Firefighters' Pension System of the City of Kansas City, Missouri

Actuarial Valuation and Review as of May 1, 2006

The Segal Company
6300 S. Syracuse Way, Suite 750 Englewood, CO 80111
T 303.714.9900 F 303.714.9990 www.segalco.com

September 15, 2006

Board of Trustees
Firefighters' Pension System of the City of Kansas City, Missouri
Kansas City, Missouri

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of May 1, 2006. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2006 and analyzes the preceding year's experience.

The census and financial information on which our calculations were based was prepared by the Pension System. That assistance is gratefully acknowledged. The actuarial calculations were completed under our supervision.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and the expectations for the Plan.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

THE SEGAL COMPANY

By: ______________________________ ______________________________

Andre Latia, FSA, MAAA, EA	*Tammy F. Dixon, FSA, MAAA, EA*
Senior Vice President and Actuary	*Vice President and Actuary*

SECTION 1

VALUATION SUMMARY

SECTION 2

VALUATION RESULTS

SECTION 3

SUPPLEMENTAL INFORMATION

SECTION 4

REPORTING INFORMATION

Purpose

This report has been prepared by The Segal Company to present a valuation of the Firefighters' Pension System of the City of Kansas City, Missouri as of May 1, 2006. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- The benefit provisions of the Pension Plan, as administered by the Board;
- The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of May 1, 2006, provided by the Pension System;
- The assets of the Plan as of April 30, 2006, provided by the Pension System;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

Significant Issues in Valuation Year

The following key findings were the result of this actuarial valuation:

- The GASB annual required contribution as of May 1, 2006, based on a 30-year amortization of the unfunded actuarial accrued liability (UAAL) is $9,419,485, which is 20.03% of payroll.
- The expected contribution shortfall (the GASB annual required contribution less the scheduled contribution) is approximately $203,000. Last year the expected contribution shortfall was approximately $850,000.
- The excess of the actuarial accrued liability over the actuarial value of assets decreased from $60.4 million as of May 1, 2005 to $52.6 million as of May 1, 2006.
- Based on the scheduled contribution, the effective amortization period for the amortization of the UAAL is 36 years as of May 1, 2006. This means that the scheduled contribution is sufficient to pay the principal and interest payment on the UAAL. Last year the effective amortization period was infinite, meaning the scheduled contribution was not sufficient to pay the principal and interest on the UAAL.

- Based on the experience study presented earlier this year, the actuarial asset valuation method has been changed to Method 5 as described in that study. The actuarial value of assets is $381 million. The actuarial value is less than the market value of assets of $424 million as of April 30, 2006 by approximately $43 million.
- Despite the change in actuarial asset valuation method, the Plan's asset valuation method requires that the actuarial valuation of assets be no more than 110% or no less than 90% of the market value of assets. Since the preliminary calculation of the actuarial value is less than 90% of the market value of assets, the actuarial value of assets has been set equal to 90% of the market value of assets for this valuation, the same as in the prior year.
- Based on the five-year experience study presented earlier this year, we have updated the mortality tables, withdrawal rates (higher rates for ages above 25) and the assumed salary increases (higher rates for ages 25 through 29 and lower rates for ages 30 through 64). These assumption changes reduced the funded ratio from 94% to 88%.
- The pattern of the higher than expected occurrence of disability retirements that has occurred in recent years continued as of the April 30, 2006 plan year end. For this year end, 12 of the 14 new retirements were classified as disability retirements, and 10 of the 12 were eligible for normal retirement.
- There were no changes in plan provisions since the prior valuation.

Summary of Key Valuation Results

	2006	2005
Contributions for plan year beginning May 1:		
Scheduled*	$9,216,326	$8,957,313
Actual	--	9,087,549
Funding elements for plan year beginning May 1:		
Normal cost, including employee contributions**	$10,184,840	$9,967,042
Market value of assets	423,782,498	369,350,790
Actuarial value of assets	381,404,249	332,415,711
Actuarial accrued liability	434,033,285	392,856,425
Unfunded actuarial accrued liability	52,629,036	60,440,714
Funding period	36 years	Infinite
GASB 25/27 information for plan year beginning May 1:		
Annual required contributions	$9,419,485	$9,807,644
Actual contributions	--	9,087,549
Percentage contributed	--	92.7%
Funded ratio	87.87%	84.62%
Covered payroll	$47,022,072	$45,700,578
Demographic data for plan year beginning May 1:		
Number of retired participants and beneficiaries (including child beneficiaries)	892	893
Number of refunds due	11	16
Number of active members	908	902
Total anticipated 2006 payroll	$47,022,072	$45,700,578
Average anticipated 2006 payroll	51,786	50,666

**Scheduled City contributions are 19.6% of the total anticipated 2006 payroll.*
***Excludes adjustments for timing.*

A. MEMBER DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, vested terminated members, retired participants and beneficiaries.

This section presents a summary of significant statistical data on these member groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A, B, and C.

A historical perspective of how the member population has changed over the past ten valuations can be seen in this chart.

CHART 1

Member Population: 1997 – 2006

Year Ended April 30	Active Members	Vested Terminated Members*	Retired Participants and Beneficiaries	Ratio of Non-Actives to Actives
1997	774	- -	764	0.99
1998	761	- -	781	1.03
1999	786	1	782	1.00
2000	780	- -	799	1.02
2001	752	- -	808	1.07
2002	801	- -	797	1.00
2003	818	- -	850	1.04
2004	868	- -	880	1.01
2005	902	- -	893	0.99
2006	908	- -	892	0.98

**Excludes terminated members due a refund of employee contributions.*

Active Members
Plan costs are affected by the age, years of service and payroll of active members. In this year's valuation, there were 908 active members with an average age of 37.6, average years of service of 11.7 years and average payroll of $51,786. The 902 active members in the prior valuation had an average age of 37.1, average service of 11.5 years and average payroll of $50,666.

Inactive Members
There were 11 members entitled to a return of their employee contributions, totaling $166,891. Last year, there were 16 members entitled to receive a return of their employee contributions, totaling $103,659.

These graphs show a distribution of active members by age and by years of service.

CHART 2

Distribution of Active Members by Age as of April 30, 2006

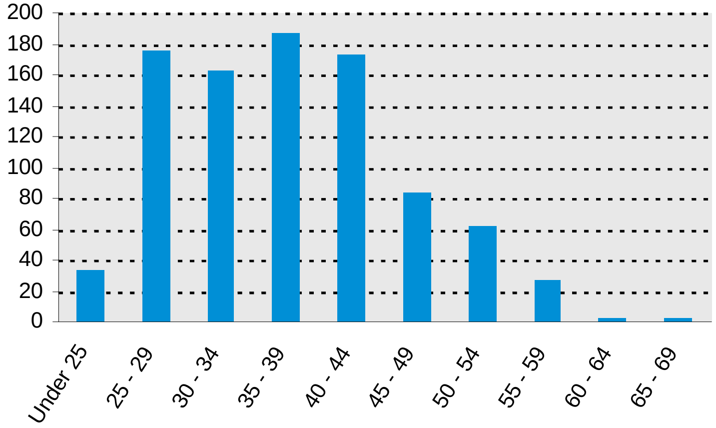
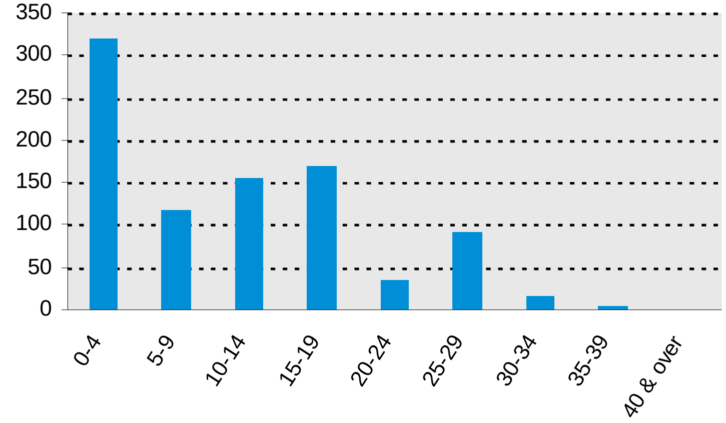


CHART 3

Distribution of Active Members by Years of Service as of April 30, 2006



Retired Participants and Beneficiaries

As of April 30, 2006, 671 retired participants and 221 beneficiaries were receiving total monthly benefits of $1,924,227. For comparison, in the previous valuation, there were 673 retired participants and 220 beneficiaries receiving monthly benefits of $1,849,703. Beneficiaries include widows and children of former participants as well as Qualified Domestic Relations Orders (QDROs) recipients.

These graphs show a distribution of the current retired participants and beneficiaries (widows, QDROs and children) based on their monthly amount and age, by type of pension.

CHART 4

Distribution of Retired Participants and Beneficiaries by Type and by Monthly Amount as of April 30, 2006

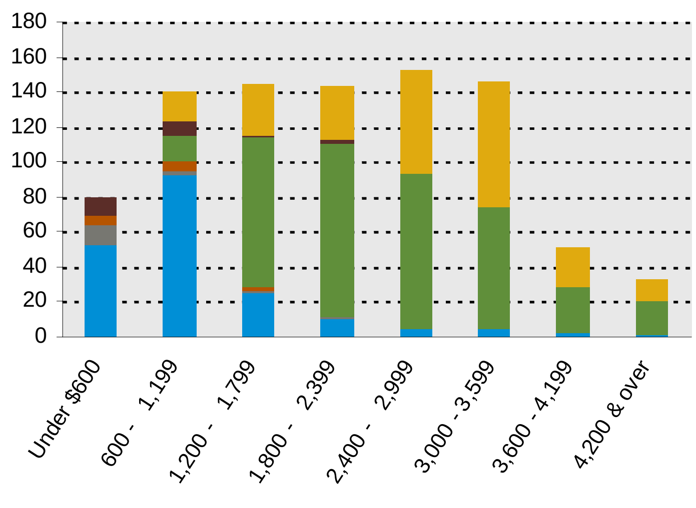
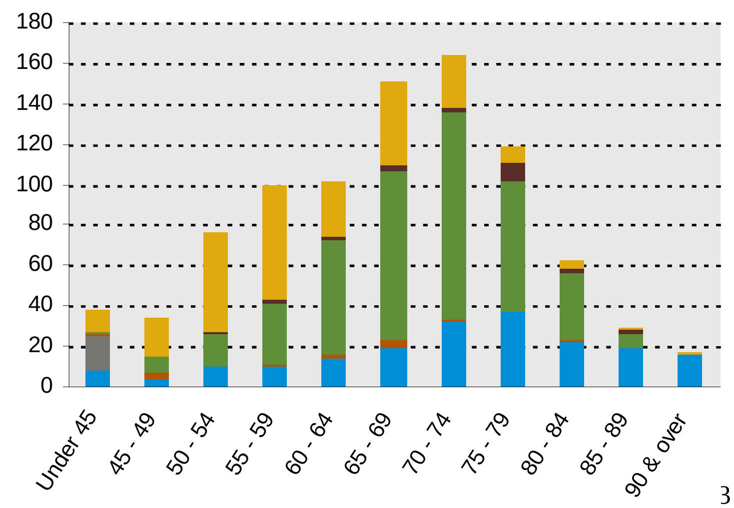


CHART 5

Distribution of Retired Participants and Beneficiaries by Type and by Age as of April 30, 2006



B. FINANCIAL INFORMATION

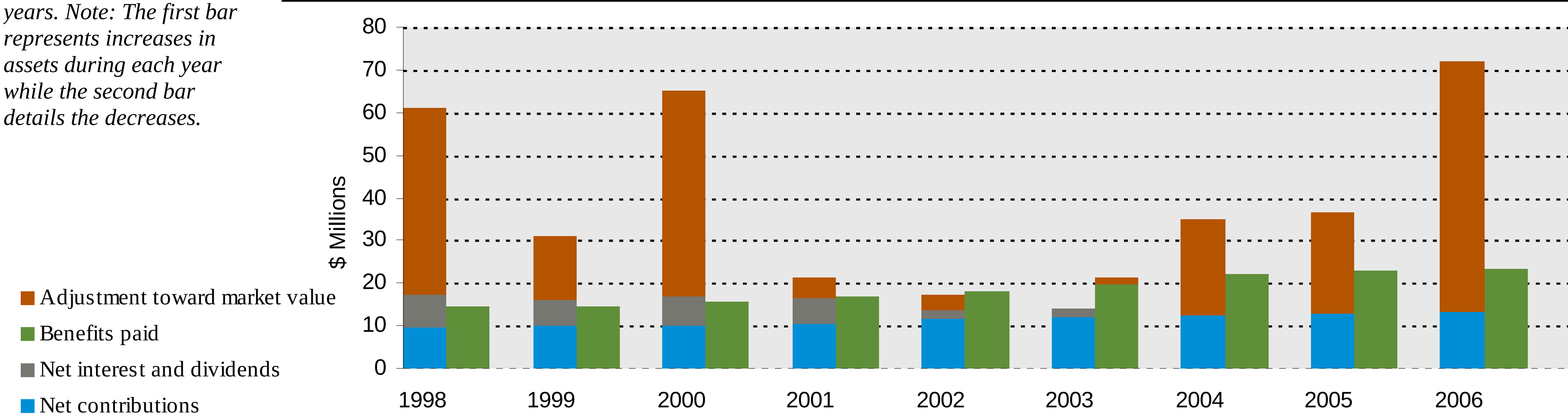
Retirement plan funding anticipates that, over the long term, both net contributions and net investment earnings (less investment fees and administrative expenses) will be needed to cover benefit payments.

Retirement plan assets change as a result of the net impact of these income and expense components. Additional financial information, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits D, E and F.

The chart depicts the components of changes in the actuarial value of assets over the last nine years. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

CHART 6

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended April 30, 1998 – 2006



It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

The calculation outlined in Chart 7 recognizes the change in actuarial asset valuation method adopted by the Board earlier this year.

The chart shows the determination of the actuarial value of assets as of the valuation date.

CHART 7

Determination of Actuarial Value of Assets for Year Ended April 30, 2006

		Original	5-Year	
1.	Actuarial value of assets as of April 30, 2005*			$351,562,574
2.	Net new money			(9,864,886)
3.	Expected interest on actuarial value			27,730,410
4.	Amortization of investment gains and losses	Amount**	Payment***	
	(a) Year ended April 30, 2006	$36,535,226	$7,307,045	
	(b) Year ended April 30, 2005	-1,944,981	-388,996	
	(c) Year ended April 30, 2004	70,114,301	14,022,860	
	(d) Year ended April 30, 2003	-43,964,235	-8,792,847	
	(e) Year ended April 30, 2002	-25,538,633	-5,107,727	
	(f) Total amortization payments			7,040,335
5.	Preliminary actuarial value: (1) + (2) + (3) + (4f)			376,468,433
6.	Market value of assets as of April 30, 2006			423,782,498
7.	Adjustment to be within 10% corridor			4,935,816
8.	Final actuarial value of assets as of April 30, 2006: (5) + (7)			$381,404,249
9.	Actuarial value as a percentage of market value: (8) ÷ (6)			90.0%

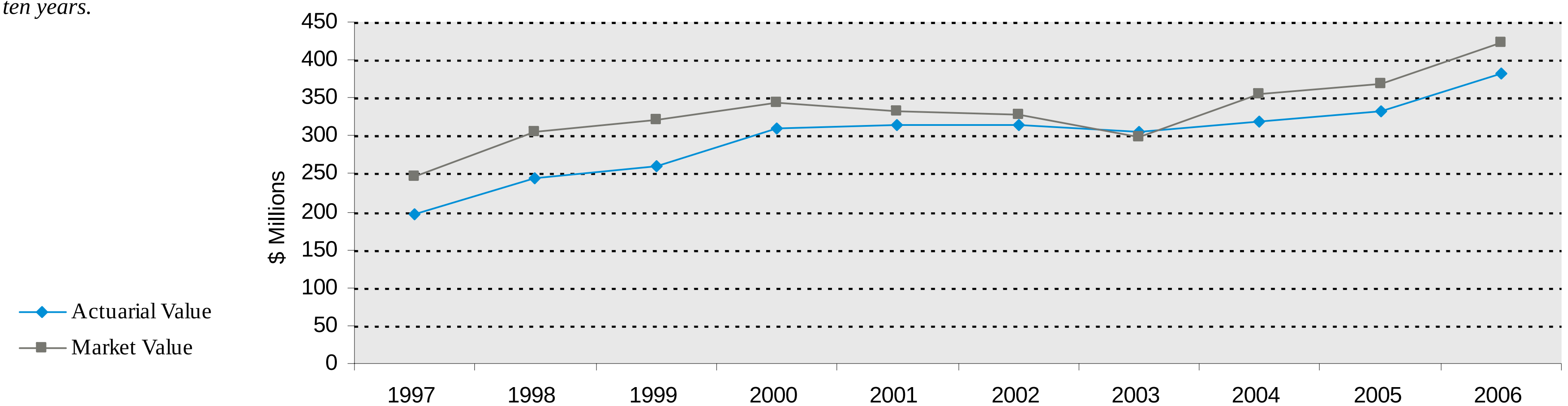
* *Under new asset valuation method.*
** *Total return on market value basis minus expected return on actuarial basis using the net investment return assumption.*
*** *Recognition at 20% per year over 5 years.*

Both the actuarial value and market value of assets are representations of the Pension System's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets. The actuarial asset value is significant because the Pension System's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

This chart shows the change in the actuarial value of assets versus the market value over the past ten years.

CHART 8

Actuarial Value of Assets vs. Market Value of Assets as of April 30, 1997 – 2006



C. ACTUARIAL EXPERIENCE

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

The total gain is $40,003,680, $32,654,763 from investments and $7,348,917 from all other sources. The net experience gain from individual sources other than investments was 1.7% of the actuarial accrued liability. A discussion of the major components of the actuarial experience is on the following pages.

This chart provides a summary of the actuarial experience during the past year.

CHART 9

Actuarial Experience for Year Ended April 30, 2006

1.	Net gain from investments*	$32,654,763
2.	Net gain from other experience**	7,348,917
3.	Net experience gain: (1) + (2)	$40,003,680

**Details in Chart 10*

***Details in Chart 13*

Investment Rate of Return

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the Pension System's investment policy. For valuation purposes, the assumed rate of return on the actuarial value of assets is 8.00%. The actual rate of return on an actuarial basis for the 2006 plan year was 17.97%.

Since the actual return for the year was greater than the assumed return, the Pension System experienced an actuarial gain during the year ended April 30, 2006 with regard to its investments.

This chart shows the gain due to investment experience.

CHART 10

Actuarial Value Investment Experience for Year Ended April 30, 2006

1.	Actual return	$58,853,424
2.	Average value of assets	327,483,268
3.	Actual rate of return: (1) ÷ (2)	17.97%
4.	Assumed rate of return	8.00%
5.	Expected return: (2) x (4)	$26,198,661
6.	Actuarial gain: (1) – (5)	$32,654,763

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. The chart below shows the rate of return on an actuarial basis compared to the market value investment return for the last nine years, including the five-year average.

Based upon this experience and future expectations, we have maintained the assumed rate of return of 8.00%.

CHART 11

Investment Return – Actuarial Value vs. Market Value: 1998 - 2006

	Net Interest and Dividend Income		Adjustment Toward Market		Actuarial Value Investment Return		Market Value Investment Return	
Year Ended April 30	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1998	$7,920,944	4.09%	$43,630,769	22.51%	$51,551,713	27.45%	$64,857,213	23.82%
1999	6,299,831	2.61	14,901,188	6.17	21,201,019	8.79	19,902,793	6.42
2000	6,855,562	2.66	48,186,422	18.70	55,041,984	21.37	29,911,717	9.08
2001	6,197,167	2.02	4,637,434	1.51	10,834,601	3.54	-5,022,522	-1.50
2002	2,166,977	0.70	3,709,662	1.19	5,876,639	1.90	2,202,729	0.67
2003	1,812,554	0.59	-1,650,284	-0.53	162,270	0.05	-21,277,516	-6.55
2004	18,976	0.01	22,348,602	7.42	22,367,578	7.42	64,395,554	21.85
2005	-97,639	-0.03	23,527,395	7.49	23,429,756	7.46	24,937,995	7.14
2006	26,369	0.01	58,827,055	17.96	58,853,424	17.97	64,296,594	17.64
Total	$31,200,741		$218,118,243		$249,318,984		$244,204,557	
					Five-year average return	7.09%		8.09%

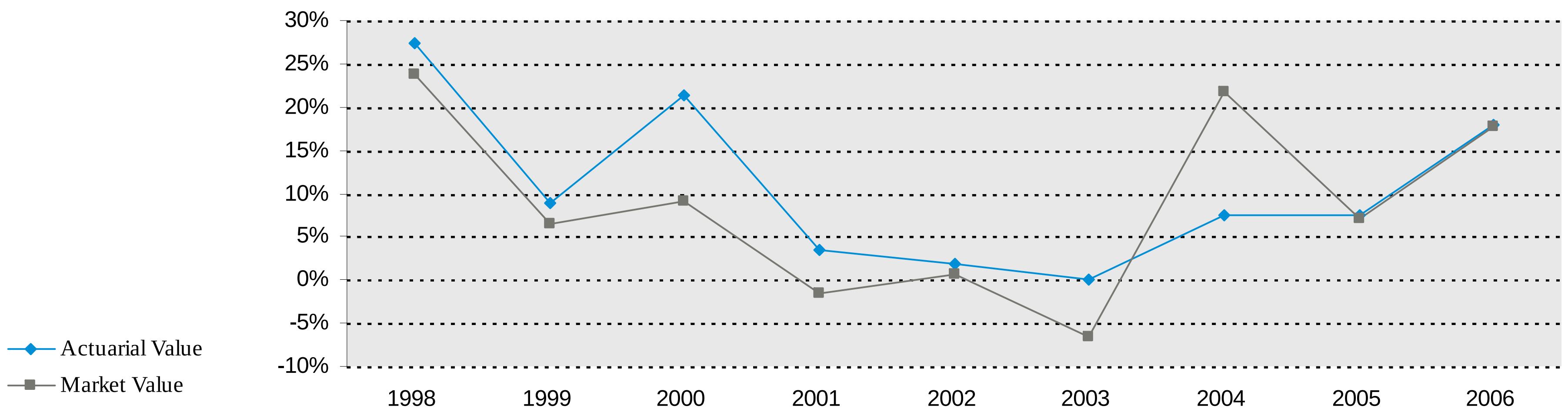
Note: Each year's yield is weighted by the average asset value in that year. Totals may not add due to rounding.

Subsection B described the actuarial asset valuation method that gradually takes into account fluctuations in the market value rate of return. The effect of this is to stabilize the actuarial rate of return, which contributes to leveling pension plan costs.

This chart illustrates how this leveling effect has actually worked over the years 1998 - 2006.

CHART 12

Market and Actuarial Rates of Return for Years Ended April 30, 1998 - 2006



Other Experience
There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- the extent of turnover among the participants,
- retirement experience (earlier or later than expected),
- mortality (more or fewer deaths than expected),
- the number of disability retirements, and
- salary increases different than assumed.

The net gain from this other experience for the year ended April 30, 2006 amounted to $7,348,917 which is 1.7% of the actuarial accrued liability.

A brief summary of the demographic gain/(loss) experience of the Pension System for the year ended April 30, 2006 is shown in the chart below.

Based on the five-year experience study presented earlier this year, we have updated the mortality tables, withdrawal rates (higher rates for ages above 25) and the assumed salary increases (higher rates for ages 25 through 29 and lower rates for ages 30 through 64).

The chart shows elements of the experience gain/(loss) for the most recent year.

CHART 13

Experience Due to Changes in Demographics for Year Ended April 30, 2006

1.	Pre-retirement mortality gain	$71,829
2.	Disability gain	269,978
3.	Withdrawal loss	-327,299
4.	Retirement gain	1,217,135
5.	Loss from deaths among pensioners and beneficiaries	-3,276,997
6.	Loss from new members and returns to work	-915
7.	Gain from salary increases for continuing actives	4,397,352
8.	Miscellaneous gain	4,997,834
9.	Total gain	$7,348,917

D. SCHEDULED CONTRIBUTION

The scheduled City contribution is established as 19.60% of payroll. As of May 1, 2006, the calculated normal cost is 13.03% of payroll and the amount available for amortization is 6.57% of payroll.

The scheduled contribution is sufficient to pay the principal and interest payment on the unfunded actuarial accrued liability.

The contribution rates as of May 1, 2006 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

The chart compares this valuation's scheduled contribution with the prior valuation.

CHART 14

Scheduled Contribution

	Year Beginning May 1			
	2006		2005	
	Amount	**% of Payroll**	**Amount**	**% of Payroll**
1. Total normal cost, adjusted for timing*	$10,615,790	22.58%	$10,388,775	22.73%
2. Expected employee contributions, adjusted for timing*	-4,490,608	-9.55%	-4,364,404	-9.55%
3. City normal cost: (1) + (2)	$6,125,182	13.03%	$6,024,371	13.18%
4. Actuarial accrued liability	434,033,285		392,856,425	
5. Actuarial value of assets	381,404,249		332,415,711	
6. Unfunded actuarial accrued liability: (4) - (5)	$52,629,036		$60,440,714	
7. Amount available for amortization	3,091,144	6.57%	2,932,942	6.42%
8. Scheduled City contribution: (3) + (7)	$9,216,326	19.60%	$8,957,313	19.60%
9. Total anticipated payroll	$47,022,072		$45,700,578	
10. Effective amortization period	36 years		Infinite	

**Contributions are assumed to be paid at the end of every month.*

Reconciliation of Scheduled Contribution
The chart below details the changes in the scheduled contribution from the prior valuation to the current year's valuation.

The chart reconciles the contribution from the prior valuation to the amount determined in this valuation.

CHART 15

Reconciliation of Scheduled Contribution from May 1, 2005 to May 1, 2006

Scheduled Contribution as of May 1, 2005	$8,957,313
Effect of change in asset method	$0
Effect of change in amortization period	314,590
Effect of changes in actuarial assumptions	1,729,790
Effect of contributions more than scheduled contribution	-361
Effect of investment gain	-1,585,035
Effect of other gains and losses on accrued liability	-356,710
Effect of net other changes	156,739
Total change	$259,013
Scheduled Contribution as of May 1, 2006	$9,216,326

E. INFORMATION REQUIRED BY THE GASB

Governmental Accounting Standards Board (GASB) reporting information provides standardized information for comparative purposes of governmental pension plans. This information allows a reader of the financial statements to compare the funding status of one governmental plan to another on relatively equal terms.

Critical information to the GASB is the historical comparison of GASB required contributions to the actual contributions. This comparison demonstrates whether a plan is being funded on an actuarially sound basis and in accordance with the GASB funding requirements. Chart 16 below presents a graphical representation of this information for the Plan.

The other critical piece of information regarding the Plan's financial status is the funded ratio. This ratio compares the actuarial value of assets to the actuarial accrued liabilities of the plan as calculated under GASB requirements. High ratios indicate a well-funded plan with assets sufficient to pay most benefits. Lower ratios may indicate recent changes to benefit structures, funding of the plan below actuarial requirements, poor asset performance, or a variety of other changes.

Although GASB standards require that the actuarial value of assets be used to determine the standards funded ratio, Chart 17 shows the funded ratio calculated using both the actuarial value of assets (88% for 2006) and the market value of assets (98% for 2006).

The details regarding the calculations of these values and other GASB numbers may be found in Section 4.

These graphs show key GASB factors.

CHART 16

Required Versus Actual Contributions

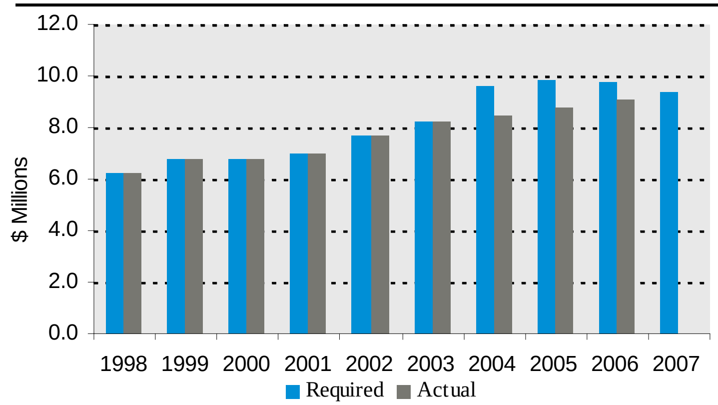


CHART 17

Funded Ratio

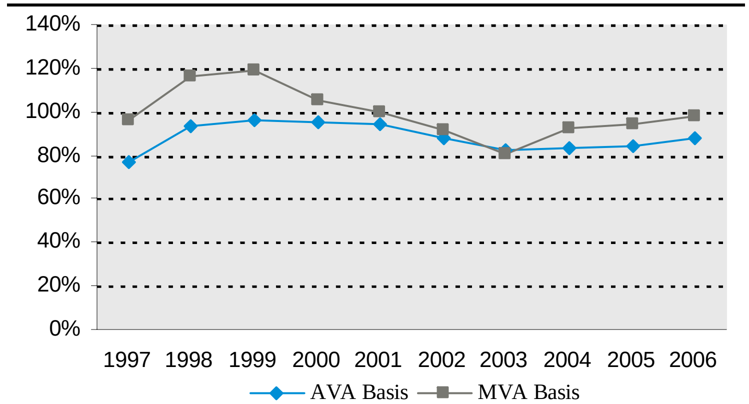


EXHIBIT A
Table of Plan Coverage

Category	Year Ended April 30 2006	Year Ended April 30 2005	Change From Prior Year
Active members in valuation:			
Number	908	902	0.7%
Average age	37.6	37.1	N/A
Average service	11.7	11.5	N/A
Total anticipated payroll	$47,022,072	$45,700,578	2.9%
Average anticipated payroll	51,786	50,666	2.2%
Account balances	48,310,918	44,545,187	8.5%
Eligible to retire on:			
Normal pension	113	128	-11.7%
Deferred pension	358	329	8.8%
Total active vested members	471	457	3.1%
Vested terminated members	0	0	N/A
Pensioners:			
Number in pay status	671	673	-0.3%
Average age	65.7	64.3	N/A
Average monthly benefit	$2,546	$2,440	4.3%
Beneficiaries in pay status*	221	220	0.5%
Members due refunds	11	16	-31.3%
New Disabilities	12	20	-40.0%
Eligible to retire on normal pension	10	13	-23.1%

**Widows, QDROs and children.*

EXHIBIT B

Members in Active Service as of April 30, 2006
By Age, Years of Service, and Average Payroll

		Years of Service								
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	33	33	- -	- -	- -	- -	- -	- -	- -	- -
	$34,347	$34,347	- -	- -	- -	- -	- -	- -	- -	- -
25 - 29	176	162	14	- -	- -	- -	- -	- -	- -	- -
	36,973	35,991	$48,331	- -	- -	- -	- -	- -	- -	- -
30 - 34	162	73	50	39	- -	- -	- -	- -	- -	- -
	45,920	37,399	49,483	$57,302	- -	- -	- -	- -	- -	- -
35 - 39	187	39	35	77	36	- -	- -	- -	- -	- -
	53,547	39,861	50,136	57,635	$62,946	- -	- -	- -	- -	- -
40 - 44	173	9	13	37	99	15	- -	- -	- -	- -
	60,491	40,857	50,377	58,521	62,769	$70,865	- -	- -	- -	- -
45 - 49	84	2	3	1	33	14	31	- -	- -	- -
	62,614	46,308	48,708	61,380	63,104	64,891	$63,500	- -	- -	- -
50 - 54	62	- -	1	1	- -	5	49	6	- -	- -
	66,579	- -	52,524	58,716	- -	70,430	65,653	$74,584	- -	- -
55 - 59	27	1	2	- -	- -	1	11	10	2	- -
	66,548	57,396	94,248	- -	- -	55,752	61,569	68,735	$65,280	- -
60 - 64	2	- -	- -	- -	- -	- -	- -	- -	2	- -
	63,750	- -	- -	- -	- -	- -	- -	- -	63,750	- -
65 - 69	2	- -	- -	- -	- -	- -	- -	1	- -	1
	76,212	- -	- -	- -	- -	- -	- -	85,848	- -	$66,576
Total	908	319	118	155	168	35	91	17	4	1
	$51,786	$36,885	$50,403	$57,794	$62,873	$67,981	$64,426	$71,806	$64,515	$66,576

EXHIBIT C

Reconciliation of Member Data

	Active Members	Child Beneficiaries	Pensioners	Widows, Beneficiaries and QDROs	Total
Number as of May 1, 2005	902	19	673	201	1,795
New members	27	0	N/A	N/A	27
Terminations – without vested rights	-7	0	N/A	N/A	-7
Retirements	-2	0	2	N/A	0
New disabilities	-12	0	12	N/A	0
Died with beneficiary	0	0	-10	10	0
Died without beneficiary	0	0	-6	-8	-14
Certain period expired	N/A	-2	0	0	-2
Show-up beneficiaries	0	0	0	1	1
Number as of May 1, 2006	908	17	671	204	1,800

EXHIBIT D

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended April 30, 2006		Year Ended April 30, 2005	
Contribution income:				
City contributions	$9,087,549		$8,743,431	
Employee contributions	4,201,927		4,267,118	
Net contribution income		$13,289,476		$13,010,549
Investment income:				
Interest, dividends and other income	$2,411,071		$2,061,484	
Adjustment toward market value	58,827,055		23,527,395	
Investment fees	-2,319,651		-2,079,215	
Administrative expenses	-65,051		-79,908	
Net investment income		58,853,424		23,429,756
Total income available for benefits		$72,142,900		$36,440,305
Less benefit payments:				
Benefit payments	-$22,543,927		-$21,322,107	
Funeral benefits	-36,000		-32,000	
Refund of contributions	-574,435		-1,512,048	
Net benefit payments		-$23,154,362		-$22,866,155
Change in actuarial asset method		$0		N/A
Change in reserve for future benefits		$48,988,538		$13,574,150

EXHIBIT E

Table of Financial Information

	Year Ended April 30, 2006		Year Ended April 30, 2005	
Cash equivalents		$11,043,800		$10,874,827
Accounts receivable:				
Contributions	$417,217		$564,369	
Investment income	145,717		130,915	
Sale of investments	2,642,269		635,690	
Total accounts receivable		3,205,203		1,330,974
Investments:				
Common stock	$138,250,201		$119,313,070	
Collective trusts	275,305,236		239,261,082	
Total investments at market value		413,555,437		358,574,152
Total assets		$427,804,440		$370,779,953
Less accounts payable:				
Purchase of investments	-$3,499,064		-$694,993	
Administrative expenses payable	-522,878		-734,170	
Total accounts payable		-$4,021,942		-$1,429,163
Net assets at market value		$423,782,498		$369,350,790
Net assets at actuarial value		$381,404,249		$332,415,711

EXHIBIT F

Development of the Fund Through April 30, 2006

Year Ended April 30	City Contributions	Employee Contributions	Net Investment Return*	Benefit Payments	Actuarial Value of Assets at End of Year
1998	$6,261,872	$3,264,100	$51,551,713	$14,487,887	$243,758,960
1999	6,732,893	3,122,134	21,201,019	14,335,928	260,479,078
2000	6,798,148	3,193,758	55,041,984	15,500,743	310,012,225
2001	6,990,611	3,405,594	10,834,601	16,823,097	314,419,934
2002	7,709,082	3,753,099	5,876,639	18,139,027	313,619,727
2003	8,215,224	4,003,110	162,270	19,795,971	306,204,360
2004	8,455,725	4,117,717	22,367,578	22,303,819	318,841,561
2005	8,743,431	4,267,118	23,429,756	22,866,155	332,415,711
2006	9,087,549	4,201,927	58,853,424	23,154,362	381,404,249

** Net of investment fees and administrative expenses*

EXHIBIT G

Development of Unfunded Actuarial Accrued Liability for Year Ended April 30, 2006

1.	Unfunded actuarial accrued liability at beginning of year		$60,440,714
2.	Plus: Expected Changes Due to:		
	Normal cost	$9,967,042	
	Interest on unfunded actuarial accrued liability and normal cost	5,632,620	
	Subtotal	$15,599,662	
	Less: Expected Changes Due to:		
	Scheduled City and expected employee contributions	-$13,321,717	
	Interest on expected contributions	-522,617	
	Subtotal	-$13,844,334	
	Scheduled change		1,755,328
3.	Plus: Deficient (Surplus) Contributions:		
	Scheduled City and expected employee contributions	$13,321,717	
	Actual City and employee contributions	-13,289,476	
	Deficient (surplus) contributions	$32,241	
	Interest on deficient (surplus contributions)	1,263	
	Deficient (surplus) contributions		33,504
4.	Plus: Actuarial (Gains)/Losses*		
	Total		-40,003,680
5.	Plus: Effect of assumption changes		30,403,170
6.	Unfunded actuarial accrued liability at end of year		$52,629,036

** Detailed (Gains)/Losses by source is shown in Chart 13 on page 11*

EXHIBIT H

Definitions of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Assumptions or Actuarial Assumptions: The estimates on which the cost of the Plan is calculated including:

(a) Investment return — the rate of investment yield that the Plan will earn over the long-term future;

(b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;

(c) Retirement rates — the rate or probability of retirement at a given age;

(d) Withdrawal rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

Normal Cost: The amount of contributions required to fund the benefit allocated to the current year of service.

Actuarial Accrued Liability For Actives: The equivalent of the accumulated normal costs allocated to the years before the valuation date.

Actuarial Accrued Liability For Pensioners: The single sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

Unfunded Actuarial Accrued Liability: The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan. There are many approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.

Amortization of the Unfunded Actuarial Accrued Liability:	Payments made over a period of years equal in value to the Plan's unfunded actuarial accrued liability.
Investment Return:	The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.

EXHIBIT I

Summary of Actuarial Valuation Results

The valuation was made with respect to the following data supplied to us:

1.	Retired participants as of the valuation date (including 221 beneficiaries in pay status)		892
2.	Members active during the year ended April 30, 2006		908
	Fully vested	471	
	Not vested	437	
3.	Members due refunds as of April 30, 2006		11

EXHIBIT I (continued)

Summary of Actuarial Valuation Results

The detail of the scheduled contribution as of the valuation date is as follows:

1.	Actuarial accrued liability:		$434,033,285
	Pensioners and beneficiaries	$263,331,854	
	Active participants	170,534,540	
	Members due refunds	166,891	
2.	Actuarial value of assets ($423,782,498 at market value)		381,404,249
3.	Unfunded actuarial accrued liability: (1) – (2)		52,629,036
4.	Portion of unfunded actuarial accrued liability that can be amortized		3,091,144
5.	Normal cost, payable monthly:		
	Amount		10,615,790
	As a percent of payroll		22.58%
6.	Total scheduled contribution: (4) + (5)		
	Amount		$13,706,934
	As a percent of payroll		29.15%
7.	Expected employee contribution (9.55% of payroll)		$4,490,608
8.	Scheduled City contribution: (6) – (7)		
	Amount		9,216,326
	As a percent of payroll		19.60%
9.	Expected City contribution (19.60% of payroll)		$9,216,326
10.	Total anticipated 2006 payroll		47,022,072
11.	Effective amortization period		36 years

EXHIBIT I (continued)

Summary of Actuarial Valuation Results

The determination of the GASB annual required contribution (ARC) as of the valuation date is as follows:

1.	Actuarial accrued liability:		$434,033,285
	Pensioners and beneficiaries	$263,331,854	
	Active participants	170,534,540	
	Members due refunds	166,891	
2.	Actuarial value of assets ($423,782,498 at market value)		381,404,249
3.	Unfunded actuarial accrued liability: (1) – (2)		52,629,036
4.	Unfunded actuarial accrued liability amortized over 30 years		3,294,303
5.	Normal cost, payable monthly:		
	Amount		10,615,790
	As a percent of payroll		22.58%
6.	Total scheduled contribution: (4) + (5)		
	Amount		$13,910,093
	As a percent of payroll		29.58%
7.	Expected employee contribution (9.55% of payroll)		$4,490,608
8.	Annual required contribution (ARC): (6) – (7)		
	Amount		$9,419,485
	As a percent of payroll		20.03%
9.	Expected City contribution (19.60% of payroll)		$9,216,326
10.	Difference in contributions: (9) – (8)		
	Amount		-203,159
	As a percent of payroll		-0.43%
11.	Total anticipated 2006 payroll		47,022,072

EXHIBIT II

Supplementary Information Required by the GASB – Schedule of City Contributions

Plan Year Ended April 30	Annual Required Contributions*	Actual Contributions	Percentage Contributed
2000	$6,798,148	$6,798,148	100.0%
2001	6,990,611	6,990,611	100.0%
2002	7,709,082	7,709,082	100.0%
2003	8,215,224	8,215,224	100.0%
2004	9,632,622	8,455,725	87.8%
2005	9,808,923	8,743,431	89.1%
2006	9,807,644	9,087,549	92.7%
2007	9,419,485	--	--

**Actual contributions are shown for the plan years ended April 30, 2000 through April 30, 2003 since the effective amortization period is allowable by GASB. The annual required contribution for the plan years ended April 30, 2004 through April 30, 2007 is based on a 30-year amortization period, which is allowable by GASB.*

EXHIBIT III

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll* [(b) - (a)] / (c)
05/01/1999	$260,479,078	$269,962,700	$9,483,622	96.49%	$33,092,300	28.66%
05/01/2000	310,012,225	326,277,600	16,265,375	95.01%	33,712,200	48.25%
05/01/2001	314,419,934	334,755,400	20,335,466	93.93%	36,046,956	56.41%
05/01/2002	313,619,727	358,688,291	45,068,564	87.44%	41,698,908	108.08%
05/01/2003	306,204,360	371,993,884	65,789,524	82.31%	42,315,396	155.47%
05/01/2004	318,841,561	384,247,836	65,406,275	82.98%	43,920,060	148.92%
05/01/2005	332,415,711	392,856,425	60,440,714	84.62%	45,700,578	132.25%
05/01/2006	381,404,249	434,033,285	52,629,036	87.87%	47,022,072	111.92%

** Not less than zero*

EXHIBIT IV

Supplementary Information Required by the GASB

Valuation date	May 1, 2006
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Open 30-year amortization period; level dollar amount for remaining unfunded/(overfunded) actuarial accured liabililty
Remaining amortization period	30 years
Asset valuation method	A preliminary actuarial value of assets is calculated as the sum of the beginning of the year actuarial value of assets, the net new money and the expected return on an actuarial basis. The gains or losses over the last 4 years are recognized over the next 5 year period. The gain or loss of each year is the excess of market value of assets over the preliminary value of assets, minus the sum of the unrecognized gains and losses from each of the 4 years. Finally, an adjustment is made so that the final actuarial value of assets is within a 10% corridor of market value.
Actuarial assumptions:	
Investment rate of return	8.00% per annum, net of investment fees and administrative expenses
Projected salary increases	3.00% to 8.00% per annum, depending on age
Cost of living adjustments	3.00% of original benefit
Membership of the system:	
Pensioners and beneficiaries receiving benefits	892
Active plan members	908
Members due refunds	11
Total	1,811

EXHIBIT V

Progress of Pension Rolls Through April 30, 2006

			In Force at End of Year	
Year Ended April 30	**Awards**	**Deaths***	**Number**	**Monthly Amount**
1997	36	31	764	$999,800
1998	38	21	781	1,090,300
1999	32	31	782	1,122,400
2000	53	36	799	1,273,900
2001	28	19	808	1,358,300
2002	29	18	819	1,466,605
2003	44	13	850	1,594,084
2004	56	26	880	1,744,071
2005	41	28	893	1,849,703
2006	25	26	892	1,924,227

** Includes certain period expired benefits.*

EXHIBIT VI

Pensions in Payment Status on May 1, 2006 by Type and Monthly Amount

		Type of Pension				
Monthly Amount	Total	Normal	Disability	Vested	Widows & QDROs	Children
Total	892	403	245	23	204	17
Under $600	80	- -	- -	11	57	12
600 – 1,199	140	15	17	8	98	2
1,200 – 1,799	145	86	30	1	27	1
1,800 – 2,399	144	99	31	3	10	1
2,400 – 2,999	153	88	60	- -	4	1
3,000 – 3,599	146	69	72	- -	5	- -
3,600 – 4,199	51	26	23	- -	2	- -
4,200 and over	33	20	12	- -	1	- -

**During the year ended April 30, 2006, there were 25 new pensions awarded (2 Normal, 12 Disabled, and 11 Widows, QDROs, and Children).*

EXHIBIT VII
Actuarial Assumptions and Actuarial Cost Method

Mortality Rates:

Healthy: 1983 Group Annuity Mortality Table with 5% of deaths assumed to be Duty related

Disabled: 1983 Group Annuity Mortality Table

Rates before Retirement: Sample rates shown below:

	Rate (%)			
	Mortality		Disability	Withdrawal
Age	Male	Female		
20	0.04	0.02	0.03	2.50
25	0.05	0.03	0.05	2.50
30	0.06	0.03	0.13	1.69
35	0.09	0.05	0.30	1.05
40	0.12	0.07	0.60	0.75
45	0.22	0.10	1.12	0.75
50	0.39	0.16	1.90	0.52
55	0.61	0.25	4.50	-
60	0.92	0.42	7.60	-

Percentage of Disability Retirements that are Duty Related:

Age	Annual Rate (%)
20 - 24	75.0
25 - 29	66.7
30 - 34	70.6
35 - 39	78.9
40 - 44	81.1
45 - 49	81.9
50 - 54	80.3
55 - 59	78.2
60 and up	75.4

Retirement Rates for Active Employees:

Years of Service	Rate(%)
25	10
26	10
27	5
28	5
29	15
30	25
31	50
32	50
33	50
34	50
35 years, or age 65 if earlier	100

Retirement Age for Inactive Vested Members: 50

Unknown Data for Members: Same as those exhibited by members with similar known characteristics.

Percent Married: 94% of active participants

Age of Spouse: Females four years younger than males

Eligible Children: None

Net Investment Return: 8.00%, net of investment fees and administrative expenses, including inflation at 3.00%.

Salary Increases:

Age	Rate (%)
Less than 25	8.0
25 - 29	8.0
30 - 34	6.0
35 - 39	5.0
40 - 44	4.0
45 - 49	3.5
50 - 54	3.5
55 - 59	3.5
60 - 64	3.5
65 and up	3.0

Actuarial Value of Assets: A preliminary actuarial value of assets is calculated as the sum of the beginning of the year actuarial value of assets, the net new money and the expected return on an actuarial basis. The gains and losses over the last 4 years are recognized over the next 5 year period. The gain or loss of each year is the excess of market value of assets over the preliminary value of assets, minus the sum of the unrecognized gains and losses from each of the 4 years. Finally, an adjustment is made so that the final actuarial value of assets is within a 10% corridor of market value.

Actuarial Cost Method:	Entry Age Normal Actuarial Cost Method. Entry Age is the age at the time the participant commenced employment. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by salary, with Normal Cost determined as if the current benefit accrual rate had always been in effect.
Amortization of Unfunded Actuarial Accrued Liability/(Surplus):	Open amortization period; level percentage of payroll, recognizing monthly payments. Payroll is expected to increase 3.0% per year.
Changes in Assumptions:	Based on past experience and future expectations, the following actuarial assumptions were changed: ➤ Increase the salary increase rate for ages 25 through 29, and decrease for ages 30 through 64. ➤ Decrease withdrawal rates for ages above 25. ➤ Update mortality for healthy lives, previously 1971 Group Annuity Mortality Table. ➤ Update mortality for disabled lives, previously 1983 Railroad Retirement Board Disabled Life Mortality Table.

EXHIBIT VIII
Summary of Plan Provisions

This exhibit summarizes the major provisions of the Pension System included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	May 1 through April 30
Membership:	All Firefighters become members as a condition of employment. Membership begins on the first day of employment.
Creditable Service:	Total creditable service is defined as the sum of the service as a Firefighter after becoming a member after July 1, 1953, plus any service earned prior to July 1, 1953, if continuous.
Normal Retirement:	
Age Requirement	None, however, members are required to retire after reaching age 65 regardless of service.
Service Requirement	25 years of service.
Amount	The base pension is 2.5% of average final compensation per year of creditable service to a maximum of 80%. Average final compensation is defined as the average of the two highest years of base compensation in the last ten years. The minimum retirement benefit is $600 per month.
Duty Disability:	
Age Requirement	None
Service Requirement	None
Amount	The pension is 62.5% of average final compensation at disability with a minimum 62.5% of the current maximum salary payable to the rank of a firefighter. The current maximum monthly salary as of May 1, 2006 is $5,077.

Non-duty Disability:	
Age Requirement	Less than 65
Service Requirement	10 years of service.
Amount	The pension is 25% of the average final compensation plus 2.5% of average final compensation per year of creditable service in excess of 10 years, not to exceed 80% of average final compensation.
Vesting:	
Age Requirement	None
Service Requirement	10 years of service.
Amount	2.5% of average final compensation per year of creditable service, not to exceed 62.5% of average final compensation, payable at age 50. If the employee dies in a deferred status, before age 50, the beneficiary receives a lump sum equal to member contributions with interest. If such death occurs after age 50, the widow and children receive the same benefits as for pre-retirement non-duty death, but reduced by the ratio of the member’s service to 25 years.
Withdrawal (Refund) Benefit:	
Age Requirement	None
Service Requirement	Less than 10 years of creditable service.
Amount	If an employee terminates before becoming eligible for a deferred pension, he or she receives a return of member contributions with interest. This benefit is reduced by a service charge of 10%, 8%, 6%, 4% or 2% if employee withdraws with less than one year, two years, three years, four years, or five years of employment respectively.

Pre-Retirement Duty Death Benefit:

Age Requirement	None
Service Requirement	None
Funeral Benefit	A lump-sum payment of $2,000.
Surviving Spouse Benefit	100% of the accrued pension is paid with a minimum of 62.5% of the average final compensation. The surviving spouse’s benefit for spouses of active firefighters eligible for a service pension is 100% of the regular pension reduced for the election of optional 100% joint and survivor coverage. The minimum benefit is $275 per month.
Child’s Benefit	If there is no surviving spouse or the spouse dies or remarries, the spouse’s benefit is divided equally to the children and paid until age 18 (or age 21 if a student). If a surviving spouse exists, $100 per month is paid until age 18 (or age 21 if a student).
Return of Contributions	A return of accumulated contributions is guaranteed. If there is no surviving spouse or dependent children, or if the spouse remarries, the accumulated contributions or the unpaid balance thereof shall be paid to the estate or to a named beneficiary.

Pre-Retirement Non-duty Death Benefit:	
Age Requirement	None
Service Requirement	None
Funeral Benefit	A lump-sum payment of $2,000.
Surviving Spouse Benefit	50% of the accrued pension is paid, with a minimum of 25% of average final compensation payable for the life of the surviving spouse. The surviving spouse's benefit for active firefighters eligible for a service pension is 100% of the regular pension, reduced for the election of optional 100% joint and survivor coverage. The minimum benefit is $275 per month.
Child's Benefit	If no surviving spouse or the spouse dies, the spouse's benefit is divided equally to the children and paid until age 18 (or 21 if student). If a surviving spouse exists, $100 per month is paid until age 18 (or 21 if student).
Return of Contributions	A return of accumulated contributions is guaranteed. If there is no surviving spouse or dependent children, or if the surviving spouse is no longer eligible to receive payments because of remarriage, the accumulated contributions or the unpaid balance thereof shall be paid to the estate or to a named beneficiary.
Post-Retirement Death Benefit:	
Age Requirement	None
Service Requirement	None
Amount	If married, pension benefits are paid in the form of a Joint and 50% Survivor annuity or in any other available optional form elected by the member and spouse in an actuarially equivalent amount. The minimum benefit is $275. Payments equal to the amount of the member's accumulated contributions are guaranteed. In addition, a lump-sum funeral benefit of $2,000 is paid.

Cost of Living Adjustment (COLA):	A maximum increase of 3% of the original pension (prior to election of option) will be made annually. This does not apply to funeral benefits. Members must retire on or before January 1st in order to receive a COLA in the next year.
Contributions:	
Pension System	Employees contribute 9.55% of base salary. The City currently contributes 19.6% of payroll.
Interest on Employee Contributions	3.0% per year.
Health Insurance Subsidy	Effective January 1, 2000, the City contribution is 2% of base salary and the employee contribution is 1% of base salary. Contributions and benefits for the Health Insurance Subsidy are separately accounted for under the plan. The assets, liabilities, contributions, and benefits of the Health Insurance Subsidy are excluded from this valuation.
Changes in Plan Provisions:	There have been no changes in the plan provisions since the preceding actuarial valuation

175068v1/01254.001