

**The Municipal Fire & Police Retirement System of Iowa**

**Report To**

**The Public Retirement Systems Committee**

**November 3, 2005**

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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 retirement 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**           Recommendations for statutory change as proposed by the MFPRSI Board of Trustees.
- 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
  - Tom Ryan, retired fire fighter, Davenport
  - Judy Bradshaw, active police officer, Des Moines
  - June Anne Gaeta, active fire fighter, Muscatine
  
- Four city representatives, representing the participating cities
  - Jody E. Smith, West Des Moines
  - Allen McKinley, Des Moines
  - Duane Pitcher, Ames
  - Cindy Kendall, Marshalltown
  
- A private citizen
  - Mary Bilden, Boone (CPA)
  
- Two Senators from the Iowa Senate and two Representatives from the Iowa House.
  - Senator Ron Wieck, Sioux City
  - Representative Paul Bell, Newton
  - Senator Wally Horn, Cedar Rapids
  - 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 Assessment and Reporting of Benefit Liabilities (Actuarial Valuation)***

**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 in response to investment market changes and benefit plan modifications. The plan remains in a stronger financial position than the preceding plans.

***GOAL IV. Improve the Performance on Portfolio Assets***

**Result:** Established a comprehensive investment program and systematically review its activities. Performance has exceeded the actuarial assumed growth rate since inception.

***GOAL V. Develop Statutory Recommendations***

**Result:** Various recommendations have been proposed to and adopted by the legislature, including:  
a) Technical changes, b) IRS Qualification, c) Escalator Program revision, d) VEBA concept, e) Disability Program Improvements.

## **II. ACTIVITIES OF THE SYSTEM**

The pension plan established by Iowa Code Chapter 411 involves the following activities on an ongoing basis: the collection of member and employer contributions, pre-retirement and refund counseling, disability program execution, delivery of monthly benefit payments, and compliance with federal and state legal requirements.

In addition to the aforementioned activities, the System has 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 implemented each of the requirements established by the statutory changes. Effective July 1, 2003, the System established the following: 1) revised entrance medical examination protocols for the position of police officer and fire fighter, 2) a wellness program guideline for possible usage by the cities and the membership, and 3) a state-wide network of sites for the conduct of the pre-employment medical examinations.
- B. *Investment Policy Revision:*** The Board of Trustees has regularly examined the long-term asset-liability forecast for the System, in consultation with the System's investment consultant and actuary. The most recent review occurred in 2004, which led to revisions to the investment allocation policy of the System.
- C. *Investment Policy Implementation:*** Annually, the Board determines changes required to the individual portfolio components and directs the implementation of the changes through competitive bids (RFPs) to select additional or replacement investment managers, thereby, further diversifying the investment program.

## **II. ACTIVITIES OF THE SYSTEM (continued)**

- D. *Review of System's Goals:*** The Board of Trustees in 2002 completed a re-examination of the Mission Statement and Goals it had previously established for the System and adopted a revised statement. At each of its meetings, the Board reviews the progress made toward accomplishment of the individual goals.
- E. *Study of Actuarial Assumptions:*** In consultation with the System's actuary (Silverstone Group) the Board has annually reviewed the impact of the actuarial assumptions and the plan's financial profile.
- F. *Legislative Changes:*** The Board has periodically recommended various technical changes to the governing statute (Chapter 411) for consideration by the General Assembly. Upon adoption, the System has implemented each of the changes.
- G. *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 monthly increase effective in July 2005 was \$57.02 (2.8%).
- H. *Legislative Package for 2006:*** The Board of Trustees has reviewed various provisions of the governing statute and has adopted a legislative package for consideration by the 2006 Iowa General Assembly. [Contained within Section V]
- I. *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.

## **II. ACTIVITIES OF THE SYSTEM (continued)**

- J. *Litigation:*** The System has continued to represent the requirements of the plan document (Chapter 411) and applicable federal requirements before the Iowa Supreme Court and District Courts.
  
- K. *Benefit/Contribution Analysis:*** In response to legislative inquiries and requests from the membership associations and the Iowa League of Cities, the System has prepared and submitted reports on the financial impact of various benefit and contribution concepts. Beginning in 2004, the Board began evaluating the concept of a *Deferred Retirement Option Program (Drop)* in response to a request from the member associations and a member of the Iowa Senate.



### III. PROGRAM DESCRIPTION & STATUS

#### A. Membership Profile

The membership profile of the retirement system is outlined in the following Table (Silverstone Group - Actuary).

<b>MEMBERSHIP PROFILE</b>	
<b>(July 1, 2005 Actuarial Report)</b>	
<b>Active Members:</b>	
Number	3786
Average Age	40.2
Average Past Service	13.3
Annual Participating Payroll: Total	\$196,143,062
Annual Participating Payroll: Ave.	\$51,807
<b>Non-Active Members With Deferred Benefits:</b>	
Number	276
Average Age	45.3
Total Annual Benefits	\$3,913,560
Annual Participating Payroll: Ave.	\$14,180
<b>Members &amp; Beneficiaries in Pay Status:</b>	
Number	3461
Average Age	67.6
Annual Benefit: Total	\$84,850,440
Annual Benefit: Average	\$24,516

**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%
- 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.

**C. Member Cities**

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

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

\* denotes police department only

### III. PROGRAM DESCRIPTION AND STATUS (Continued)

#### D. Benefit Activity Since Creation of the System

The following Table compares the level of benefit activity (service and disability 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 2005 – 13.5 yrs.)	
		#	Avg. Per Year	#	Avg. Per Year
1.	Service Retirements	223	44.6	923	68.37
2.	Disability Retirements(*)	278	55.6	586	43.41
3.	Refunds Paid	<u>0</u>	<u>0</u>	<u>802</u>	<u>59.41</u>
	Totals:	501	100.2	2311	171.19
Distribution of Disability Retirements					
	a) Accidental Disability (service)	238	47.6	483	35.78
	b) Ordinary Disability (non-service)	<u>40</u>	<u>8.0</u>	<u>103</u>	<u>7.63</u>
	Totals:	278	55.6	586	43.41

Exhibit I provides a breakdown of the System's total benefit activities (following page).

Exhibit II provides the disability retirement statistics for the plan (subsequent page).

[NOTE: A review of the disability rate experienced under MFPRSI versus the rate experienced at the 87 local systems shows that the Chapter 411 benefit plan has experienced an important reduction in the rate of disabilities. MFPRSI has experienced an average of 12 fewer disabilities per year in comparison to the experience at the local systems, a total of 162 fewer disabilities. The plan's liability costs have been favorably impacted by this lower rate of disability.]

**EXHIBIT I**

**MEMBERSHIP ACTIVITY**

	TYPE	Fiscal	92-94	95-97	98-00	01-03	2004	2005	Total
MEMBERS	Service Ret.		140	238	152	253	77	63	923
	Disability Ret.								
	Accid.		72	114	107	126	36	28	483
	Ordinary		11	29	23	26	7	7	103
	Denied		10	18	11	6	1	5	51
	Vested Into Pay Status		19	23	26	41	16	11	136
BENEFICIARY	Service Ret.		50	76	81	75	31	37	350
	Disability Ret.								
	Accid.		43	29	44	44	15	10	185
	Ordinary		8	9	7	10	1	1	36
	Vested Into Pay Status		5	6	7	10	4	3	35
	Accidental Death		3	4	6	3	2	0	18
	Ordinary Death		4	5	7	4	1	1	22
	Dependents		29	14	21	19	14	4	101
	Lump Sum		2	2	2	4	4	1	15
	Subtotal			396	567	494	621	209	171
OTHER	Marital Property Orders								385
	Child Support Ord.								48
	IRS Levies								14
	Disability Re-examinations*		7	15	17	16	2	2	59
	Refunds		108	149	204	180	66	95	802
TOTAL ACTIVITY			511	731	715	817	277	268	3766

\*[Eight individuals returned to work]

**EXHIBIT II**

**MEMBERSHIP ACTIVITY – DISABILITIES**

Beginning 01/01/92	5 Fys 92-96	5 Fys 97-01	Fy 02	Fy 03	Fy 04	Fy 05	TOTAL
<b>Disability Retirements:</b>							
Accidental	143	201	39	36	36	28	483
Ordinary	30	40	13	7	6	7	103
Denied	21	19	3	2	1	5	51
Re-examination	14	25	9	4	11	6	69
Return to Work	3	3	0	0	1	1	8
<b>TOTALS</b>	<b>211</b>	<b>288</b>	<b>64</b>	<b>49</b>	<b>55</b>	<b>47</b>	<b>714</b>
<b>Accidental Disability</b>							
Ortho/ Non-Back	39	56	18	15	15	7	150
Back	33	69	5	8	6	8	129
Heart	44	53	11	10	11	8	137
Lung	17	17	2	1	1	2	40
Depression/PTSD/Stress	8	5	3	2	2	2	22
Cancer (Non-Lung)	0	0	0	0	0	0	0
Other	2	1	0	0	1	1	5
<b>Total</b>	<b>143</b>	<b>201</b>	<b>39</b>	<b>36</b>	<b>36</b>	<b>28</b>	<b>483</b>
<b>Ordinary Disability</b>							
Ortho/ Non-Back	3	8	3	3	1	4	22
Back	2	1	2	1	2	0	8
Heart	0	0	0	0	0	0	0
Lung	0	0	0	0	0	0	0
Cancer (Non-Lung)	2	0	0	0	0	1	3
Depression/PTSD/Stress	18	14	1	2	2	0	37
Other	5	17	7	1	1	2	33
<b>Total</b>	<b>30</b>	<b>40</b>	<b>13</b>	<b>7</b>	<b>6</b>	<b>7</b>	<b>103</b>

**III. PROGRAM DESCRIPTION & STATUS (Continued)**

**E. Assets and Investments**

The transfer liability from the local systems to the 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 transferred assets to meet the liabilities as of that date or pledged 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, 2005 the market value of the System's assets has increased to \$1,469.8 million, an appreciation of \$895 million. Investment performance of the System's portfolio since inception of the fund has been as follows:

January 2, 1992 – June 30, 2005 (Annualized)	<u>1 year</u>	<u>3 years</u>	<u>5 Years</u>	<u>Since Inception</u>
Total MFPRSI	12.3	11.6	5.0	8.6
Policy Index	11.0	10.6	3.5	8.0
Actuarial Assumption	7.5	7.5	7.5	7.5

The retirement System's asset allocation policy is provided on the following page. The assets of the System will be invested in a diversified manner which has as its performance objective a return of 8.00% with an annualized rate of inflation of 2.25% and a Standard Deviation of 10.40%. NOTE: An overview of historical investment performance has been prepared by the System's investment consultant, Summit Strategies (see Addendum to this document). The overview describes the equity risk premium obtained overtime from investing in the U.S. stock markets and the current assumptions for the capital markets.

**MFPRSI INVESTMENT POLICY (2005)**

<b>ASSET ALLOCATION POLICY*</b>		<b>Target Allocations</b>		
US Equity		30.0%		
International Equity		20.0%		
Real Estate		10.0%		
Alternative Equity		<u>10.0%</u>		
Total Equity Oriented Investments			70.00%	
US Fixed Income		12.0%		
Tactical Bonds		18.0%		
Cash		<u>0.0%</u>		
Total Debt Oriented Investments			30.00%	
<b>POLICY DETAIL – COMPONENTS</b>		<b>Core (40%)</b>	<b>Alternative (20%)</b>	<b>Strategic (40%)</b>
U.S. Equity Target		37.5%		37.5%
International Equity Target		25.0%		25.0%
Real Estate Target			50.0%	
Alternative Equity Target			<u>50.0%</u>	
Component Equity Target		<u>62.5%</u>	100.0%	<u>62.5%</u>
US Fixed Income Target		15.0%		
Tactical Fixed Income Target		22.5%		
Universal Fixed Income Target				37.5%
Cash Target		<u>0.0%</u>		<u>0.0%</u>
Component Debt Target		37.5%		37.5%

#### **IV. ISSUES FACING THE RETIREMENT SYSTEM**

##### **A. LOWER INVESTMENT RETURN EXPECTATIONS**

- 1) 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. Assumptions utilized by the investment consultant project lower annual returns for the capital markets over the next ten years. The revised allocation policy has an overall 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 lead to a decline in the funded status of the plan.
- 2) 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 \$2.7 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 – 2005 would restore over \$30 million to the assets of the plan.



#### ***IV. ISSUES FACING THE RETIREMENT SYSTEM (continued)***

##### **D. VETERAN'S REEMPLOYMENT RIGHTS**

Members of the retirement System have been called to active military duty. 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:

- 1) 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.
- 2) The member shall be granted membership service credit by the System for the period of military service.
- 3) 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.
- 4) 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. As of September 2005, 129 members have been called to active duty. It is estimated that the cost to the System will range in excess of \$500,000 in lost contributions and earnings. Final determination of the financial cost to the System must await their return to their positions with the local police and fire departments.

##### **E. IMPLEMENTATION OF PROGRAMS**

The System has a number of program initiatives underway:

- 1) Periodic review of the medical protocols and activities of the medical examination network.
- 2) Continued refinement and evaluation of the investment program, including management of the activities of the investment firms currently managing the System's investment portfolios.
- 3) Implementation of legislative changes if adopted by the 2006 General Assembly.
- 4) Development of legislative reports in response to Committee member requests, including finalization of a report on the concept of a Deferred Retirement Option Plan.

***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.**

**EXHIBIT III            “PROPOSED 2006 STATUTORY CHANGES”**

**ADOPTED BY THE BOARD OF TRUSTEES  
AUGUST 25, 2005**

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**1. Confidentiality of Investment Records & Information                      Code Section: 411.5 (6)**

**Current Statutory:** The Code provides for the release of information regarding the system’s programs.

**Proposed Revision:** Provide that the System be allowed to maintain as confidential certain investment records if the disclosure of such information could result in harm to the retirement system or to the provider of such information. Provide that the Board of Trustees may hold a closed session to discuss financial or commercial information if the release of such information could result in harm to the system or to the provider of such information.

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**2. Pre-Existing Condition: Clarify reference to knowledge      Code Section: 411.6 (5) (a),**

**Current Statutory Provision:** Precludes the member from receiving disability benefits due to a condition which was known to exist prior to the member’s entrance into the System.

**Proposed Revision:** Establishes that a medical condition is known to exist on the date the membership commenced if it is reflected in any record or document completed or obtained as a result of the system’s medical protocol (medical entrance exams) or in a document obtained during the disability application process.

**EXHIBIT III (CONTINUED)**

**3. Temporary Disability Payments**

**Code Section: 411.6 (5) (b)**

**Current Statutory Provision:** Provides for the continuation of full pay and allowances for a member who is temporarily disabled due to a work caused injury or illness, payable from the city's general fund.

**Proposed Revision:** Allows the city to make the payments from the city's trust and agency funds or the city's general fund.

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**4. Dependent Parents Reference**

**Code Section: 411.6 (8) (c) (3), 411.6 (9) (b) (1c), 411.6 (9) (b) (2c)**

**Current Statutory Provision:** Makes reference "to continue until remarriage or death" in cases of a dependent parent.

**Proposed Revision:** Eliminate references "until remarriage", remarriage of a dependent parent should not automatically disqualify the individual from receipt of benefits; the issue is one of maintenance of the dependent relationship.

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**5. Non-Vested Contribution Payments**

**Code Section: 411.23**

**Current Statutory Provision:** Provides for the refund of contributions upon termination of membership.

**Proposed Revision:** Authorize the System to automatically disperse such contributions for terminated, non-vested members who have been absent from active membership for 4 years or more, in accordance with the IRS Code.

## VI. ACTUARIAL REPORT

### ACTUARIAL INFORMATION

The following information describes the actuarial status of the retirement plan as of July 1, 2005 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. The method does not separately calculate an actuarial accrued liability.

*Contribution Rate Formula =*

*Present Value of Projected Benefits*

*less*

*Actuarial Value of Assets*

*less*

*Present Value of Future Member Contributions*

*Divided by*

*Present Value*

*of Future Pay*

- 2) Contribution Rate Requirement (for July 1, 2005) will be implemented effective July 1, 2006.

- Estimated Earnable Compensation	\$196,143,062
- Estimated State’s Contribution (\$)	\$2,745,784
- Estimated State’s Contribution (%) (1977 benefit legislation)	1.40%
- Member’s Contribution Rate (fixed by statute)	9.35%
- Actuarial Calculated Rate for Cities	27.75%

- 3) 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. Iowa Code Chapter 411 specifies the cities’ contribution rate shall not be below 17%.

**VI. ACTUARIAL REPORT (Continued)**

**4) Valuations of Assets and Liabilities (as of July 1, 2005)**

- Market Value of Total Assets:	\$1,469,753,955
- Actuarial Value of Assets: (System utilizes four year rolling average to value assets for actuarial calculation.)	\$1,367,204,133
- Present Value of all Accrued Benefits:	\$1,600,631,755
- Interest Rate Assumption:	7.5%

**Exhibit IV** Provides the actuary's calculation of the "Retirement System Liabilities & Contributions".

**Exhibit V** Provides the actuary's calculation of the "Actuarial Present Value of Accrued Benefits".

**Exhibit VI** Provides a summary of the actuarial experience of the plan over the last several years.

**EXHIBIT IV: RETIREMENT SYSTEM LIABILITIES AND CALCULATIONS**

**ACTUARIAL VALUATION RESULTS**

***Retirement System Liabilities and Contributions***

<i>Present Value of Unfunded Future Benefits</i>	<i>As of July 1</i>	
	<b>2004</b>	<b>2005</b>
<b>1. Actuarial Present Value of all Future Benefits</b>		
<b>a. Active members</b>		
Service retirements	\$ 695,060,636	\$ 736,832,043
Ordinary disability	82,703,060	86,651,389
Accidental disability	221,660,921	232,268,557
Ordinary death	25,613,982	26,713,958
Accidental death	28,005,752	29,182,928
Withdrawal	<u>22,230,232</u>	<u>23,175,175</u>
<b>Total Active</b>	<b>1,075,274,583</b>	<b>1,134,824,050</b>
<b>b. Inactive members</b>		
Members receiving benefits	926,945,896	979,915,572
Deferred vested terminations	23,212,009	27,190,301
Refund of member contributions due	<u>288,738</u>	<u>185,839</u>
<b>Total Inactive</b>	<b>950,446,643</b>	<b>1,007,291,712</b>
<b>c. Total Present Value of Future Benefits</b>	<b>2,025,721,226</b>	<b>2,142,115,762</b>

<i>Present Value of Unfunded Future Benefits</i>	As of July 1	
	2004	2005
2. Actuarial Value of Plan Assets	1,272,587,580	1,367,204,133
3. Actuarial Present Value of Future Member Contributions	180,436,807	188,171,508
4. Present Value of Unfunded Future Benefits (1) – (2) – (3)	572,696,839	586,740,121

*Determination of Preliminary Total Contribution*

5. Present value of future payroll of all covered members	1,929,805,420	2,012,529,498
6. Total (Cities plus State) normal contribution (4) ÷ (5)	29.68%	29.15%
7. Covered payroll	186,919,429	196,143,062
8. Preliminary total contribution from Cities and State (6) x (7)	55,477,687	57,175,703
9. Estimated State Contribution	2,745,784	2,745,784
10. Estimated State Contribution as a percent of payroll (9) ÷ (7)	1.47%	1.40%
11. Preliminary Cities' Contribution (8) – (9)	52,731,903	54,429,919
12. Cities' contribution as a percent of payroll (11) ÷ (7)	28.21%	27.75%
13. Minimum required contribution rate for Cities	17.00%	17.00%
14. Cities' contribution (Greater of 12 or 13) x (7)	\$52,729,971	\$54,429,700



**EXHIBIT V: PV OF ACCRUED BENEFITS (FUNDING RATIOS)**

*Actuarial Present Value of Accrued Benefits*

	As of July 1	
	2004	2005
1. Present value of vested accrued benefits		
a. Present value of vested accrued benefits for active members	\$ 514,456,886	\$ 555,199,096
b. Present value of benefits for terminated members	23,500,747	27,376,140
c. Present value of benefits being paid to retirees and beneficiaries	<u>926,945,896</u>	<u>979,915,572</u>
Total	\$1,464,903,529	\$1,562,490,808
2. Present value of accrued non-vested benefits	46,338,026	38,140,947
3. Present value of all accrued benefits (1) + (2)	\$1,511,241,555	\$1,600,631,755
4. Market value of assets	\$1,323,691,524	\$1,469,753,955
5. Ratio of <u>market value</u> of assets to the present value of <u>all accrued benefits</u> (4) ÷ (3)	88%	92%
6. Ratio of <u>market value</u> of assets to the present value of <u>vested accrued benefits</u> (4) ÷ (1)	90%	94%

**EXHIBIT VI**

**ACTUARIAL SUMMARY REPORT**

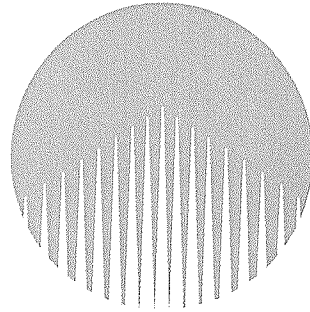
**ACTUARIAL VALUATION HIGHLIGHTS**

Valuation as of July 1 <sup>st</sup>	1999	2000	2001	2002	2003	2004	2005
Funded Status – ratio of market value of assets to present value of accrued benefits	107%	105%	91%	82%	80%	88%	92%
Asset Return · Market Value	9.80%	9.10%	-5.70%	2.80%	5.20%	18.50%	12.20%
Asset Return · Actuarial Value	12.3	10.9	5.9	-2.1	0.8	3.1	8.7
Benefit Improvement	—	After 22 years 60% to 66%		—	—	—	—
		After 30 years 72% to 82%					
Assumption Changes	Mortality Increment, Salary, Retirement	Mortality Increment	Mortality Increment	—	—	—	—
Annual Contribution – as a percentage							
Members Contribution	9.35%	9.35%	9.35%	9.35%	9.35%	9.35%	9.35%
State Contribution	1.93	1.79	1.77	1.63	1.56	1.47	1.40
Cities Actuarial Rate of Contribution	11.12	15.36	16.74	20.48	24.92	28.21	27.75
Total – Including Actuarial Rate for Cities	22.4	26.5	27.86	31.46	35.83	39.03	38.50
Total – Including 17% Minimum for Cities	28.28	28.14	28.12	31.46	35.83	39.03	38.50

Valuation as of July 1 <sup>st</sup>	1999	2000	2001	2002	2003	2004	2005
<b>Increment in Actuarial Rate for Cities –</b>							
<b>increase (decrease) attributed to experience, benefit</b>							
<b>improvements and assumption changes</b>							
<b>Experience</b>							
▯ <b>Asset Return</b>	-2.16%	1.12%	3.76%	4.49%	2.82%	-0.74%	n/a
▯ <b>Actuarial Factors</b>	-0.1	-0.3	-0.16	-0.12	0.38	-0.36%	n/a
▯ <b>State Contribution</b>	0.14	0.02	0.14	0.07	0.09	0.07%	n/a
<b>Benefit Improvements</b>	5.85	—	—	—	—	—	n/a
<b>Assumption Changes</b>	0.51	0.54	—	—	—	0.57%	n/a
<b>Net Change in Cities Actuarial Rate</b>	4.24%	1.38%	3.74%	4.44%	3.29%	-.46%	n/a

**ADDENDUM**

***US EQUITY RISK PREMIUM: HISTORICAL VS. PROSPECTIVE***



***Summit Strategies Group***

*7700 Bonhomme Avenue, Suite 300*

*St. Louis, Missouri 63105*

*314/727-7211*

**The Equity Risk Premium: Historical vs. Prospective**

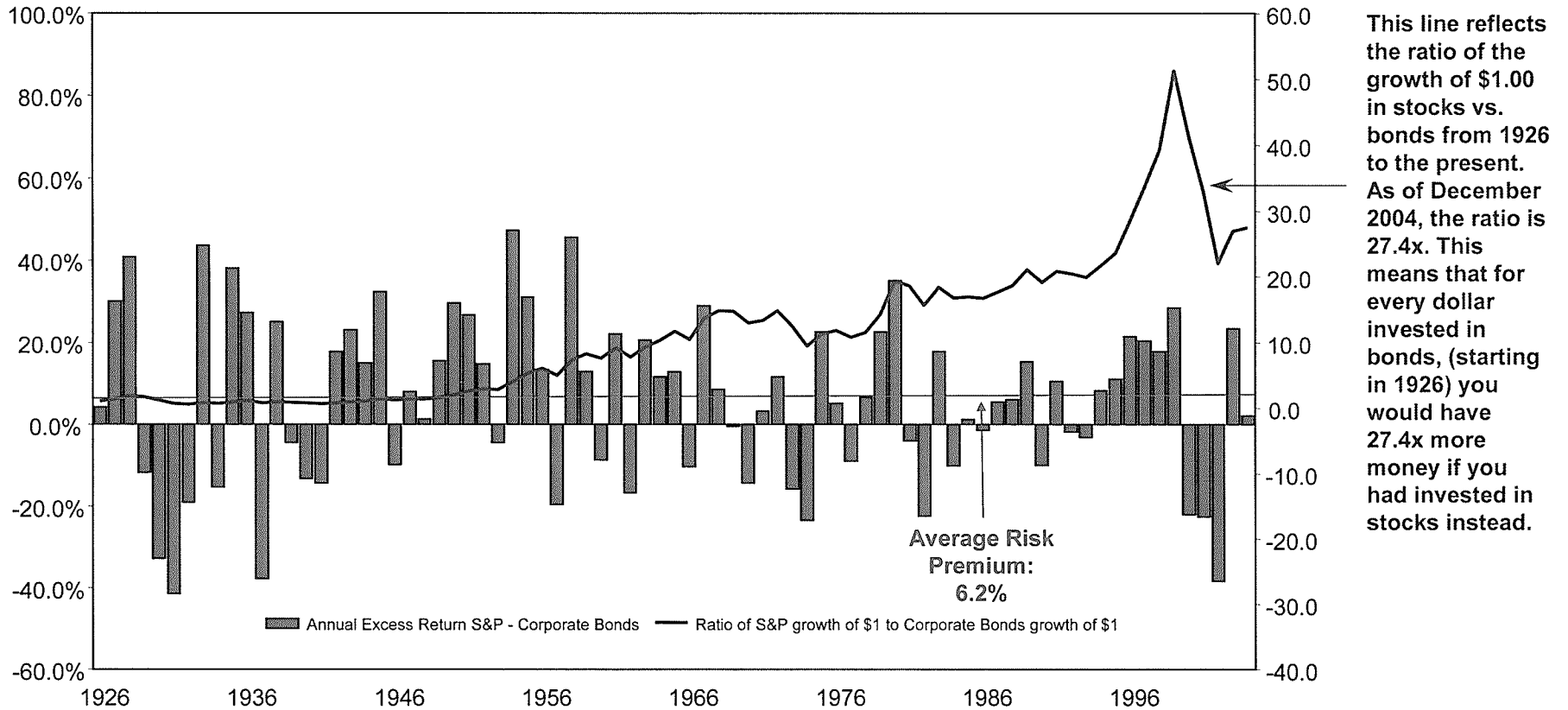
**Municipal Fire & Police Retirement  
System of Iowa**

*September 2005*

## HISTORICAL PERSPECTIVE DEFINITIONS AND CONCLUSIONS

- The US equity risk premium is defined as the difference by which US stocks outperform US bonds.
- For this exercise, we used two comparisons to determine the risk premium:
  - The first measures the risk premium as the excess return of the S&P 500 over Corporate Bonds (1926 – 2004).
    - The average risk premium for the S&P 500 over Corporate Bonds is 6.2%
  - The second measures the risk premium as the excess return of the S&P 500 over the Lehman Aggregate Bond Index (1976 – 2004).
    - The average risk premium for the S&P 500 over the Lehman Aggregate is 4.9%
- In addition, we measured the growth of \$1.00 invested in the S&P 500 vs. Corporate Bonds and the growth of \$1.00 invested in the S&P 500 vs. the Lehman Aggregate Bond Index.
  - The growth of \$1.00 was 27.4x greater in the S&P 500 than it was in Long Corporate Bonds (1926-2004). This means that you would have 27.4x more money if you had invested in stocks rather than bonds.
  - The growth of \$1.00 was 2.9x greater in the S&P 500 than it was in the Lehman Aggregate (1976-2004). This means that you would have 2.9x more money if you had invested in stocks rather than bonds.

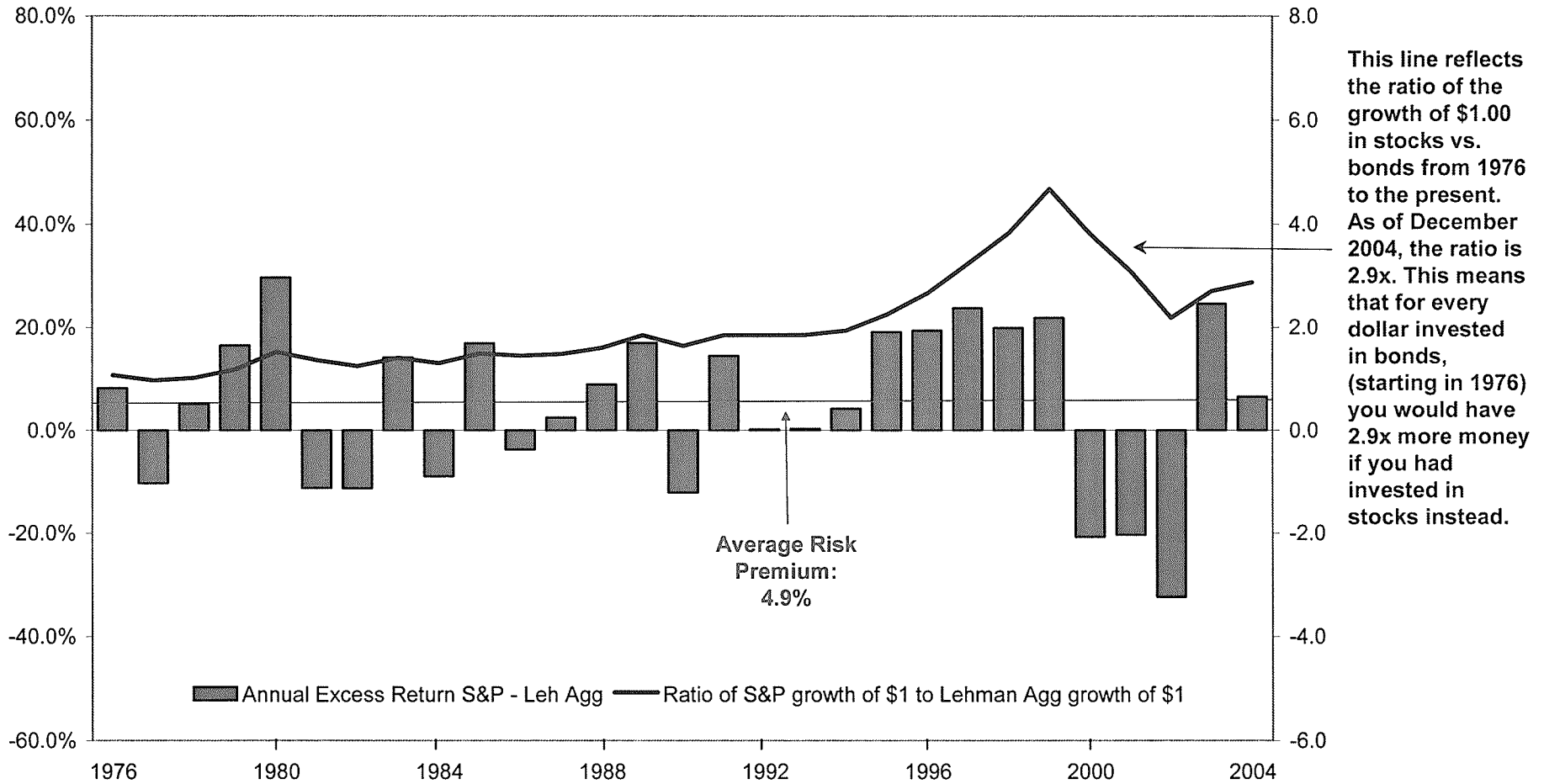
ANALYSIS OF HISTORICAL RISK PREMIUM 1926-2004 – S&P 500 VS. LONG TERM CORPORATE BONDS



Excess Returns (Risk Premium) By Decade

	1920s	1930s	1940s	1950s	1960s	1970s	1980s	1990s	2000s
S&P 500 Average Return	21.1%	5.3%	10.3%	20.8%	8.7%	7.5%	18.2%	19.0%	-0.7%
Corporate Bond Average Return	5.2%	7.0%	2.7%	1.1%	1.8%	6.5%	13.9%	8.6%	10.8%
Excess Return (Risk Premium)	15.9%	-1.7%	7.6%	19.7%	6.9%	1.0%	4.3%	10.4%	-11.5%

ANALYSIS OF HISTORICAL RISK PREMIUM 1976-2004 – S&P 500 VS. LEHMAN AGGREGATE

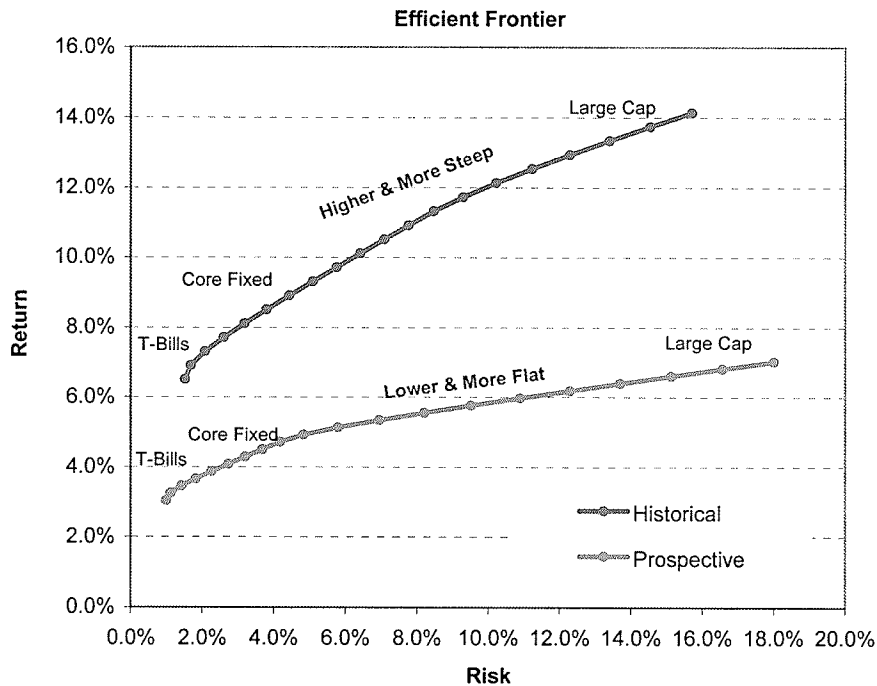


Excess Returns (Risk Premium) By Decade

	1970s	1980s	1990s	2000s
S&P 500 Average Return	18.2%	19.0%	-0.7%	20.8%
Lehman Aggregate Average Return	5.5%	12.8%	7.9%	7.8%
Excess Return (Risk Premium)	12.7%	6.2%	-8.6%	13.0%



CURRENT ASSUMPTIONS VERSUS HISTORICAL EXPERIENCE



- Based on Summit's current capital market assumptions, expected returns are below their historical level while expected volatility has shifted slightly outward.
- In other words, Summit believes that investors are no longer rewarded for taking risk to the extent that they once were.
- The large cap equity risk-premium (measured by large cap over core fixed) has dropped from 4.9% (historical) to 2.5% (prospective).
- As a result, the incremental return pick-up generated by equities has decreased while the incremental risk has not.
  - In other words, relative to the past we are working much harder to earn less money
- The chart to the left reflects three asset classes:
  - Large Cap
  - Core Fixed
  - T-Bills
- The table below compares current risk premiums to historical risk premiums in the major asset classes.

	Current Expected Return	Current Risk Premium	Historical Average Return	Historical Risk Premium
Large Cap Core	7.0%	2.5%	14.1%	4.9%
Small Cap Core <sup>1</sup>	7.0%	2.5%	15.1%	5.6%
International Developed Core	8.0%	3.5%	14.0%	4.7%
Core Fixed <sup>2</sup>	4.5%	0.0%	9.2%	0.0%
Long Gov/CorpFixed Income	5.5%	1.0%	10.5%	1.3%

<sup>1</sup>Data only available from 1979 – present

<sup>2</sup>Used to determine the risk premium (1976 – present)