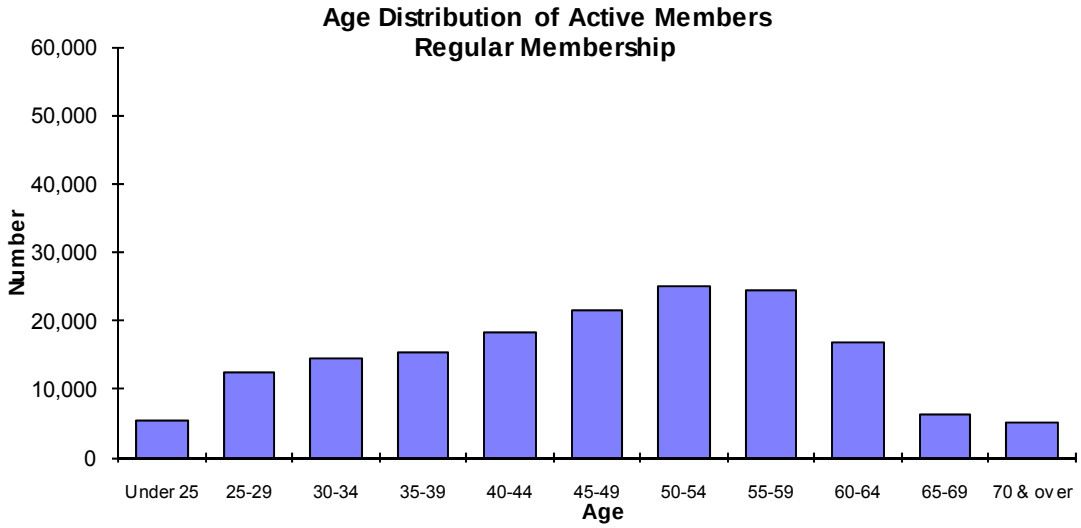
*Including retired/reemployed members

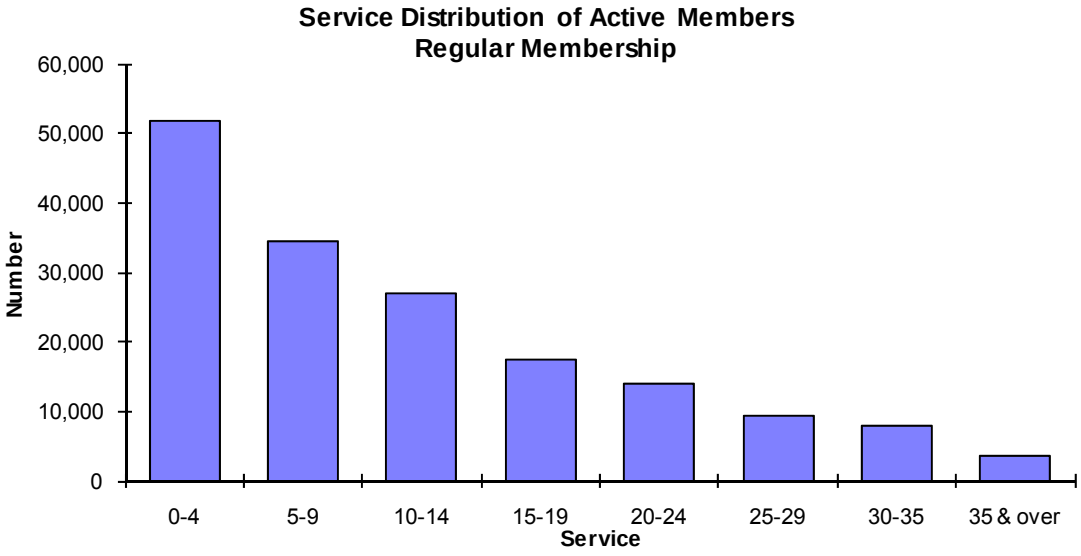
AGE AND SERVICE DISTRIBUTION AS OF JUNE 30, 2010 FOR ACTIVE MEMBERS*

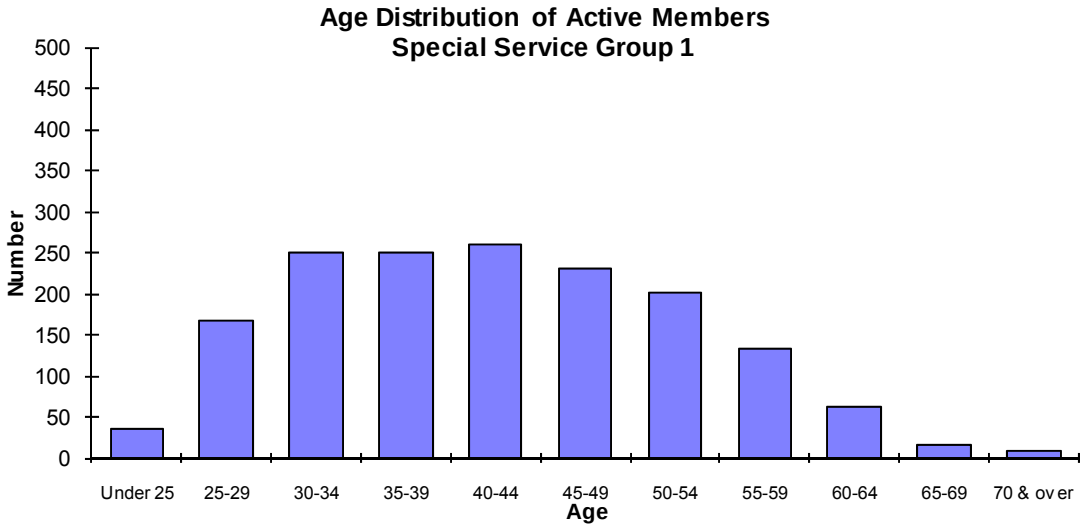
Males and Females - Special Service Group 2

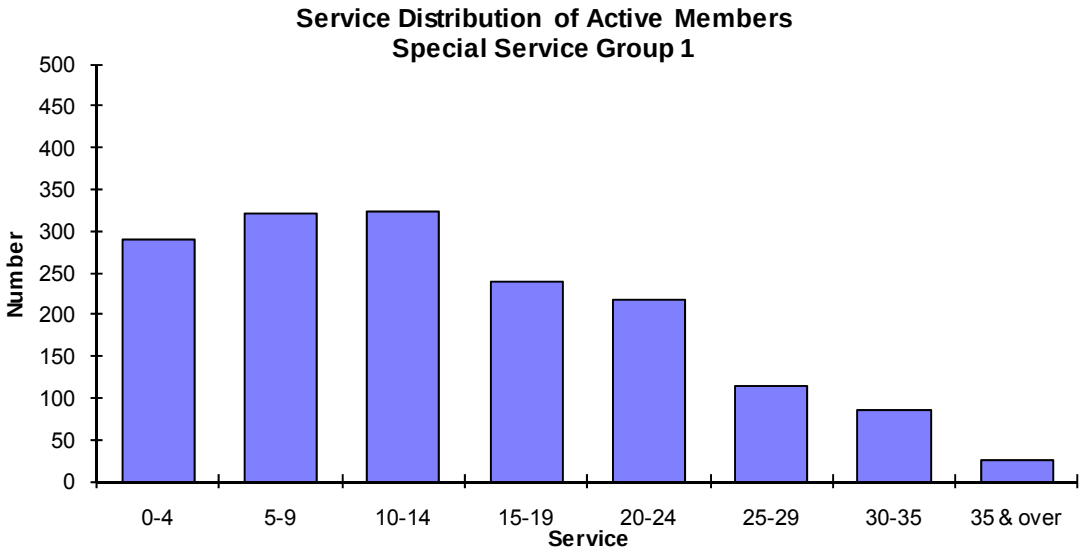
	Years of Service																			
	0 to 4		5 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39		40 and over		Total	
Age	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary
Under 25	328	23,933	13	34,143	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	341	24,322
25-29	613	31,745	215	39,145	7	55,294	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	835	33,848
30-34	390	29,994	339	40,099	183	45,635	3	54,976	0	NA	0	NA	0	NA	0	NA	0	NA	915	36,948
35-39	252	27,881	258	35,040	327	49,768	95	51,109	1	53,027	0	NA	0	NA	0	NA	0	NA	933	39,924
40-44	213	28,064	201	33,407	278	46,520	200	51,032	97	53,509	2	47,580	0	NA	0	NA	0	NA	991	41,490
45-49	179	28,162	186	34,758	219	47,337	134	49,100	174	54,904	98	54,406	13	53,152	0	NA	0	NA	1,003	43,897
50-54	102	29,312	139	33,680	173	43,674	133	45,482	120	52,668	157	57,614	105	59,218	4	58,904	0	NA	933	46,190
55-59	110	27,552	102	35,523	142	46,638	89	45,415	69	49,454	73	56,819	60	54,409	22	55,106	2	85,806	669	44,136
60-64	59	19,171	61	34,973	71	47,361	59	40,028	42	48,859	36	50,704	26	55,260	12	61,443	0	NA	366	41,093
65-69	26	11,802	15	24,355	19	46,129	10	27,691	4	49,679	3	39,753	2	57,637	1	33,233	1	50,702	81	28,922
70 & over	18	17,808	5	13,861	3	14,505	2	30,132	0	NA	2	89,681	0	NA	0	NA	0	NA	30	22,433
Totals	2,290	28,311	1,534	36,210	1,422	46,957	725	47,718	507	52,820	371	55,914	206	56,920	39	56,884	3	74,104	7,097	39,937

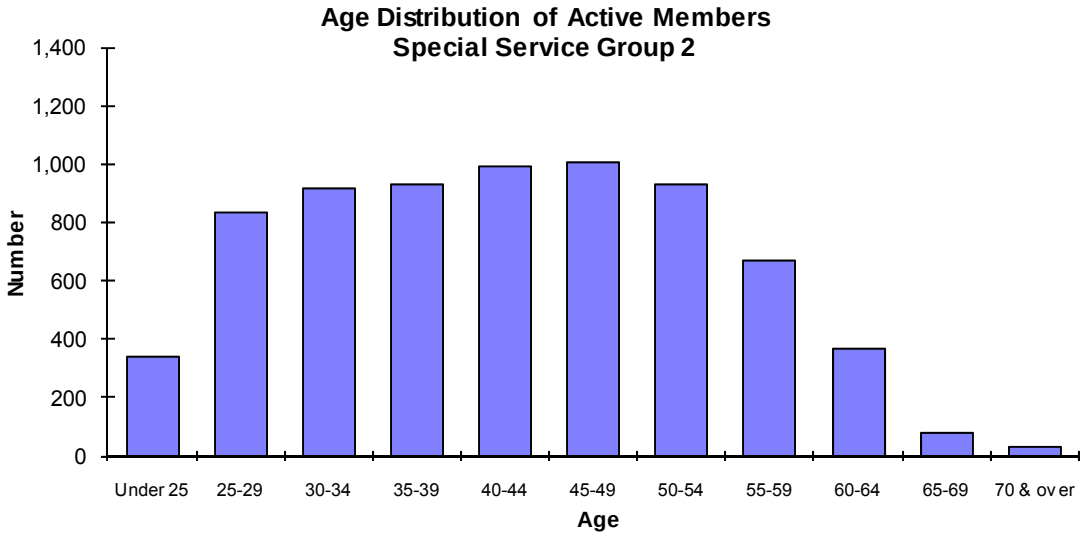
*Including retired/reemployed members

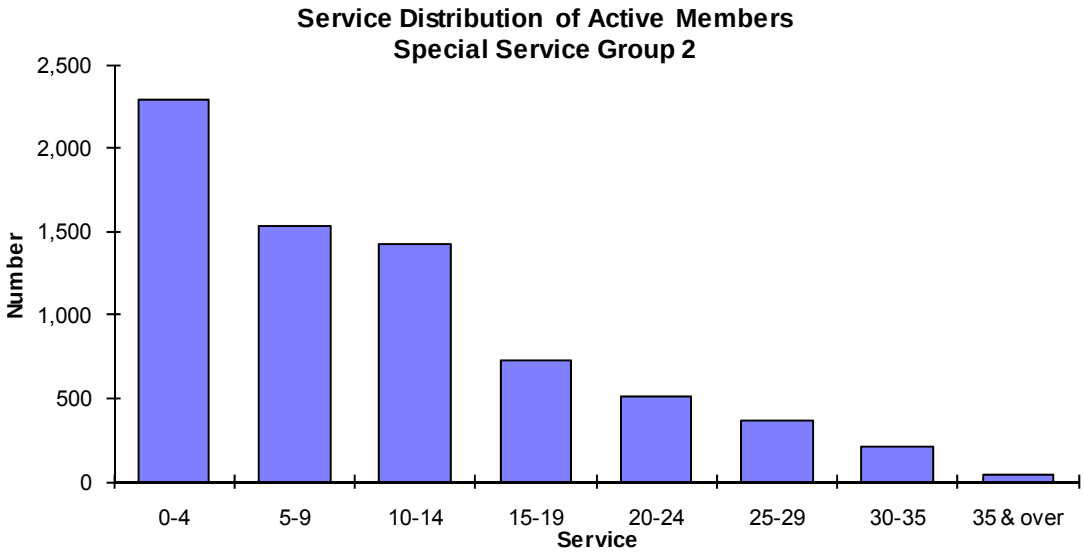

Age Distribution of Active Members
Regular Membership
60,000
50,000
40,000
30,000
20,000
10,000
0
Number
Under 25
25-29
30-34
35-39
40-44
45-49
50-54
55-59
60-64
65-69
70 & over
Age


Service Distribution of Active Members
Regular Membership
60,000
50,000
40,000
30,000
20,000
10,000
0
Number
0-4
5-9
10-14
15-19
20-24
25-29
30-35
35 & over
Service


Age Distribution of Active Members
Special Service Group 1
Number
500
450
400
350
300
250
200
150
100
50
0
Under 25
25-29
30-34
35-39
40-44
45-49
50-54
55-59
60-64
65-69
70 & over
Age


Service Distribution of Active Members
Special Service Group 1
Number
500
450
400
350
300
250
200
150
100
50
0
0-4
5-9
10-14
15-19
20-24
25-29
30-35
35 & over
Service


Age Distribution of Active Members
Special Service Group 2
Number
1,400
1,200
1,000
800
600
400
200
0
Under 25
25-29
30-34
35-39
40-44
45-49
50-54
55-59
60-64
65-69
70 & over
Age


Service Distribution of Active Members
Special Service Group 2
Number
2,500
2,000
1,500
1,000
500
0
0-4
5-9
10-14
15-19
20-24
25-29
30-35
35 & over
Service

AGE AND SERVICE DISTRIBUTION AS OF JUNE 30, 2010 FOR INACTIVE VESTED MEMBERS

Males and Females - Regular Membership

Years of Service

	0 to 3		4 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39		40 and over		Total	
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	34	11,129	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	34	11,129
25-29	0	NA	443	19,833	3	8,484	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	446	19,838
30-34	0	NA	1,321	26,092	49	12,930	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	1,370	26,231
35-39	0	NA	1,579	25,516	324	15,871	22	32,055	0	NA	0	NA	0	NA	0	NA	0	NA	1,925	26,795
40-44	0	NA	1,855	22,233	508	16,957	112	38,506	12	33,968	0	NA	0	NA	0	NA	0	NA	2,487	24,656
45-49	0	NA	2,318	19,604	762	16,638	308	32,151	119	37,452	21	35,378	0	NA	0	NA	0	NA	3,528	22,761
50-54	0	NA	2,724	17,707	1,277	16,243	582	29,974	320	37,480	119	40,818	43	45,901	1	42,541	0	NA	5,066	22,548
55-59	2,368	10,754	2,564	17,400	1,123	17,685	549	24,156	235	31,303	91	40,011	25	48,542	2	41,250	0	NA	6,957	17,159
60-64	1,795	9,173	1,408	15,166	512	18,200	226	21,515	89	26,554	25	32,786	9	46,082	1	42,337	0	NA	4,065	13,697
65-69	895	6,996	463	9,656	117	13,783	41	18,025	18	24,948	8	35,563	6	24,863	1	25,094	1	39,522	1,550	9,003
70 & over	312	5,029	135	6,332	20	9,860	12	5,217	1	28,894	0	NA	1	27,750	0	NA	0	NA	481	5,684
Totals	5,370	9,267	14,844	19,545	4,695	16,789	1,852	27,695	794	34,075	264	39,187	84	44,988	5	38,494	1	39,522	27,909	19,504

AGE AND SERVICE DISTRIBUTION AS OF JUNE 30, 2010 FOR INACTIVE VESTED MEMBERS

Males and Females - Special Service Group 1

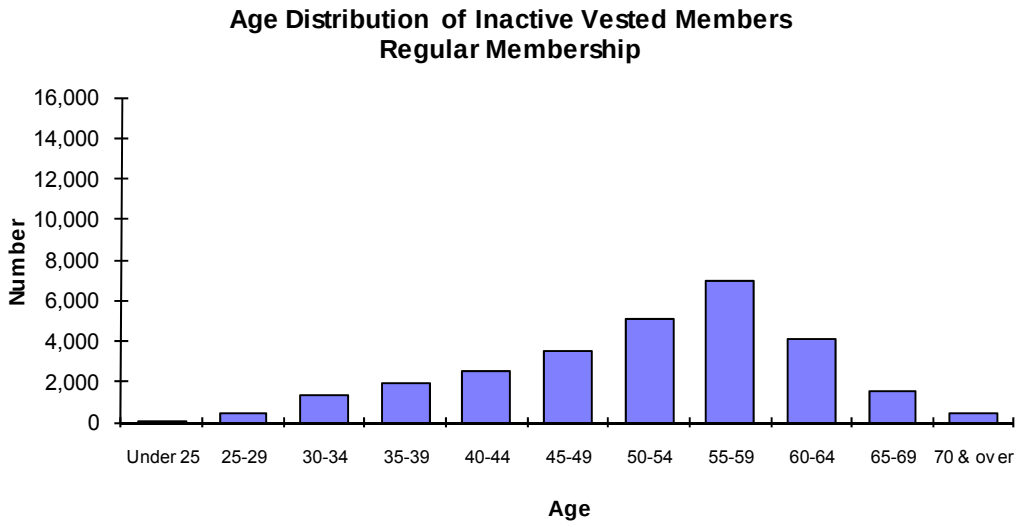
Years of Service

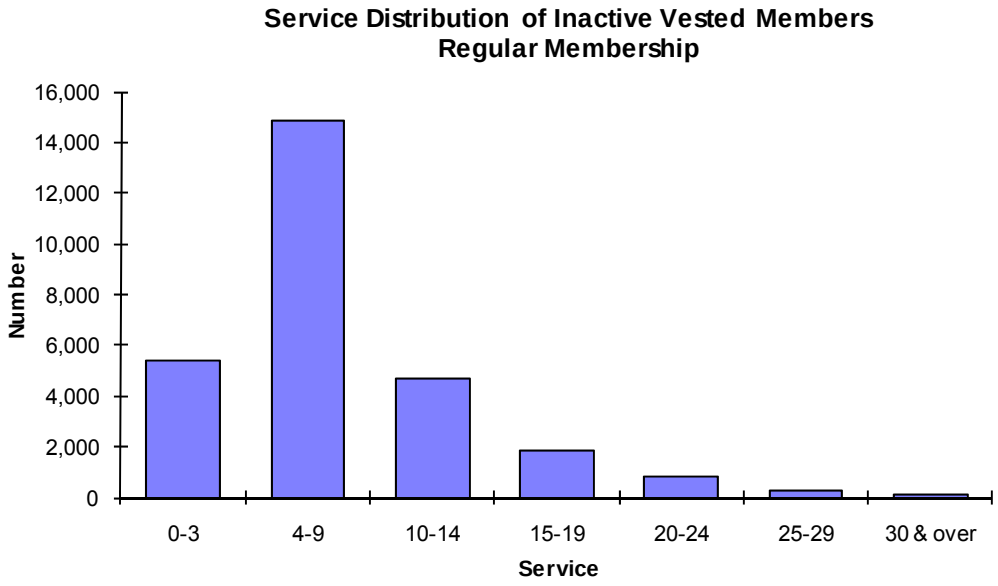
	0 to 3		4 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39		40 and over		Total	
Age	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3
Under 25	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA
25-29	0	NA	3	31,812	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	3	31,812
30-34	0	NA	11	45,410	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	11	45,410
35-39	0	NA	9	40,335	8	35,287	2	47,654	0	NA	0	NA	0	NA	0	NA	0	NA	19	42,872
40-44	0	NA	5	38,493	5	33,984	4	45,253	0	NA	0	NA	0	NA	0	NA	0	NA	14	41,020
45-49	0	NA	3	30,923	7	41,470	5	45,920	1	50,384	0	NA	0	NA	0	NA	0	NA	16	41,051
50-54	0	NA	5	26,639	6	39,724	3	34,583	5	36,204	0	NA	1	53,692	0	NA	0	NA	20	33,889
55-59	0	NA	3	20,155	0	NA	3	28,207	0	NA	0	NA	0	NA	0	NA	0	NA	6	24,181
60-64	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA
65-69	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA
70 & over	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA
Totals	0	NA	39	36,843	26	37,725	17	40,841	6	38,567	0	NA	1	53,692	0	NA	0	NA	89	38,915

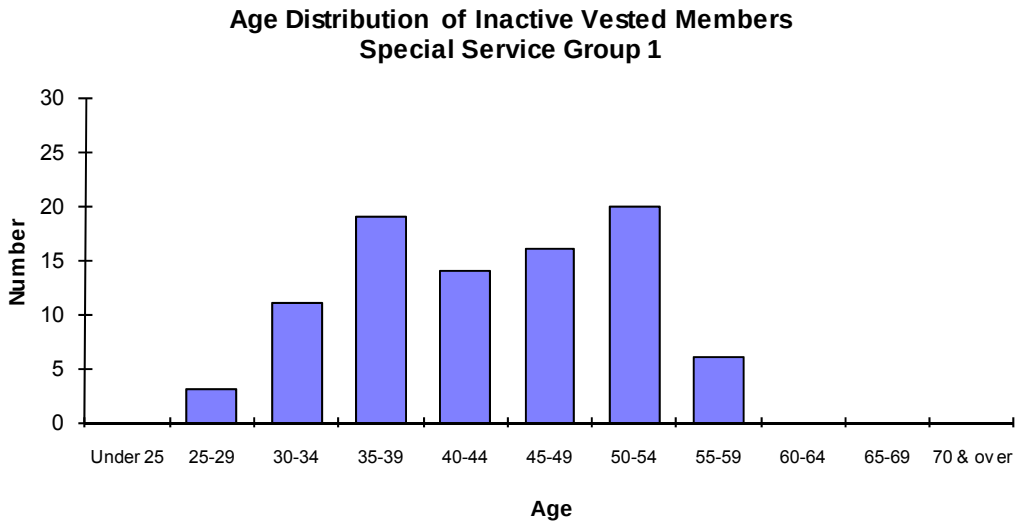
AGE AND SERVICE DISTRIBUTION AS OF JUNE 30, 2010 FOR INACTIVE VESTED MEMBERS

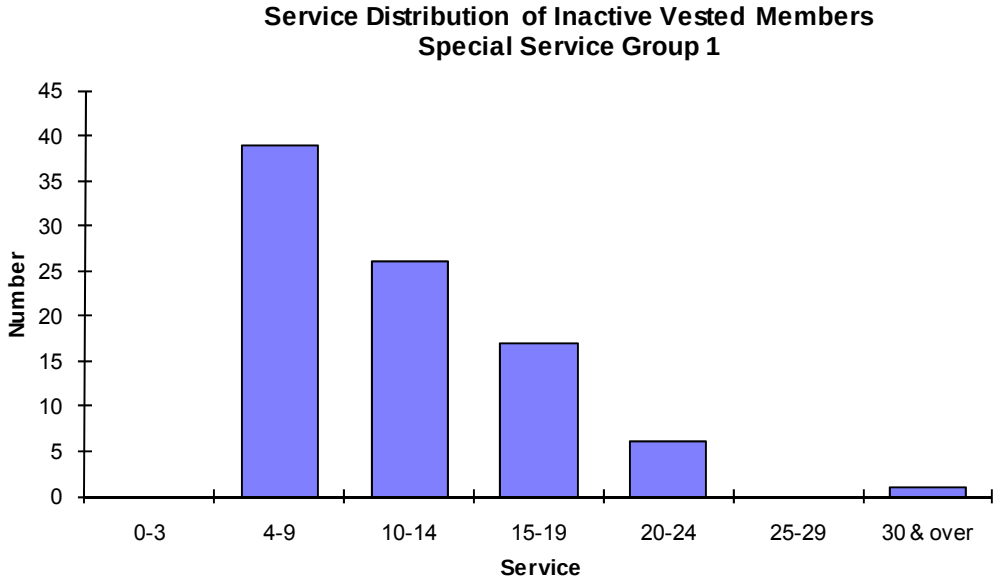
Males and Females - Special Service Group 2

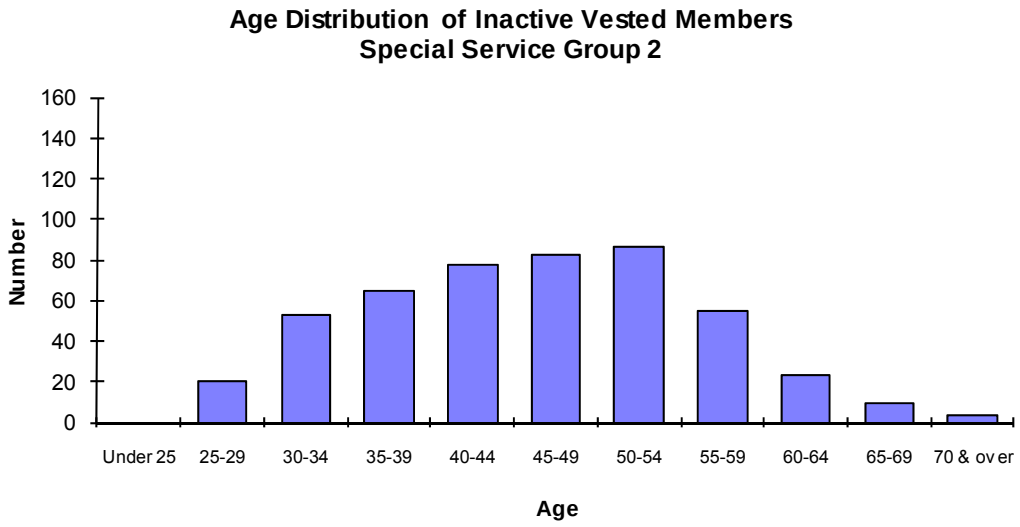
	Years of Service																			
	0 to 3		4 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39		40 and over		Total	
Age	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3	No.	Avg. Hi-3
Under 25	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA
25-29	0	NA	19	22,577	1	15,052	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	20	23,164
30-34	0	NA	49	24,330	4	23,636	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	53	25,628
35-39	0	NA	48	17,034	15	21,455	2	42,102	0	NA	0	NA	0	NA	0	NA	0	NA	65	20,388
40-44	0	NA	40	15,236	28	20,976	8	31,263	2	43,903	0	NA	0	NA	0	NA	0	NA	78	21,967
45-49	0	NA	40	18,399	25	26,643	9	32,050	8	42,756	0	NA	0	NA	0	NA	0	NA	82	26,244
50-54	0	NA	37	17,902	25	22,795	9	32,894	7	38,597	5	44,290	3	47,630	0	NA	0	NA	86	26,521
55-59	11	15,688	21	10,209	10	13,618	9	30,258	1	51,372	3	36,725	0	NA	0	NA	0	NA	55	18,682
60-64	7	18,013	9	11,095	6	11,146	1	7,470	0	NA	0	NA	0	NA	0	NA	0	NA	23	13,947
65-69	5	11,400	3	1,327	1	1,382	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	9	6,841
70 & over	1	312	2	2,028	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	3	1,456
Totals	24	14,832	268	17,794	115	21,384	38	31,542	18	41,745	8	41,453	3	47,630	0	NA	0	NA	474	22,589

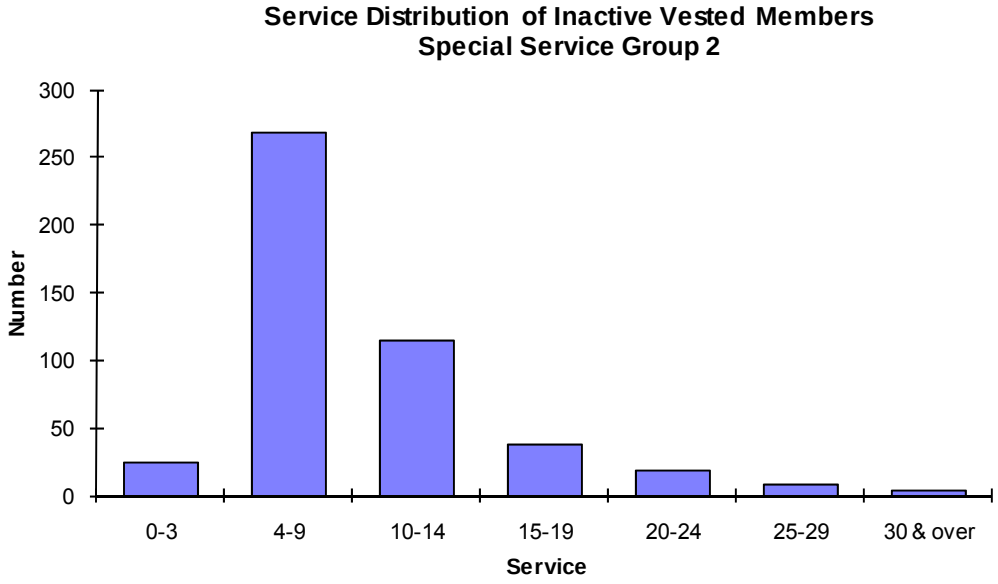

Age Distribution of Inactive Vested Members
Regular Membership
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Number
Under 25
25-29
30-34
35-39
40-44
45-49
50-54
55-59
60-64
65-69
70 & over
Age


Service Distribution of Inactive Vested Members
Regular Membership
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Number
0-3
4-9
10-14
15-19
20-24
25-29
30 & over
Service


Age Distribution of Inactive Vested Members
Special Service Group 1
Number
30
25
20
15
10
5
0
Under 25
25-29
30-34
35-39
40-44
45-49
50-54
55-59
60-64
65-69
70 & over
Age


Service Distribution of Inactive Vested Members
Special Service Group 1
Number
45
40
35
30
25
20
15
10
5
0
0-3
4-9
10-14
15-19
20-24
25-29
30 & over
Service


Age Distribution of Inactive Vested Members
Special Service Group 2
Number
160
140
120
100
80
60
40
20
0
Under 25
25-29
30-34
35-39
40-44
45-49
50-54
55-59
60-64
65-69
70 & over
Age


Service Distribution of Inactive Vested Members
Special Service Group 2
Number
300
250
200
150
100
50
0
0-3
4-9
10-14
15-19
20-24
25-29
30 & over
Service

ANALYSIS OF RETIREES AND BENEFICIARIES

Males and Females - Regular Membership

Number of Members and Beneficiaries

Age	Chapt 97	Option 1	Option 2	Option 3	Option 4	Contingent Beneficiary	Option 5	Option 6	Period Certain	Total	Average Annual Benefit
Under 40	0	9	3	4	5	32	1	3	9	66	$6,753
40 to 44	0	13	14	1	2	20	2	5	3	60	7,211
45 to 49	0	48	13	14	12	30	5	13	9	144	7,296
50 to 54	0	119	34	33	34	75	15	29	3	342	9,387
55 to 59	0	1,254	1,196	806	383	199	498	1,289	16	5,641	20,311
60 to 64	0	3,450	3,321	2,393	1,030	352	1,482	3,573	37	15,638	19,897
65 to 69	0	4,336	3,632	2,720	1,743	421	1,816	2,792	44	17,504	15,926
70 to 74	0	4,657	3,511	2,398	2,400	588	2,026	1,079	32	16,691	12,438
75 to 79	0	4,188	2,974	1,570	2,366	734	1,724	188	25	13,769	9,374
80 to 84	0	3,406	2,690	1,064	1,476	759	1,123	11	6	10,535	6,823
85 to 89	0	2,582	1,597	674	735	564	813	2	4	6,971	5,318
90 to 94	2	1,480	450	246	216	197	534	0	0	3,125	4,589
95 to 99	1	480	67	83	29	39	153	0	0	852	3,756
100 & up	2	85	7	19	4	6	20	0	0	143	3,454
Counts	5	26,107	19,509	12,025	10,435	4,016	10,212	8,984	188	91,481	$12,826
% of Total	0.0%	28.5%	21.3%	13.1%	11.4%	4.4%	11.2%	9.8%	0.2%	100.0%	

ANALYSIS OF RETIREES AND BENEFICIARIES

Males and Females - Special Service Group 1

Number of Members and Beneficiaries

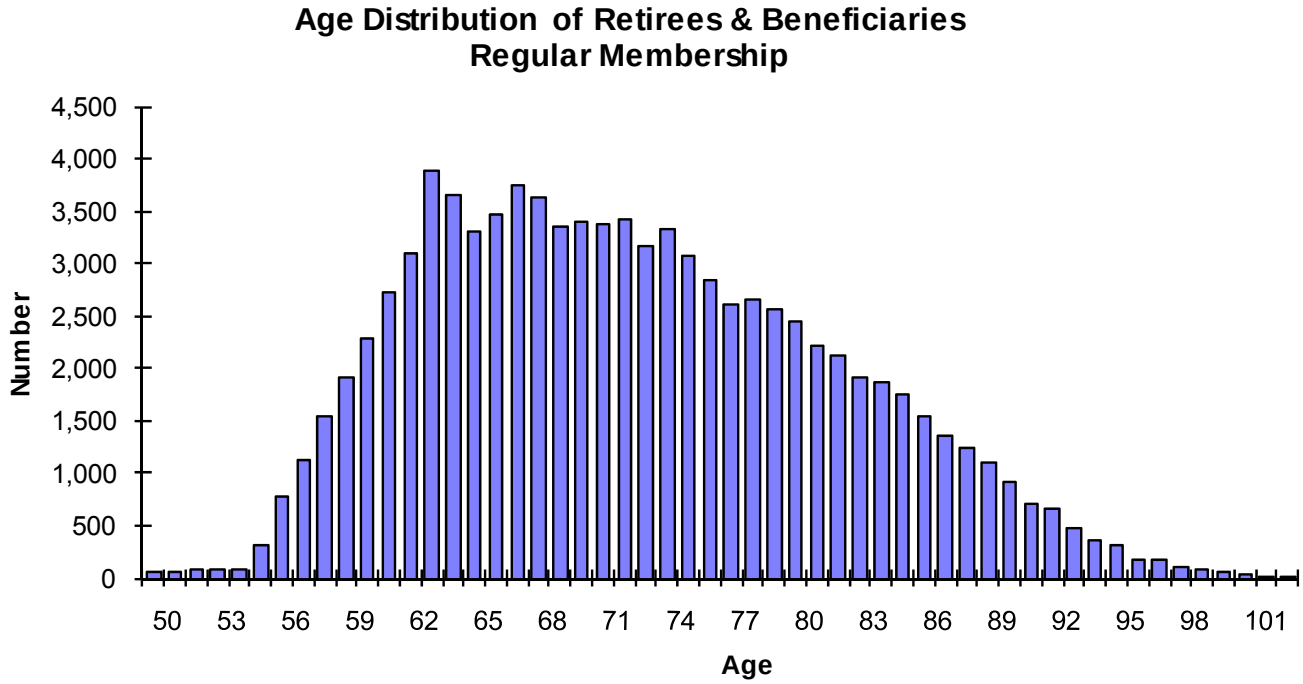
Age	Chapt 97	Option 1	Option 2	Option 3	Option 4	Contingent Beneficiary	Option 5	Option 6	Period Certain	Total	Average Annual Benefit
Under 40	0	0	0	0	0	1	0	0	0	1	$6,159
40 to 44	0	2	1	0	0	1	0	0	0	4	21,474
45 to 49	0	3	0	0	0	1	0	0	0	4	25,041
50 to 54	0	8	9	3	10	2	2	21	0	55	34,312
55 to 59	0	27	15	13	31	1	5	44	0	136	30,715
60 to 64	0	39	14	5	25	3	9	53	0	148	28,940
65 to 69	0	25	13	10	26	4	5	21	0	104	25,847
70 to 74	0	14	5	5	28	6	5	10	0	73	18,924
75 to 79	0	17	8	3	18	7	2	1	0	56	13,876
80 to 84	0	7	2	1	5	6	1	0	0	22	10,793
85 to 89	0	1	3	0	4	4	0	0	0	12	7,920
90 to 94	0	0	1	0	0	0	0	0	0	1	53,420
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	143	71	40	147	36	29	150	0	616	$25,531
% of Total	0.0%	23.2%	11.5%	6.5%	23.9%	5.8%	4.7%	24.4%	0.0%	100.0%	

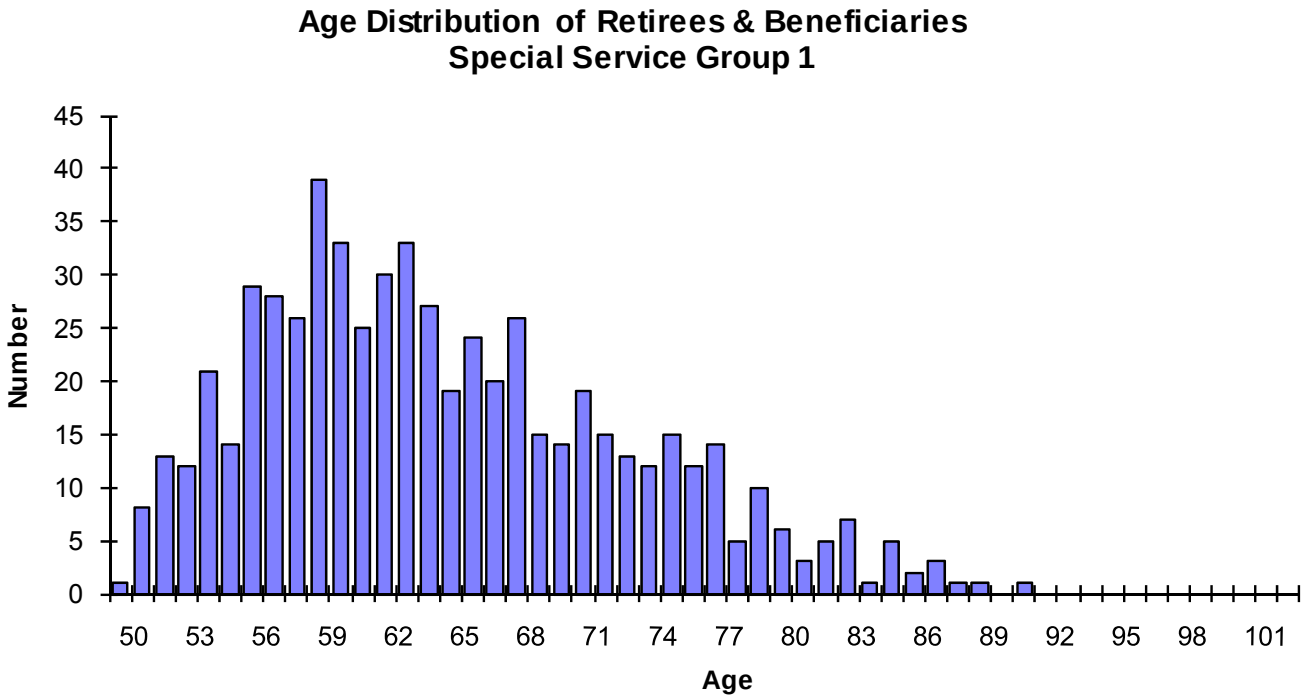
ANALYSIS OF RETIREES AND BENEFICIARIES

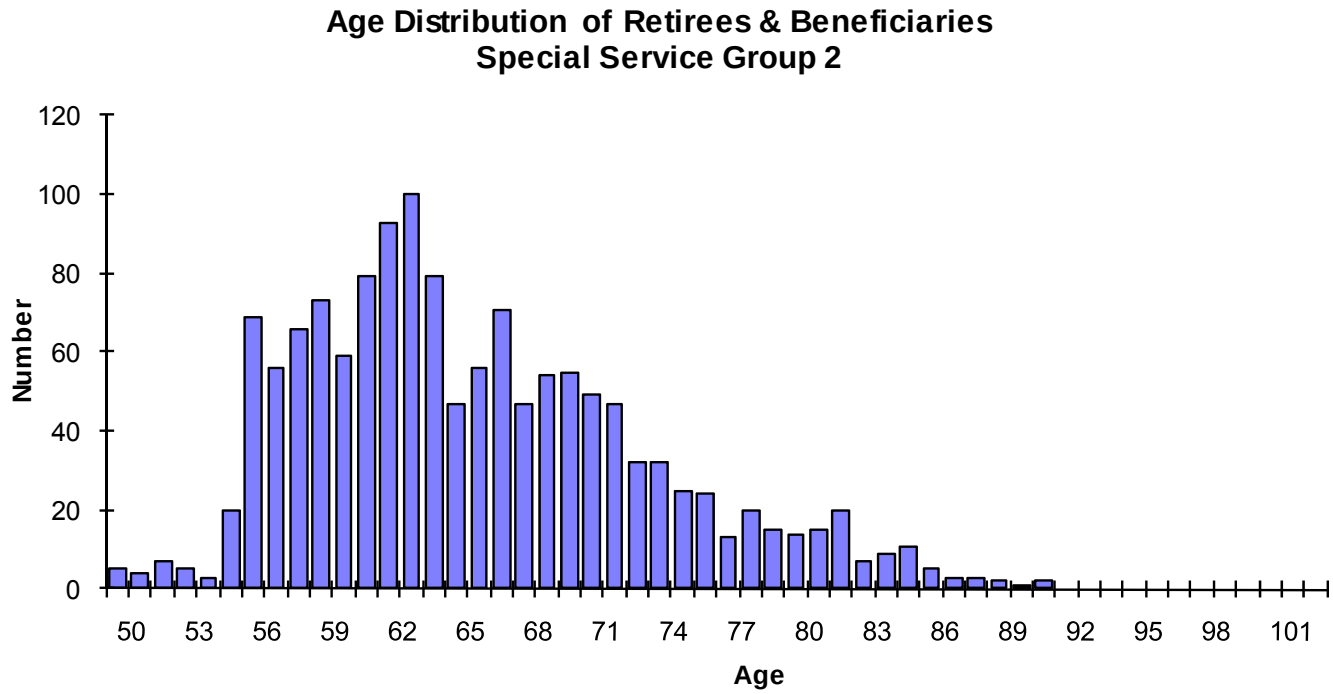
Males and Females - Special Service Group 2

Number of Members and Beneficiaries

Age	Chapt 97	Option 1	Option 2	Option 3	Option 4	Contingent Beneficiary	Option 5	Option 6	Period Certain	Total	Average Annual Benefit
Under 40	0	0	0	0	1	0	1	0	0	2	$31,082
40 to 44	0	1	0	1	2	0	0	1	0	5	14,070
45 to 49	0	6	1	2	0	1	0	2	0	12	15,049
50 to 54	0	2	1	6	5	4	0	6	0	24	16,984
55 to 59	0	67	46	15	43	11	8	94	0	284	28,604
60 to 64	0	87	48	38	78	6	21	131	1	410	23,791
65 to 69	0	70	39	23	51	14	18	60	0	275	18,831
70 to 74	0	44	30	18	63	14	14	32	0	215	14,666
75 to 79	0	27	2	4	44	12	7	1	0	97	12,411
80 to 84	0	27	6	1	19	8	4	0	0	65	9,291
85 to 89	0	5	2	0	4	6	7	0	0	24	7,207
90 to 94	0	1	0	0	1	1	0	0	0	3	9,085
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	337	175	108	311	77	80	327	1	1,416	$20,437
% of Total	0.0%	23.8%	12.4%	7.6%	22.0%	5.4%	5.6%	23.1%	0.1%	100.0%	


Age Distribution of Retirees & Beneficiaries
Regular Membership
Number
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
50
53
56
59
62
65
68
71
74
77
80
83
86
89
92
95
98
101
Age


Age Distribution of Retirees & Beneficiaries
Special Service Group 1
Number
45
40
35
30
25
20
15
10
5
0
50
53
56
59
62
65
68
71
74
77
80
83
86
89
92
95
98
101
Age


Age Distribution of Retirees & Beneficiaries
Special Service Group 2
Number
120
100
80
60
40
20
0
50
53
56
59
62
65
68
71
74
77
80
83
86
89
92
95
98
101
Age

SUMMARY OF DATA FILE RECONCILIATION

The following table reconciles the data we received from IPERS to the final membership counts used in the valuation.

Records on the in-pay data file	93,692
Removed deaths prior to 7/1/10	(179)
Records used in the valuation	93,513
Records on the not-in-pay data file	257,687
Records removed because the member has received all benefits	(18,143)
Records used in the valuation	239,544

These records are allocated as follows:

Active members	165,626
Retired, re-employed members	8,347
Vested inactive members	28,472
Nonvested inactive members	37,099
Total	239,544

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APPENDIX B

SUMMARY OF PLAN PROVISIONS

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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. Membership is mandatory if a person is in covered employment. Exceptions to this are set out in the law. Notable exceptions 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.

Service Credit: A member will receive membership credit for service rendered after July 4, 1953 (special rules apply to service before this date). Service is counted to the complete quarter of a calendar year. A member will not receive credit for more than four quarters of service in a calendar year regardless of the number of employers reporting covered wages for that member. A calendar year is the 12-month period beginning January 1 and ending December 31.

Members may purchase service under specified conditions. To make such a purchase, the member must pay the actuarial cost of such service.

REGULAR MEMBERS:

Average Salary: The average of the member's highest three years of covered wages. Effective July 1, 2012 the average of a member's highest five years of covered wages, but not less than the member's highest three years as of June 30, 2012, if vested at that time.

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 of age 55.
Early Retirement	First day of any month starting with the month of the member's 55th birthday but preceding the normal retirement date.
Inactive Vested Benefit	Four years of service (seven years effective July 1, 2012). Prior to July 1, 2005 inactive members could become eligible for a vested benefit merely by reaching age 55.
Pre-retirement Death Benefit	Upon death of a member before benefits have started.
Disability Benefit	Upon meeting requirements to be vested, if the active or inactive member begins receiving federal Social Security disability or Railroad Retirement disability benefits.

Retirement Benefits:

Normal Retirement	An annual annuity equal to 2% of Average Salary (AS) for each year of service up to 30 years plus 1% of AS for each of the next 5 years of service. Maximum years of service recognized for benefit accrual purposes is 35 with a resulting maximum benefit of 65% of AS.
Early Retirement	An annuity, determined in the same manner as for normal retirement. However, a reduction of 0.25% per month is applied for each month the benefit commences prior to normal retirement age (based on service at early retirement). Effective July 1, 2012, the reduction changes to 0.50% per month and applies to each month that the benefit commences before age 65. Transition rules apply if members have service both before and after July 1, 2012.
Pre-retirement Death Benefits	Beneficiaries of members may receive a lump sum determined by a formula that includes how much the member contributed to IPERS, years of service, highest year's salary, and other factors. Beneficiaries may have the option of receiving a monthly benefit based on the present value of the member's accrued benefit at death.
Disability Benefits	An annuity, payable immediately, equal to the Normal Retirement Benefit without an early retirement adjustment.

Termination Benefits:

Less than four* years of Service (Nonvested)	A refund of all of the member's accumulated contributions.
Four* or more years of Service (Vested)	At the member's election either: (1) a refund of all of the member's accumulated contributions plus a portion (years of service divided by 30) 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.

* Effective July 1, 2012 seven years of service for those not vested at that time.

Form of Annuity:	The base form, or normal form, is a life annuity with a guaranteed return of employee contributions (Option 2).
Optional Forms of Payment:	*Option 1:* The member specifies a dollar amount, in $1,000 increments, that the member wishes to have paid to a designated beneficiary following the death of the member. The death benefit will be in the form of a single payment and cannot exceed the amount of a member's own accumulated contributions to IPERS, and it cannot lower the member's

benefit as calculated under Option 2 by more than 50%.

Option 3: After the member's death, all benefits cease.

Option 4: The member receives a reduced monthly benefit so that a lifetime monthly benefit may be provided after the member's death to the person named by the member as the contingent annuitant. The member specifies what benefit the contingent annuitant will receive after the death of the member. The monthly benefit can be the same as the member's monthly benefit or three-fourths, one-half, or one-fourth of the amount. These choices may be restricted if the contingent annuitant is not the member's spouse and is more than ten years younger than the member.

Option 5: If the member dies before ten full years (120 months of payments) have ended, the member's beneficiary will receive a monthly benefit for the remainder of the ten years. Members who have attained age 90 as of the first month of entitlement are not allowed to select this option.

Option 6: The member receives a reduced monthly benefit so that a lifetime monthly benefit may be provided after the member's death to the person named by the member as the contingent annuitant. In addition, the monthly amounts are also reduced to pay for a pop-up feature. The pop-up feature provides that if the contingent annuitant dies before the member, the member's benefit will pop back up to what it would have been under IPERS Option 2, and death benefits may be payable to the member's designated beneficiary if certain conditions are met.

Actuarial Equivalent Lump Sum Payment: If a vested member is entitled to receive a benefit and it is less than $50 per month under Option 2, the member shall receive a retirement benefit in an actuarial equivalent lump sum payment. The lump sum will include the member's and employer's accumulated contributions.

Post-retirement Benefit Increases: Annual dividends are paid to those retired prior to July 1, 1990. Effective with the November 2000 dividend payment, the dividend is 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%.

Favorable Experience Dividend (FED): For members who retired after June 30, 1990, a favorable experience dividend (FED) reserve account has been established under Iowa Code §97B.49F(2). The main purpose of this account is to help offset the negative effects of postretirement inflation. All members and beneficiaries who receive a monthly allowance qualify for favorable experience dividend payments. Each November, IPERS

determines if a FED payment should be paid the following January subject to the following conditions:

- The member must be retired one year.
- The FED rate cannot exceed 3%.
- The FED payment will be issued in a lump sum in January.
- The FED payment is not guaranteed.

The formula is as follows:
(December's Monthly benefit) X (12 months) X (Rate) X (Full calendar years retired) = FED

Source of Funds:

Regular Membership:

Contribution Rates

Time Period	Member	Employer	Total
Prior to 7/1/07	3.70%	5.75%	9.45%
7/1/07 – 6/30/08	3.90%	6.05%	9.95%
7/1/08 – 6/30/09	4.10%	6.35%	10.45%
7/1/09 – 6/30/10	4.30%	6.65%	10.95%
7/1/10 – 6/30/11	4.50%	6.95%	11.45%
7/1/11 – 6/30/12	5.38%	8.07%	13.45%
7/1/12 and later	Actuarially Determined*		

*Change in contribution rate cannot exceed 1.0% per year.

SPECIAL SERVICE GROUPS 1 AND 2:

Average Salary: The average of the member's highest three years of covered wages

Age and Service Requirements for Benefits:

Normal Retirement: Generally age 55. However, a member of the Sheriffs and Deputy Sheriffs (Group 1) may retire at age 50 with 22 years of service.

Inactive Vested Benefit: Four years of service. Prior to July 1, 2005 inactive members could become eligible for vested benefits merely by reaching age 55.

Pre-retirement Death Benefit: Upon death of a member before benefits have started.

Disability Benefit	Upon meeting requirements to be vested, (i) if the active or inactive member begins receiving federal Social Security or Railroad Retirement disability benefits, or (ii) upon being determined by IPERS to be disabled under the provisions of Iowa Code section 97B.50A. The disability benefits under Iowa Code section 97B.50A must be applied for through IPERS within one (1) year after termination of employment. Benefits under Iowa Code section 97B.50A may be paid for in-service disability or ordinary disability.
Retirement Benefits:	
Normal Retirement	60% of average salary after completion of 22 years of service, plus an additional 1.5% of average salary for years of service greater than 22 but not more than 30. Maximum formula is 72% of average salary.
Pre-retirement Death Benefits	Beneficiaries of members may receive a lump sum determined by a formula that includes how much the member contributed to IPERS, years of service, highest year's salary, and other factors. Beneficiaries may have the option of receiving a monthly benefit based on the present value of the member's accrued benefit at death.
Disability Benefits	An annuity, payable immediately, equal to the Normal Retirement Benefit, without an adjustment. The benefit is the greater of the Normal Retirement Benefit and either 50% (for ordinary disability) or 60% (for in-service disability) of Average Salary.
Termination Benefits:	
Less than four years of Service (Non-vested)	A refund of all of the member's accumulated contributions.
Four or more years of Service (Vested)	At the member's election either: (1) a refund of all of the member's accumulated contributions plus a portion (years of service divided by 22) of the employer's contributions with interest, or (2) a deferred benefit determined in the same manner as for normal retirement. Payments begin at normal retirement.
Form of Annuity:	The base form, or normal form, is a life annuity with a guaranteed return of employee contributions (Option 2).
Optional Forms of Payment:	*Option 1:* The member specifies a dollar amount, in $1,000 increments, that the member wishes to have paid to a designated beneficiary following the death of the member.

The death benefit will be in the form of a single payment and cannot exceed the amount of a member's own accumulated contributions to IPERS, and it cannot lower the member's benefit as calculated under Option 2 by more than 50%.

Option 3: After the member's death, all benefits cease.

Option 4: The member receives a reduced monthly benefit so that a lifetime monthly benefit may be provided after the member's death to the person named by the member as the contingent annuitant. The member specifies what benefit the contingent annuitant will receive after the death of the member. The monthly benefit can be the same as the member's monthly benefit or three-fourths, one-half, or one-fourth of the amount. These choices may be restricted if the contingent annuitant is not the member's spouse and is more than ten years younger than the member.

Option 5: If the member dies before ten full years (120 months of payments) have ended, the member's beneficiary will receive a monthly benefit for the remainder of the ten years. Members who have attained age 90 as of the first month of entitlement are not allowed to select this option.

Option 6: The member receives a reduced monthly benefit so that a lifetime monthly benefit may be provided after the member's death to the person named by the member as the contingent annuitant. In addition, the monthly amounts are also reduced to pay for a pop-up feature. The pop-up feature provides that if the contingent annuitant dies before the member, the member's benefit will pop back up to what it would have been under IPERS Option 2, and death benefits may be payable to the member's designated beneficiary if certain conditions are met.

Level Income Payment Option: A Level Income payment alternative is authorized for special service members. This alternative applies to all IPERS retirement options listed above except Option 6. The Level Income payment alternative permits a special service member to receive a relatively level income both before and after age 62 when benefits from IPERS and Social Security are combined. Higher IPERS benefits are paid prior to age 62. When the member reaches age 62, the member's IPERS benefit is permanently reduced. This amount is determined when the member retires and is not recomputed based on the actual Social Security benefit.

Actuarial Equivalent Lump Sum Payment: If a vested member is entitled to receive a benefit and it is less than $50 per month under Option 2, the member shall receive a retirement benefit in an actuarial equivalent lump sum payment. The lump sum will include the member's and employer's accumulated contributions.

Post-retirement Benefit Increases:

Annual dividends are paid to those retired prior to July 1, 1990. Effective with the November 2000 dividend payment, the dividend is 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%.

Favorable Experience Dividend (FED):

For members who retired after June 30, 1990, a favorable experience dividend (FED) reserve account has been established under Iowa Code §97B.49F(2). The main purpose of this account is to help offset the negative effects of postretirement inflation. All members and beneficiaries who receive a monthly allowance qualify for favorable experience dividend payments. Each November, IPERS determines if a FED payment should be paid the following January subject to the following conditions:

- The member must be retired one year.
- The FED rate cannot exceed 3%.
- The FED payment will be issued in a lump sum in January.
- The FED payment is not guaranteed.

The formula is as follows:
(December's Monthly benefit) x (12 months) x (Rate) x (Full calendar years retired) = FED

Source of Funds:

Special Service Group 1:

Actuarially determined contribution rate. Members contribute 50% and employers contribute 50%.

Special Service Group 2:

Actuarially determined contribution rate. Members contribute 40% and employers contribute 60%.

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APPENDIX C

ACTUARIAL ASSUMPTIONS AND METHODS

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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.

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 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 2010, based on experience from 2005-2009. The Investment Board has adopted and approved the use of the assumptions and methods presented in the 2005-09 Experience Study. The following is a summary of the assumptions and methods used in the valuation:

ECONOMIC ASSUMPTIONS:

Rate of Inflation (effective June 30, 2006)

3.25% per annum

Rate of Crediting Interest on Contribution Balances (effective June 30, 2006)

4.00% per annum, compounded annually

Rate of Investment Return (effective June 30, 1996)

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

Wage Growth Assumption (effective June 30, 1999)*

4.00% per annum based on 3.25% inflation assumption and 0.75% real wage inflation.

*Total of 4.0% did not change but the components changed June 30, 2006

Payroll Increase Assumption (effective June 30, 1999)

4.00% per year

DEMOGRAPHIC ASSUMPTIONS:

Rates of Mortality (effective June 30, 2010)

Pre-Retirement

State	
Male	RP2000 Employee Table, Generational, set back 3 years
Female	RP2000 Employee Table, Generational, set back 8 years
School	
Male	RP2000 Employee Table, Generational, set back 3 years
Female	RP2000 Employee Table, Generational, set back 8 years
Other	
Male	RP2000 Employee Table, Generational, no set back
Female	RP2000 Employee Table, Generational, set back 8 years
Special Services	
Male	RP2000 Healthy Annuitant Table, Generational
Female	RP2000 Healthy Annuitant Table, Generational

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

Post-Retirement

State	RP2000 Healthy Annuitant, Generational
Male	No set back
Female	1 Year set forward with 70% decrease below 75 and 10% decrease
School	RP2000 Healthy Annuitant, Generational
Male	2 Year set back with 10% decrease below 75 and 10% increase
Female	3 Year set back with 25% decrease below 75 and 10% increase
Other	RP2000 Healthy Annuitant, Generational
Male	No set forward or set back
Female	3 Year set back with 10% decrease below 75 and 15% increase
Special Services	RP2000 Healthy Annuitant Table, Generational
Male	No age adjustment
Female	No age adjustment

Beneficiaries:	Same as members
Disabled Members (all groups):	RP2000 Disabled Mortality, Generational Set back 1 year for males and set forward 3 years for females

Retirement Rates (effective June 30, 2010)

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

	Assumed Retirement Rates – Early		
Age	State	School	Other
55	5.0%	8.0%	5.0%
56	5.0%	8.0%	5.0%
57	5.0%	8.0%	5.0%
58	5.0%	8.0%	5.0%
59	5.0%	9.0%	5.0%
60	5.0%	10.0%	5.0%
61	15.0%	15.0%	10.0%
62	15.0%	20.0%	20.0%
63	15.0%	20.0%	20.0%
64	15.0%	20.0%	20.0%

Upon reaching the requirements for normal retirement (unreduced benefits), the following rates apply:

Assumed Retirement Rates – Select Unreduced

Age	State	School	Other
55	20.0%	30.0%	20.0%
56	15.0%	30.0%	20.0%
57	15.0%	30.0%	20.0%
58	15.0%	30.0%	20.0%
59	15.0%	30.0%	20.0%
60	15.0%	30.0%	20.0%
61	20.0%	30.0%	20.0%
62	40.0%	40.0%	40.0%
63	35.0%	30.0%	35.0%
64	30.0%	30.0%	35.0%
65	30.0%	30.0%	30.0%

Assumed Retirement Rates – Ultimate Unreduced

Age	State	School	Other
55	15.0%	23.0%	15.0%
56	15.0%	23.0%	15.0%
57	15.0%	23.0%	15.0%
58	15.0%	23.0%	15.0%
59	15.0%	23.0%	15.0%
60	15.0%	23.0%	15.0%
61	20.0%	30.0%	20.0%
62	40.0%	35.0%	35.0%
63	30.0%	30.0%	25.0%
64	30.0%	30.0%	25.0%
65	30.0%	45.0%	40.0%
66	30.0%	35.0%	30.0%
67	20.0%	25.0%	20.0%
68	20.0%	25.0%	20.0%
69	35.0%	40.0%	40.0%
70	100.0%	100.0%	100.0%

	Assumed Retirement Rates	
Age	SS1	SS2
50	20.0%	
51	20.0%	
52	20.0%	
53	20.0%	
54	20.0%	
55	25.0%	20.0%
56	20.0%	10.0%
57	20.0%	10.0%
58	20.0%	10.0%
59	20.0%	10.0%
60	20.0%	10.0%
61	20.0%	10.0%
62	35.0%	35.0%
63	50.0%	30.0%
64	50.0%	30.0%
65	100.0%	100.0%

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.

Rates of Disablement (effective June 30, 2010)

	Assumed Rates					
	Males			Females		
Age	State	School	Other	State	School	Other
27	0.020%	0.020%	0.020%	0.020%	0.030%	0.020%
32	0.020%	0.020%	0.020%	0.020%	0.030%	0.020%
37	0.040%	0.040%	0.040%	0.032%	0.040%	0.032%
42	0.065%	0.065%	0.065%	0.051%	0.050%	0.051%
47	0.120%	0.110%	0.140%	0.087%	0.090%	0.087%
52	0.220%	0.160%	0.326%	0.220%	0.165%	0.200%
57	0.320%	0.260%	0.630%	0.390%	0.240%	0.350%
62	0.420%	0.360%	0.900%	0.620%	0.320%	0.500%

Assumed Rates Special Services	
Age	Rate
27	0.150%
32	0.150%
37	0.150%
42	0.180%
47	0.230%
52	0.280%
57	0.380%
62	0.510%

Rates of Termination of Employment (effective June 30, 2010)

Regular Membership

	Male			Female		
Years of Service	School	State	Other	State	School	Other
1	State	School	21.0%	15.4%	15.9%	21.0%
5	15.4%	15.9%	8.4%	5.5%	6.9%	9.2%
10	5.5%	6.9%	4.3%	2.2%	2.9%	5.8%
15	2.2%	2.9%	2.6%	1.7%	1.8%	4.1%
20	1.7%	1.8%	2.4%	1.1%	1.3%	3.2%
25	1.1%	1.3%	2.0%	1.1%	1.2%	2.4%
30	1.1%	1.2%	1.2%	1.1%	1.2%	1.5%

Special Services

Age	Rate of Termination
22	5.8%
27	5.8%
32	3.5%
37	3.0%
42	2.6%
47	2.0%
52	2.0%

Probability of Electing a Deferred Vested Benefit (effective June 30, 2010)

	Regular Membership					
	Male			Female		
Years of Service	State	School	Other	State	School	Other
5	66.0%	76.0%	61.0%	61.0%	80.0%	70.0%
10	73.0%	81.0%	66.0%	66.0%	80.0%	73.0%
15	78.0%	86.0%	71.0%	76.0%	85.0%	80.0%
20	83.0%	91.0%	76.0%	86.0%	90.0%	85.0%
25	88.0%	95.0%	80.0%	96.0%	95.0%	90.0%
30	90.0%	95.0%	80.0%	100.0%	100.0%	90.0%

	Special Services
Years of Service	Rate
5	53%
10	65%
15	85%
20	95%
25	100%
30	100%

Rates of Salary Increase* (effective June 30, 2010)

	Annual Increase			
Years of Service	State	School	Other	Special Services
1	15.0%	17.0%	15.0%	17.0%
5	7.6%	6.5%	6.1%	6.5%
10	6.3%	5.3%	5.3%	5.3%
15	5.2%	4.5%	4.8%	4.8%
20	4.8%	4.2%	4.5%	4.5%
25	4.6%	4.0%	4.4%	4.5%
30+	4.3%	4.0%	4.4%	4.0%

* Includes 4.0% wage growth

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 rates.

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 rates 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 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 Service members, the contribution rate is the sum of the normal cost rate and the rate required to amortize the UAL or surplus over 30 years. The one-year lag between the valuation date and the date the contribution rate is effective is reflected in calculating the UAL and the corresponding amortization payment.

ACTUARIAL VALUE OF ASSETS SMOOTHING METHOD

The market value of assets, representing a fair 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 applied to the prior actuarial value 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.

Step 5: Verify the preliminary actuarial value of assets in Step 4 is not more than 120% of the market value of assets nor less than 80% of the market value. If it is, adjust the actuarial value of assets so it falls within the 80% - 120% corridor.

TECHNICAL VALUATION PROCEDURES

Data Procedures

In-pay members:

If a birth date is not available, the member is assumed to be 80. If a retirement date is also not available, the member is assumed to have retired at 65.

If a beneficiary birth date is needed but not supplied, husbands are assumed to be 3 years older than wives.

Not in-pay members:

If a birth date is not available, the member is assumed to be the average age of the members with the same status.

If gender is not provided, regular members are assumed to be female and Special Service members are assumed to be male.

Salaries for first year members are annualized based on the number of quarters with wages.

Membership Transfers

IPERS provides Milliman with a code to indicate that a member is in a membership group (regular, Special Service 1 and Special Service 2) different from that on the prior valuation date. The actuarial liability for these members is calculated under the assumptions and provisions of the prior membership group. A preliminary funded ratio (before asset transfer) is determined for the three membership groups. Assets are then transferred from the prior to the current membership group based on the funded ratio of the prior group times the actuarial liability of the member in the prior group. Then, the members are revalued in the current membership group for purposes of valuation calculations.

Other Valuation Procedures

No actuarial accrued liability in excess of the unclaimed member contribution balance is held for nonvested, inactive members. Inactive vested members who have died are treated in the same manner.

The wages used in the projection of benefits and liabilities are considered earnings for the current year ending June 30, increased by the salary scale.

The calculations for the actuarial required contribution are determined as of mid-year. This is a reasonable estimate since contributions are made on a monthly basis throughout the year.

The projected IRC Section 415 limit for active participants was not valued. The impact was assumed to be *de minimus*.

The compensation limitation under IRC Section 401(a)(17) is considered in this valuation.

DEFINITION OF TERMS

Accrued Service	Service credited under the system that was rendered before the date of the actuarial valuation.
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.
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."
Actuarial Equivalent	A single amount or series of amounts of equal value to another single amount or series of amounts computed on the basis of a given set of actuarial assumptions.
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 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.
Experience Gain (Loss)	The difference between actual experience and actuarial assumptions anticipated experience during the period between two actuarial valuation dates.
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

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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.