IOWA PEACE OFFICERS' RETIREMENT, ACCIDENT AND DISABILITY SYSTEM

Actuarial Valuation Report as of July 1, 2005

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

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November 3, 2005

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

Dear Members of the Board:

At your request, we have conducted our annual valuation of the Iowa Peace Officers' Retirement, Accident and Disability System as of July 1, 2005. The results of the valuation are contained in this report. The plan provisions and actuarial assumptions are the same as those used in last year's valuation.

In preparing our report, we relied, without audit, on information (some oral and some written) supplied by the System's staff. This information includes, but is not limited to, statutory provisions, member data and financial information. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

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

We hereby further certify that all costs, liabilities, rates of interest and other factors for the System have been determined on the basis of actuarial assumptions and methods which are internally consistent, individually reasonable (taking into account the experience of the Plan and reasonable expectations of future experience); and which, in combination, offer our best estimate of anticipated experience under the Plan. Nevertheless, the emerging costs will vary from those presented in this report to the extent actual experience differs from that projected by the actuarial assumptions. 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 actuarial contribution rates for funding the System. Determinations for purposes other than this may be significantly different from the results contained in this report. Any third party recipient of Milliman's work product who desires professional guidance beyond the scope of this report should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs. Any distribution of this report must be in its entirety including this cover letter, unless prior written consent from Milliman is obtained.

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

Respectfully submitted,

MILLIMAN, INC.

Patrice A. Beckham, F.S.A.

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Consulting Actuary

Brent A. Banister, F.S.A.

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Actuary

SECTION 1

EXECUTIVE SUMMARY

Purpose of the Report

This report presents the results of the July 1, 2005 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 law governing the Peace Officers' Retirement, Accident and Disability System requires the actuary, as the technical advisor to the Board of Trustees, to make "an annual valuation of the assets and liabilities of the funds of the System created by this Chapter." [Chapter 97A, Section 5].

The valuation results provide a "snapshot" view of the System's financial condition on July 1, 2005. The 2005 valuation is based on the same benefit provisions, actuarial assumptions and methods as last year's valuation.

The State's normal contribution rate increased slightly from 35.60% in last year's valuation to 35.74% this year, based on a member contribution rate of 9.35%. This rate exceeds the State's appropriated contribution rate of 17% by 18.74%. 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 normal contribution rate but the net change was small:

- an investment return on the actuarial value of assets below the expected rate increased the contribution rate.
- actual contributions below the actuarial rate increased the contribution rate.
- no increases in base pay rates, affecting future salary estimates and escalator amounts, decreased the contribution rate.

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 contribution rate and experience less favorable than expected will generally increase the contribution rate. The member's contribution rate is fixed. Therefore, the entire change in the total contribution rate is reflected in the State's normal contribution rate, which can create volatility.

Contribution Rates

The total contribution rate for the Plan Year beginning July 1, 2005 is 45.09% of covered payroll. The State's portion is 35.74%. This exceeds the prior year's rate by 0.14%. The sources of change are as follows:

	Plan Year July 1, 2005	Beginning July 1, 2004
Prior year total contribution rate	44.95%	37.96%
 change due to asset (gains)/losses change due to other actuarial experience change due to actual contribution rate other than actuarial rate 	1.03% (2.33)% 1.44%	3.68% 2.37% 0.94%
Current year total contribution rate Members' contribution rate State's normal contribution rate	45.09% <u>9.35%</u> 35.74%	44.95% <u>9.35%</u> 35.60%

Liabilities

The liabilities of the System are future benefit payment promised to current members. There are different measurements of liability, depending on which type of future benefits are being valued. The standard measurements include:

- Actuarial Balance Sheet Liability is used in developing the total contribution rate. This liability is calculated based on both future salary projections and service credits to retirement or other separation from service. It represents the present value of all benefits expected to be paid to all current System participants (retired, active and deferred vested) in the future. The difference between the actuarial balance sheet liability and the actuarial value of assets is the present value of future contributions to the System, which ultimately determines the total contribution rate.
- Projected Benefit Obligation (PBO) was a liability measurement used for reporting purposes under GASB No. 5. New GASB standards replaced this reporting basis, but POR continues to report for GASB purposes using the PBO. The PBO represents the present value of benefits based on future payroll projections but only reflecting service credits as of June 30, 2004. This measure of the funded status of the plan does not impact the normal contribution rate.
- Liability for Accrued Benefits is used only for informational purposes. It does <u>not</u> impact the total contribution rate for the System. This liability represents the present value of benefits earned to date, based on service and salary as of June 30, 2005. The liability for accrued benefits is often used as a measure of the funded status since it represents the amount required to pay all accrued benefits if the fund were to liquidate on the measurement date.

Each liability measurement discussed above is used for a different purpose. Therefore, the relative importance of the measurement will depend on the perspective of the person using the information. From an actuarial viewpoint, the actuarial balance sheet liability is the most critical because it, along with the actuarial value of assets, ultimately determines the total contribution rate for the System. The other liability figures are valuable because they provide useful comparisons of assets and liabilities, but the actuarial balance sheet liability is the driving force in determining the contribution rate.

A comparison of System liabilities between July 1, 2004 and July 1, 2005 are summarized below:

	Jul		
	2005	2004	Change
Actuarial Balance Sheet Liability	\$448,037,660	\$433,632,881	3.3%
PBO	343,117,410	338,799,386	1.3%
Liability for Accrued Benefits	290,449,655	282,187,749	2.9%

Assets

As of July 1, 2005, the System had total funds, measured on a market value basis, of \$260,104,910. This was an increase of \$17,824,912 from last year's market value. The components of the change in the market value of assets are shown below:

	Market Value
Assets, July 1, 2004	\$242,279,998
 Employer and Member Contributions Benefit Payments Expenses Investment Income 	8,436,691 (15,552,844) (65,471) 25,006,536
Assets, July 1, 2005	\$260,104,910

The dollar weighted rate of return on the market value of assets, net of expenses, was 10.4%.

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 12 for a detailed development of the actuarial value of assets. The smoothing method was first implemented with the July 1, 2001 valuation.

Between July 1, 2004 and July 1, 2005, the actuarial value of assets increased by \$8.0 million.

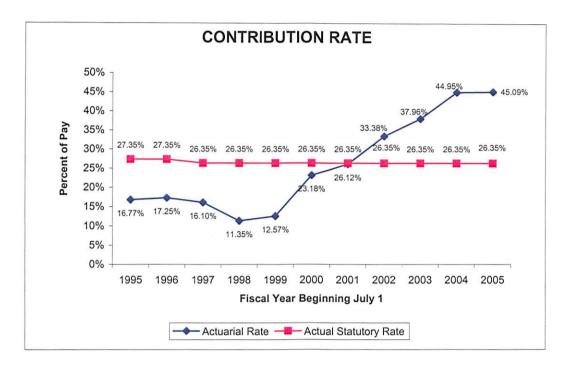
	Plan Year Ending June 30		
	2005	2004	
Actuarial Value of Net Assets at the beginning of the plan year	\$244,161,533	\$246,443,660	
Change in Assets			
- Contributions (including lump sum)	8,436,691	8,528,821	
- Benefits and Refunds	(15,552,844)	(14,749,160)	
- Administrative Expenses	(65,471)	(108,459)	
- Investment Return	14,848,904	4,046,671	
Total Changes	7,667,280	(2,282,127)	
Actuarial Value of Net Assets at the end of the plan year	\$251,828,813	\$244,161,533	

The expected investment earnings on the actuarial value of assets for the plan year ending June 30, 2005 are based on an assumed rate of return of 8.0%. The actual rate of return on the actuarial value of assets was 6.1%, resulting in an actuarial loss of about \$4.5 million and a corresponding increase in the contribution rate of 1.03%. More detail on the System assets is presented in Section 2 of this report.

Since the inception of the smoothing method, the actuarial value of assets has exceeded the market value as prior losses were deferred. This year, however, the situation has reversed as recent favorable investment returns are now being deferred and the market value of assets is greater than the actuarial value.

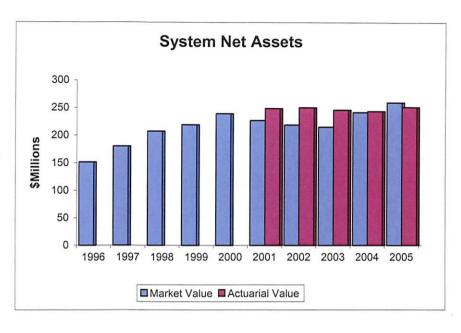
Comparison of Major Valuation Results

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

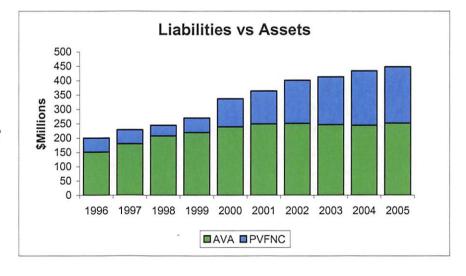


The statutory contribution rate generally exceeded the actuarial contribution rate in the first part of the past decade. Unfavorable experience from 2001 through 2003 led to a reversal of that situation. Due to actual experience and actual contributions that are less than the actuarial normal contribution rate, the actuarial rate has continued to grow.

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 in FY2004 and FY2005 has resulted in the market value of assets exceeding actuarial.



The difference between the present value of future benefits and the actuarial value of assets has increased significantly over this period due to unfavorable investment experience and actual contributions to the fund below the actuarial rate. As a result, the contribution rate has increased.



PVFB = Present Value of Future Benefits (Actuarial Balance Sheet Liability)

MV = Market Value of Assets

AV = Actuarial Value of Assets

COMPARISON OF PRINCIPAL VALUATION RESULTS

	July 1, 2005	July 1, 2004	% Chg
SYSTEM MEMBERSHIP			
Active Membership Number of Participants	580	566	2.5
- Projected Covered Payroll	\$ 33,336,856	\$ 32,519,722	2.5
- Average Salary	57,477	57,455	0.0
- Average Attained Age	39.2	39.6	(1.0)
- Average Service	13.6	14.3	(4.9)
2. Inactive Membership			
- Number of Vested Deferred Members	35	31	12.9
- Number of Retired Members & Beneficiaries	500	485	3.1
- Average Annual Benefit	\$ 32,304	\$ 29,643	5.2
ASSETS AND LIABILITIES			
1. Net Assets			
- Market Value	\$260,104,910	\$242,279,998	7.4
- Actuarial Value	\$251,828,813	\$244,161,533	3.1
2. Projected Liabilities			
- Annuity Savings Fund	\$ 0	\$ 0	0.0
- Pension Reserve Fund	203,424,396	191,693,603	6.1
- Annuity Reserve Fund	0	0	0.0
- Pension Accumulation Fund	244,613,264	241,939,278	1.1
- Total	\$448,037,660	\$433,632,881	3.3
SYSTEM CONTRIBUTIONS			
Total Contribution Rate	45.09%	44.95%	0.3
Member's Contribution Rate	9.35%	9.35%	0.0
State's Normal Contribution Rate	35.74%	35.60%	0.4
Appropriated Contribution Rate	17.00%	17.00%	0.0
Excess (Shortfall)	(18.74)%	(18.60)%	0.8

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, 2005. 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, 2005 the market value of assets for the Retirement System was \$260,104,910. Table 1 is a comparison, at market values, of System assets as of July 1, 2004 and July 1, 2005, in total and by investment category. Table 2 summarizes the change in the market value of assets from July 1, 2004 to July 1, 2005.

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 July 1, 2005. Due to the rate of return on the market value of assets last year, the actuarial value of assets is now greater than the market value as of the valuation date.

TABLE 1

ANALYSIS OF NET ASSETS AT MARKET VALUE

		July 1, 2005		July 1, 2004	
Pooled Cash		Amount \$ 12,120,273	% of Total 3.7	Amount \$ 3,633,230	% of Total 1.3
Receivables		4,318,181	1.3	4,414,257	1.6
Common Stocks		154,058,948	47.6	131,488,191	47.3
Securities on Loan		54,689,605	16.9	64,608,684	23.3
Bonds		<u>98,967,117</u>	<u>30.5</u>	73,602,009	<u>26.5</u>
	Subtotal	\$ 324,154,124	100.0%	\$ 277,746,371	100.0%
Payables		(64,049,214)		(35,466,373)	
NET ASSETS		<u>\$ 260,104,910</u>		\$ 242,279,998	

TABLE 2

SUMMARY OF FUND ACTIVITY

(Market Value)

1. NET ASSETS ON JULY 1, 2004	;	\$242,279,998
2. CONTRIBUTIONS		
a. Member Contributionsb. Employer Contributionsc. Lump Sum Contributions	\$	2,993,823 5,442,868 0
d. Total Contributions	\$	8,436,691
3. BENEFIT PAYMENTSa. Pension and annuity paymentsb. Refunds	\$ 	15,541,819 11,025
c. Total Benefit Payments	\$	15,552,844
4. ADMINISTRATIVE EXPENSE	\$	65,471
5. INVESTMENT INCOME	\$	25,006,536
6. NET ASSETS ON JULY 1, 2005 (1) + (2d) - (3c) - (4) + (5)	\$	260,104,910

TABLE 3

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

	Plan Year Ending June 30			
	<u>2005</u>	<u>2004</u>	2003	2002
1. Market value of assets, beginning of year	\$242,279,998	\$215,454,491	\$219,373,555	\$227,402,298
2. Contributions during year				
a. Member	2,993,823	3,026,103	3,046,982	3,006,461
b. Employer	5,442,868	5,502,718	5,540,116	5,466,366
c. Lump sum payments	0	0	0	0
d. Total	8,436,691	8,528,821	8,587,098	8,472,827
3. Benefits paid during year	15,541,819	14,742,141	13,345,261	11,889,295
4. Refunds paid during year	11,025	7,019	7,673	15,438
5. Expected net investment income at 8%				
a. Market value of assets, beginning of year	19,382,400	17,236,359	17,549,884	18,192,182
b. Contributions	330,975	334,590	336,876	332,389
c. Benefits	(609,713)	(578,341)	(523,541)	(466,417)
d. Refunds	(433)	(275)	(301)	(605)
e. Total	19,103,229	16,992,333	17,362,918	18,057,549
6. Expected Value of Assets (1) + (2d) - (3) - (4) + (5e)	254,267,074	226,226,485	231,970,637	242,027,941
7. Market value of assets, end of year	260,104,910	242,279,998	215,454,491	219,373,555
8. Excess (shortfall) of investment income for Year (7) – (6)	5,837,836	16,053,513	(16,516,146)	(22,654,386)

TABLE 4

DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS

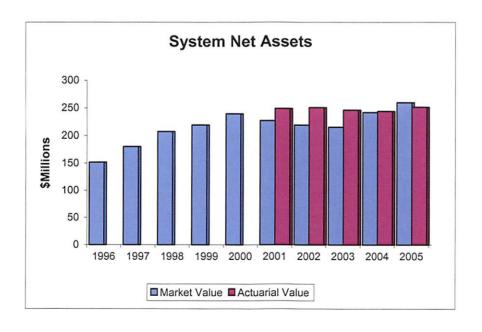
_	Plan Year Ending June 30	
<u>Item</u>	<u>2005</u>	<u>2004</u>
1. Excess (Shortfall) of investment income		
for current and previous 2 years		
a. Current year	\$5,837,836	\$16,053,513
b. Current year - 1	16,053,513	(16,516,146)
c. Current year - 2	<u>(16,516,146)</u>	(22,654,386)
d. Total	4,950,509	(23,117,019)
2. Deferral of excess (shortfall) of investment income		
a. Current year (75%)	4,378,377	12,040,135
b. Current year – 1 (50%)	8,026,757	(8,258,073)
c. Current year – 2 (25%)	(4,129,037)	(5,663,597)
d. Total deferred	8,276,097	(1,881,535)
3. Market value of plan net assets, end of year	260,104,910	242,279,998
4. Actuarial value of plan assets, end of year (Item 3 – Item 2d)	\$251,828,813	\$244,161,533
5. Actuarial value divided by market value	96.8%	100.8%

TABLE 5
HISTORICAL COMPARISON

<u>Value As of</u>	Market Value of Net Assets	Estimated Rate of Return (MVA)*	Actuarial Value of Assets**	Estimated Rate of Return (AVA)
July 1, 1996	151,753,761	13.8%		
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%

^{*}Net of Expenses - Information prior to 1996 not readily available.

^{**}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, 2005. 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. These liabilities 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 to be earned. For all members, active and retired, the value extends over benefits earnable and payable for the rest of their lives and, if an optional benefit is chosen, for the lives of the surviving beneficiaries.

The actuarial assumptions used to determine liabilities are based on the results of an Experience Study prepared for the System. The assumptions, as adopted by the Board, are shown in Appendix C.

All liabilities reflect the benefit structure in place July 1, 2005.

TABLE 6
ACTUARIAL BALANCE SHEET LIABILITIES

The actuarial balance sheet liabilities represent the present value of all future benefits expected to be paid from the fund for current members, including both future salary projections and service credits.

Present Value of Projected Future Benefits	July 1, 2005	July 1, 2004
Active Members	\$241,879,932	\$239,705,316
Inactive Vested Members	2,733,332	2,233,962
Retirees and Beneficiaries	203,424,396	<u>191,693,603</u>
Total	\$448,037,660	\$433,632,881

TABLE 7 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	<u>July 1, 2005</u>	July 1, 2004
1. Vested Benefits		
a. Participants currently receiving payments	\$203,424,396	\$191,693,603
b. Deferred vested members	2,733,332	2,233,962
c. Active members	83,802,089	<u>85,592,365</u>
d. Total vested benefits	\$289,959,817	\$279,519,930
2. Nonvested Benefits	\$ 489,838	\$ 2,667,819
3. Total Present Value of Accrued Benefits	\$290,449,655	\$282,187,749
4. Market Value of Assets	\$260,104,910	\$242,279,998
5. Unfunded (Surplus) Present Value of Accrued Benefits	\$ 30,344,745	\$ 39,907,751
6. Funded Percentage	89.6%	85.9%

SECTION 4

SYSTEM CONTRIBUTIONS

The previous two sections were devoted to a discussion of the assets and liabilities of the System. A comparison of Tables 6 and 4 indicates that current assets fall short of meeting the present value of future benefits (total System 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 to each year of service, and are called the normal cost.

The actuarial funding method used to determine System costs is the Aggregate Cost method. A more detailed description of this method can be found in Appendix C.

TABLE 8

ACTUARIAL BALANCE SHEET as of July 1, 2005

ASSETS

Actuarial value of assets		\$ 251,828,813
Present value of future contributions		 196,208,847
Total Net Assets		\$ 448,037,660
LIABILIT	<u>ries</u>	
Present Value of Projected Benefits		
Retired Members and Beneficiaries		\$ 203,424,396
Active Members		
Retirement	\$ 214,288,433	
Ordinary death	7,718,152	
Accidental death	3,588,612	
Accidental disability	8,237,379	
Ordinary disability	8,013,807	
Termination	33,549	
Total		241,879,932
Inactive Vested Members		 2,733,332

Total Liabilities

\$

448,037,660

TABLE 9

DEVELOPMENT OF THE NORMAL CONTRIBUTION RATE

		7/1/05	7/1/04
1.	Actuarial Present Value of Projected Benefits	\$ 448,037,660	\$ 433,632,881
2.	Actuarial Value of Plan Assets	251,828,813	244,161,533
3.	Actuarial Present Value of Future Contributions The excess of the actuarial present value of projected pension benefits over the actuarial value of assets) (the amount used to determine normal cost).	196,208,847	189,471,348
4.	Actuarial Present Value of Future Valuation Earnings of Active Members	435,118,858	421,558,774
5.	Total Normal Contribution Rate The actuarial present value of future contributions divided by the actuarial present value of future earnings.	45.09%	44.95%
6.	Member's Contribution Rate	9.35%	9.35%
7.	State's Normal Contribution Rate (5) - (6)	35.74%	35.60%
8.	Contribution Rate Appropriated	17.00%	17.00%
9.	Excess (Shortfall) The excess of the appropriated contribution rate over the State's normal contribution rate: (8) - (7)	(18.74)%	(18.60)%
10.	Projected Covered Payroll	\$ 33,336,856	\$ 32,519,722
11.	Estimated Amount of State's Contribution (a) Normal Contribution: (7) x (10) (b) Appropriated Contribution: (8) x (10) (c) Excess (Shortfall): (11b) - (11a)	11,914,592 5,667,266 (6,247,326)	11,577,021 5,528,353 (6,048,668)

SECTION 5

PLAN ACCOUNTING INFORMATION

One liability measurement for evaluating the funded status of the Plan is the standardized "pension benefit obligation". This value (known as the actuarial present value of credited projected benefits) is that portion of the present value of all projected pension benefits, adjusted for the effects of projected salary increases, estimated to be payable in the future as a result of employee service to date under the projected unit credit actuarial cost method. The measure is independent of the actuarial funding method used to determine contributions to the System.

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

	7/1/05	7/1/04
Pension Benefit Obligation		
Former Members (in pay status or deferred)	\$ 206,157,728	\$ 193,927,565
Current Employees:		
- Estimated accumulated employee contributions		
including allocated investment earnings	45,851,900	43,865,566
- Employer-financed vested obligation	89,513,955	93,172,570
- Employer-financed nonvested obligation	<u>1,593,827</u>	<u>7,833,685</u>
Total Pension Benefit Obligation	\$ 343,117,410	\$ 338,799,386
Net Market Value of Assets Available for Benefits	\$ 260,104,910	\$ 242,279,998
Unfunded Pension Benefit Obligation	\$ 83,012,500	\$ 96,519,388
Funded Percentage	75.8%	71.5%

The actuarial assumptions used to determine the pension benefit obligation are the same as those used in the respective valuations (see the Actuarial Assumptions section).

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.

Based on the NPO of \$(11,241,945) as of June 30, 2004 and the annual required contribution for the 2005 fiscal year of \$11,577,021, the annual pension cost for fiscal year end 2005 is \$11,590,745. The actual employer contribution was \$5,442,868. The effect of the smaller contribution is to increase the net pension obligation by \$6,147,877 to \$(5,094,068) as of June 30, 2005. As a result, the annual pension cost for the 2006 fiscal year is \$11,920,811 based on the annual required contribution of \$11,914,592.

TABLE 10
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)**	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (P/R) (c)	UAAL as a Percentage of Covered P/R [(b-a)/c]
6/30/96	151,753,761	160,781,808	9,028,047	94.38%	25,272,192	35.72%
6/30/97	180,551,242	166,700,726	(13,850,516)	108.31%	26,277,703	(52.71%)
6/30/98	207,649,859	178,631,341	(29,018,518)	116.24%	26,954,246	(107.66%)
6/30/99	219,462,509	187,312,171	(32,150,338)	117.16%	28,059,369	(114.58%)
6/30/00	239,568,583	240,785,081	1,216,498	99.49%	30,292,856	4.02%
6/30/01	249,226,895	263,001,999	13,775,104	94.76%	30,925,529	44.54%
6/30/02	250,914,077	294,514,429	43,600,352	85.20%	32,154,663	135.60%
6/30/03	246,443,660	306,098,170	59,654,510	80.51%	33,019,306	180.67%
6/30/04	244,161,533	338,799,386	94,637,853	72.07%	32,519,722	291.00%
6/30/05	251,828,813	343,117,410	91,288,597	73.39%	33,336,856	273.84%

^{*}Beginning with the 6/30/01 valuation, a smoothing method was used to determine the actuarial (market related) value of assets. Prior to this, market value was used.

^{**}The Aggregate method, which does not directly develop an actuarial accrued liability, is used to determine the actuarial required contribution.

The actuarial accrued liability shown here is based on the Projected Unit Credit Cost method.

TABLE 11
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)
6/30/96	1,763,383	4,390,688	248.99%
6/30/97	1,996,503	4,597,867	230.30%
6/30/98	1,773,145	4,588,667	258.79%
6/30/99	556,317	4,860,834	873.75%
6/30/00	948,875	3,990,488	420.55%
6/30/01	4,231,914	5,291,371	125.03%
6/30/02	5,332,844	5,466,366	102.50%
6/30/03	7,883,879	5,540,116	70.27%
6/30/04	9,446,823	5,502,718	58.25%
6/30/05	11,577,021	5,442,868	47.01%

Notes to the Required Schedules:

- 1. The cost method used to determine the ARC is the Aggregate Cost Method. This method does not identify or separately amortize unfunded actuarial liabilities.
- 2. The assets are shown at fair market value prior to 6/30/01 and at actuarial (market related) value thereafter.
- 3. Economic assumptions are as follows:

Investment return rate of 8.00%

Salary increase rate of 10% the first year, 5% for each of the

next 4 years and 5.5% thereafter.

Post-retirement benefit increases are based on expected payroll growth and provisions of the law.

4. The amortization method is an open period, level percentage of payroll. The average remaining service life of active members is 17 years as of 6/30/05.

TABLE 12

Development of the Net Pension Obligation

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

Fiscal Year:	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>
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)	14	14	14	18	18
Cost Method	Aggregate	Aggregate	Aggregate	Aggregate	Aggregate
Annual Pension Cost:					
Annual Required Contribution (ARC)	\$1,996,503	\$1,773,145	\$556,317	\$948,875	\$4,231,914
Interest on NPO	(296,503)	(500,547)	(718,926)	(1,053,431)	(1,298,858)
Adjustment to ARC	347,316	586,328	842,132	1,027,211	1,266,529
Annual Pension Cost	\$2,047,316	\$1,858,926	679,523	\$922,655	\$4,199,585
Contribution for the Year:	\$4,597,867	\$4,588,667	\$4,860,834	\$3,990,488	\$5,291,371
Net Pension Obligation (NPO):					
NPO at beginning of year	\$(3,706,289)	\$(6,256,840)	\$ (8,986,581)	\$(13,167,892)	\$(16,235,725
Annual Pension Cost for year	2,047,316	1,858,926	679,523	922,655	4,199,585
Contract of Contra	(4,597,867)	(4,588,667)	(4.860.834)	(3,990,488)	(5,291,371
Contributions for year	(4,397,007)	(4,300,007)	7.100000001	12122011001	
NPO at end of year	\$(6,256,840)	\$(8,986,581)	\$(13,167,892)	(16,235,725)	
					
NPO at end of year Fiscal Year:	\$(6,256,840)	\$(8,986,581)	\$(13,167,892)	(16,235,725)	(17,327,511
NPO at end of year	\$(6,256,840)	\$(8,986,581)	\$(13,167,892)	(16,235,725)	(17,327,511
NPO at end of year Fiscal Year: Assumptions and Method:	\$(6,256,840) 2002	\$(8,986,581) <u>2003</u>	\$(13,167,892) 2004	(16,235,725) 2005	(17,327,511 2006
NPO at end of year Fiscal Year: Assumptions and Method: Interest Rate	\$(6,256,840) 2002 8.00%	\$(8,986,581) 2003 8.00%	\$(13,167,892) 2004 8.00%	(16,235,725) 2005 8.00%	(17,327,511 2006 8.00%
NPO at end of year Fiscal Year: Assumptions and Method: Interest Rate Wage Inflation	\$(6,256,840) 2002 8.00% 4.00%	\$(8,986,581) 2003 8.00% 4.00%	\$(13,167,892) 2004 8.00% 4.00%	(16,235,725) 2005 8.00% 4.00%	2006 8.00% 4.00%
NPO at end of year Fiscal Year: Assumptions and Method: Interest Rate Wage Inflation Amortization Period (years)	\$(6,256,840) 2002 8.00% 4.00% 18	\$(8,986,581) 2003 8.00% 4.00% 18	\$(13,167,892) 2004 8.00% 4.00% 17	2005 8.00% 4.00% 17	2006 8.00% 4.00% 17
NPO at end of year Fiscal Year: Assumptions and Method: Interest Rate Wage Inflation Amortization Period (years) Cost Method	\$(6,256,840) 2002 8.00% 4.00% 18	\$(8,986,581) 2003 8.00% 4.00% 18	\$(13,167,892) 2004 8.00% 4.00% 17	2005 8.00% 4.00% 17	2006 8.00% 4.00% 17
Fiscal Year: Assumptions and Method: Interest Rate Wage Inflation Amortization Period (years) Cost Method Annual Pension Cost: Annual Required Contribution (ARC) Interest on NPO	\$(6,256,840) 2002 8.00% 4.00% 18 Aggregate	\$(8,986,581) 2003 8.00% 4.00% 18 Aggregate	\$(13,167,892) 2004 8.00% 4.00% 17 Aggregate	2005 8.00% 4.00% 17 Aggregate	2006 8.00% 4.00% 17 Aggregate \$11,914,592 (407,525)
NPO at end of year Fiscal Year: Assumptions and Method: Interest Rate Wage Inflation Amortization Period (years) Cost Method Annual Pension Cost: Annual Required Contribution (ARC) Interest on NPO Adjustment to ARC	\$(6,256,840) 2002 8.00% 4.00% 18 Aggregate \$5,332,844	\$(8,986,581) 2003 8.00% 4.00% 18 Aggregate \$7,883,879	\$(13,167,892) 2004 8.00% 4.00% 17 Aggregate \$9,446,823	2005 8.00% 4.00% 17 Aggregate \$11,577,021	2006 8.00% 4.00% 17 Aggregate \$11,914,592
Fiscal Year: Assumptions and Method: Interest Rate Wage Inflation Amortization Period (years) Cost Method Annual Pension Cost: Annual Required Contribution (ARC) Interest on NPO	\$(6,256,840) 2002 8.00% 4.00% 18 Aggregate \$5,332,844 (1,386,201)	\$(8,986,581) 2003 8.00% 4.00% 18 Aggregate \$7,883,879 (1,399,643)	\$(13,167,892) 2004 8.00% 4.00% 17 Aggregate \$9,446,823 (1,216,369)	2005 8.00% 4.00% 17 Aggregate \$11,577,021 (899,356)	2006 8.00% 4.00% 17 Aggregate \$11,914,592 (407,525)
Fiscal Year: Assumptions and Method: Interest Rate Wage Inflation Amortization Period (years) Cost Method Annual Pension Cost: Annual Required Contribution (ARC) Interest on NPO Adjustment to ARC	\$(6,256,840) 2002 8.00% 4.00% 18 Aggregate \$5,332,844 (1,386,201) 1,351,697	\$(8,986,581) 2003 8.00% 4.00% 18 Aggregate \$7,883,879 (1,399,643) 1,346,805	\$(13,167,892) 2004 8.00% 4.00% 17 Aggregate \$9,446,823 (1,216,369) 1,234,931	2005 8.00% 4.00% 17 Aggregate \$11,577,021 (899,356) 913,080	2006 8.00% 4.00% 17 Aggregate \$11,914,592 (407,525) 413,744
Fiscal Year: Assumptions and Method: Interest Rate Wage Inflation Amortization Period (years) Cost Method Annual Pension Cost: Annual Required Contribution (ARC) Interest on NPO Adjustment to ARC Annual Pension Cost Contribution for the Year: Net Pension Obligation (NPO):	\$(6,256,840) 2002 8.00% 4.00% 18 Aggregate \$5,332,844 (1,386,201) 1,351,697 \$5,298,340	\$(8,986,581) 2003 8.00% 4.00% 18 Aggregate \$7,883,879 (1,399,643) 1,346,805 \$7,831,041	\$(13,167,892) 2004 8.00% 4.00% 17 Aggregate \$9,446,823 (1,216,369) 1,234,931 \$9,465,385	2005 8.00% 4.00% 17 Aggregate \$11,577,021 (899,356) 913,080 \$11,590,745	2006 8.00% 4.00% 17 Aggregate \$11,914,592 (407,525) 413,744 \$11,920,811
Fiscal Year: Assumptions and Method: Interest Rate Wage Inflation Amortization Period (years) Cost Method Annual Pension Cost: Annual Required Contribution (ARC) Interest on NPO Adjustment to ARC Annual Pension Cost Contribution for the Year: Net Pension Obligation (NPO): NPO at beginning of year	\$(6,256,840) 2002 8.00% 4.00% 18 Aggregate \$5,332,844 (1,386,201) 1,351,697 \$5,298,340 \$5,466,366 \$(17,327,511)	\$(8,986,581) 2003 8.00% 4.00% 18 Aggregate \$7,883,879 (1,399,643) 1,346,805 \$7,831,041	\$(13,167,892) 2004 8.00% 4.00% 17 Aggregate \$9,446,823 (1,216,369) 1,234,931 \$9,465,385 \$5,502,718 (15,204,612)	2005 8.00% 4.00% 17 Aggregate \$11,577,021 (899,356) 913,080 \$11,590,745 5,442,868 (11,241,945)	2006 8.00% 4.00% 17 Aggregate \$11,914,592 (407,525) 413,744 \$11,920,811
Fiscal Year: Assumptions and Method: Interest Rate Wage Inflation Amortization Period (years) Cost Method Annual Pension Cost: Annual Required Contribution (ARC) Interest on NPO Adjustment to ARC Annual Pension Cost Contribution for the Year: Net Pension Obligation (NPO): NPO at beginning of year Annual Pension Cost for year	\$(6,256,840) 2002 8.00% 4.00% 18 Aggregate \$5,332,844 (1,386,201) 1,351,697 \$5,298,340 \$5,466,366 \$(17,327,511) 5,298,340	\$(8,986,581) 2003 8.00% 4.00% 18 Aggregate \$7,883,879 (1,399,643) 1,346,805 \$7,831,041 \$5,540,116 (17,495,537) 7,831,041	\$(13,167,892) 2004 8.00% 4.00% 17 Aggregate \$9,446,823 (1,216,369) 1,234,931 \$9,465,385 \$5,502,718 (15,204,612) 9,465,385	2005 8.00% 4.00% 17 Aggregate \$11,577,021 (899,356) 913,080 \$11,590,745 5,442,868 (11,241,945) 11,590,745	2006 8.00% 4.00% 17 Aggregate \$11,914,592 (407,525) 413,744 \$11,920,811 *
Fiscal Year: Assumptions and Method: Interest Rate Wage Inflation Amortization Period (years) Cost Method Annual Pension Cost: Annual Required Contribution (ARC) Interest on NPO Adjustment to ARC Annual Pension Cost Contribution for the Year: Net Pension Obligation (NPO): NPO at beginning of year	\$(6,256,840) 2002 8.00% 4.00% 18 Aggregate \$5,332,844 (1,386,201) 1,351,697 \$5,298,340 \$5,466,366 \$(17,327,511)	\$(8,986,581) 2003 8.00% 4.00% 18 Aggregate \$7,883,879 (1,399,643) 1,346,805 \$7,831,041 \$5,540,116 (17,495,537)	\$(13,167,892) 2004 8.00% 4.00% 17 Aggregate \$9,446,823 (1,216,369) 1,234,931 \$9,465,385 \$5,502,718 (15,204,612)	2005 8.00% 4.00% 17 Aggregate \$11,577,021 (899,356) 913,080 \$11,590,745 5,442,868 (11,241,945)	2006 8.00% 4.00% 17 Aggregate \$11,914,592 (407,525) 413,744 \$11,920,811

^{*} Will not be determined until the end of Fiscal Year 2006.

APPENDIX A SYSTEM MEMBERSHIP

INFORMATION

AGE AND SERVICE DISTRIBUTION AS OF JULY 1, 2005 FOR ACTIVE PARTICIPANTS Males and Females

Years of Service

	<u>0</u>	to 4	<u>5</u>	to 9	<u>10</u>	to 14	<u>15</u>	<u>to 19</u>	20	to 24	<u>25</u>	to 29	<u>30</u>	to 34	<u>35</u>	to 39	<u>40 ar</u>	nd over	I	otal
		Avg.		Avg.		Avg.		Avg.		Avg.		Avg.		Avg.		Avg.		Avg.		Avg.
Age	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary
Under 25	15	34,341	1	44,945	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	16	35,004
25-29	32	42,221	16	46,361	1	49,904	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	49	43,730
30-34	20	44,522	92	51,202	27	55,738	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	139	51,122
35-39	3	44,880	32	51,276	75	58,382	7	59,932	0	NA	0	NA	0	NA	0	NA	0	NA	117	56,185
40-44	0	NA	6	53,868	32	58,331	56	62,972	7	66,383	0	NA	0	NA	0	NA	0	NA	101	61,197
45-49	0	NA	1	54,783	10	59,806	27	66,849	32	66,586	3	77,357	0	NA	0	NA	0	NA	73	66,036
50-54	0	NA	0	NA	0	NA	9	63,921	7	61,026	39	69,178	7	66,775	0	NA	0	NA	62	67,223
55-59	0	NA	0	NA	0	NA	1	83,526	1	64,606	12	72,172	8	73,997	0	NA	0	NA	22	73,008
60-64	0	NA	0	NA	0	NA	0	NA	0	NA	1	55,683	0	NA	0	NA	0	NA	1	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	70	41,304	148	50,784	145	57,918	100	64,097	47	65,686	55	70,032	15	70,627	0	NA	0	NA	580	57,170

ANALYSIS OF RETIREES AND BENEFICIARIES as of July 1, 2005 Males and Females

Number of Participants

				Number	or Participant	5	· · · · · · · · · · · · · · · · · · ·		
١	<u>Age</u>	Service Retirement	Accidental Disability	Ordinary Disability	<u>Vested</u> <u>Retirement</u>	<u>Child</u> <u>Beneficiary</u>	Contingent Beneficiary	<u>Deferred</u> <u>Vested</u>	<u>Total</u>
ı	Under 40	3	6	0	0	12	0	20	41
	40 to 44	0	3	0	0	0	2	5	10
	45 to 49	0	2	0	0	0	3	6	11
	50 to 54	1	7	2	0	0	4	4	18
	55 to 59	47	16	3	4	0	6	0	76
	60 to 64	66	20	2	6	0	7	0	101
	65 to 69	55	16	1	7	0	8	0	87
	70 to 74	48	11	2	0	0	11	0	72
	75 to 79	41	5	1	1	0	17	0	65
	80 to 84	23	0	0	0	0	9	0	32
	85 to 89	4	1	0	0	0	7	0	12
	90 to 94	1	0	0	0	0	9	0	10
	95 to 99	0	0	0	0	0	0	0	0
	100 & over	0	0	0	0	0	0	0	0
	Totals	289	87	11	18	12	83	35	535

ANALYSIS OF RETIREES AND BENEFICIARIES as of July 1, 2005 Males and Females

Average Annual Benefits of Participants

<u>Age</u>	Service <u>Retirement</u>	Accidental <u>Disability</u>	Ordinary <u>Disability</u>	Vested Retirement	Child Beneficiary	Contingent Beneficiary	Deferred <u>Vested</u>
Under 40	34,857	21,269	NA	NA	4,426	NA	6,774
40 to 44	NA	30,302	NA	NA	NA	16,190	13,568
45 to 49	NA	31,226	NA	NA	NA	21,097	22,093
50 to 54	52,377	39,610	30,330	NA	NA	22,245	29,454
55 to 59	50,345	38,626	34,027	11,910	NA	22,414	NA
60 to 64	45,448	36,276	37,549	9,324	NA	18,352	NA
65 to 69	35,975	33,147	30,186	12,143	NA	17,318	NA
70 to 74	33,134	31,473	23,221	NA	NA	16,124	NA
75 to 79	29,066	32,813	22,380	5,616	NA	17,478	NA
80 to 84	26,147	NA	NA	NA	NA	17,556	NA
85 to 89	25,170	24,326	NA	NA	NA	16,576	NA
90 to 94	27,375	NA	NA	NA	NA	17,094	NA
95 to 99	NA	NA	NA	NA	NA	NA	NA
100 & over	NA	NA	NA_	NA	NA	NA_	NA
Totals	38,251	34,765	30,622	10,789	4,426	17,934	14,949

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

Monthly Annuity

Age 55 with 22 years of service.

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.
 - 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

service.

Monthly Annuity

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

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

Deferred Vested Benefit

Eligibility

Monthly Annuity

Four years of service.

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

Benefit

Ordinary Death Benefit

Eligibility

Benefit

None.

- (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.

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

- (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 Iowa Highway Safety 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 Iowa Highway Safety 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

Benefit

In actual performance of duty.

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

Adjustments to Pensions

Each July 1 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 <u>Retired</u>	Increase <u>Per Year</u>
1-4	\$ 15
5-9	20
10-14	25
15-19	30
20 or more	35

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 Iowa Highway Safety Patrol.

Member Contributions

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

	Member		
Period	Contribution Rate		
January 1, 1995 - June 30, 1995			
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 60 days, commence covered employment under another eligible retirement system, may elect to transfer the average accrued benefit 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

The Aggregate Actuarial Cost Method has been used in this valuation. Under this method, the normal cost (the portion of the total cost of pension benefits under this plan allocated to the current year under this actuarial cost method) is determined by multiplying the normal cost accrual rate for the current year by the total valuation earnings for active participants under the assumed retirement age on the current valuation date.

An actuarial accrued liability, as such, is not determined under the Aggregate Actuarial Cost Method; all past and future costs are funded over the future. The normal cost accrual rate for the current year is:

- 1. the actuarial present value of projected pension benefits for all participants determined using the assumptions shown below for normal cost, minus the actuarial value of assets (as reported by the System), both as of the current valuation date, divided by
- 2. the actuarial present value of the expected future valuation earnings for all active participants from the current valuation date to the assumed retirement age.

Actuarial gains and losses are reflected in this accrual rate and are spread over the current and future years' normal costs. Experience gains will reduce and experience losses will increase future normal cost accrual rates.

Actuarial Assumptions

Active Members:

1.	Ordinary death rate	1983 Group Annuity Mortality Table.
2.	Accidental death rate	8.5 deaths per 10,000 exposed for one year.
3.	Ordinary disability rate	1970-71 Industry Experience on Male Lives (Occupational Group II).
4.	Accidental disability rate	1970-71 Industry Experience on Male Lives (Occupational Group II) increased by 50% for age 35 and younger, grading up 1% per age to 69% for age 54.
5.	Withdrawal rate	5% for first year of employment, grading down 1% a year to 0% in sixth and following years.

6. Retirement age

<u>Age</u>	Probability of Retirement			
55	45%			
56	30%			
57-58	20%			
59-60	25%			
61	33%			
62	100%			

7. Salary scale

Annual increases: 10% the first year, 5% for each of the next 4 years, and 5.5% thereafter.

8. Post-retirement adjustments

Same as for retired members.

Retired Members and Other Beneficiaries:

1. Mortality rate

Service retirements and beneficiaries: 1983 Group Annuity

Mortality (GAM) Tables - Male and Female.

2. Mortality rate

Disability retirements: 1983 GAM Tables - Male and

Female rated up 5 years in age.

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.

Interest Rate:

8% per year.

Price Inflation:

3.5% per year.

Wage Inflation:

4.0% per year, including price inflation.

Reconciliation of Member Status From July 1, 2004 to July 1, 2005

1

	Active Members	Members & Beneficiaries Receiving Benefits	Former Members with Deferred Benefits	Children Receiving Benefits	Total
Members as of July 1, 2004	566	471	31	14	1,082
Began Receiving Benefits	(20)	+24	(1)	0	+3
Terminated Without Further Benefit Eligibility (including refunds of contributions)	(1)	0	0	0	(1)
Terminated With Benefit Eligibility	(5)	0	+5	0	0
Returned to Active Status	+2	(1)	(1)	0	0
Deceased	0	(6)	0	0	(6)
Benefits Ended	0	0	0	(2)	(2)
Newly Hired	+38	0	0	0	+38
Adjustments	0	0	+1	0	+1
Members as of July 1, 2005	580	488	35	12	1,115