Report to the Public Retirement Systems Interim Committee

by

The Municipal Fire & Police Retirement System of Iowa

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INTRODUCTION

In consideration of the request of the General Assembly, the Board of Trustees of the Municipal Fire and Police Retirement System of Iowa (MFPRSI) respectfully submits the following report. The report is separated into six sections.

Section I A brief description of the retirement System since its statutory creation in 1990 and a discussion of the goals for the consolidated retirement System.

Section II A compilation of the accomplishments of the Board of Trustees and the retirement System's administration.

Section III A description of the plan and its programs:

- Statistical information describing the current System

- Summary of the plan benefits

- Identification of the member cities

- Description of the level of benefit activity

- Description of the plan's assets & investment performance

Section IV A discussion of the challenges facing the retirement System.

Section V The recommendations for statutory changes as proposed by the Board of Trustees of MFPRSI.

Section VI A profile of the current actuarial status of the plan.

I. HISTORY OF THE RETIREMENT SYSTEM

In 1990, the Iowa General Assembly enacted legislation to consolidate the local fire and police retirement systems that existed in forty-nine cities. Effective January 1, 1992 the eighty-seven local fire and police retirement systems were consolidated into a single statewide system.

The System was placed under the direction of a Board of Trustees, which consists of nine voting members, serving staggered four-year terms, and four legislative members. The current membership of the Board is as follows:

- Four representatives of the membership: two fire & two police representatives
 - Marty Pottebaum, retired police officer, Sioux City
- Judy Bradshaw, active police officer, Des Moines

- Tom Ryan, retired fire fighter, Davenport

- June Anne Gaeta, active fire fighter, Muscatine
- Four city representatives, representing the participating cities
 - Jody E. Smith, West Des Moines

- Duane Pitcher, Ames

- Allen McKinley, Des Moines

- Sheri Mertz, Carroll

- A private citizen
 - Mary Bilden, Boone (CPA)
- Two Senators from the Iowa Senate and two Representatives from the Iowa House.
 - Senator Ron Wieck

- Senator Wally Horn, Cedar Rapids

- Representative Paul Bell, Newton

- Representative Chuck Gipp, Decorah

I. HISTORY OF THE RETIREMENT SYSTEM (continued)

Through the consolidation of the local plans, the General Assembly sought to achieve certain goals for the pension program codified within Iowa Code Chapter 411. The initial goals, as understood by the System's Board of Trustees and Administration, are described below with a statement of the results to date.

- GOAL I. Consistent Application of the Benefit Statute
 - Result: Programs and policies established and uniformly applied to the entire membership, including the establishment of extensive legal and judicial definitions for the plan.
- GOAL II. Improve the Liability Assessment and Reporting
 - Result: Actuarial assessments performed and reported annually to all parties. Periodic assessments conducted of actuarial assumptions and experience and adjustments made as warranted.
- GOAL III. Strengthen the Financial Profile of the Benefit Plan
 - Result: Funding status of the plan has fluctuated over the 10-year period in response to investment market changes and benefit plan modifications.
- GOAL IV. Improve the Performance on Portfolio Assets
 - Result: Established a comprehensive investment program and systematically review its activities (controls/due diligence). Performance has matched the actuarial assumed growth rate since inception.
- GOAL V. Develop Program Recommendations

Result: Various recommendations were proposed to and adopted by the legislature, including:

- a) Technical Chapter 411 changes,
- b) IRS Plan Qualification,
- c) Escalator Program revision,
- d) VEBA program concept, and
- e) Disability Program Improvements.

II. ACTIVITIES OF THE SYSTEM

The pension plan established by Iowa Code Chapter 411 involves each of the following activities on an ongoing basis: the collection of member and employer contributions, pre-retirement and refund counseling, disability program execution, establishment and delivery of monthly benefit payments, and compliance with various legal requirements. In addition to the systematic execution of the aforementioned activities, the System has also undertaken various major activities to enhance its capabilities since its creation in 1992. Recent major activities include those identified on the following list.

MAJOR PROGRAM ACTIVITIES

- A) Review of Disability Program: In 1999 the Board of Trustees undertook a comprehensive examination of the disability provisions provided in the statute. Several recommendations were submitted to and adopted by the General Assembly in the 2000 legislative session. The System has implemented each of the requirements established by the statutory changes. Effective July 1, 2003, the System established the following: a) revised entrance medical examination protocols for the position of police officer and fire fighter, b) a wellness guideline for consideration by the cities and the membership, and c) established a state-wide network of sites for the conduct of the pre-employment medical examinations.
- B) Investment Policy Revision: Beginning in the fall of 2001 the Board of Trustees undertook an extensive evaluation of the long-term asset-liability forecast for the System, in consultation with the System's investment consultant. The consultant's recommendations concerning the asset allocation policy and the specific portfolio components thereof were reviewed by the Board and a revised asset allocation policy was adopted.
- C) Investment Policy Implementation: During 2002 and 2003 the revised asset allocation policy was implemented using a competitive bid process to select additional investment managers, thereby, further diversifying the investment program. [Addition of private equity, increased real estate exposure, and use of additional specialists for active portfolio management].
- D) Review of System's Goals: In March 2002 the Board of Trustees completed its re-examination of the Mission Statement and Goals it had previously established for the System. The Board adopted a revised statement for the plan and has subsequently monitored its accomplishment.

II. ACTIVITIES OF THE SYSTEM (continued)

- E) Study of Actuarial Assumptions: In consultation with the System's actuary (Silverstone Group), on an annual basis, the Board has reviewed the impact of the actuarial assumptions and the plan's financial profile.
- F) Legislative Changes: The Board recommended various technical changes to the governing statute (Chapter 411) for consideration by the 2002 General Assembly. Upon adoption, the System implemented the changes as established.
- VEBA Program: In 2001 the System renewed its efforts to establish a Voluntary Employee Beneficiary Association (VEBA) to allow the active membership to set aside funds for post-retirement health insurance expenses. As previously authorized by the General Assembly, the VEBA program will be administered as a separate trust from the Chapter 411 plan and is not eligible under the statute for employer funding. After extensive effort, the Board's request for a favorable ruling from the Internal Revenue Service was approved in the spring of 2003. The System has undertaken a program to inform each active member concerning the VEBA and its advantages and to establish the necessary participation level.
- H) Escalator Program Report: The Board of Trustees has periodically examined the financial impact of the current escalator program, which provides an annual cost of living increase for the majority of the retired membership. Consisting of a two-part formula, the escalator provides an acceptable level of increase. The average increase for July 2003 was \$53.77 (3%).
- I) Legislative Package for 2004: The Board of Trustees has reviewed various provisions of the governing statute and has adopted a legislative package for consideration by the 2004 Iowa General Assembly. [Contained within Section V]
- J) Federal Legislative Interest in Public Funds: The System has continued to monitor and comment upon the potential actions of Congress pertaining to pension plans, in particular, regarding security law, corporate governance, tax law changes, and potential investment directives.
- K) Litigation: The System has continued to represent the requirements of the plan document (Chapter 411) and applicable federal requirements before the Iowa Supreme and District Courts.

III. PROGRAM DESCRIPTION & STATUS

A. Membership Profile

The membership profile of the retirement system is outlined in the following Table.

Summary of System Members	July 1	July 1	
	2002	2003	
Active Members			
Number	3,805	3,825	
Average Attained Age	39.8	39.8	
Average Past Service	13.2	13.1	
Total Annual Compensation	\$173,140,899	\$180,390,246	
Average Annual Compensation	\$45,504	\$47,161	
Non-Active Members in Pay Status			
Number	3,248	3,329	
Average Age (excluding children)	67.0	67.1	
Total Annual Benefits	\$68,407,755		
Average Annual Benefit	\$21,062	\$73,916,556 \$22,204	
Non-Active Members with Deferred Benefits			
Number*	244	253	
Average Age	45.2	45.1	
Total Annual Benefits	\$3,242,136		
Average Annual Benefit	\$13,287	\$3,361,260 \$13,286	

^{*} Excludes 90 and 86 terminated non-vested members who have not yet received a refund of contributions for 2002 and 2003.

- Silverstone Group Consulting Actuary: July 1, 2003 Actuarial Valuation -

III. PROGRAM DESCRIPTION & STATUS (Continued)

B. Benefit Program Description

A Chapter 411 benefit plan description is available from the System - MFPRSI Member Benefit Handbook. The retirement formulas established by Iowa Code 411.6, effective July 1, 2000 are as follows:

-	Basic Service Retirement Formula (22 years of service):	66%	
-	Additional Credit (for up to 8 years beyond 22 years – 2% per year):	16%	
	Maximum retirement formula with 30 or more years of service:	82%	6
-	Basic Accidental Disability Retirement Formula (work-related)*:	60%	
-	Basic Ordinary Disability Retirement Formula*:	50%	

^{*} An individual retiring on disability is entitled to either the disability formula or the percentage payable corresponding to the number of years of service that the individual has earned under the service retirement.

C. Member Cities

The members of the retirement System are current and former police and fire personnel of forty-nine cities.

Employers Co	vered by MFPR.	SI .					
Ames Cedar Rapids Decorah Ft. Madison Marion Pella* West Des Moines	Ankeny Centerville Des Moines Grinnell Marshalltown Sioux City	Bettendorf Charles City DeWitt* Indianola* Mason City Spencer	Boone Clinton Dubuque Iowa City Muscatine Storm Lake denotes police	Burlington Clive* Estherville* Keokuk Newton Urbandale department on	Camanche Council Bluffs Evansdale* Knoxville Oelwein Waterloo	Carroll* Creston Fairfield LeMars* Oskaloosa Waverly	Cedar Falls Davenport Ft. Dodge Maquoketa* Ottumwa Webster City

III. PROGRAM DESCRIPTION AND STATUS (Continued)

D. Benefit Activity Since Creation of the System

The following Table compares the level of benefit activity (retirements & refunds only) since the creation of the System in 1992 to the level of activity in the 87 local systems. Actual activities of the retirement System have been substantially higher due to statutory and judicially established requirements.

Comparison of Benefit Activity		Experience Prior To Consolidation (Jan. 1987 – December 1991 – 5 yrs.)		Experience Since Consolidation (Jan. 1992 – June 2003 – 11.5 yrs.)		
		#	Avg. Per Yr.	#	Avg. Per Year	
1.	Service Retirements	223	44.6	761	66.17	
2.	Disability Retirements(*)	278	55.6	508	44.17	
3.	Refunds Paid	0	0	606	52.69	
	Totals:	501	100.1	1875	163.04	
(*) D	istribution of Disability Retirements					
	a) Accidental Disability (service)	238	47.6	419	36.43	
	b) Ordinary Disability (non-service)	<u>_40</u>	<u>_8.0</u>	_89	7.73	
	Totals:	278	55.6	508	44.17	

Exhibit I (following page) provides a breakdown of the System's total benefit activities. Exhibit II (subsequent page) provides the disability retirement statistics for the plan.

NOTE: A review of the disability rate experienced under MFPRSI versus the rate experienced at the eighty-seven local systems indicates that the Chapter 411 benefit plan has experienced an important reduction in the annual rate of disabilities. The average of 11.4 fewer disabilities per year multiplied by 11.5 years has lead to 131 fewer disabilities. The plans liability costs have been favorably impacted by the lower rate of disability (by over \$13 million to date).

EXHIBIT I

MEMBERSHIP ACTIVITY

Fiscal Years

	FI	scai x ears			
ТҮРЕ	5 Fys 92-96	5 Fys 97-01	Fy 02	Fy 03	TOTAL
MEMBERS					
Service Retirements	323	292	79	67	761
Disability Retirements				•	,01
Accidental	143	201	39	36	419
Ordinary	30	40	13	6	89
Denied	21	19	3	2	45
Vested into Pay Status	33	44	12	12	101
BENEFICIARIES					
Service Retirements	104	126	32	25	287
Disability Retirements:					20.
Accidental	59	60	17	21	157
Ordinary	13	16	2	3	34
Vested into Pay Status	9	14	3	2	28
Accidental Death	9	9	0	1	19
Ordinary Death	9	6	3	2	20
Dependents	36	34	1	9	80
SUBTOTAL	789	861	204	186	2040
Marital Property Orders					325
Child Support Orders					41
IRS Levys					11
Disability Re-examinations *	17	25	9	4	55
Refunds	212	294	51	49	606
TOTAL ACTIVITY	1018	1180	264	239	3078

[*Six individuals returned to work]

EXHIBIT II

MEMBERSHIP ACTIVITY - DISABILITIES

01/01/92 - 06/2003	5 Fys 92-96	5 Fys 97-01	Fy 02	Fy 03	TOTAL	
Disability Retirements:						
Accidental	143	201	39	36	419	
Ordinary	30	40	13	6	89	•
Denied	21	19	3	2	45	
Re-examination	14	25	9	0	48	
Return to Work	3	3	0	0	6	
TOTALS	211	288	64	44	607	
Accidental Disability						
Ortho/ Non-Back	39	56	18	15	128	
Back	33	69	5	8	115	
Heart	44	53	11	10	118	
Lung	17	17	2	1	37	
Depression/PTSD/Stress	8	5	3	2	18	
Cancer (Non-Lung)	0	0	0	0	0	
Other	2	1	0	0	3	
Total	143	201	39	36	419	
Ordinary Disability						
Ortho/ Non-Back	3	8	3	2	16	
Back	2	1	2	1	6	
Heart	0	0	0	0	0	
Lung	0	0	0	0	0	
Cancer (Non-Lung)	2	0	0	0	2	
Depression/PTSD/Stress	18	14	1	2	35	
Other	5 _	17	7	1	30	
Total	30	40	13	6	89	

III. PROGRAM DESCRIPTION & STATUS (Continued)

E. Assets and Investments

The transfer liability from the cities to the retirement System at the initial transition date of January 1, 1992 was \$574.5 million.

This dollar amount constituted the beginning asset value of the retirement System. Each of the 49 cities were required to transfer assets to meet the liabilities as of that date or to pledge future assets to meet the un-funded portion. The cities were granted a statutory right to amortize any un-funded portion of the liability. Four cities took advantage of this opportunity, each of which completed payment of the amortized liability prior to June 30, 1997.

As of June 30, 2003 the market value of the System's assets has increased to \$1,137,102,633 an appreciation of \$562.6 million.

Cumulative performance of the System's portfolio since inception of the fund on January 2, 1992 through the most recent fiscal year (June 30, 2003) has been as follows:

-	Cumulative	Actuarial Projected Rate 229.72%	Portfolio 229.38%
Investment perfor	mance for the plan over	r various periods, has been as follows:	
-	One-year period end		4.5%
-	Three-year period (annualized)	(1.4%)
-	Five-year period (an	nualized)	2.9%
-	Since inception (ann	ualized)	7.5%

The retirement System's asset allocation policy as established by the Board of Trustees is provided on the following page.

NOTE: In response to the System's request, an overview of historical investment performance has been prepared by the System's investment consultant, Wilshire Associates (see Addendum to this document). The overview describes the equity risk premium obtained over time from investing in the equity (stock) market.

MFPRSI INVESTMENT POLICY (2003)

ASSET ALLOCATION POLICY*	Target Allocations
US Equity	30.0%
International Equity	20.0%
Real Estate	10.0%
Alternative Equity	10.0%
Total Equity Oriented Investments	70.00%
US Fixed Income	25.0%
High Yield Bonds	5.00%
Cash	
Total Debt Oriented Investments	_0.0%
rotal Debt Offented Investments	30.00%
lan Investment Performance Expectation*: 8.00%	Risk (Standard Deviation) Expectation*: 11.52%

POLICY DETAIL - COMPONENTS OF PORTFOLIO US Equity Target International Equity Real Estate Alternative Equity Component Equity Targets	Core (40%) 37.50% 25.00%	Alternative (20%) 50.00% 50.00% 100.00%	Strategic (40%) 37.50% 25.00%	
US Fixed Income High Yield Bonds Cash Component Debt Targets	31.25% 6.25% _0.00% 37.50%	0.00%	31.25% 6.25% _0.00% 37.50%	

^{[*} Allocation, performance expectations and risk projection based upon Wilshire Associates January 2002 assumptions.]

IV. ISSUES FACING THE RETIREMENT SYSTEM

A. LOWER INVESTMENT RETURN EXPECTATIONS

- In 2001 2002 the Board of Trustees conducted a review of the asset-liability profile for the plan including consideration of a revised asset allocation policy based upon reduced long-term expectations for the equity and debt markets. As a result thereof, the plan's equity allocation target was increased to 70.0%. This policy revision was developed in conjunction with the System's investment consultant (Wilshire Associates). Assumptions utilized by the investment consultant project lower annual returns for the capital markets (equity 8.75% and debt 5.50%), over the next ten years. The revised allocation policy has a return expectation of 8.0%.
- 2) Such levels of return will make it more difficult to surpass the actuarial interest rate assumption of 7.5%.

B. FINANCIAL STATUS OF THE PLAN

- 1) The substantive decline in the equity markets beginning in March 2000 and continuing through the first quarter 2003 has lead to a decline in the funding status of the plan.
- The combination of the funding status and the lower expected returns has caused an increase in the actuarially determined contribution requirement for future years. In accordance with the governing statute, the contribution rate for the cities has been increased to meet the actuarial determined requirement.

C. FINANCIAL SUPPORT FOR THE SYSTEM

The System continues to request restoration of the full State funding for the benefits committed to in 1977, a change from the fixed dollar amount of \$2.8 million to a rate of 3.79% of earnable compensation. Additionally, payment by the State of the amount absorbed by the plan for fiscal years 1993 – 2003 would restore over \$20 million to the assets of the plan.

IV. ISSUES FACING THE RETIREMENT SYSTEM (continued)

D. VETERAN'S REEMPLOYMENT RIGHTS

Active members of the retirement System have been called to active military duty as a result of the terrorist attacks of September 11, 2001. A federal law, the Uniformed Services Employment and Reemployment Rights Act of 1994 ("USERRA"), protects the reemployment rights of these individuals. Under USERRA and Iowa Code Chapter 411 the following requirements exist:

- a) The member shall be restored to their prior position with full pay and benefits, adjusted as if they had not been called to active duty.
- b) The member shall be granted membership service credit by the System for the period of military service.
- c) Contributions shall be made by the employer to the retirement plan upon the return of the member to employment for the period of military service. The contributions shall be made without interest/earnings.
- d) The member is exempt from making the member's contributions to the retirement plan for the period of military service.

Therefore, the retirement System is experiencing an additional cost for each of the returning members. Currently, ninety-seven (97) members of the System have been called to active duty. It is estimated that the cost to the System may range up to \$500,000 in lost contributions and earnings for these individuals. Final determination of the financial cost to the System must await the individuals' return to their positions with the local police and fire departments.

E. IMPLEMENTATION OF PROGRAMS

As noted previously, the System has a number of program initiatives underway, each of which will require significant efforts over the next twelve to twenty-four months:

- a) Refinement of the requirements of the new medical protocols and of the implementation of the new medical examination network.
- b) Implementation and administration of the VEBA via enrollment of active membership. Final establishment of the VEBA is subject to enrollment of a minimum number of participants.
- c) Completion of implementation of the revised Asset Allocation Policy and establishment of over-sight program to monitor and evaluate the activities of the investment firms and the portfolios.
- d) Implementation of legislative changes if adopted by the 2004 General Assembly.

V. RECOMMENDATIONS FOR STATUTORY CHANGES MFPRSI (CHAPTER 411)

The MFPRSI Board of Trustees respectfully submits several legislative proposals for consideration by the General Assembly, as described on Exhibit III.

MFPRSI Future Statutory Changes (2004)

AS ADOPTED BY THE MFPRSI BOARD OF TRUSTEES JUNE 26, 2003

1. Post-Disability Retirement Re-examinations Frequency Code Section 411.6(7)

Current Statutory Provision: "Once each year during the first five years following retirement of a member on a disability retirement and once in every three year period thereafter, the system may and upon the member's application shall, require any disability beneficiary who has not yet attained the age fifty-five to undergo a medical examination at a place designated by the medical board."

Proposed Revision: Eliminate references to five and three years, which do not reflect the process used to re-exam individuals.

2. Actuarial Liability Calculation Transfers With POR Code Section 411.31 Optional transfers with chapter 97A.

Current Statutory Provision: Current statutory language provides for the calculation of the transfer liability between the two systems to be based upon the following definition: a. "Average accrued benefit" means the average of the amounts representing the present value of the accrued benefit earned by the member determined by the former system and the present value of the accrued benefit earned by the member determined by the current system. A problem exists in that the refund liability for the individual may be greater than the liability calculated under the above definition.

Proposed Revision: Revise the language to provide that the liability should be determined using the greater of the average accrued liability or the refund liability.

3. Interest Rate - Subrogation

Code Section § 411.22

Current Statutory Provision: Provides that the present value of the member's future benefit for purposes of determining the amount of the System's lien is to be computed using the judgment interest rate. b. A sum sufficient to pay the retirement system the present worth, computed at the interest rate provided in section 535.3 for court judgments and decrees, of the future payments of such benefits, for which the retirement system is liable, but the sum is not a final adjudication of the future payments which the member is entitled to receive. and (2) The present worth, computed at the interest rate provided in section 535.3 for court judgments and decrees, of the future payments of such benefits, for which the retirement system is liable, but the sum is not a final adjudication of the future payments which the member is entitled to receive. (Two statutes reference the rate.)

Proposed Revision: Replace the reference to the judgment interest rate with a reference to the System's interest rate assumption.

4. Federal (IRC) Rollover Requirements

Code Section § 411.6(B)

Current Statutory Provision: Provides for rollovers, but under prior IRC provisions. The rollover provisions of the Internal Revenue Code were liberalized, and a technical amendment to the System's rollover provisions is required for conformity. The main change that affects the System is that after-tax (non-taxable) amounts may now be rolled over, as long as the receiving plan or IRA agrees to accept them.

Proposed Revision: Amend chapter 411 to conform with applicable IRC provisions.

5. Limitation on Charges for Medical Records

Code Section § 411.5 (?) (new provision)

Current Statutory Provision: None. Workers comp has the authority to limit, by rule, the amount medical providers may charge per page for copies of medical records. This issue is not addressed under chapter 411.

Proposed Revision: Amend chapter 411 to give the Board of Trustees authority to impose such a limit by rule.

6. Payments to Incarcerated Individuals

Code Section § 411.6(17)

Current Statutory Provision: In 2000, the General Assembly enacted legislation, which included recommendations from the Board of Trustees concerning the payment of benefits to convicted felons who are incarcerated. Upon review of the current provisions of the statute, the language only provides for suspension of payment if both of the following conditions exist:

- 1. The individual is confined to a jail, prison or corrections facility pursuant to conviction of a felony.
- and 2. The individual has a spouse, or a child or children, as defined in section 411.1.

The payment would then be directed to the spouse or dependent child or children.

Proposed Revision: Amend chapter 411 to provide that the payment is suspended to the member if convicted of a felony and incarcerated, regardless if married or whether they have a dependent child or children. Additionally, if the member has a spouse or dependent child or children, the payment will be directed to them while the incarceration continues.

EXHIBIT III (continued)

7. Earnings Test Reporting Requirement Code Section 411.6(7)(a)

Current Statutory Provision: "A beneficiary retired under this paragraph, in order to be eligible for continued receipt of retirement benefits, shall no later than May 15 of each year submit to the system a copy of the beneficiaries' federal individual income tax return for the preceding year.

Proposed Revision: Amend § 411.6(7) to clarify that, in addition to the complete tax return, the member must submit any information deemed necessary by the System to determine gross wages. (This information is not always apparent from the tax return if the individual has certain pre-tax items, such as contributions to a cafeteria plan.)

VI. ACTUARIAL REPORT

ACTUARIAL INFORMATION

The following information describes the actuarial status of the retirement plans as of <u>June 30, 2003</u> as reported by the actuary for the System (Silverstone Group) and adopted by the Board of Trustees.

1) Actuarial Method "Aggregate Cost Method" Amortizes costs as a level percentage of pay over remaining careers of current members. Does not separately calculate an actuarial accrued liability.

Contribution Rate Formula =

Present Value of Projected Benefits

less

Divided by

Actuarial Value of Assets

Present Value

less

of Future Pay

Present Value of Future Member Contributions

- 2) Contribution Rate Requirement (for July 1, 2003) will be implemented effective July 1, 2004.
 - Estimated Earnable Compensation

\$180,390,246

- Estimated State's Contribution (\$)

\$2,816,189

- Estimated State's Contribution (%) (1977 benefit legislation)

1.56%

- Member's Contribution Rate (fixed by statute)

9.35%

- Actuarial Calculated Rate for Cities

24.92%

In accordance with Iowa Code Chapter 411.8, the cities' contribution rate is established annually, following the completion of the actuarial valuation, at the level required to fund the plan. The statute specifies that the cities' contribution rate shall not be below 17%.

VI. ACTUARIAL REPORT (continued)

ACTUARIAL INFORMATION (continued)

- 4) Valuations of Assets and Liabilities (as of July 1, 2003)
 - Market Value of Total Assets:

\$1,137,102,633

- Actuarial Value of Assets:

\$1,255,190,585

(System utilizes four year rolling average to value assets for actuarial calculation.)

- Present Value of all accrued benefits:

\$1,429,109,638

- Interest Rate Assumptions:

7.5%

- 5) Funded Status (As of July 1, 2003)
 - Funded percentage based on the present value of accrued plan benefits and the market value of assets is: 80.0%

Exhibit IV (following page) Provides a review of "Actuarial Valuation Highlights" for the last six-year period.

Exhibit V (subsequent pages) Provides the actuary's calculation of the "Retirement System Liabilities & Contributions".

Exhibit VI (subsequent pages) Provides the actuary's calculation of the "Actuarial Present Value of Accrued Benefits".

MUNICIPAL FIRE AND POLICE RETIREMENT SYSTEM OF IOWA ACTUARIAL VALUATION HIGHLIGHTS

			Valuation a	as of July 1		
	1998	1999	2000	2001	2002	2003
Funded Status - ratio of market value of assets to present value of accrued benefits	106%	107%	105%	91%	82%	80%
Asset Return • Market Value • Actuarial Value	11.0% 12.9%	9.8% 12.3%	9.1% 10.9%	(5.7%) 5.9%	(2.8%) 2.1%	5.2% 0.8%
Benefit Improvement	After 30 years 64.8% to 72%		After 22 years 60% to 66% After 30 years 72% to 82%		_	
Assumption Changes		Mortality, Salary, Retirement	Mortality Increment	Mortality Increment	_	_
Annual Contribution - as a percentage of participating payroll						
Members State Cities - minimum of 17%	9.35% 2.00 13.60	9.35% 1.93 11.12	9.35% 1.79 15.36	9.35% 1.77 16.74	9.35% 1.63 20.48	9.35% 1.56 24.92
Increment in Annual Contribution - increase(decrease) attributed to experience, benefit improvements and valuation assumptions						
 Experience Asset Return Actuarial Factors State Contribution 	(2.82)% (.08) .08	(2.16%) (.10) .14	1.12% (.30) .02	3.76 (.16) .14	4.49 (.12) .07	<u></u>
Benefit Improvement	_	5.85	_	_	_	
Assumption Changes	.34	.51	.54	_	-	_
Total Net Change	(2.48)%	4.24%	1.38%	3.74%	4.44%	

EXHIBIT V

ACTUARIAL VALUATION RESULTS: Retirement System Liabilities and Contributions

Present Value of Un-funded Future Benefits	July 1, 2002	July 1, 2003
1. Actuarial Present Value of all Future Benefits		
a. Active members		
Service retirements	\$ 651,318,328	\$ 669,442,382
Ordinary disability	77,063,255	80,045,258
Accidental disability	206,065,306	214,179,002
Ordinary death	23,961,003	24,885,118
Accidental death	26,253,995	27,205,142
Withdrawal	20,807,513	21,686,666
Total Active	1,005,469,400	1,037,443,568
b. Inactive members		
Members receiving benefits	808,135,182	865,994,214
Deferred vested terminations	21,953,039	22,553,192
Refund of member contributions due	259,328	293,761
Total Inactive	830,347,549	888,841,167
c. Total Present Value of Future Benefits	1,835,816,949	1,926,284,735
2. Actuarial Value of Plan Assets	1,269,716,305	1,255,190,585
3. Actuarial Present Value of Future		
Member Contributions	168,232,608	175,131,086
4. Present Value of Un-funded Future Benefits		
(1) - (2) - (3)	397,868,036	495,963,064

EXHIBIT V (continued)

	July 1, 2002	<u>July 1, 2003</u>				
Determination of Preliminary Total Contribution						
5. Present value of future payroll of all covered members	1,799,279,225	1,873,059,739				
6. Total (Cities plus State) normal contribution $(4) \div (5)$	22.11%	26.48%				
7. Covered payroll	173,140,899	180,390,246				
8. Preliminary total contribution from Cities	· · ·	, ,				
and State (6) x (7)	38,281,453	47,767,337				
Determination of Cities' Contribution						
9. Estimated State Contribution	2,816,189	2,816,189				
10. Estimated State Contribution as a percent of payroll		• •				
$(9) \div (7)$	1.63%	1.56%				
11. Preliminary Cities' Contribution (8) – (9)	35,465,264	44,951,148				
12. Cities' contribution as a percent of payroll $(11) \div (7)$	20.48%	24.92%				
13. Minimum required contribution rate for Cities	17.00%	17.00%				
14. Cities' contribution (Greater of 12 or 13) x (7)	\$35,459,256	\$44,953,249				

EXHIBIT VI

ACTUARIAL VALUATION RESULTS: Actuarial Present Value of Accrued Benefits

	Present value of vested accrued benefits		As of July 1		
1.			2002	2003	
	a.	Present value of vested accrued benefits for active members	\$453,199,413	\$481,190,804	
	b.	Present value of benefits for terminated members	22,212,367	22,846,953	
	c.	Present value of benefits being paid to retirees and beneficiaries	808,135,182	865,994,214	
		Total	\$1,283,546,962	\$1,370,031,971	
2.	Pre	esent value of accrued non-vested benefits	70,906,269	59,077,667	
3.	Present value of all accrued benefits (1) + (2)		\$1,354,453,231	\$1,429,109,638	
4.	Ma	rket value of assets	\$1,104,502,423	\$1,137,102,633	
5.	Ratio of market value of assets to the present value of all accrued benefits (4) ÷ (3) 82% 80%				
6.	Rat	tio of market value of assets to the present value of assets $(4) \div (1)$	alue 86%	83%	

Municipal Fire & Police Retirement System of Iowa US Equity Risk Premium - Historical Perspectives

September, 2003



Conclusions

Definitions

- > The US equity risk premium is defined as the difference by which US stocks outperform US bonds
- > For purposes of this analysis, the risk premium is measured as the excess return of the S&P 500 Index over the Lehman Aggregate Bond Index
- > The time period measured in this analysis is the 77-year period from June 1926 through June 2003

Observations

- > The US equity risk premium was positive approximately two-thirds of the time
 - □ there were 49 years with a positive risk premium (64% of the time)
 - □ there were 25 three-year periods; 17 resulted in a positive risk premium (68% of the time)
 - □ there were 15 five-year periods; 10 resulted in a positive risk premium (67% of the time)



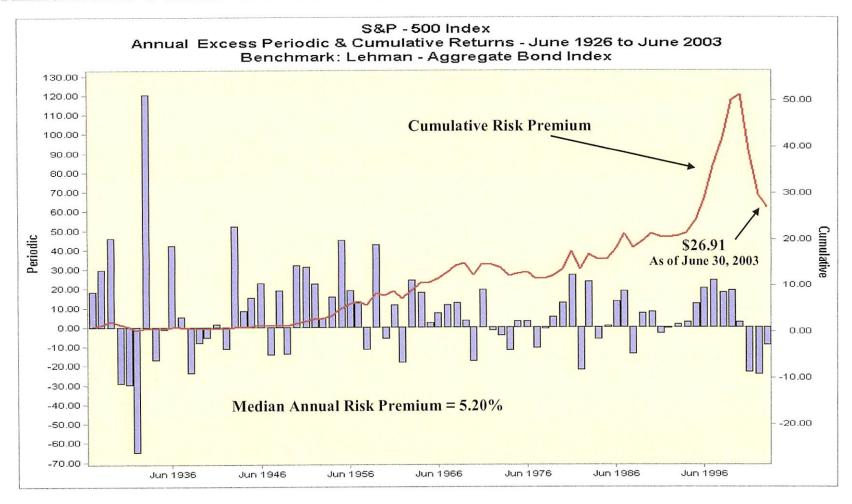
Conclusions

Observations (continued)

- > The median annual risk premium was 5.20%
- > The growth of \$1.00 in the S&P 500 was 26.91 times greater than the growth of \$1.00 in the Lehman Aggregate

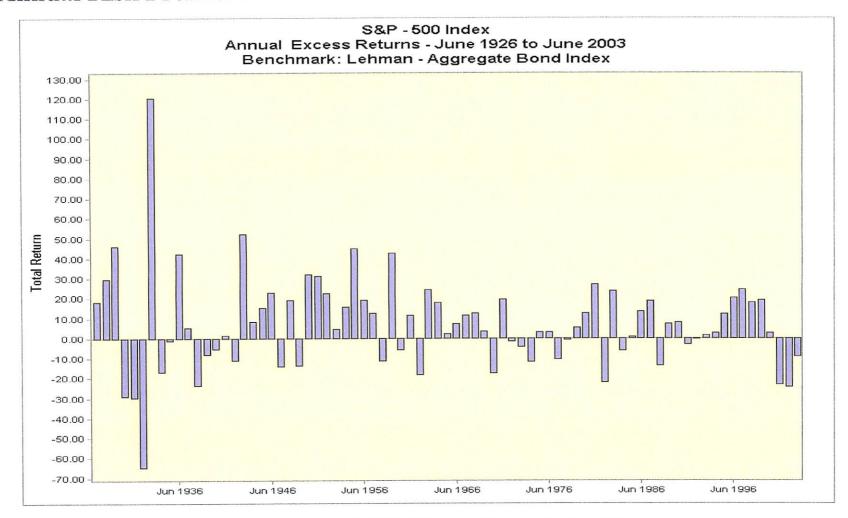


Annual and Cumulative Risk Premium



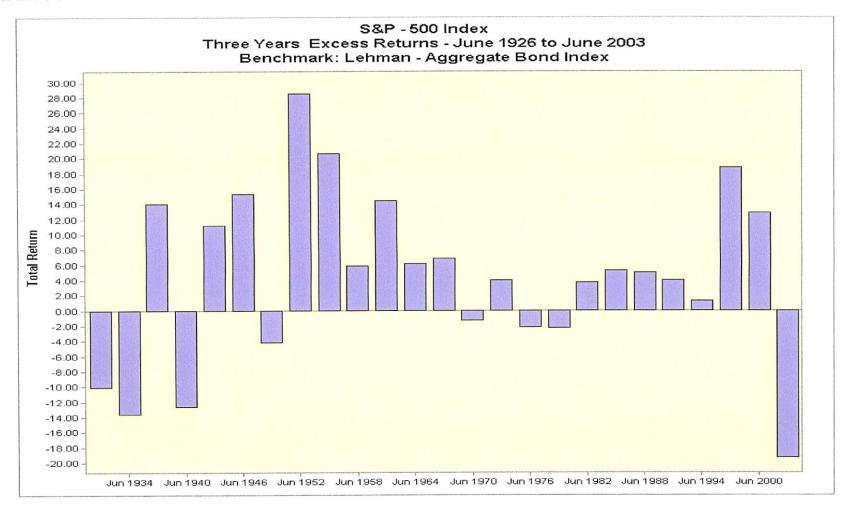


Annual Risk Premium





Three-Year Risk Premium





Five-Year Risk Premium

