IOWA PEACE OFFICERS' RETIREMENT, ACCIDENT AND DISABILITY SYSTEM

Actuarial Valuation Report
as of July 1, 2009

Prepared by:

Milliman, Inc.
1120 South 101st Street, Suite 400
Omaha, NE 68124-1088

ACTUARIAL VALUATION
OF THE
IOWA PEACE OFFICERS'
RETIREMENT, ACCIDENT AND DISABILITY SYSTEM

TABLE OF CONTENTS

Section		Page
	Certification Letter	
1	Executive Summary	1
2	System Assets	9
3	System Liabilities	15
4	Employer Contributions	21
5	Plan Accounting Information	25

APPENDICES

A	System Membership Information
B	Summary of Plan Provisions
C	Actuarial Method and Assumptions

Milliman

1120 South 101st Street
Suite 400
Omaha, NE 68124-1088
USA

Tel +1 402 393 9400
Fax +1 402 393 1037

milliman.com

October 28, 2009

Board of Trustees
Iowa Peace Officers' Retirement, Accident
and Disability System
Wallace State Office Building
Des Moines, IA 50319

Dear Members of the Board:

In accordance with your request, we have performed an actuarial valuation of the Iowa Peace Officers' Retirement, Accident and Disability System as of July 1, 2009 for determining the adequacy of the statutory contribution rate. The results of the valuation are contained in this report. The report reflects the benefit provisions and contribution rates in effect as of July 1, 2009 for the fiscal year ended June 30, 2010. The benefit provisions and actuarial assumptions are unchanged from those used in last year's valuation. The employer contribution rate is scheduled to increase 2% per year for five years beginning July 1, 2008 to an ultimate rate of 27% of pay.

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, statutory provisions, employee data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer our best estimate of anticipated experience affecting the System.

Future actuarial measurements may differ significantly from the current measurements 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. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements. The Board of Trustees has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in Appendix C.

Actuarial computations presented in this report are for purposes of determining the recommended funding amounts for the System. Actuarial computations presented in this report under GASB Statements No. 25 and 27 are for purposes of fulfilling financial accounting requirements. The

Milliman

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 Statements No. 25 and 27. 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.

Milliman's work is prepared solely for the internal business use of the Iowa Peace Officers' Retirement, Accident and Disability System. To the extent that Milliman's work is not subject to disclosure under applicable public records laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exception(s):

(a) The System may provide a copy of Milliman's work, in its entirety, to the System's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the System.

(b) The System may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law.

No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

We would like to express our appreciation to Dave Heuton and to members of his staff, who gave substantial assistance in supplying the data on which this report is based.

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

MILLIMAN, INC.

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

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

SECTION 1

EXECUTIVE SUMMARY

Purpose of the Report

This report presents the results of the July 1, 2009 actuarial valuation of the Iowa Peace Officers' Retirement, Accident and Disability System (PORS). The primary purposes of performing the valuation are as follows:

- to determine the normal contribution rate payable by the State under Chapter 97A.8(1b) of the Code of Iowa.
- to satisfy the reporting requirements under Chapter 97A.8 of the Code of Iowa.
- to disclose asset and liability measures indicating the current funded status of the System as of the valuation date.
- to analyze and report on trends in System contributions, assets, and liabilities over the past several years.
- to provide financial reporting information in accordance with Statements No. 25 and 27 of the Governmental Accounting Standards Board.

The valuation results provide a "snapshot" view of the System's financial condition on July 1, 2009. The 2009 valuation is based on the same benefit provisions, actuarial assumptions, and methods as last year's valuation.

Changes in both the System's assets and liabilities impact the contribution rate. Experience which is more favorable than anticipated, based on actuarial assumptions, will generally lower the UAL and the actuarial contribution rate and experience less favorable than expected will generally increase the UAL and the actuarial contribution rate. The State's actuarial contribution rate increased from 32.13% in last year's valuation to 35.18% this year, based on a member contribution rate of 9.35%. This rate exceeds the State's appropriated contribution rate for FY2010 of 21% by 14.18%. Milliman did not make any assumption regarding the operation of Chapter 97A relating to the Board's ability to raise member contribution rates. Several factors impacted the actuarial contribution rate (note that the impact of the less-than-expected investment return had a much greater impact than the other two factors):

- An investment return on the actuarial value of assets significantly below the expected rate increased the unfunded actuarial liability (UAL) and the contribution rate.
- Actual contributions below the actuarial rate increased the contribution rate.
- Other actuarial experience was favorable, which lowered the contribution rate.

The State's appropriated contribution rate has been lower than the actuarial contribution rate for the last eight years. The shortfall between the State's actuarial contribution rate and the actual contributions to the System results in an increase in the UAL and the actuarial contribution rate. Given the statutory contribution rate, including the future increases of 2% per year for the next three years, a contribution shortfall is expected to exist if current assumptions are met in the future. Given the System's funded status and deferred investment experience, significantly higher contributions are needed to fund the benefits of the System. The longer it takes to increase the funding level, the higher the ultimate contribution rate will be. We urge the Board and the State to take further action to address the long- term funding of the System.

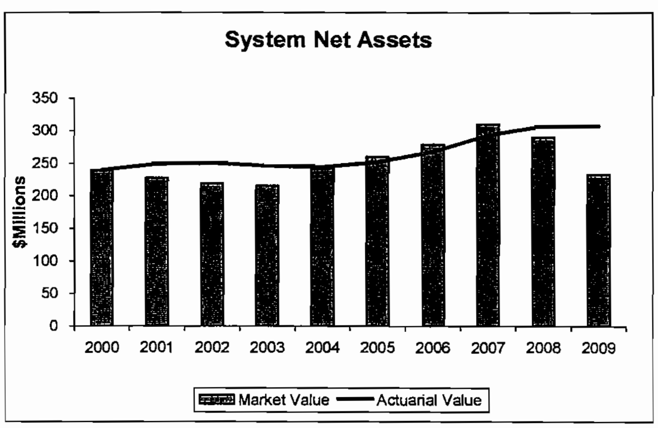
Assets

As of July 1, 2009, the System had total funds, measured on a market value basis, of $233,187,738. This was a decrease of $57,118,519 from last year's market value of $290,306,257. The market value of assets is not used directly in the calculation of the contribution rate. The System uses an asset valuation method to smooth the effects of market fluctuations. The actuarial value of assets spreads the difference between the actual return and the expected return (based on the actuarial assumption) over four years. See page 14 for a detailed development of the actuarial value of assets. The components of the change in the asset values are shown below:

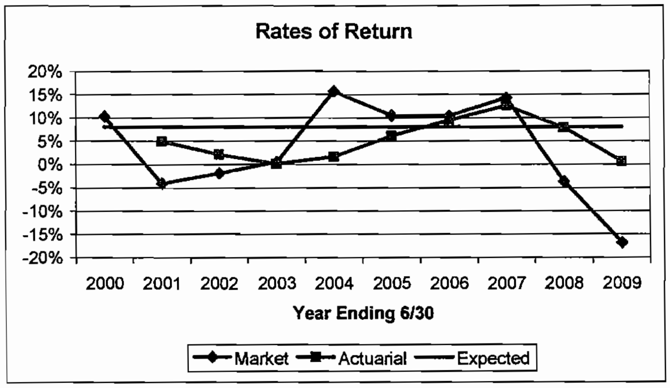
	Market Value	**Actuarial Value**
Net Assets, July 1, 2008	$290,306,257	$307,291,608
• Employer and Member Contributions	11,780,463	11,780,463
• Benefit Payments	(20,591,068)	(20,591,068)
• Administrative Expenses	(154,437)	(154,437)
• Investment Income	(48,153,477)	1,935,771
Net Assets, July 1, 2009	$233,187,738	$300,262,337

The dollar weighted rate of return measured on the market value of assets, net of expenses, was approximately –16.9%. Measured on the actuarial value of assets the rate of return was 0.6%, resulting in an actuarial loss of $22.5 million.

There is currently $67 million in deferred investment loss. Absent favorable investment experience in future years to offset the recognition of the deferred loss, it will decrease the System's funding and increase the contribution rate as it is reflected through the asset smoothing method over the next three years.



An asset smoothing method was implemented with the 2001 valuation. Actual investment performance below the 8% assumption resulted in the actuarial value of assets exceeding the market value in 2001-2003. Strong investment performance from 2004 – 07 resulted in the market value of assets exceeding the actuarial value in those years. For the 2008 and 2009 valuations, the actuarial value of assets again exceeds the market value of assets.



Rates of return on the market value of assets are very volatile. The return on the actuarial value of assets (first implemented in 2001) is less volatile, illustrating the advantage of using an asset smoothing method.

System Liabilities

The actuarial accrued liability is that portion of the present value of future benefits that will not be paid by future employer normal costs or member contributions. The difference between this liability and asset values at the same date is referred to as the unfunded actuarial accrued liability (UAAL). The unfunded actuarial accrued liability will be reduced if the employer's contributions exceed the employer's normal cost for the year, after allowing for interest earned on the previous balance of the unfunded actuarial accrued liability. Benefit improvements, experience gains and losses, and changes in actuarial assumptions and methods will also impact the total actuarial accrued liability (AAL) and the unfunded portion thereof.

The unfunded actuarial accrued liability as of July 1, 2009 is as follows:

Actuarial Accrued Liability	$432,894,495
Actuarial Value of Assets	300,262,337
Unfunded Actuarial Accrued Liability	$132,632,158

See Table 7 for the detailed development of the Actuarial Accrued Liability and Table 11 for the calculation of the Unfunded Actuarial Accrued Liability.

Other factors influencing the UAAL from year to year include actual experience versus that expected based on the actuarial assumptions (both asset and liability), changes in actuarial assumptions, procedures or methods and changes in benefit provisions. The actual experience measured in this valuation is that which occurred during the prior plan year (fiscal year 2009). There was an experience loss on the actuarial value of assets and an experience gain on the actuarial accrued liability. The net result was an actuarial loss which resulted in an increase in the UAAL.

Between July 1, 2008 and July 1, 2009 the change in the unfunded actuarial accrued liability for the System was as follows (in millions):

	$ millions
Unfunded Actuarial Accrued Liability, July 1, 2008	$110
• effect of contributions less than actuarial rate	6
• expected increase due to amortization method	2
• investment experience	22
• liability experience[1]	(7)
• change in actuarial assumptions	0
• change in benefit provisions	0
Unfunded Actuarial Accrued Liability, July 1, 2009	$133

[1] Liability gain is about 1.6% of total actuarial accrued liability.

An evaluation of the unfunded actuarial accrued 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 accrued liability and the progress made in its funding is to track the funded status, the ratio of the actuarial value of assets to the actuarial accrued liability. The funded status information, on both an actuarial and a market value basis, is shown below (in millions). The entry age normal method has only been used since the 2008 valuation. Prior to that time, the aggregate method was used, which does not develop an actuarial accrued liability.

	7/1/08	7/1/09
Using Actuarial Value of Assets:		
Funded Ratio	73.7%	69.4%
Unfunded Actuarial Accrued Liability (UAAL)	$110	$133
Using Market Value of Assets:		
Funded Ratio	69.7%	53.9%
Unfunded Actuarial Accrued Liability (UAAL)	$127	$200

Contribution Rates

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

- 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,
- an "unfunded actuarial accrued liability contribution" for the excess of the portion of projected liabilities allocated to service to date over the actuarial value of assets.

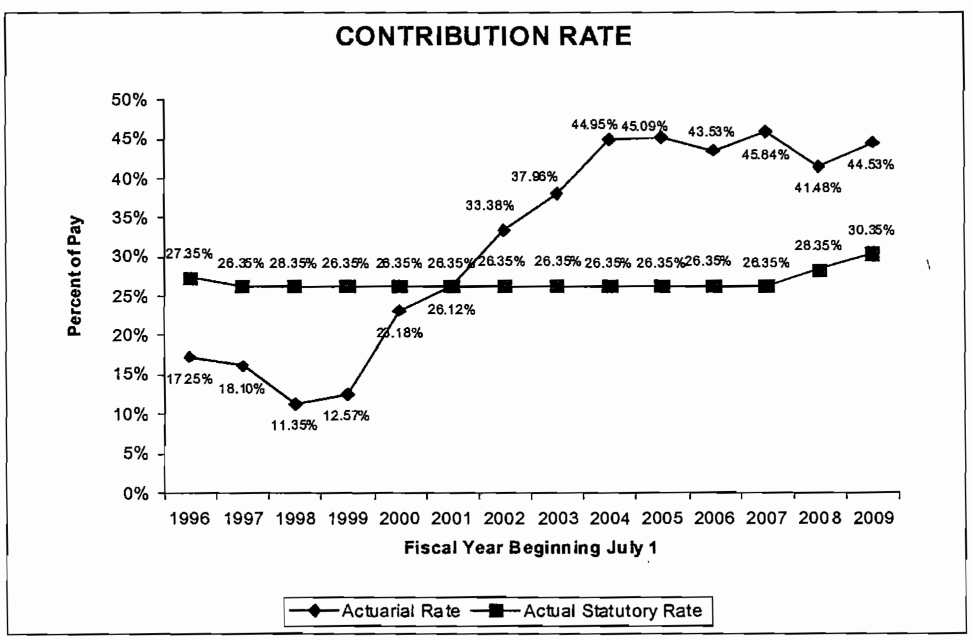
The Board has elected to amortize the unfunded actuarial accrued liability over a closed 30-year period, beginning July 1, 2008, as a level percent of payroll.

The total contribution rate for the Plan Year beginning July 1, 2009 is 44.53% of covered payroll. Assuming a member contribution rate of 9.35%, the State's portion is 35.18%. The sources of change are shown in the following table:

	Plan Year Beginning July 1, 2009	Plan Year Beginning July 1, 2008
Prior year total contribution rate	41.48%[2]	45.84%[1]
• change due to asset (gains)/losses	3.10%	0.09%
• change due to other actuarial experience	(0.80)%	(1.60)%
• change due to new assumptions	0.00%	0.00%
• change due to actual contribution rate other than actuarial rate	0.75%	1.57%
• change due to Entry Age Normal method	0.00%	(4.42%)
Current year total contribution rate	44.53%[2]	41.48%[2]
Members' contribution rate	9.35%	9.35%
State's contribution rate	**35.18%[2]**	**32.13%[2]**

[1] Based on Aggregate cost method
[2] Based on Entry Age Normal cost method

Contributions to the Retirement System are made by both the members and the State. Members contribute 9.35% of pay. The State's contribution had been 17% of pay for many years, but is increasing 2% per year for five years commencing July 1, 2008 to 27% of pay for the fiscal year beginning July 1, 2012. The State's contribution rate for FY2010 is 21%. The ultimate contribution rate for the State (27%) is still less than the employer actuarial contribution rate for fiscal year 2010 of 35.18%. The following graph shows the total actuarial contribution rate compared to the actual contribution rate in each year.



Over the last eight years, actual contributions to the System have been significantly less than the actuarial contribution rate. This, coupled with low investment returns, has resulted in a decline in the System's funded status. The recognition of the deferred investment loss, along with the State contributing less than the actuarial rate, is expected to result in an increase in the actuarial contribution rate in future years and a decline in the funded ratio.

Summary

The funded ratio in the 2009 valuation dropped to 69% primarily due to the market performance in the last plan year. Most public retirement plans are similarly situated and experienced significant asset losses. The investment return on the market value of assets for FY2009 was -17%. When compared to the expected return of +8%, the assets were about 25% lower than expected. Such a dramatic drop in the asset value results in a significant increase in the actuarially required contribution. When the fixed nature of the employee contribution rate is factored into the calculation, the impact on the employer contribution rate is even more significant.

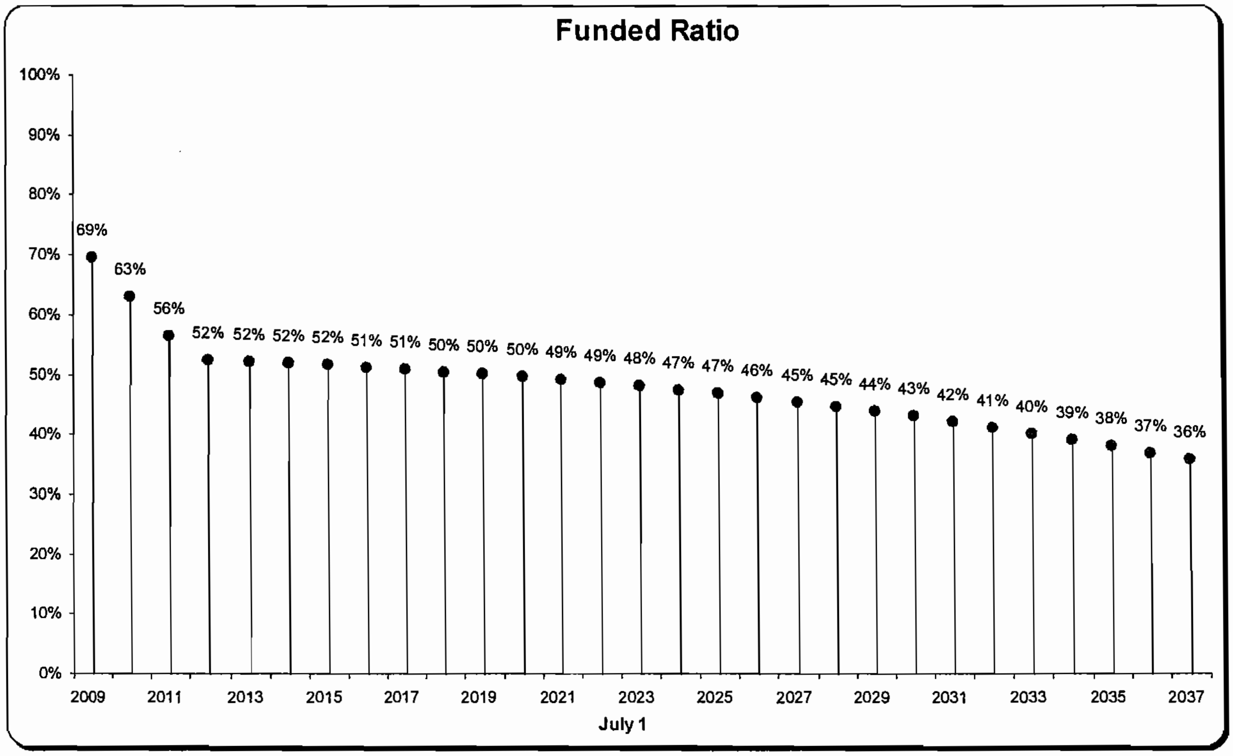
Retirement plans use several mechanisms to provide more stability in the contribution rate. These include an asset smoothing method, which smoothes out the peaks and valleys of investment returns, and amortization of actuarial gains or losses. The System utilizes an asset smoothing method that spreads the difference between expected and actual return on market value of assets over a four-year period. As a result of the smoothing method, the actuarial value of assets is 29% higher than market value.

Given the size of the investment loss, a significant increase in the actuarially required contribution level could not be avoided, even with the use of these "stability mechanisms". The normal cost rate remained stable as a percentage of payroll, but the System's unfunded actuarial accrued liability increased from $110 million to $133 million. As a result, the actuarially required contribution rate increased from 41.48% last year to 44.53% of pay in this year's valuation.

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 (unrecognized) investment experience. The asset smoothing method impacts only the timing of when the actual market experience on the assets is recognized in the valuation process. Due to the dramatically negative return in FY2009, the actuarial value of assets exceeds the pure market value by nearly 30%. If asset returns are not significantly higher than 8% over the next few years, the $67 million of deferred investment experience will be recognized and the actuarially required contribution rate can be expected to increase significantly. If the market value of assets were used rather than actuarial value, the actuarially required contribution would have been 53.80% rather than 44.53%.

The employer actuarial contribution rate for fiscal year end June 30, 2009 was 32.13%. The statutory contribution rate was 19% of covered payroll. This difference between the actual and actuarial contribution rate increased the unfunded actuarial accrued liability by about $6 million. To the extent the System does not have investment returns above the assumed rate of 8% or other favorable experience sufficient to offset the contribution shortfall, the unfunded actuarial accrued liability will increase.

The long-term financial health of this retirement system is heavily dependent on two key items: (1) investment returns and (2) contributions to the System. Given the System's funded status, the magnitude of the deferred investment losses, and the current schedule of contribution rates for the State, the funded ratio of the System is expected to steadily decline, as shown in the following graph. If, as expected, the funded status continues to decline, it may impact the sustainability of the current benefit structure over the long term. We strongly recommend the long-term funding of the System be evaluated.



A summary of key data elements and valuation results as of July 1, 2009 and July 1, 2008 are presented on the following page. More detail on each of these elements can be found in the following Sections of this report.

SUMMARY OF PRINCIPAL RESULTS
IOWA PEACE OFFICERS' RETIREMENT, ACCIDENT AND DISABILITY SYSTEM

	July 1, 2009 Valuation	July 1, 2008 Valuation	% Change
PARTICIPANT DATA			
Number of			
- Active Members	662	646	2.5
- Retired and Disabled Members and Beneficiaries	538	532	1.1
- Inactive Vested Members	31	34	(8.8)
Total Members	1,231	1,212	1.6
Projected Annual Salaries of Active Members	$ 41,862,395	$ 40,829,801	2.5
Average Annual Benefit for Retired Members and Beneficiaries	$ 39,097	$ 36,760	6.4
ASSETS AND LIABILITIES			
Total Actuarial Accrued Liability	$432,894,495	$417,176,049	3.8
Actuarial Value of Assets	300,262,337	307,291,608	(2.3)
Unfunded Actuarial Accrued Liability	132,632,158	109,884,441	20.7
Funded Ratio (Actuarial Value of Assets)	69.4%	73.7%	(5.8)
Market Value of Assets	233,187,738	290,306,257	(19.7)
Funded Ratio (Market Value of Assets)	53.9%	69.6%	(22.6)
CONTRIBUTION RATES			
Normal Cost Rate	26.20%	26.19%	0.0
Amortization of Unfunded Actuarial Accrued Liability (Level Percent of Payroll Method)	18.33%	15.29%	19.9
Actuarial Required Contribution Rate	44.53%	41.48%	7.4
Member Contribution Rate	(9.35%)	(9.35%)	0.0
Employer Actuarial Required Contribution Rate	35.18%	32.13%	9.5
Statutory State Employer Contribution Rate	(21.00%)	(19.00%)	10.5
Contribution Shortfall	14.18%	13.13%	8.0

SECTION 2

SYSTEM ASSETS

In many respects, an actuarial valuation can be thought of as an inventory process. The inventory is taken as of the actuarial valuation date, which for this valuation is July 1, 2009. On that date, the assets available for the payment of benefits are appraised. The assets are compared with the liabilities of the System, which are generally in excess of assets. The actuarial process leads to a method of determining the contributions needed by members and the employer in the future to balance the System assets and liabilities.

Market Value of Assets

The current market value represents the "snapshot" or "cash-out" value of System assets as of the valuation date. In addition, market values of assets provide a basis for measuring investment performance from time to time. At July 1, 2009 the market value of assets for the Retirement System was $233,187,738. Table 1 is a comparison, at market values, of System assets as of July 1, 2008 and July 1, 2009, in total and by investment category. Table 2 summarizes the change in the market value of assets from July 1, 2008 to July 1, 2009.

Actuarial Value of Assets

Neither the market value of assets, representing a "cash-out" value of System assets, nor the book value of assets, representing the cost of investments, may 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 swings in the market value while still indirectly recognizing market values. The actuarial value of assets is equal to the market value of assets less a four year phase-in of the excess (shortfall) between expected investment return (based on the actuarial assumption) and actual investment return.

Tables 3 and 4 show the development of the actuarial value of assets (AVA) as of the valuation date.

TABLE 1
IOWA PEACE OFFICERS' RETIREMENT, ACCIDENT AND DISABILITY SYSTEM

ANALYSIS OF NET ASSETS AT MARKET VALUE

		July 1, 2009		July 1, 2008	
		Amount	**% of Total**	**Amount**	**% of Total**
Pooled Cash		$ 21,876,869	8.4%	$ 1,614,703	0.5%
Receivables		1,654,465	0.6	6,917,480	2.2
Common Stocks		91,829,015	35.6	173,583,628	54.3
Securities on Loan		25,383,287	9.8	23,277,554	7.3
Bonds		106,449,812	41.1	95,996,338	30.1
Real Estate		11,733,165	4.5	17,926,221	5.6
	Subtotal	$258,926,613	100.0%	$319,315,924	100.0%
Payables		(25,738,875)		(29,009,667)	
NET ASSETS		$233,187,738		$290,306,257	

TABLE 2
IOWA PEACE OFFICERS' RETIREMENT, ACCIDENT AND DISABILITY SYSTEM

SUMMARY OF FUND ACTIVITY
(Market Value)

1. NET ASSETS ON JULY 1, 2008		**$290,306,297**
2. CONTRIBUTIONS		
a. Member Contributions	$	3,882,107
b. Employer Contributions		7,898,356
c. Lump Sum Contributions		0
d. Total Contributions	**$**	**11,780,463**
3. BENEFIT PAYMENTS		
a. Pension and annuity payments	$	20,581,718
b. Refunds		9,350
c. Total Benefit Payments	**$**	**20,591,068**
4. ADMINISTRATIVE EXPENSE	$	154,437
5. INVESTMENT INCOME	$	(48,153,477)
6. NET ASSETS ON JULY 1, 2009 (1) + (2d) – (3c) – (4) + (5)	$	233,187,738

TABLE 3
IOWA PEACE OFFICERS' RETIREMENT, ACCIDENT AND DISABILITY SYSTEM

CALCULATION OF EXCESS (SHORTFALL) INVESTMENT INCOME FOR ACTUARIAL VALUE OF ASSETS

	Plan Year Ending June 30			
	2009	**2008**	**2007**	**2006**
1. Market value of assets, beginning of year	$290,306,257	$310,489,530	$278,940,737	$260,104,910
2. Contributions during year				
a. Member	3,882,107	3,701,009	3,617,843	3,146,469
b. Employer	7,898,356	6,696,538	6,262,951	5,817,819
c. Lump sum payments	0	0	0	0
d. Total	11,780,463	10,397,547	9,880,794	8,964,288
3. Benefits paid during year	20,581,718	19,128,339	17,482,698	16,229,598
4. Refunds paid during year	9,350	7,393	10,718	14,975
5. Expected net investment income at 8%				
a. Market value of assets, beginning of year	23,224,501	24,839,162	22,315,259	20,808,393
b. Contributions	462,153	407,901	387,628	351,673
c. Benefits	(807,431)	(750,414)	(685,855)	(636,695)
d. Refunds	(369)	(290)	(420)	(587)
e. Total	22,878,854	24,496,359	22,016,612	20,522,784
6. Expected Value of Assets (1) + (2d) – (3) – (4) + (5e)	304,374,506	326,247,704	293,344,727	273,347,409
7. Market value of assets, end of year	233,187,738	290,306,257	310,489,530	278,940,737
8. Excess (shortfall) of investment income for Year (7) – (6)	(71,186,768)	(35,941,447)	17,144,803	5,593,328

TABLE 4
IOWA PEACE OFFICERS' RETIREMENT, ACCIDENT AND DISABILITY SYSTEM

DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS

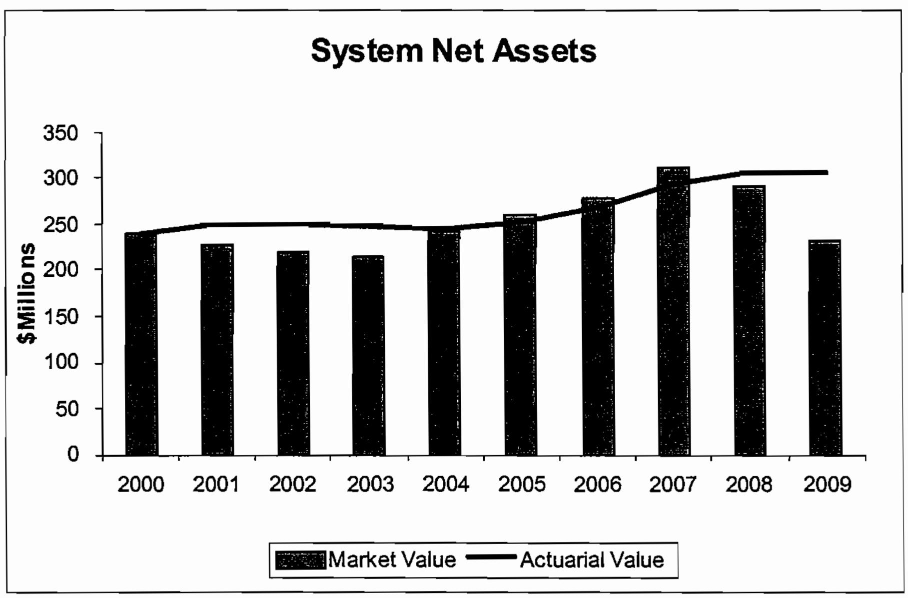
Item	Plan Year Ending June 30	
	2009	2008
1. Excess (Shortfall) of investment income for current and previous 2 years		
a. Current year	$(71,186,768)	$(35,941,447)
b. Current year - 1	(35,941,447)	17,144,803
c. Current year - 2	17,144,803	5,593,328
d. Total	(89,983,412)	(13,203,316)
2. Deferral of excess (shortfall) of investment income		
a. Current year (75%)	(53,390,076)	(26,956,085)
b. Current year – 1 (50%)	(17,970,724)	8,572,402
c. Current year – 2 (25%)	4,286,201	1,398,332
d. Total deferred	(67,074,599)	(16,985,351)
3. Market value of plan net assets, end of year	233,187,738	290,306,257
4. Actuarial value of plan assets, end of year (Item 3 – Item 2d)	$300,262,337	$307,291,608
5. Actuarial value divided by market value	128.8%	105.9%

TABLE 5
IOWA PEACE OFFICERS' RETIREMENT, ACCIDENT AND DISABILITY SYSTEM

HISTORICAL COMPARISON

Value As of	Market Value of Net Assets	Estimated Rate of Return (MVA)*	Actuarial Value of Assets**	Estimated Rate of Return (AVA)
July 1, 1997	$180,551,242	18.9%		
July 1, 1998	207,649,859	15.3%		
July 1, 1999	219,462,509	6.2%		
July 1, 2000	239,568,583	10.2%		
July 1, 2001	227,402,298	-4.2%	$249,226,895	4.9%
July 1, 2002	219,373,555	-2.0%	250,914,077	2.1%
July 1, 2003	215,454,491	0.4%	246,443,660	0.1%
July 1, 2004	242,279,998	15.6%	244,161,533	1.6%
July 1, 2005	260,104,910	10.4%	251,828,813	6.1%
July 1, 2006	278,940,737	10.3%	267,813,445	9.4%
July 1, 2007	310,489,530	14.2%	293,374,805	12.6%
July 1, 2008	290,306,257	-3.8%	307,291,608	7.8%
July 1, 2009	233,187,738	-16.9%	300,262,337	0.6%

* Net of Expenses.
** A smoothing method for actuarial value of assets was implemented July 1, 2001



SECTION 3

SYSTEM LIABILITIES

In the previous section, an actuarial valuation was compared with an inventory process, and an analysis was given of the inventory of assets of the System as of the valuation date, July 1, 2009. In this section, the discussion will focus on the commitments of the System, which are referred to as its liabilities.

Table 6 contains an analysis of the actuarial present value of all future benefits (PVFB) for contributing members, inactive members, retirees and their beneficiaries. The analysis is provided for each group.

The liabilities summarized in Table 6 include the actuarial present value of all future benefits expected to be paid with respect to each member. For an active member, this value includes measures of both benefits already earned and future benefits expected to be earned. For all members, active and retired, the value extends over benefits earnable and payable for the rest of their lives and for the lives of the surviving beneficiaries.

The actuarial assumptions used to determine liabilities are based on the results of an Experience Study prepared in 2007. This set of assumptions, as adopted by the Board, is shown in Appendix C and was first used for the July 1, 2007 valuation. The Board's election to change the actuarial cost method from Aggregate to Entry Age Normal was first reflected in the July 1, 2008 valuation.

Actuarial 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. An actuarial cost method is a mathematical technique that allocates the present value of future benefits into annual costs. In order to do this allocation, it is necessary for the funding method to "breakdown" the present value of future benefits into two components:

(1) that which is attributable to the past and

(2) that which is attributable to the future.

Actuarial terminology calls the part attributable to the past the "past service liability" or the "actuarial accrued liability". The portion allocated to the future is known as the present value of future normal costs, with the specific piece of it allocated to the current year being called the "normal cost". Table 7 contains the calculation of actuarial accrued liability.

TABLE 6
IOWA PEACE OFFICERS' RETIREMENT, ACCIDENT AND DISABILITY SYSTEM

PRESENT VALUE OF FUTURE BENEFITS
AS OF JULY 1, 2009

1. Active employees	
a. Retirement Benefit	$264,028,555
b. Withdrawal Benefit	2,200,226
c. Pre-Retirement Death Benefit	8,434,338
d. Disability Benefit	25,414,314
e. Total	$300,077,433
2. Inactive Vested Members	2,730,206
3. Disability Retirees	47,971,470
4. Retirees and Beneficiaries	206,749,986
5. Total Present Value of Future Benefits (1e) + (2) +(3) + (4)	$557,529,095

TABLE 7
IOWA PEACE OFFICERS' RETIREMENT, ACCIDENT AND DISABILITY SYSTEM

ACTUARIAL ACCRUED LIABILITY
AS OF JULY 1, 2009

1. Present Value of Future Benefits		
a. Retirement Benefit	$264,028,555	
b. Withdrawal Benefit	2,200,226	
c. Pre-Retirement Death Benefit	8,434,338	
d. Disability Benefit	25,414,314	
e. Total		$300,077,433
2. Present Value of Future Normal Costs		
a. Retirement Benefit	$ 92,761,698	
b. Withdrawal Benefit	2,898,827	
c. Pre-Retirement Death Benefit	8,036,573	
d. Disability Benefit	20,937,502	
e. Total		124,634,600
3. Present Value of Future Benefits for Inactive Members		257,451,662
4. Total Actuarial Accrued Liability (1e) – (2e) +3		$432,894,495
5. Actuarial Value of Assets		300,262,337
6. Unfunded Actuarial Accrued Liability		$132,632,158
7. Funded Ratio * (5) ÷ (4)		69.4%

* The market value of assets was $233,187,738. The funded ratio, using the market value of assets, was 53.9%.

TABLE 8
IOWA PEACE OFFICERS' RETIREMENT, ACCIDENT AND DISABILITY SYSTEM
CALCULATION OF ACTUARIAL GAIN/(LOSS)

The actuarial gain/(loss) is comprised of both the liability and the actuarial asset gain/(loss). Each of these represents the difference between the expected and actual values as of July 1, 2009.

1. Expected actuarial accrued liability		
a. Actuarial accrued liability at July 1, 2008	$	417,176,049
b. Normal cost for year ending June 30, 2009		10,692,682
c. Benefit payments for fiscal year ending June 30, 2009		(20,591,068)
d. Interest on (a), (b), and (c)		32,985,765
e. Change in assumptions		0
f. Change in plan provisions		0
g. Expected actuarial accrued liability at July 1, 2009 (a) + (b) + (c) + (d) + (e) + (f)	$	440,263,428
2. Actuarial accrued liability at July 1, 2009	$	432,894,495
3. Actuarial accrued liability gain/(loss) (1g) – (2)	$	7,368,933
4. Expected actuarial value of assets		
a. Actuarial value of assets at July 1, 2008	$	307,291,608
b. Contributions for fiscal year ending June 30, 2009		11,780,463
c. Benefit payments and administrative expenses for fiscal year ending June 30, 2009		(20,591,068)
d. Interest on (a), (b), and (c)		24,237,684
e. Expected actuarial value of assets at July 1, 2009 (a) + (b) + (c) +(d)	$	322,718,687
5. Actuarial value of assets at July 1, 2009	$	300,262,337
6. Actuarial value of assets gain/(loss) (5) – (4e)	$	(22,456,350)
7. Net actuarial gain/(loss) (3) + (6)	$	(15,087,417)

TABLE 9
IOWA PEACE OFFICERS' RETIREMENT, ACCIDENT AND DISABILITY SYSTEM

ACTUARIAL BALANCE SHEET
as of
July 1, 2009

ASSETS

Actuarial value of assets		$	300,262,337
Present value of future contributions			124,634,600
Unfunded actuarial accrued liability			132,632,158
Total Net Assets		$	557,529,095

LIABILITIES

Present Value of Future Benefits			
Retired Members and Beneficiaries		$	254,721,456
Active Members			
Retirement	$ 264,028,555		
Death	2,200,226		
Disability	8,434,338		
Termination	25,414,314		
Total			300,077,433
Inactive Vested Members			2,730,206
Total Liabilities		$	557,529,095

TABLE 10

IOWA PEACE OFFICERS' RETIREMENT, ACCIDENT AND DISABILITY SYSTEM

PRESENT VALUE OF ACCRUED BENEFITS

The present value of accrued benefits represents the lump sum value, as of the valuation date, of benefits earned to date based on service and salary as of the valuation date.

Present Value of Accrued Benefits	July 1, 2009	July 1, 2008
1. Vested Benefits		
a. Participants currently receiving payments	$254,721,456	$247,585,666
b. Inactive vested members	2,730,206	2,584,189
c. Active members	108,245,430	101,993,297
d. Total vested benefits	$365,697,092	$352,163,152
2. Nonvested Benefits	$ 2,655,091	$ 2,744,409
3. Total Present Value of Accrued Benefits	$368,352,183	$354,907,561
4. Market Value of Assets	$233,187,738	$290,306,257
5. Unfunded (Surplus) Present Value of Accrued Benefits	$135,164,445	$ 64,601,304
6. Funded Percentage	63.3%	81.8%

SECTION 4

EMPLOYER CONTRIBUTIONS

The previous two sections were devoted to a discussion of the assets and liabilities of the System. A comparison of Tables 4 and 6 indicates that current assets fall short of meeting the present value of future benefits (total liability). This is expected in all but a fully closed down fund, where no further contributions are anticipated.

In an active system, there will almost always be a difference between the actuarial value of assets and total liabilities. This deficiency has to be made up by future contributions and investment returns. An actuarial valuation sets out a schedule of future contributions that will deal with this deficiency in an orderly fashion.

The method used to determine the incidence of the contributions in various years is called the actuarial cost method. Under an actuarial cost method, the contributions required to meet the difference between current assets and current liabilities are allocated each year between two elements: (1) the normal cost and (2) the payment on the unfunded actuarial accrued liability.

The term "fully funded" is often applied to a system in which contributions at the normal cost rate are sufficient to pay for the benefits of existing employees as well as for those of new employees. More often than not, systems are not fully funded, either because of past benefit improvements that have not been completely funded and/or because of actuarial deficiencies that have occurred because experience has not been as favorable as anticipated. Under these circumstances, an unfunded actuarial accrued liability (UAAL) exists.

Description of Rate Components

Effective with the July 1, 2008 valuation, the actuarial cost method used by the System changed from Aggregate to the traditional Entry Age Normal (EAN) – level percent of pay cost method. Under the EAN cost method, the actuarial present value of each member's projected benefit is allocated on a level basis over the member's compensation between the entry age of the member and the assumed exit ages. The portion of the actuarial present value allocated to the valuation year is called the normal cost. The actuarial present value of benefits allocated to prior years of service is called the actuarial accrued liability. The unfunded actuarial accrued liability represents the difference between the actuarial accrued liability and the actuarial value of assets as of the valuation date. The unfunded actuarial accrued liability is calculated each year and reflects experience gains/losses.

The UAAL is amortized as a level percent of payroll over a closed 30-year period commencing July 1, 2008. Given a stable active workforce, the level percent of payroll amortization method is expected to produce a payment stream that is constant as a percent of covered payroll.

Contribution Rate Summary

The normal cost rate is developed in Table 11. Table 12 develops the contribution rate for amortization of the unfunded actuarial accrued liability. Table 13 develops the total actuarial contribution rate.

TABLE 11
IOWA PEACE OFFICERS' RETIREMENT, ACCIDENT AND DISABILITY SYSTEM

NORMAL COST RATE
AS OF JULY 1, 2009

1. Normal Cost		**% of Pay**
a. Retirement Benefit	$ 8,155,800	19.48%
b. Withdrawal Benefit	260,254	0.62%
c. Pre-Retirement Death Benefit	719,956	1.72%
d. Disability Benefit	1,833,246	4.38%
e. Total	$10,969,256	26.20%
2. Estimated Payroll for the Year	$41,862,395	
3. Normal Cost Rate [(1e) / (2)]	26.20%	

TABLE 12
IOWA PEACE OFFICERS' RETIREMENT, ACCIDENT AND DISABILITY SYSTEM

UNFUNDED ACTUARIAL ACCRUED LIABILITY CONTRIBUTION RATE AS OF JULY 1, 2009

1. Actuarial Present Value of Future Benefits	$	557,529,095
2. Actuarial Present Value of Future Normal Costs		124,634,600
3. Actuarial Accrued Liability (1) – (2)	$	432,894,495
4. Actuarial Value of Assets		300,262,337
5. Unfunded Actuarial Accrued Liability (UAAL) (3) – (4)	$	132,632,158
6. Amortization of UAAL over 30 years from July 1, 2008 (assumed mid-year) *	$	7,673,449
7. Total Estimated Payroll for Year Ending June 30, 2010	$	41,862,395
8. Amortization as a Percent of Payroll	$	18.33%

* The UAAL is amortized as a level percent of payroll, assuming payroll increases of 4% per year.

TABLE 13
IOWA PEACE OFFICERS' RETIREMENT, ACCIDENT AND DISABILITY SYSTEM

ACTUARIAL CONTRIBUTION RATE

FOR FISCAL YEAR ENDING JUNE 30, 2010

1.	Total Normal Cost Rate	26.20%
2.	Amortization of UAAL	18.33%
3.	Total Actuarial Contribution Rate	44.53%
4.	Member Contribution Rate	9.35%
5.	State Actuarial Contribution Rate (3) – (4)	35.18%

Amortization of UAAL is level percent of payroll assuming a 4% annual increase in payroll.

SECTION 5

PLAN ACCOUNTING INFORMATION

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

GASB Statement No. 25 establishes a financial reporting framework for defined benefit 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 is not required for plans which use the Aggregate Method to determine the annual required contribution. Since the information shown in the schedule is similar to the information formerly required under GASB Statement No. 5, the Peace Officers' Retirement, Accident, and Disability System has elected to prepare the schedule based on the Projected Unit Credit method. The system uses an asset smoothing method, which was first implemented with the July 1, 2001 valuation.

- The Schedule of Employer Contributions provides historical information about the annual required contribution (ARC) and the percentage of the ARC that was actually contributed. For the Peace Officers' Retirement, Accident and Disability System, the ARC is equal to State's Normal Contribution Rate multiplied by the expected covered payroll for the fiscal year.

GASB Statement No. 27 establishes standards for the measurement, recognition, and display of pension expense and related liabilities. Annual pension cost is measured and disclosed on the accrual basis of accounting. In general, the annual pension cost is equal to the ARC with adjustments for past under-contributions or over-contributions. These adjustments are based on the net pension obligation (NPO) that represents the cumulative difference between the annual pension cost and the actual contributions to the plan. The first adjustment is equal to interest on the NPO which is added to the ARC. The second adjustment is an amortization of the NPO which is deducted from the ARC. Because the system uses the Aggregate method to determine the ARC, the amortization basis is a level percentage of payroll over the average remaining service life of active members.

These statements were adopted by the Peace Officers' Retirement System for the 1996 fiscal year. A transition pension liability (asset) was developed under Statement No. 27 equal to the cumulative difference between the actuarially determined funding requirement and the actual amount contributed for fiscal years 1988 through 1995. As of the adoption date, all outstanding pension liabilities (assets) were adjusted to equal the transition NPO.

TABLE 14
IOWA PEACE OFFICERS' RETIREMENT, ACCIDENT AND DISABILITY SYSTEM

SCHEDULE OF FUNDING PROGRESS

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

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL)* (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (P/R) (c)	UAAL as a Percentage of Covered P/R [(b-a)/c]
7/1/04	$ 244,161,533	$ 338,799,386	$ 94,637,853	72.07%	$ 32,519,722	291.00%
7/1/05	251,828,813	343,117,410	91,288,597	73.39%	33,336,856	273.84%
7/1/06	267,813,495	358,844,655	91,031,160	74.63%	36,231,639	251.25%
7/1/07	293,374,805	392,022,773	98,647,968	74.84%	37,268,060	264.70%
7/1/08	307,291,608	417,176,049	109,884,441	73.66%	40,829,801	269.13%
7/1/09	300,262,337	432,894,495	132,632,158	69.36%	41,862,395	316.83%

* Prior to 7/1/08 the Aggregate method, which does not directly develop an actuarial accrued liability, was used to determine the actuarial required contribution. The actuarial accrued liability using the Projected Unit Credit Cost method was reported for those years. Effective 7/1/08, the Entry Age Normal cost method was used and the actuarial accrued liability under that method is reported.

TABLE 15
IOWA PEACE OFFICERS' RETIREMENT, ACCIDENT AND DISABILITY SYSTEM

SCHEDULE OF EMPLOYER CONTRIBUTIONS

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

Fiscal Year Ending	Annual Required Contribution (a)	Total Employer Contribution (b)	Percentage of ARC Contribution (b / a)
6/30/07	12,383,974	6,262,951	50.57%
6/30/08	13,599,115	6,696,538	49.24%
6/30/09	13,118,615	7,898,356	60.21%

Notes to the Required Schedules:

1. The cost method used to determine the ARC for FYE 2008 and prior years is the Aggregate Cost Method. This method does not identify or separately amortize unfunded actuarial accrued liabilities.
2. The assets are shown at actuarial (smoothed) value.
3. Economic assumptions are as follows:
   Investment return rate of 8.00%.
   Salary increase rate varies from 6.75% to 4.75%, based on years of service.
   Post-retirement benefit increases are based on expected payroll growth and provisions of the law.
4. Amortization of the unfunded actuarial liability is over a 30-year closed period starting July 1, 2008.

TABLE 16
IOWA PEACE OFFICERS' RETIREMENT, ACCIDENT AND DISABILITY SYSTEM

Development of the Net Pension Obligation

In Accordance with Statement No. 27 of the Governmental Accounting Standards Board

Fiscal Year:	2001	2002	2003	2004	2005
Assumptions and Method:					
Interest Rate	8.00%	8.00%	8.00%	8.00%	8.00%
Wage Inflation	4.00%	4.00%	4.00%	4.00%	4.00%
Amortization Period (years)	18	18	18	17	17
Cost Method	Aggregate	Aggregate	Aggregate	Aggregate	Aggregate
Annual Pension Cost:					
Annual Required Contribution (ARC)	$4,231,914	$5,332,844	$7,883,879	$9,446,823	$11,577,021
Interest on NPO	(1,298,858)	(1,386,201)	(1,399,643)	(1,216,369)	(899,356)
Adjustment to ARC	1,266,529	1,351,697	1,346,805	1,234,931	913,080
Annual Pension Cost	$4,199,585	$5,298,340	$7,831,041	$9,465,385	$11,590,745
Contribution for the Year:	$5,291,371	$5,466,366	$5,540,116	$5,502,718	5,442,868
Net Pension Obligation (NPO):					
NPO at beginning of year	$(16,235,725)	$(17,327,511)	(17,495,537)	(15,204,612)	(11,241,945)
Annual Pension Cost for year	4,199,585	5,298,340	7,831,041	9,465,385	11,590,745
Contributions for year	(5,291,371)	(5,466,366)	(5,540,116)	(5,502,718)	(5,442,868)
NPO at end of year	(17,327,511)	(17,495,537)	(15,204,612)	(11,241,945)	(5,094,068)

Fiscal Year:	2006	2007	2008	2009	2010
Assumptions and Method:					
Interest Rate	8.00%	8.00%	8.00%	8.00%	8.00%
Wage Inflation	4.00%	4.00%	4.00%	4.00%	4.00%
Amortization Period (years)	17	17	16	30	29
Cost Method	Aggregate	Aggregate	Aggregate	EAN	EAN
Annual Pension Cost:					
Annual Required Contribution (ARC)	$11,914,592	$12,383,974	$13,599,115	$13,118,615	$14,727,191
Interest on NPO	(407,525)	80,714	570,297	1,119,738	1,563,340
Adjustment to ARC	413,744	(81,946)	(604,863)	(794,969)	(1,130,590)
Annual Pension Cost	$11,920,811	$12,382,742	$13,564,549	$13,443,384	$15,159,941
Contribution for the Year:	5,817,819	6,262,951	6,696,538	7,898,356	*
Net Pension Obligation (NPO):					
NPO at beginning of year	(5,094,068)	1,008,924	7,128,715	13,996,726	
Annual Pension Cost for year	11,920,811	12,382,742	13,564,549	13,443,384	*
Contributions for year	(5,817,819)	(6,262,951)	(6,696,538)	(7,898,356)	
NPO at end of year	1,008,924	7,128,715	13,996,726	19,541,754	

* Will not be determined until the end of Fiscal Year 2010.

APPENDIX A

SYSTEM MEMBERSHIP INFORMATION

AGE AND SERVICE DISTRIBUTION AS OF JULY 1, 2009 FOR ACTIVE PARTICIPANTS

Males and Females

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	29	40,609	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	29	40,609
25-29	89	45,517	3	54,845	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	92	45,821
30-34	42	47,059	32	57,395	24	62,244	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	98	54,153
35-39	16	49,630	19	57,340	99	66,631	16	69,041	0	NA	0	NA	0	NA	0	NA	0	NA	150	63,898
40-44	5	45,332	3	58,637	36	68,774	67	70,508	3	78,493	0	NA	0	NA	0	NA	0	NA	114	68,754
45-49	1	43,763	0	NA	10	66,170	27	72,434	43	77,266	9	69,618	0	NA	0	NA	0	NA	90	73,447
50-54	0	NA	0	NA	1	63,250	7	69,173	19	77,512	30	83,951	10	83,961	0	NA	0	NA	67	80,273
55-59	0	NA	0	NA	0	NA	1	77,411	7	78,044	2	75,799	9	81,631	0	NA	0	NA	19	79,474
60-64	0	NA	0	NA	0	NA	0	NA	1	92,782	1	74,187	0	NA	1	74,187	0	NA	3	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	182	45,437	57	57,308	170	66,418	118	70,729	73	77,668	42	80,259	19	82,857	1	NA	0	NA	662	62,872

ANALYSIS OF RETIREES AND BENEFICIARIES
as of July 1, 2009
Males and Females

Number of Participants

Age	Service Retirement	Accidental Disability	Ordinary Disability	Vested Retirement	Child Beneficiary	Contingent Beneficiary	Deferred Vested	Total
Under 40	0	3	0	0	10	0	15	28
40 to 44	0	4	0	0	0	0	4	8
45 to 49	0	3	1	0	0	2	7	13
50 to 54	0	4	0	0	0	7	4	15
55 to 59	47	11	3	1	0	3	1	66
60 to 64	62	12	2	4	0	6	0	86
65 to 69	67	21	3	6	0	12	0	109
70 to 74	56	14	1	6	0	15	0	92
75 to 79	36	8	2	0	0	20	0	66
80 to 84	32	2	0	1	0	16	0	51
85 to 89	15	0	0	0	0	7	0	22
90 to 94	3	0	0	0	0	6	0	9
95 to 99	1	0	0	0	0	3	0	4
100 & over	0	0	0	0	0	0	0	0
Totals	319	82	12	18	10	97	31	569

ANALYSIS OF RETIREES AND BENEFICIARIES
as of July 1, 2009
Males and Females

Average Annual Benefits of Participants

Age	Service Retirement	Accidental Disability	Ordinary Disability	Vested Retirement	Child Beneficiary	Contingent Beneficiary	Deferred Vested
Under 40	NA	33,904	NA	NA	5,505	NA	9,277
40 to 44	NA	37,637	NA	NA	NA	NA	15,002
45 to 49	NA	34,662	31,928	NA	NA	25,090	13,639
50 to 54	NA	41,120	NA	NA	NA	25,656	31,856
55 to 59	63,491	44,834	42,358	13,351	NA	32,607	31,566
60 to 64	55,609	41,879	35,151	12,377	NA	29,066	NA
65 to 69	48,900	40,903	39,609	12,989	NA	20,809	NA
70 to 74	41,465	39,340	29,803	8,037	NA	20,239	NA
75 to 79	35,455	35,157	27,009	NA	NA	19,565	NA
80 to 84	34,148	34,608	NA	5,616	NA	19,685	NA
85 to 89	31,491	NA	NA	NA	NA	19,063	NA
90 to 94	29,760	NA	NA	NA	NA	21,088	NA
95 to 99	32,634	NA	NA	NA	NA	20,225	NA
100 & over	NA	NA	NA	NA	NA	NA	NA
Totals	47,002	39,959	35,996	10,813	5,505	21,466	14,633

APPENDIX B

SUMMARY OF PLAN PROVISIONS

Chapter 97A of the Iowa code sets out the benefit provisions of the Iowa Peace Officers' Retirement, Accident and Disability System, which are briefly summarized as follows:

Retirement Benefit

Eligibility	Age 55 with 22 years of service.
Monthly Annuity	The sum of (1) and (2):

(1)
   a. For retirement prior to July 1, 1990, 50% of average final compensation at retirement. Average final compensation equals average of highest three years of compensation.

   b. For retirement after June 30, 1990 and before July 1, 1992, 54% of average final compensation at retirement.

   c. For retirement after June 30, 1992 and before July 1, 1993, 56% of average final compensation at retirement.

   d. For retirement after June 30, 1993 and before July 1, 1994, 58% of average final compensation at retirement.

   e. For retirement after June 30, 1994, and before July 1, 2000, 60% of average final compensation at retirement.

   f. For retirement after July 1, 2000, 60.5% of average final compensation at retirement.

(2) For members who do not withdraw member contributions:

   a. For retirement after June 30, 1990 and before July 1, 1991, 0.3% of average final compensation for each year of service over 22 years (up to 8 years). Service after age 55 is excluded.

   b. For retirement after June 30, 1991 and before October 16, 1992, 0.6% of average final compensation for each year of service over 22 years (up to 8 years). Service after age 55 is excluded.

c. For retirement after October 15, 1992 and before July 1, 1996, 0.6% of average final compensation for each year of service over 22 years (up to 8 years).

d. For retirement after June 30, 1996, 1.5% of average final compensation for each year of service over 22 years (up to 8 years).

e. For retirement after June 30, 1998, 1.5% of average final compensation for each year of service over 22 years (up to 10 years).

f. For retirement after June 30, 2000, 2.75% of average final compensation for each year of service over 22 years (up to 10 years).

Early Retirement Benefit

Eligibility

Effective July 1, 1996, age 50 (but not age 55) with 22 years of service.

Monthly Annuity

The benefit provided as a retirement benefit actuarially reduced for commencement prior to age 55.

Deferred Vested Benefit

Eligibility

Four years of service.

Monthly Annuity

At age 55. The benefit provided as a retirement benefit at termination times a service ratio. The service ratio equals service at termination divided by 22 (not greater than 1.0).

Ordinary Disability Benefit

Eligibility

None.

Benefit

(1) If service at disability is greater than or equal to 5 years, 50% of average final compensation at disability.

(2) If service at disability is greater than or equal to 22 years, the greater of (1) or the benefit amount calculated under a service retirement. Effective July 1, 1998, the service requirement does not apply.

(3) If service at disability is less than 5 years, 25% of average final compensation at disability.

Accidental Disability Benefit

Eligibility None.

Benefit

(1) For retirement prior to July 1, 1990, 66-2/3% of average final compensation at disability.

(2) For retirement after June 30, 1990, 60% of average final compensation at disability. If the service amount at disability is greater than or equal to 22 years, the greater of 60% of average final compensation at disability or the benefit amount calculated under a service retirement.

Ordinary Death Benefit

Eligibility For member in service: None.
For member not in service: Four years of service.

Benefit

(1) A lump sum equal to 50% of compensation during the last year of employment, or

(2) A pension based on 40% of average final compensation but not less than 25% of compensation paid to an active member having the rank of senior patrol officer of the state patrol. For members not in service, benefit is multiplied by the ratio of service at termination to 22 years (not greater than 1.0).

(3) Additional benefit for members in service of 6% of compensation payable to an active member having the rank of senior patrol officer of the state patrol for each child.

Payment Date

(1) For members in service: Immediately upon death of member.

(2) For member not in service: Payable when member would have been age 55. If there are children of the member, payable commencing at the member's death until children reach age 18 or 22. Pension resumes when member would have been age 55.

Accidental Death Benefit

Eligibility

In actual performance of duty.

Benefit

(1) 50% of average final compensation payable to surviving spouse, children or dependent parents.

(2) If there is not surviving spouse, children or dependent parents, or if accidental death occurs while not in the actual performance of duty, an Ordinary Death Benefit is payable.

(3) Additional benefit for members in service of 6% of compensation payable to an active member having the rank of senior patrol officer of the state patrol, for each child.

(4) If the death meets specified criteria, a lump sum of $100,000 payable to surviving spouse, children, dependent parents, or estate.

Death After Retirement

Benefit

(1) 50% of retirement allowance of retired member but not less than 25% of compensation paid to an active member having the rank of senior patrol officer of the state patrol.

(2) Additional benefit of 6% of compensation payable to an active member having the rank of senior patrol officer of the state patrol, for each child.

Adjustments to Pensions

Each July 1 and January 1, if applicable, the following adjustments are made: Monthly earnable compensation payable to an active member, of the same rank and position in the salary scale as was held by the retired or deceased member at the time of the member's retirement or death, for July of the current year less that of the preceding July, times the following percentages:

(1) 40% for members receiving a service retirement allowance and for beneficiaries receiving an accidental death benefit.

(2) 40% for members with five or more years of membership who are receiving an ordinary disability benefit.

(3) 40% for member receiving an accidental disability benefit.

(4) 24% for members with less than five years of membership who are receiving an ordinary disability benefit and for beneficiaries receiving an ordinary death benefit.

(5) 50% of the amount which would have been added to the benefit of the retired member, for surviving spouses, but not less than 25% of the monthly earnable compensation paid to an active member having the rank of senior patrol officer.

Additionally, the following aggregate amounts will be added to a member or beneficiary monthly pension as follows:

Years Since Retired*	Increase Per Year
0-4	$15
5-9	20
10-14	25
15-19	30
20 or more	35

*Measured in whole years.

Surviving children's pensions are adjusted each July to equal 6% of monthly earnable compensation payable to an active member having the rank of senior patrol officer of the state patrol.

Member Contributions

(1) The following percentage of earnable compensation will be paid as member contributions:

Period	Member Contribution Rate
January 1, 1995 - June 30, 1995	8.35%
July 1, 1995 forward	9.35%

(2) Beginning July 1, 1996 and each fiscal year thereafter, the system will increase the member contribution rate as necessary to cover the increased cost to the system resulting from statutory changes enacted by any session of the general assembly after January 1, 1995 if such increase cannot be absorbed within the contribution rate otherwise established, subject to a maximum member contribution rate of 11.3%. After this maximum rate is reached, 60% of any additional costs due to statutory changes will be absorbed by the employer and 40% will be paid by the members.

Withdrawal of Member Contributions

Effective July 1, 1990, members who terminate service, other than by death or disability, can elect to withdraw their accumulated contributions with interest in lieu of any benefits to which the member may be entitled from the System.

Transfers With Statewide Fire and Police Retirement System

Beginning July 1, 1996, vested members of an eligible retirement system who terminate employment and, within one year, commences covered employment under another eligible retirement system, may elect to transfer the average accrued benefit or the refund liability earned from the former system to the current system. Once such transfer is completed, service under the former system shall be treated as membership service under the current system.

APPENDIX C

ACTUARIAL METHOD AND ASSUMPTIONS

Actuarial Cost Method

Liabilities and contributions shown in this report are computed using the Individual Entry Age method of funding.

Sometimes called "funding method," this is a particular technique used by actuaries for establishing the amount of the annual actuarial cost of pension System benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily the annual contribution to the System is comprised of (1) the normal cost and (2) an amortization payment on the unfunded actuarial accrued liability.

Under the Entry Age Actuarial Cost Method, the **Normal Cost** is computed as the level percentage of pay which, if paid from the earliest time each member would have been eligible to join the System if it then existed (thus, entry age) until his retirement or termination, would accumulate with interest at the rate assumed in the valuation to a fund sufficient to pay all benefits under the System.

The **Actuarial Accrued Liability** under this method at any point in time is the theoretical amount of the fund that would have accumulated had annual contributions equal to the normal cost been made in prior years (it does not represent the liability for benefits accrued to the valuation date). The **Unfunded Actuarial Accrued Liability** is the excess of the actuarial accrued liability over the actuarial value of System assets on the valuation date.

Under this method experience gains or losses, i.e. decreases or increases in accrued liabilities attributable to deviations in experience from the actuarial assumptions, adjust the unfunded actuarial accrued liability.

Actuarial Assumptions

Interest Rate:	8% per year.
Price Inflation:	3.5% per year.
Payroll Growth:	4.0% per year, including price inflation.
Active Members:	
1. Ordinary death rate	RP-2000 Mortality Table for Employees with Generational Projection.
2. Accidental death rate	8.5 deaths per 10,000 exposed for one year.

3. Disability rates

Age	Accidental Disability	Ordinary Disability
22	0.14%	0.09%
27	0.15%	0.10%
32	0.20%	0.13%
37	0.24%	0.16%
42	0.29%	0.19%
47	0.36%	0.24%
52	0.46%	0.31%

4. Withdrawal rate

The following table is used:

Service	Rate
0	5.0%
1-2	3.5%
3	3.0%
4	2.5%
5	2.0%
6	1.5%
7-14	1.0%
15-19	0.5%
20	0.0%

6. Retirement age

Age	Probability of Retirement
55	45%
56	30%
57-59	20%
60-61	50%
62	100%

7. Salary scale

Year	Increase
0-5	6.75%
6	6.50%
7	6.00%
8-24	5.25%
25+	4.75%

8. Post-retirement adjustments

Same as for retired members.

Retired Members and Other Beneficiaries:

1.	Mortality rate - Service retirees	Service retirements and beneficiaries: RP-2000 Mortality Table for Healthy Annuitants with Generational Projection Mortality Tables - Male and Female.
2.	Mortality rate - Disabled retirees	Disability retirements: RP-2000 Mortality Table for Healthy Annuitants with Generational Projection with a 5 year age set forward.
3.	Annual readjustment of pensions	Wages for the same rank are assumed to increase 4%.

Dependency Ratios:

1.	Ordinary death benefit	Alternate benefits payable to widow and minor children in 90% of cases.
2.	Pension to spouse and children of deceased pensioned member	In 90% of cases.

Reconciliation of Member Status
From July 1, 2008 to July 1, 2009

	Active Members	Members & Beneficiaries Receiving Benefits	Former Members with Deferred Benefits	Children Receiving Benefits	Total
Members as of July 1, 2008	**646**	**522**	**34**	**10**	**1,212**
Began Receiving Benefits	(11)	+14	0	0	+3
Terminated Without Further Benefit Eligibility	(5)	0	(3)	(1)	(9)
Terminated With Benefit Eligibility	0	0	0	0	0
Returned to Active Status	0	0	0	0	0
Deceased	0	(8)	0	0	(8)
Benefits Ended	0	0	0	0	0
Newly Hired	+32	0	0	0	+32
Adjustments	0	0	0	+1	+1
Members as of July 1, 2009	**662**	**528**	**31**	**10**	**1,231**

ADDENDUM

IOWA PEACE OFFICERS' RETIREMENT, ACCIDENT AND DISABILITY SYSTEM CERTIFICATION

We have prepared an actuarial valuation of the Iowa Peace Officers' Retirement, Accident and Disability System as of July 1, 2009, for the fiscal year ending June 30, 2010. The results of the valuation are set forth in this addendum, which reflects the benefit provisions in effect on July 1, 2009.

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, statutory provisions, employee data, and financial information. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete, or missing. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

The results in this Addendum have been prepared for the sole purpose of providing the information required under Chapter 97 D.5 of the Iowa code. Calculations are based on the following prescribed methods:

Actuarial cost method: Entry Age Normal
Amortization method: Level percent of payroll
Amortization period: 30 years, open period

All other assumptions, methodologies, and System provisions used are consistent with those used in the regular July 1, 2009 valuation for the Iowa Peace Officers' Retirement, Accident and Disability System.

The results shown in this Addendum may not be consistent with those in the regular July 1, 2009 valuation. The July 1, 2009, valuation results were determined in accordance with generally accepted actuarial principles and practices that are consistent with the Actuarial Standards of Practice promulgated by the Actuarial Standards Board and the applicable Guides to Professional Conduct, amplifying opinion and supporting recommendations of the American Academy of Actuaries. The results shown in this Addendum are not necessarily based on the methodologies adopted by the System.

Milliman's work product was prepared exclusively for the Iowa Peace Officers' Retirement, Accident and Disability System (POR) for a specific and limited purpose. It is a complex technical analysis that assumes a high level of knowledge concerning POR's operations, and used POR data, which Milliman has not audited. It is not for the use or benefit of any third party for any purpose other than to provide the required reporting to the Iowa Public Retirement Systems Committee. Any third party recipient of Milliman's work product who desires professional guidance should not rely upon Milliman's work product, but should engage a qualified professional for advice appropriate to its own specific needs.

We are available to answer any questions on the material contained in this report, or to provide explanations or further details as may be appropriate.

The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Patrice Beckham

Patrice A. Beckham, F.S.A.

October 28, 2009
Date

Brent A. Banister

Brent A. Banister, F.S.A.

October 28, 2009
Date

ADDENDUM

IOWA PEACE OFFICERS' RETIREMENT, ACCIDENT AND DISABILITY SYSTEM SUMMARY OF VALUATION RESULTS UNDER PRESCRIBED METHODOLOGY

This addendum report has been prepared to present the results of a valuation of the Iowa Peace Officers' Retirement, Accident and Disability System as of July 1, 2009, based on the prescribed methodology under current statutes and regulations issued thereunder.

The unfunded actuarial accrued liability has been amortized as a level percent of payroll over 30 years. The payroll growth assumption used was 4%.

A summary of principal valuation results from the current and the prior valuation follows.

	Actuarial Valuation as of	
	July 1, 2009	**July 1, 2008**
Summary of Costs		
Normal cost	26.20%	26.19%
UAAL amortization	17.99%	15.29%
Total	44.19%	41.48%
Less Employee Contribution Rate	(9.35%)	(9.35%)
State Required Contribution	34.84%	32.18%
Funded Status		
Actuarial accrued liability	$432,894,495	$417,176,049
Actuarial value of assets	300,262,337	307,291,608
Unfunded actuarial accrued liability	$132,632,158	$109,884,441
Funded Ratio	69.4%	73.7%
Asset Values		
Market value of assets (MVA)	$233,187,738	$290,306,257
Actuarial Value of Assets (AVA)	300,262,337	307,291,608
MVA/AVA	78%	94%