City of Kansas City, Missouri
Firefighters' Pension System

Actuarial Valuation
as of May 1, 2010

Produced by Cheiron

August 2010

CHEIRON Classic Values, Innovative Advice

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APPENDICES

August 12, 2010

Board of Pension Trustees
City of Kansas City, Missouri Firefighters' Pension System
12th Floor, City Hall
414 East 12th Street
Kansas City, MO 64106

Dear Members of the Board:

At your request, we have conducted an actuarial valuation of the City of Kansas City, Missouri Firefighters' Pension System (KCFPS) as of May 1, 2010. The valuation is organized as follows:

- In Section I, the **Board Summary** we describe the purpose of an actuarial valuation and summarize the key results found in this valuation;
- The **Main Body** of the report presents details on the System's;
    - Section II - Assets
    - Section III - Liabilities
    - Section IV- Contributions
    - Section V- Required Accounting Disclosures (GASB)
- In the **Appendices** we conclude our report with detailed information describing System membership (Appendix A), actuarial assumptions and methods employed (Appendix B), and a summary of pertinent plan provisions (Appendix C).

The results of this report rely on future plan experience conforming to the underlying assumptions. To the extent that the actual plan experience deviates from the underlying assumptions, the results would vary accordingly.

In preparing our report, we relied without audit, on information supplied by KCFPS staff. This information includes, but is not limited to, plan provisions, employee data, and financial information. In addition, we certify that, to the best of our knowledge, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice as set out by the Actuarial Standards Board.

Finally, as Members of the American Academy of Actuaries, we certify that we meet the Qualification Standards to render the opinions contained in this report.

Sincerely,
Cheiron

Stephen McElhaney, FSA, MAAA	Katie Dobbs, FSA, MAAA
Consulting Actuary	Actuary

1750 Tysons Boulevard, Suite 1100, McLean, VA 22102 Tel: 703.893.1456 Fax: 703.893.2006 www.cheiron.us

SECTION I
BOARD SUMMARY

The primary purpose of the actuarial valuation and this report is to measure, describe and identify as of the valuation date:

- The financial condition of the Plan,
- Past and expected trends in the financial progress of the Plan,
- The City's contributions for Fiscal Year 2011, and
- Information required by the Governmental Accounting Standards Board (GASB).

In the balance of this Board Summary, we present (A) the basis upon which this year's valuation was completed, (B) the key findings of this valuation including a summary of all key financial results, (C) an examination of the historical trends, and (D) the projected financial outlook for the System.

A. Valuation Basis

This May 1, 2010 valuation represents Cheiron's fourth valuation performed for KCFPS and there have been no changes since the prior year, therefore the methodology, plan provisions, and assumptions reflected in this valuation are the same as in the May 1, 2009 valuation.

B. Key Findings of this Valuation

The key results of the May 1, 2010 actuarial valuation are as follows:

- The actuarially determined City contribution rate decreased from 31.94% as of May 1, 2009 to 24.70% as of May 1, 2010. The actual rate that the City is scheduled to use for the current year is 19.60% of payroll. We believe that such rate will need to be increased in the future in order to sustain the System over the long term.

- The FPS's unfunded actuarial liability decreased from $152 million on May 1, 2009 to $81 million on May 1, 2010.

- The FPS's funding ratio, the ratio of assets over liabilities increased from 69.7% as of May 1, 2009 to 84.3% as of May 1, 2010.

- The primary factor in the increase in the Plan's funded status was an overall experience gain of $79.0 million.
  - During the year ended April 30, 2010, the Plan's assets returned 33.37% on a market value basis. The return on the actuarial asset value (i.e. incorporating asset smoothing) was 28.48% (as compared to 7.75% assumed). This resulted in an actuarial gain on investments of $71.1 million.
  - On the liability side, the System experienced an actuarial gain of $7.9 million. The majority of this gain was due to salaries being frozen, resulting in a gain of

SECTION I
BOARD SUMMARY

$6.9 million. The remaining was due to the assumptions made on rates of mortality, retirement, disability and withdrawal.

- As of May 1, 2010 the actuarial value of assets exceeds the market value by $60.7 million. The Plan will recognize this difference as a deferred asset loss over the next 4 years.

Following is Table I-1 which summarizes all the key results of the valuation with respect to System membership, assets and liabilities, and contributions. The results are presented and compared for both the current and prior plan years.

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BOARD SUMMARY

Table I-1
City of Kansas City, Missouri Firefighters' Pension System
Summary of Principal Plan Results

Valuation as of:	May 1, 2009	May 1, 2010	% Change
Participant Counts			
Active Participants	931	903	(3.01%)
Disabled Participants	257	271	5.45%
Retirees and Beneficiaries	599	592	(1.17%)
Terminated Vested Participants	0	1	N/A
Inactive Participants	6	5	(16.67%)
Total	**1,793**	**1,772**	**(1.17%)**
Annual Salaries of Active Members	$ 53,612,509	$ 51,934,305	(3.13%)
Annual Retirement Allowances for Retired Members and Beneficiaries	$ 25,085,708	$ 26,505,387	5.66%
Assets and Liabilities			
Actuarial Liability (AL)	$ 500,193,509	$ 516,599,916	3.28%
Actuarial Value of Assets	348,489,209	435,427,953	24.95%
Unfunded Actuarial Liability (UAL)	$ 151,704,300	$ 81,171,963	(46.49%)
Funded Ratio	69.7%	84.3%	
Present Value of Accrued Benefits (PVAB)	$ 470,410,163	$ 489,079,216	3.97%
Market Value of Assets	290,407,674	374,721,914	29.03%
Unfunded PVAB	$ 180,002,489	$ 114,357,302	(36.47%)
Accrued Benefit Funding Ratio	61.7%	76.6%	
Contributions as a Percentage of Payroll	**Fiscal Year 2010**	**Fiscal Year 2011**	
Normal Cost Contribution	14.64%	14.78%	
Unfunded Actuarial Liability Contribution	17.30%	9.92%	
Total City Contribution	31.94%	24.70%	
Annual Required Contribution (GASB)	$ 17,123,835	$ 12,827,773	-25.09%

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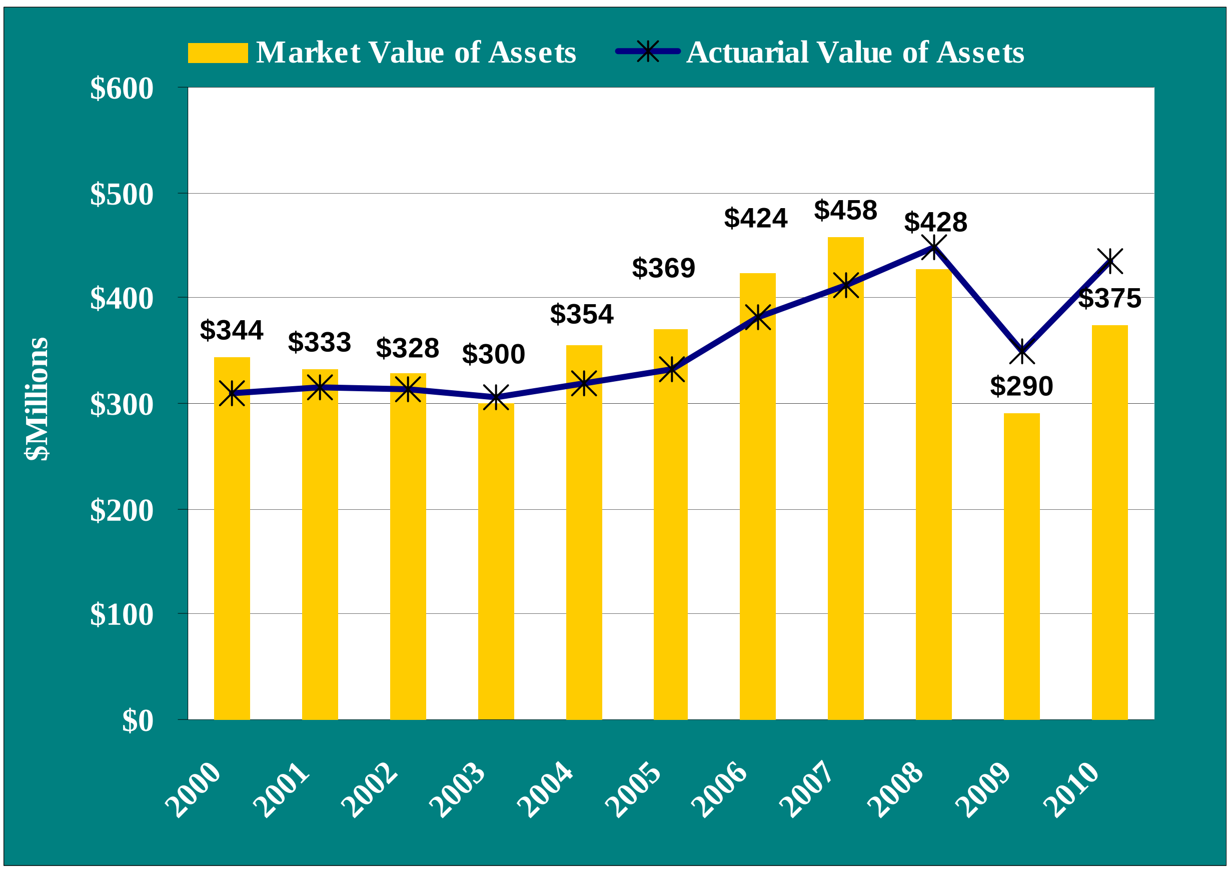
BOARD SUMMARY

C. Historical Trends

Despite the fact that for most retirement systems the greatest attention is given to the current valuation results and in particular the size of the current unfunded actuarial liability and the City's contribution, it is important to remember that each valuation is merely a snapshot in the long-term progress of a pension fund. It is more important to judge a current year's valuation result relative to historical trends, as well as trends expected into the future.

System Assets

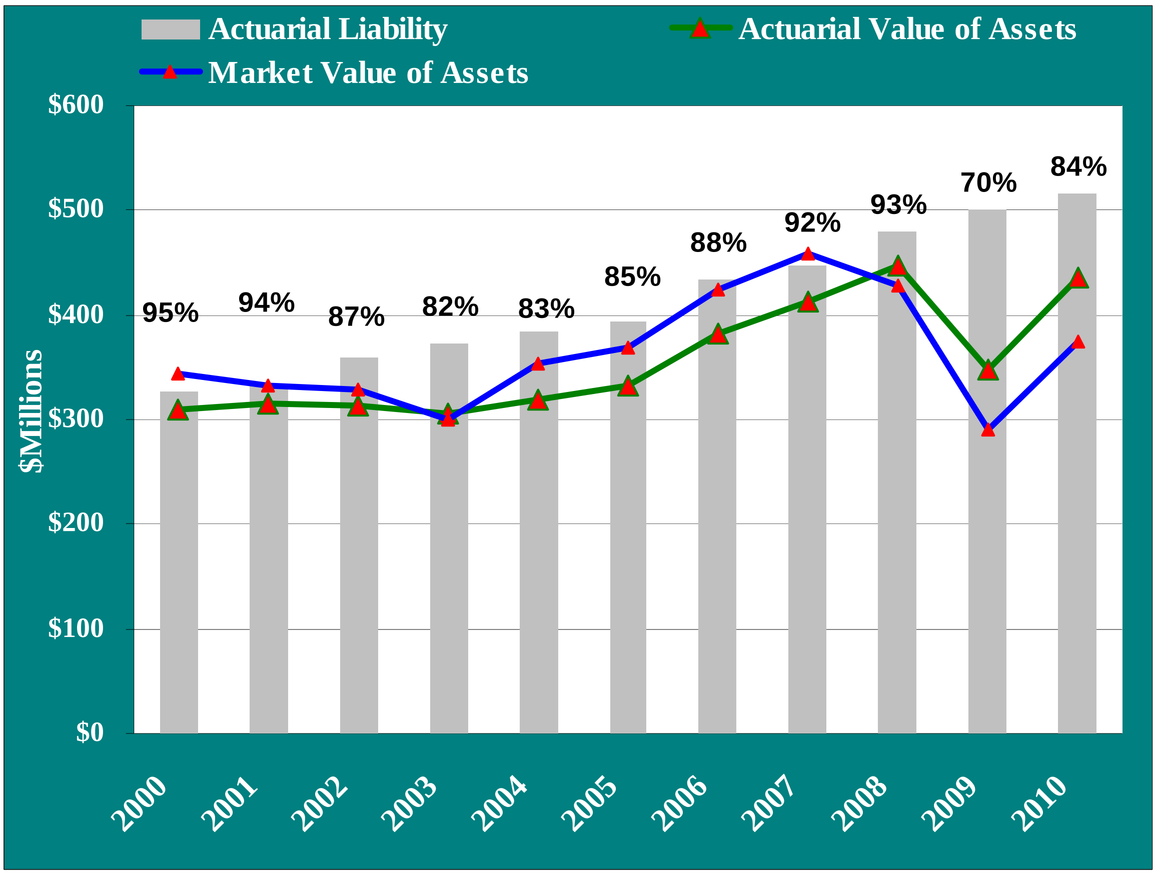


The market value of assets (MVA) had a gain on investments in 2010, returning 33.37%. With the asset smoothing method in place, the actuarial value of assets has tracked a slightly smoother path through the volatility of the market value of assets. As can be seen in the graph, the actuarial value of assets (AVA) increased significantly from 2009 to 2010 due to gains in the market.

SECTION I
BOARD SUMMARY

Assets and Liabilities

The chart below compares the market value of assets, the actuarial value of assets, and the actuarial liabilities, as well as the funded ratio (actuarial value of assets / actuarial liability), sometimes referred to as the benefit security ratio. This chart shows the Plan's funding ratio increasing to 84% from the 10-year low of 70% in 2009.



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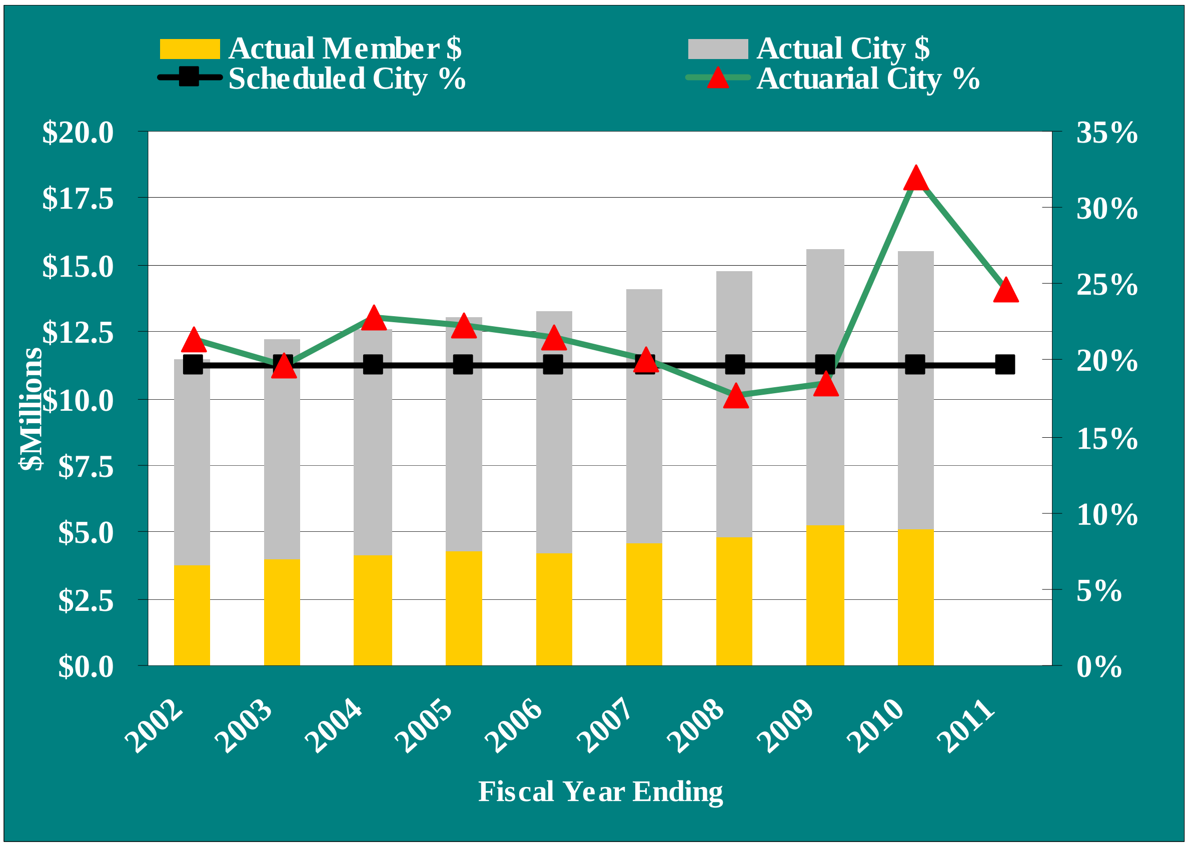
BOARD SUMMARY

Contribution Rates

The stacked bars in this graph show the dollar amount of contributions made by the City and the members (depicted on the left hand scale) since Fiscal Year Ending 2002. The green line shows the City's actuarial contribution rate as a percent of payroll (depicted on the right hand scale). The black line shows the City's scheduled contribution rate as a percent of payroll (depicted on the right hand scale). The member contribution rate is set by City law at 9.55% of payroll. The City contribution rate is currently scheduled to be 19.60% of payroll.



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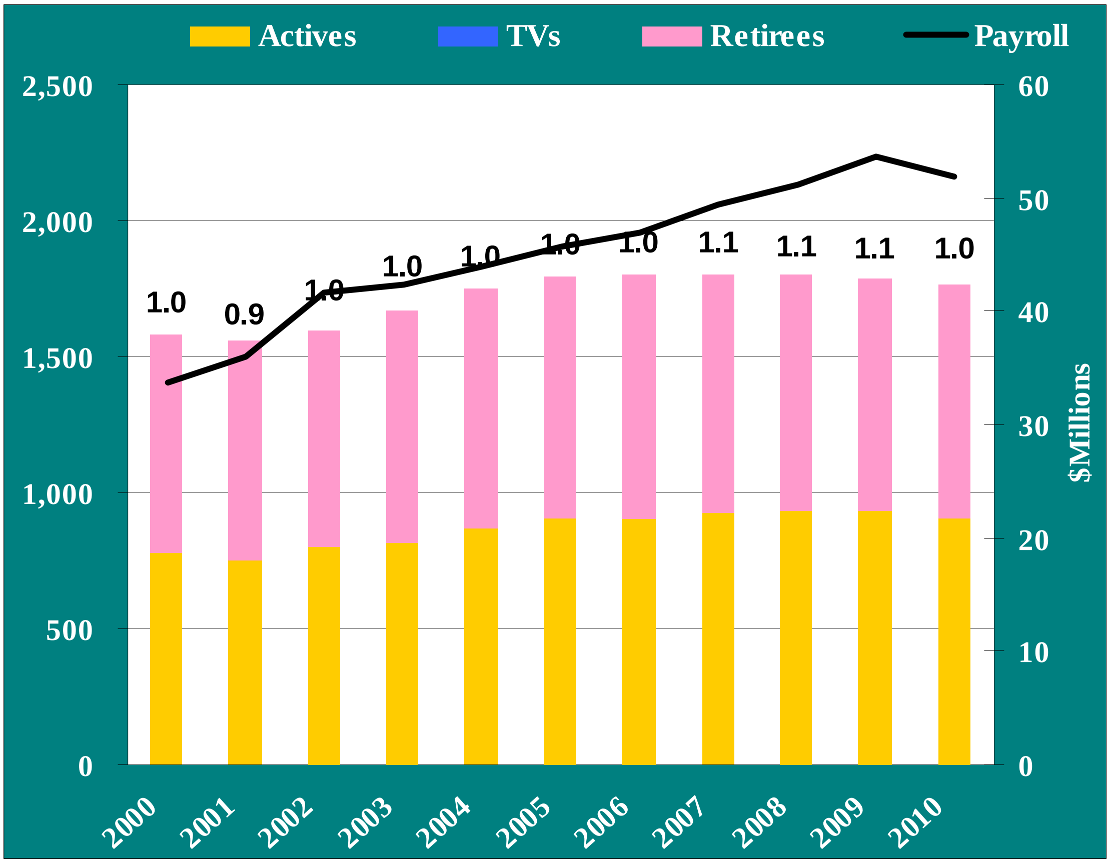
BOARD SUMMARY

Participant Trends



This chart provides a measure for the maturity in the Plan, by comparing the ratio of active members to inactive members (retirees and terminated-vesteds). The System's active-to-inactive ratio remains fairly consistent from 0.9 actives supporting each inactive member to 1.0 actives supporting each inactive member today.

SECTION I
BOARD SUMMARY

D. Future Expected Financial Trends

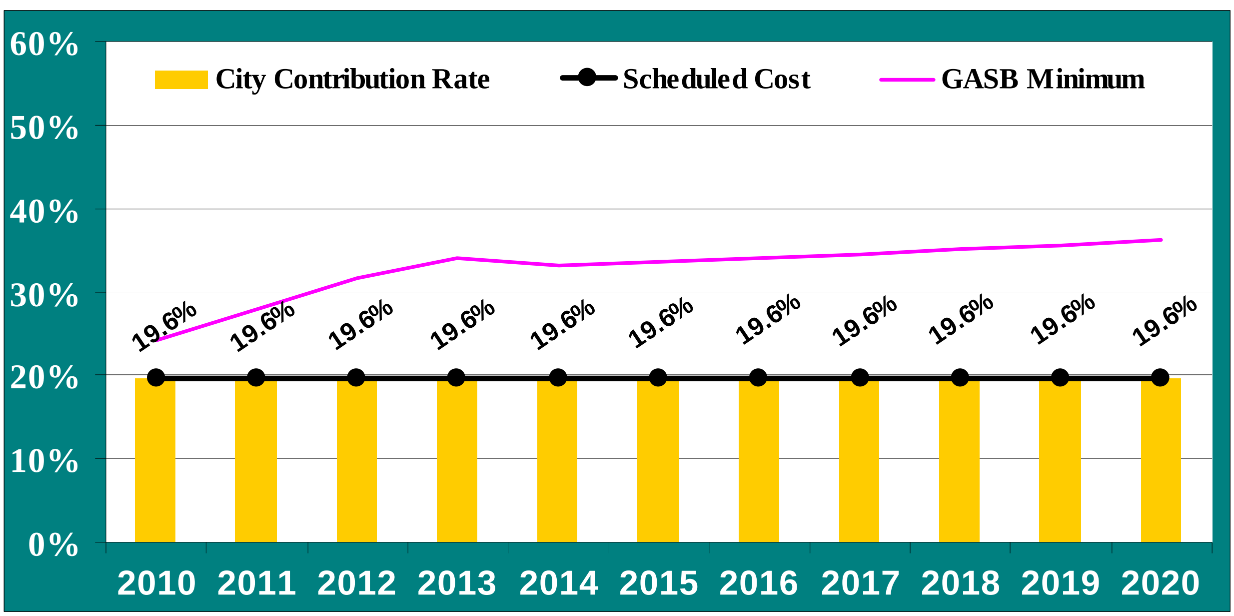
The analysis of projected financial trends is perhaps the most important component of this valuation. In this Section, we present the implications of the May 1, 2010 valuation results in terms of (1) the projected City's contributions and (2) projected Plan's funded status (ratio of assets over liabilities). For each projection set we assume three future different investment return scenarios: baseline returns of 7.75%, optimistic returns of 9.25%, and pessimistic returns of 6.25%. Finally, since the City has historically contributed on the basis of a "scheduled cost" of 19.6%, we also show the impact on these projections if the City were to contribute the actuarially computed rate that comes out of each valuation as described in Section IV. As can be seen in the charts that follow, the difference in the Plan's projected financial status, between paying the scheduled cost and the actuarially computed costs, are very dramatic.

1. <u>Contribution Rate Projections</u>

The first set of charts show the City's scheduled cost (black line) which never changes, the GASB Minimum cost (pink line) which is Normal cost plus 30 year amortization of the UAL (shown for comparison purposes), and the actual City contribution rate (gold bars). The years shown in the charts are plan years beginning May 1st.

a. Assuming the City always pays the scheduled cost:

Baseline returns of 7.75%



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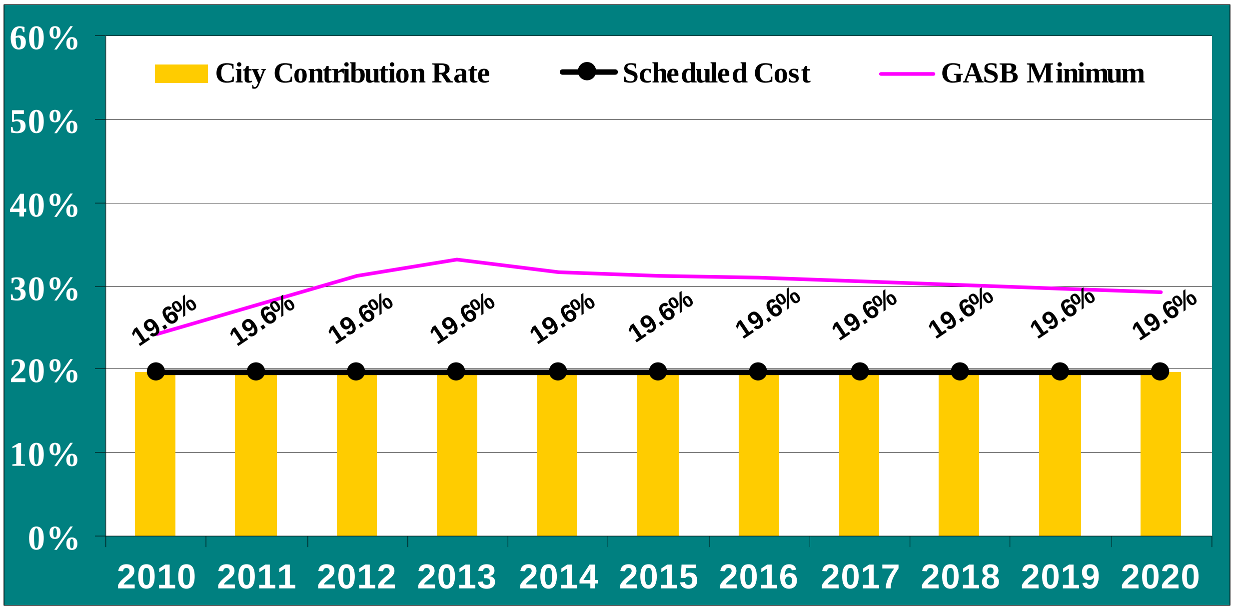
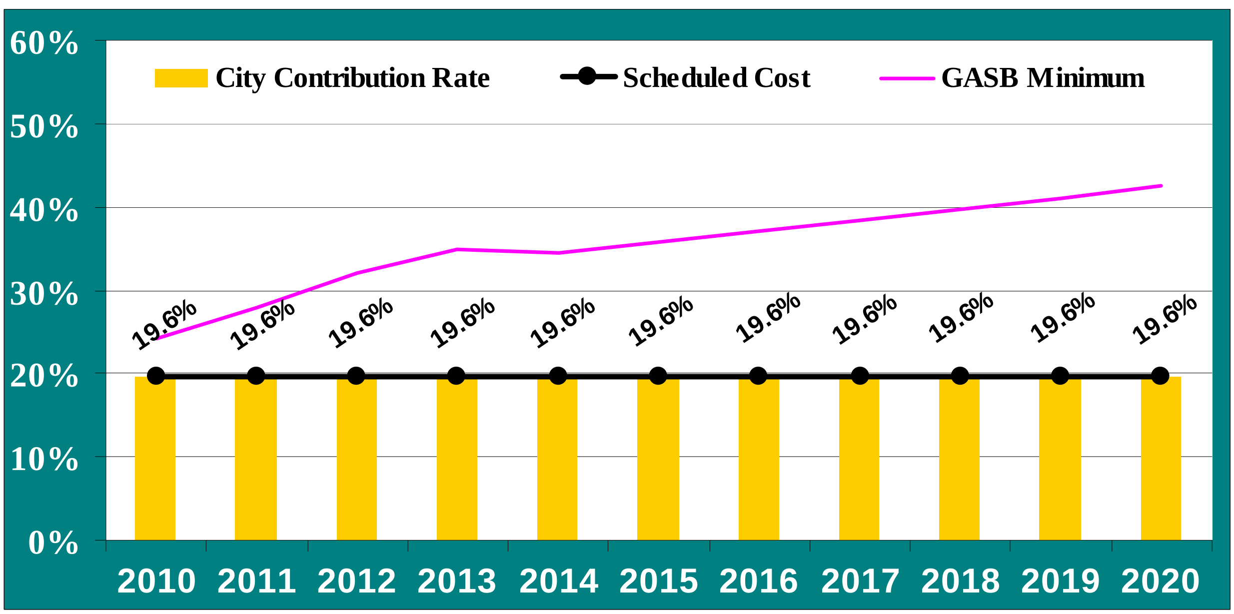
Optimistic returns of 9.25%



Pessimistic returns 6.25%



SECTION I
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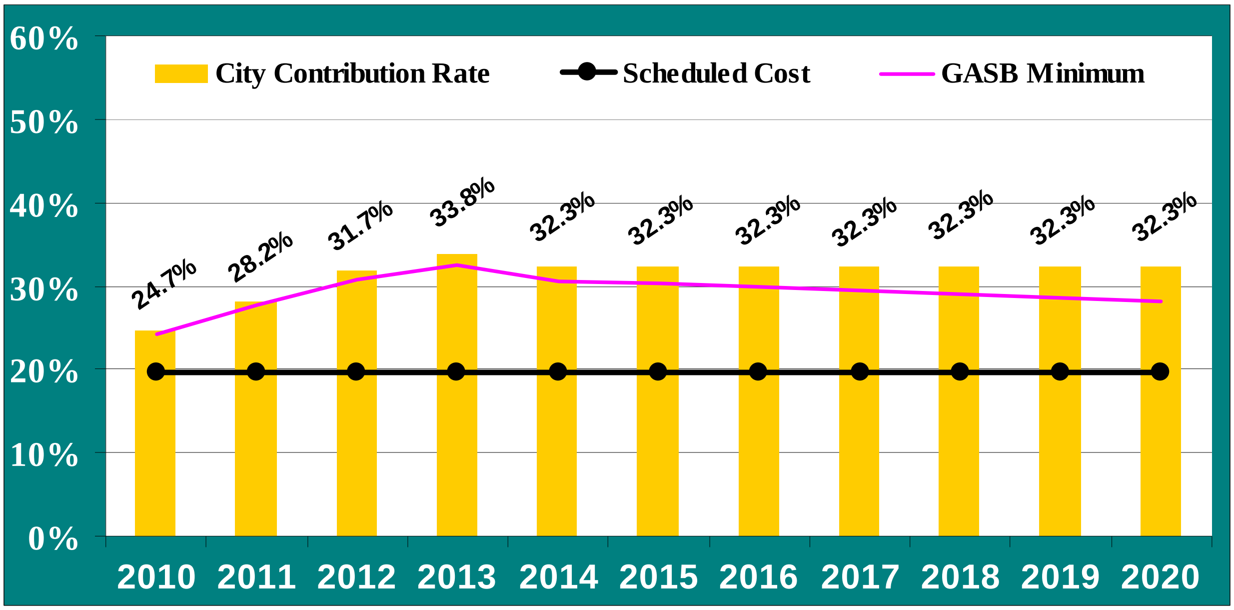
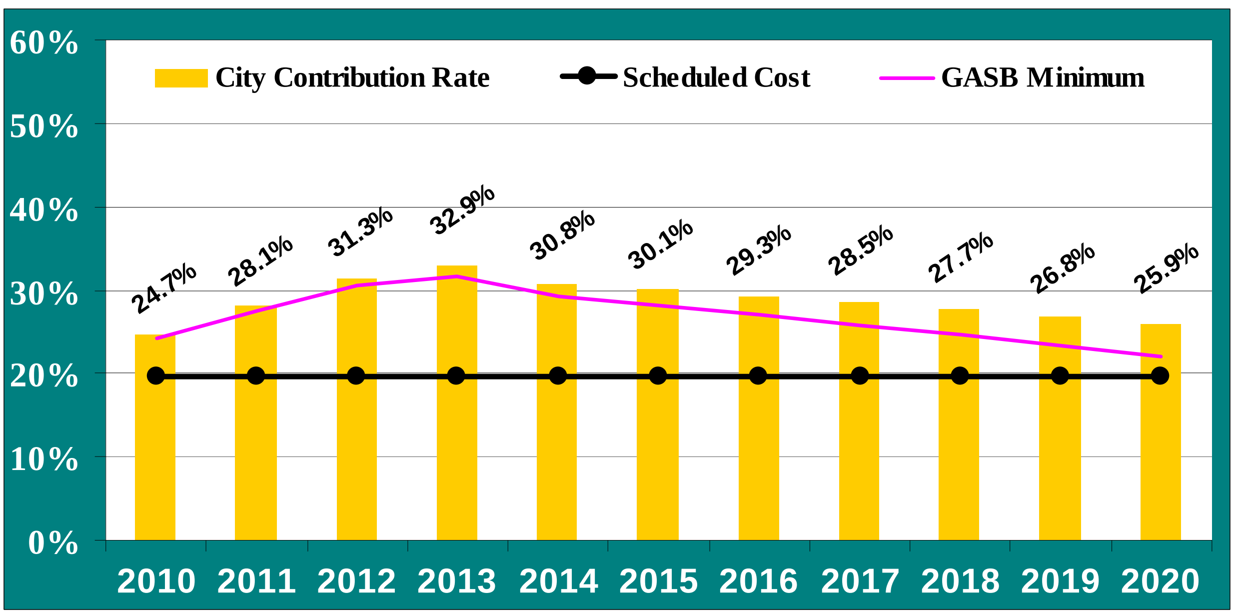
b. <u>Assuming the City always pays the actuarially computed contribution</u>

Baseline returns of 7.75%



Optimistic returns of 9.25%



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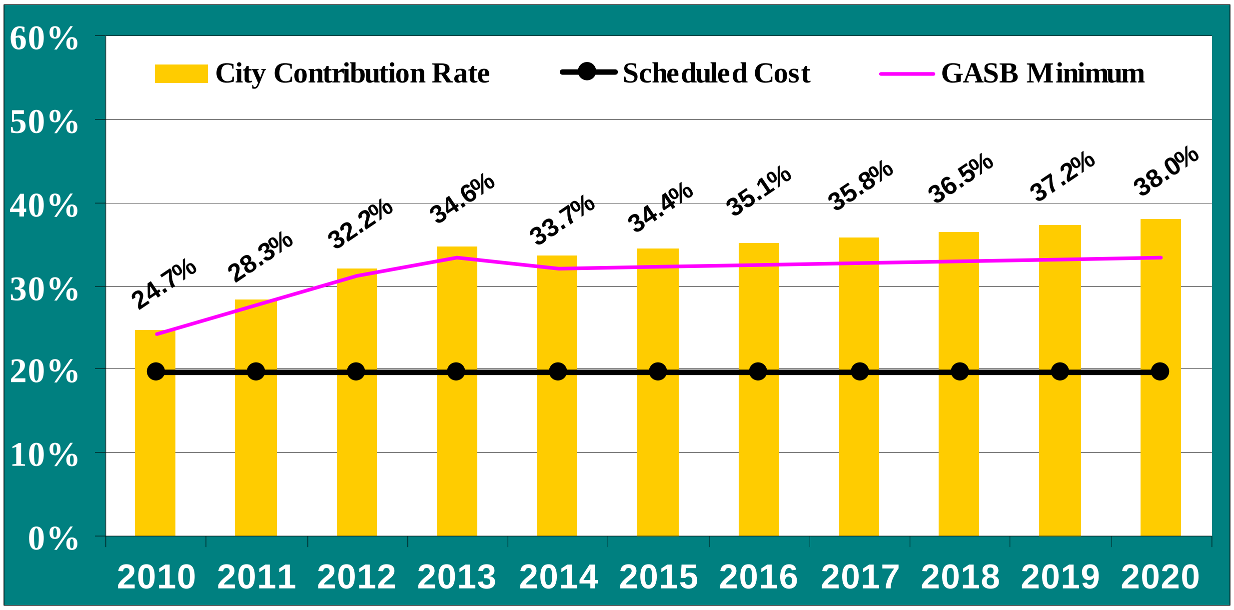
Pessimistic returns 6.25%



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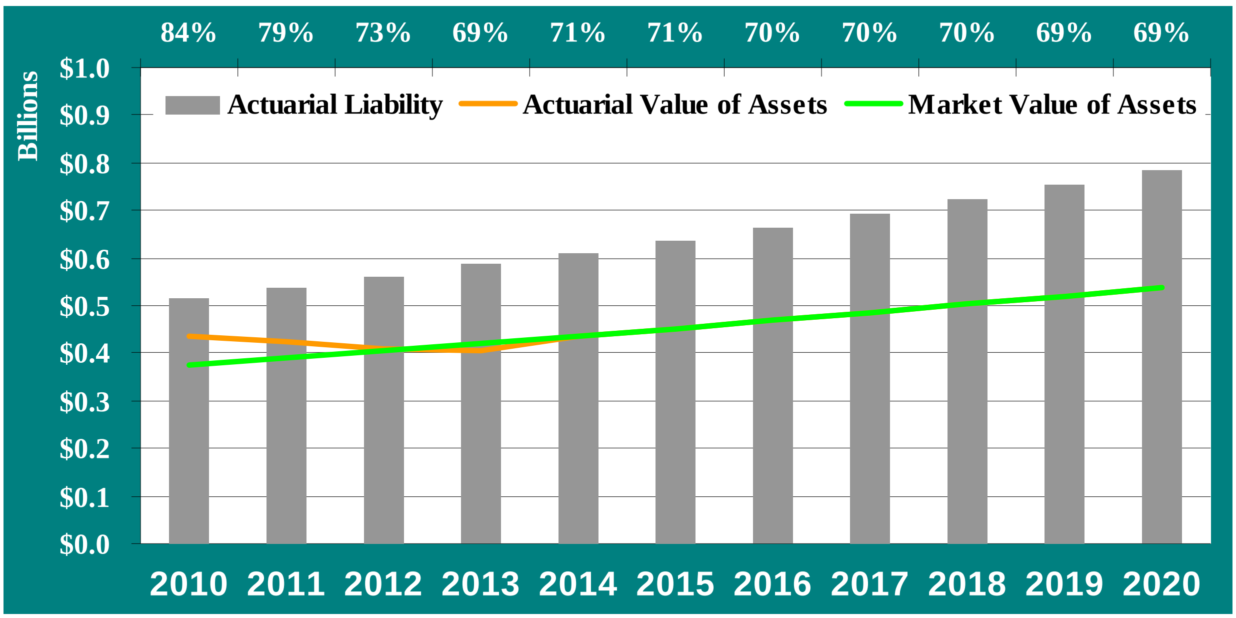
BOARD SUMMARY

2. <u>Asset and Liability Projections</u>:

This next set of projection charts compare the market value of assets (green line) and the actuarial or smoothed value of assets (gold line) to the Plan's actuarial liabilities (gray bars). In addition at the top of each chart, we show the Plan's funded ratio (ratio of actuarial value of assets to actuarial liabilities). The years shown in the charts are plan years beginning May 1st.

a. Assuming the City always pays the scheduled cost

Baseline 7.75% return



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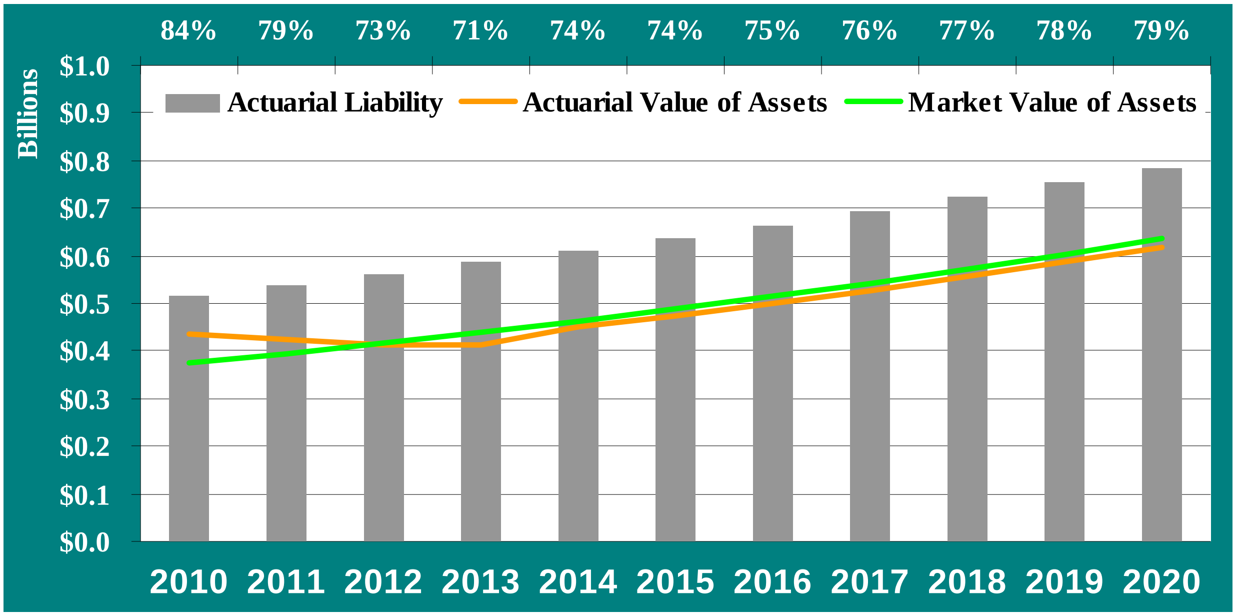
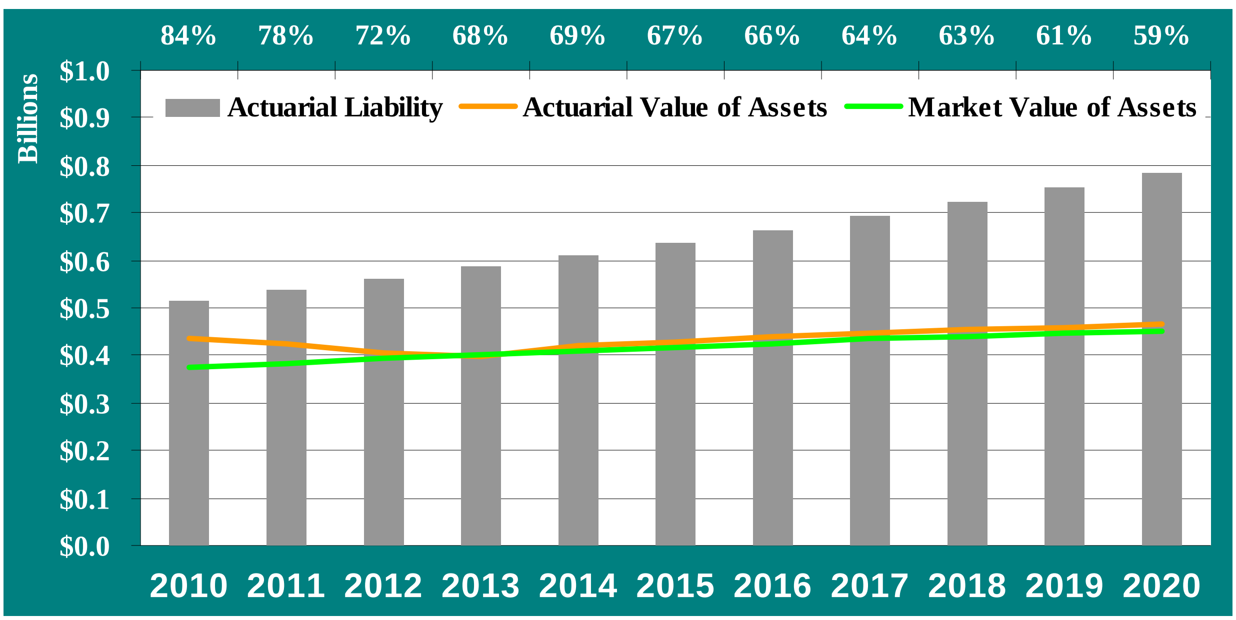
Optimistic Returns of 9.25%



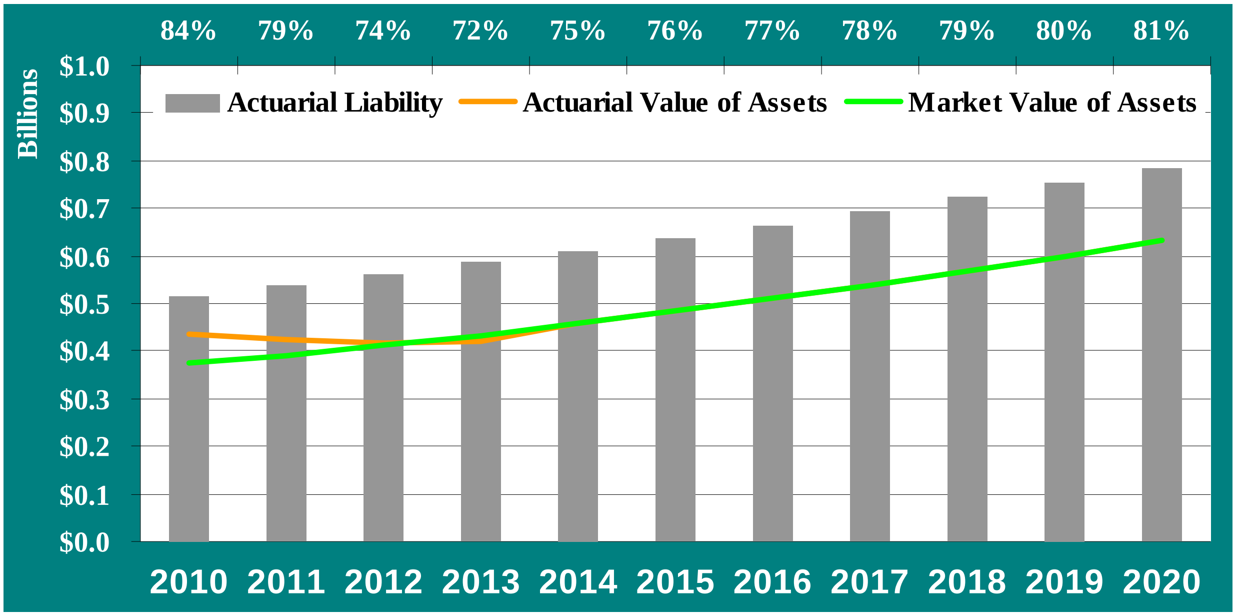
Pessimistic Returns of 6.25%



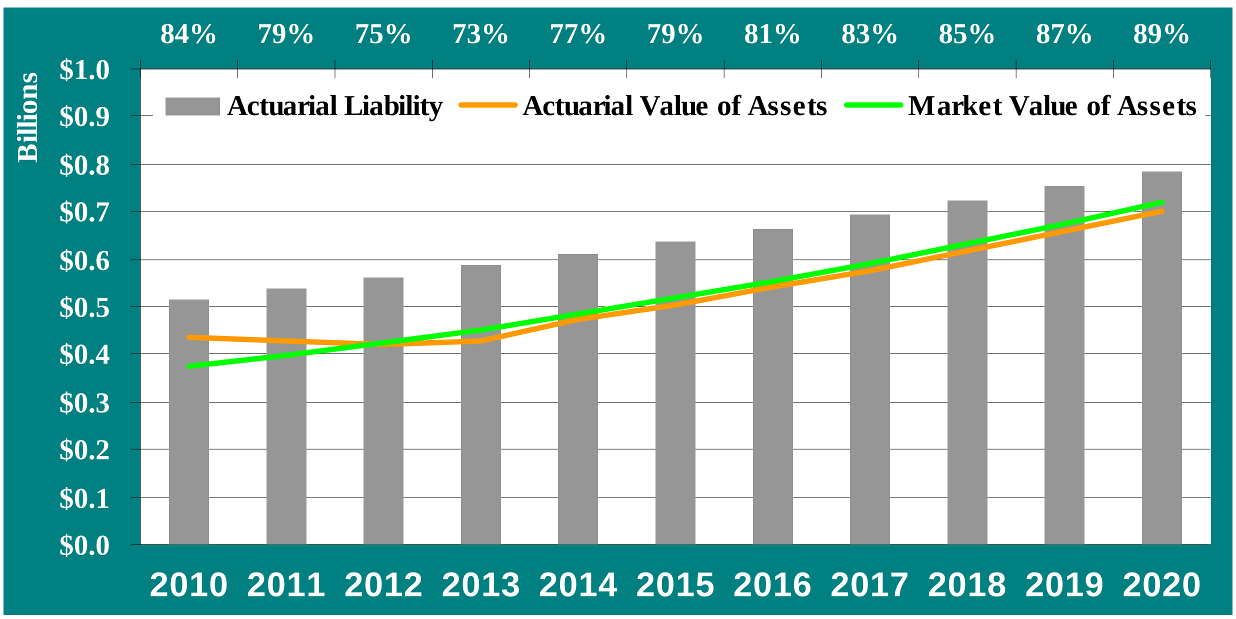
SECTION I
BOARD SUMMARY

b. *Assuming the City always pays the actuarially computed contribution*

Baseline 7.75% return



Optimistic Returns of 9.25%



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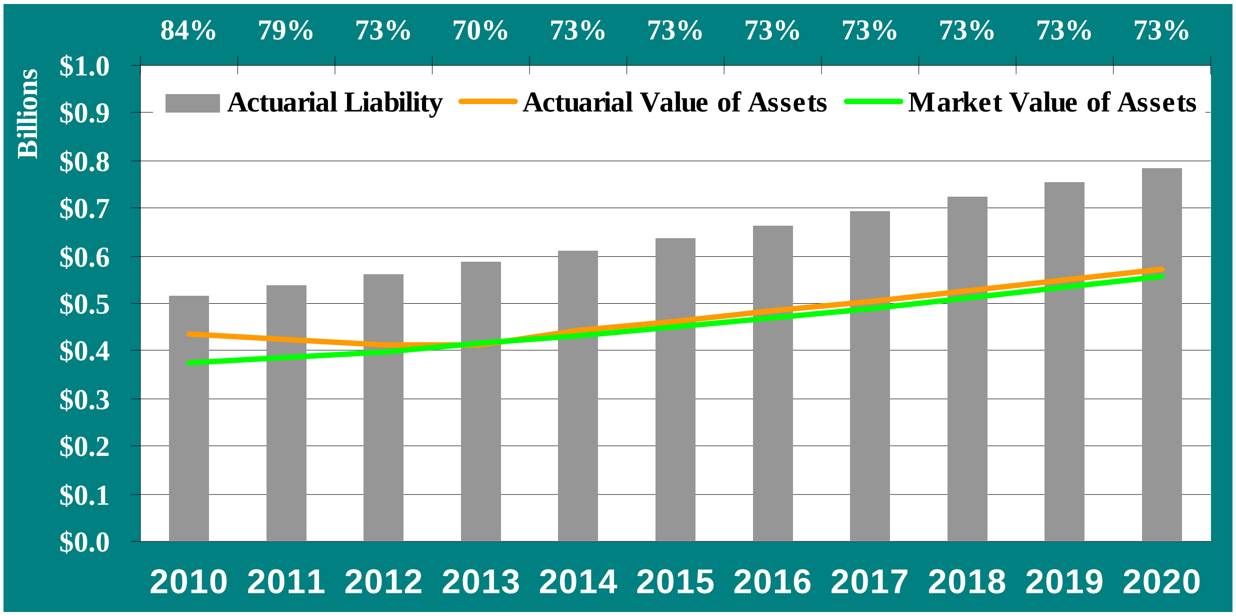
Pessimistic Returns of 6.25%



SECTION II
ASSETS

Pension System assets play a key role in the financial operation of the Plan and in the decisions the Trustees may make with respect to future deployment of those assets. The level of assets, the allocation of assets among asset classes, and the methodology used to measure assets will likely impact benefit levels, City contributions, and the ultimate security of participants' benefits.

In this section, we present detailed information on Plan assets including:

- **Disclosure** of Plan assets as of May 1, 2009 and May 1, 2010;
- Statement of the **changes** in market values during the year;
- Development of the **Actuarial Value of Assets**;
- An assessment of **investment performance**; and
- A projection of the Plan's expected **cash flow** for the next ten years.

Disclosure

There are two types of asset values disclosed in the valuation, the market value of assets and the actuarial value of assets. The market value represents "snap-shot" or "cash-out" values which provide the principal basis for measuring financial performance from one year to the next. Market values, however, can fluctuate widely with corresponding swings in the marketplace. As a result, market values are usually not as suitable for long-range planning as are the actuarial value of assets which reflect smoothing of annual investment returns.

Table II-1 below discloses and compares each asset value as of April 30, 2009 and April 30, 2010.

TABLE II-1
Statement of Assets at Market Value as of April 30,

Assets	**2009**	**2010**	**% Change**
Cash	$ 9,138,157	$ 11,137,331	21.88%
Stock and Collective Trusts	283,215,160	364,047,491	28.54%
Accounts Receivable	533,765	3,101,223	481.01%
Interest and Dividends Receivable	86,926	64,947	(25.28%)
Contributions Receivable	889,171	971,420	9.25%
Expenses Payable	(719,815)	(420,150)	(41.63%)
Purchase of Investments	(1,598,292)	(2,763,818)	72.92%
Health Assets	(1,137,398)	(1,416,530)	24.54%
Market Value of Assets	**$ 290,407,674**	**$ 374,721,914**	**29.03%**

SECTION II
ASSETS

Changes in Market Value

Table II-2 below shows the components of change between the market value of assets as of April 30, 2009 and April 30, 2010.

TABLE II-2
Changes in Market Values

Value of Assets – April 30, 2009			**$**	**290,407,674**
Additions				
Member Contributions	$	5,072,141		
Employer Contributions		10,465,322		
Interest and Dividends		1,702,715		
Investment Return		95,359,707		
Total Additions	**$**	**112,599,885**		
Deductions				
Benefit Payments	$	(26,324,850)		
Administrative Expenses		(1,960,795)		
Total Deductions	**$**	**(28,285,645)**		
Value of Assets – April 30, 2010			**$**	**374,721,914**

SECTION II
ASSETS

Actuarial Value of Assets

The next table, Table II-3 shows how the actuarial value of assets is developed.

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 at least 80% but no more than 120% of the market value.

TABLE II-3
Development of Actuarial Value of Assets

1.	Actuarial Value of Assets at May 1, 2009				$ 348,489,209
2.	Employer and Employee Contributions				15,537,463
3.	Benefit Payments				(26,324,850)
4.	Net Cash Flow (2+3)				$ (10,787,387)
5.	Expected Value of investment return at 7.75%				26,597,702
6.	Actual investment return on Market Value				95,101,627
7.	Investment gain/(loss) for the year (6-5)				$ 68,503,925
8.	Investment gain/(loss) from current and prior years to be recognized in the plan year ending April 30, 2010				
	Plan Year End	Total Gain/ (Loss)	Deferral Percentage		Deferred to Future Years
	April 30, 2010	$ 68,503,925	80%		$ 54,803,140
	April 30, 2009	(161,966,630)	60%		(97,179,978)
	April 30, 2008	(52,977,094)	40%		(21,190,838)
	April 30, 2007	14,308,187	20%		2,861,637
	April 30, 2006	36,535,226	0%		0
	Total	$ (95,596,386)			$ (60,706,039)
9.	Market Value of Assets for Year ending April 30, 2010 :				$ 374,721,914
10.	Preliminary Actuarial Value of Assets on May 1, 2010 (9 - 8 deferred):				435,427,953
11.	120% of MV, Upper Limit for Actuarial Value				$ 449,666,297
12.	80% of MV, Lower Limit for Actuarial Value				299,777,531
13.	**Actuarial Value of Assets on May 1, 2010**				**$ 435,427,953**

SECTION II
ASSETS

Investment Performance

The market value of assets (MVA) returned 33.37% during 2010, which is higher than the assumed 7.75% return. A return of 28.48% on the actuarial value of assets (AVA) is primarily the result of the asset smoothing method, which includes the application of the corridor implemented in 2009, being utilized for the calculation of the actuarial value of assets.

Projection of Plan's Future Cash Flows

Table II-4
Projection of Plan's Expected Cash Flows

Year Beginning May 1,	Expected Benefit Payments	Expected Contributions*	Net Cash Flow
2010	$ (29,135,085)	$ 15,138,850	$ (13,996,235)
2011	(30,510,087)	15,593,016	(14,917,071)
2012	(31,825,178)	16,060,806	(15,764,372)
2013	(32,820,666)	16,542,630	(16,278,036)
2014	(33,825,303)	17,038,909	(16,786,394)
2015	(34,982,975)	17,550,076	(17,432,899)
2016	(36,431,147)	18,076,579	(18,354,568)
2017	(38,073,418)	18,618,876	(19,454,542)
2018	(40,008,046)	19,177,442	(20,830,604)
2019	(42,236,266)	19,752,766	(22,483,500)

* Expected contributions include City contributions and Member contributions. For illustration purposes, we have assumed the City contribution rate will be based on the scheduled contribution rates and that payroll will increase at the actuarially assumed rate of 3.00% per year.

SECTION III
LIABILITIES

In this section, we present detailed information on Plan liabilities including:

- **Disclosure** of Plan liabilities at May 1, 2009 and May 1, 2010;
- Statement of **changes** in these liabilities during the year.

Disclosure

Several types of liabilities are calculated and presented in this report. Each type is distinguished by the people ultimately using the figures and the purpose for which they are using them.

- **Present Value of All Future Benefits:** Used for measuring all future System obligations, represents the amount of money needed today to fully pay off all benefits of the System both earned as of the valuation date and those to be earned in the future by current plan participants, under the current Plan provisions.

- **Actuarial Liability:** Used for funding calculations and GASB disclosures, this liability is calculated taking the present value of benefits and subtracting the present value of future member contributions and future employer normal costs under an acceptable actuarial funding method. This method is referred to as the **Entry Age Normal** funding method.

- **Present Value of Accrued Benefits:** Used for communicating the current level of liabilities, this liability represents the total amount of money needed today to fully pay off the current accrued obligations of the Plan, assuming no future accruals of benefits. These liabilities are also required for accounting purposes (Topic 960) and used to assess whether the Plan can meet its current benefit commitments.

Table III-1 which follows discloses each of these liabilities for the current and prior valuations. With respect to each disclosure, a subtraction of the appropriate value of Plan assets yields, for each respective type, a **net surplus** or an **unfunded liability**.

SECTION III
LIABILITIES

TABLE III-1
Liabilities Net (Surplus)/Unfunded

	May 1, 2009	May 1, 2010
Present Value of Future Benefits		
Active Participant Benefits	$ 343,859,006	$ 339,949,505
Retiree and Inactive Benefits	284,711,478	297,376,606
Present Value of Future Benefits (PVB)	**$ 628,570,484**	**$ 637,326,111**
Actuarial Liability		
Present Value of Future Benefits (PVB)	$ 628,570,484	$ 637,326,111
Present Value of Future Normal Costs (PVFNC)	128,376,975	120,726,195
Actuarial Liability (AL = PVB – PVFNC)	**500,193,509**	**516,599,916**
Actuarial Value of Assets (AVA)	348,489,209	435,427,953
Net (Surplus)/Unfunded (AL – AVA)	**$ 151,704,300**	**$ 81,171,963**
Present Value of Accrued Benefits		
Present Value of Future Benefits (PVB)	$ 628,570,484	$ 637,326,111
Present Value of Future Benefit Accruals (PVFBA)	158,160,321	148,246,895
Present Value of Accrued Benefits (PVAB=PVB–PVFBA)	**470,410,163**	**489,079,216**
Market Value of Assets (MVA)	290,407,674	374,721,914
Net Unfunded/(Surplus)	**$ 180,002,489**	**$ 114,357,302**

SECTION III
LIABILITIES

Changes in Liabilities

Each of the Liabilities disclosed in the prior table are expected to change at each valuation. The components of that change, depending upon which liability is analyzed, can include:

- New hires since the last valuation
- Benefits accrued since the last valuation
- Plan amendments increasing benefits
- Passage of time which adds interest to the prior liability
- Benefits paid to retirees since the last valuation
- Participants retiring, terminating, or dying at rates different than expected
- A change in actuarial or investment assumptions
- A change in the actuarial funding method

Unfunded liabilities will change because of all of the above, and also due to changes in Plan assets resulting from:

- Employer contributions different than expected
- Investment earnings different than expected
- A change in the method used to measure Plan assets

In each valuation, we report on those elements of change which are of particular significance, potentially affecting the long-term financial outlook of the Plan. Below we present key changes in liabilities since the last valuation.

In the table that follows, we show the components of change in the actuarial liability between May 1, 2009 and May 1, 2010.

TABLE III-2

	Actuarial Liability
Liabilities May 1, 2009	$ 500,193,509
Liabilities May 1, 2010	516,599,916
Liability Increase/(Decrease)	16,406,407
Change Due to:	
Plan Amendments	0
Assumption Changes	0
Actuarial (Gain)/Loss	(7,862,916)
Benefits Accumulated and Other Sources	24,269,323

SECTION III
LIABILITIES

In addition, we breakdown the change in actuarial liability further by showing the total actuarial (gain)/loss by source, as shown in Table III-3 below.

TABLE III-3
(Gain)/Loss by Source as of May 1, 2010

Turnover	$	80,615
Retirement		(3,559,024)
Disability		2,733,384
Pre-retirement mortality		14,095
Post-retirement mortality		1,821,683
Salary increase more/(less) than expected for continuing actives		(6,918,305)
New entrants		14,275
Data Composition & Miscellaneous changes		(2,049,639)
Total (Gain)/Loss	**$**	**(7,862,916)**

SECTION IV
CONTRIBUTIONS

In the process of evaluating the financial condition of any pension plan, the actuary analyzes the assets and liabilities to determine what level (if any) of contributions is needed to properly maintain the funding status of the Plan. Typically, the actuarial process will use a funding technique that will result in a pattern of contributions that are both stable and predictable.

For this Plan, the funding method employed is the **Entry Age Actuarial Cost Method**. Under this method, there are two primary components to the total contribution: the **normal cost rate (employee and employer)**, and the **unfunded actuarial liability rate** (UAL rate). The normal cost rate is determined by taking the value, as of entry age into the Plan, of each member's projected future benefits. This value is then divided by the value, also at entry age, of each member's expected future salary. The normal cost rate is multiplied by current salary to determine each member's normal cost rate. Finally, the total normal cost rate is reduced by the member contribution to produce the employer normal cost rate. The difference between the Entry Age actuarial liability and the actuarial value of assets is the unfunded actuarial liability.

The unfunded actuarial liability is amortized over a 30-year fixed level percent of payroll for the May 1, 2008 UAL and a 30-year fixed level percent of payroll amortization method for changes to the UAL for the years on and after May 1, 2009, recognizing monthly payments. Payroll is expected to increase 3.0% per year.

Table IV-1 below presents and compares the employer contribution rates for the Plan for this valuation and the prior one.

Table IV-1
Employer Contribution Rate

	FY ending 2010	FY ending 2011
Entry Age Normal Cost Rate	14.64%	14.78%
Amortization Payment	17.30%	9.92%
Actuarially Determined Contribution	31.94%	24.70%

SECTION IV
CONTRIBUTIONS

TABLE IV-2
Development of Plan Contribution Rate as of May 1, 2010

	As % of Payroll*
1. Normal Cost (Monthly):	
a. Total Normal Cost	24.33%
b. Expected Members Contribution	9.55%
c. Employer Paid Normal Cost (a) – (b)	14.78%
2. Amortization of Unfunded Liability *(see TABLE IV-3 below)*	9.92%
3. Total Employer Contribution Rate (1) + (2)	24.70%
4. Scheduled City Contributions (19.6% of payroll)	19.60%

* *Total payroll is $51,934,305, and the annual required contribution for plan year ending April 30, 2011 is $12,827,773 based on the total employer contribution rate.*

TABLE IV-3
Unfunded Actuarial Liabilitiy Amortization Schedule

Item	Date Created	Initial Years	Initial Balance	Remaining Years	Outstanding Balance	Amortization Payment	Amortization Factor
Initial UAL	5/1/2008	30	$ 31,525,386	28	$ 32,239,750	$ 2,037,593	15.822
(Gain)/Loss*	5/1/2009	30	$119,805,172	29	$ 121,225,495	$ 7,517,880	16.125
(Gain)/Loss*	5/1/2010	30	$(72,293,282)	30	$ (72,293,282)	$ (4,404,337)	16.414
Total					**$ 81,171,963**	**$ 5,151,136**	

* *Also includes differences between the Annual Required Contribution and the actual contributions made.*

SECTION V
ACCOUNTING STATEMENT INFORMATION

Topic 960 of the Financial Accounting Standards Board requires the Plan to disclose certain information regarding its funded status. Statement No. 25 of the Governmental Accounting Standards Board (GASB) establishes standards for disclosure of pension information by public employee retirement systems (PERS) and governmental employers in notes to financial statements and supplementary information.

The Topic 960 disclosures provide a quasi "snap shot" view of how the Plan's assets compare to its liabilities if contributions stopped and accrued benefit claims had to be satisfied. However, due to potential legal requirements and the possibility that alternative interest rates would have to be used to determine the liabilities, these values may not be a good indication of the amount of money it would take to buy the benefits for all members if the Plan were to terminate.

The GASB-25 actuarial liability is the same as the actuarial liability amount calculated for funding purposes.

Both the present value of accrued benefits (Topic 960) and the actuarial liability (GASB-25) are determined assuming that the Plan is on-going and participants continue to terminate employment, retire, etc., in accordance with the actuarial assumptions. Liabilities are discounted at the assumed valuation interest rate of 7.75% per annum.

Topic 960 specifies that a comparison of the present value of accrued (accumulated) benefits with the market value of the assets as of the valuation date must be provided. GASB Statement No. 25 requires the actuarial liability be compared with the actuarial value of assets for funding purposes. The relevant amounts as of May 1, 2010 are exhibited in Table V-1. Finally, Table V-2 reconciles the Topic 960 liabilities determined as of the prior valuation, May 1, 2009, to the liabilities as of May 1, 2010.

Tables V-3 through V-5 are exhibits to be used with the CAFR report. Table V-3 is the Note to Required Supplementary Information, Table V-4 is a history of gains and losses in actuarial liability, and Table V-5 is the Solvency Test which shows the portion of actuarial liability covered by assets.

Finally, Tables V-6 and V-7 are additional GASB supplemental exhibits. Table V-6 shows historical GASB Annual Required Contribution information, compared to what the City actually contributed. Table V-7 shows historical unfunded actuarial liability (UAL) information, funding ratios, and the UAL as a percent of payroll.

SECTION V
ACCOUNTING STATEMENT INFORMATION

Table V-1
Accounting Statement Information

	May 1, 2009	May 1, 2010
A. Topic 960 Basis		
1. Present Value of Benefits Accrued to Date		
a. Members Currently Receiving Payments	$ 284,225,942	$ 297,033,955
b. Former Vested Members	485,536	342,651
c. Active Members	185,698,685	191,702,610
2. Total Present Value of Accrued Benefits (1(a) + 1(b) + 1(c))	$ 470,410,163	$ 489,079,216
3. Assets at Market Value	290,407,674	374,721,914
4. Unfunded Present Value of Accrued Benefits (2 – 3)	$ 180,002,489	$ 114,357,302
5. Ratio of Assets to Present Value of Benefits (3 / 2)	61.7%	76.6%
B. GASB No. 25 Basis		
1. Actuarial Liabilities for retirees and beneficiaries currently receiving benefits and terminated employees not yet receiving benefits	$ 284,711,478	$ 297,376,606
2. Actuarial Liabilities for current employees	215,482,031	219,223,310
3. Total Actuarial Liability (1 + 2)	$ 500,193,509	$ 516,599,916
4. Net Actuarial Assets available for benefits	348,489,209	435,427,953
5. Unfunded Actuarial Liability (3 – 4)	$ 151,704,300	$ 81,171,963

SECTION V
ACCOUNTING STATEMENT INFORMATION

Table V-2
Statement of Changes in Total Actuarial Present Value of All Accrued Benefits

	Accumulated Benefit Obligation
Actuarial Present Value of Accrued Benefits at April 30, 2009	470,410,163
Increase/(Decrease) During Years Attributable to:	
Passage of Time and Gains/Losses	35,616,031
Benefit Paid – FY 2010	(27,325,904)
Assumption Change	0
Benefits Accrued	10,378,926
Net Increase/(Decrease)	18,669,053
Actuarial Present Value of Accrued Benefits at April 30, 2010	489,079,216

SECTION V
ACCOUNTING STATEMENT INFORMATION

Table V-3
NOTE TO REQUIRED SUPPLEMENTARY INFORMATION

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the date indicated. Additional information as of the latest actuarial valuation follows.

Valuation date	May 1, 2010
Actuarial cost method	Entry age
Amortization method	30-year closed level percent of pay amortization for changes to the UAL on or after 5/1/2008
Remaining amortization period for the UAL	Weighted average of 27.6 years
Asset valuation method	5-Year smoothed market
Actuarial assumptions:	
Investment rate of return	7.75%
Projected salary increases	3.0%
Cost-of-living adjustments	3.0% simple
Inflation	3.0%

The actuarial assumptions used have been based upon recommendations by the actuary and adopted by the Plan's Board of Trustees.

The rate of employer contributions to the Plan is composed of the normal cost and an amortization of the unfunded actuarial liability. The normal cost is a level percent of payroll cost which, along with member contributions, will pay for projected benefits at retirement for the average plan participant. The actuarial liability is that portion of the present value of projected benefits that will not be paid by future employer normal costs or member contributions. The difference between this liability and the funds accumulated as of the same date is the unfunded actuarial liability.

SECTION V
ACCOUNTING STATEMENT INFORMATION

Table V-4
ANALYSIS OF FINANCIAL EXPERIENCE

Gain and Loss in Actuarial Liability During Years Ended April 30
Resulting from Differences Between Assumed Experience and Actual Experience
Gain (or Loss) for Year ending April 30,
(expressed in thousands)

Type of Activity	2007	2008	2009	2010
Investment Income	$ 10,762	$ 12,418	$ (123,457)	$ 71,128
Combined Liability Experience	7,563	3,634	1,816	7,863
Gain (or Loss) During Year from Financial Experience	$ 18,325	$ 16,052	$ (121,641)	$ 78,991
Non-Recurring Gain (or Loss) Items	0	(13,468)	1,836	6,698
Composite Gain (or Loss) During Year	$ 18,325	$ 2,584	$ (119,805)	$ 72,293

Table V-5
SOLVENCY TEST
Aggregate Actuarial Liabilities for
(expressed in thousands)

Valuation Date May 1	Active Member Contributions (1)	Retirees & Beneficiaries (2)	Active Member Employer Financed Contributions (3)	Actuarial Value of Reported Assets	Portion of Actuarial Liabilities Covered by Reported Assets (1)	(2)	(3)
2007	52,254	268,352	127,333	412,408	100%	100%	72%
2008	55,234	281,002	142,499	447,209	100%	100%	78%
2009	59,927	284,711	155,555	348,489	100%	100%	2%
2010	57,842	297,377	161,381	435,428	100%	100%	50%

SECTION V
ACCOUNTING STATEMENT INFORMATION

Table V-6
Supplementary Information Required by GASB - Schedule of City Contributions

Plan Year Ended April 30	Annual Required Contributions	Actual Contributions	Percentage Contributed
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	$9,466,685	100.5%
2008	$8,734,919	$9,937,683	113.8%
2009	$9,476,409	$10,319,886	108.9%
2010	$17,123,835	$10,465,322	61.1%
2011	$12,827,773	--	--

* Actual contributions are shown for the plan years ended April 30, 2002 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 and beyond is based on the actuarially computed contribution. The actuarially computer contribution for the current year is described in Section IV.

SECTION V
ACCOUNTING STATEMENT INFORMATION

Table V-7
Supplementary Information Required by GASB - Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Liability (b)	Unfunded Actuarial Liability (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAL as a Percentage of Covered Payroll* [(b) - (a)] / (c)
5/1/2001	$314,419,934	$334,755,400	$20,335,466	93.93%	$36,046,956	56.41%
5/1/2002	$313,619,727	$358,688,291	$45,068,564	87.44%	$41,698,908	108.08%
5/1/2003	$306,204,360	$371,993,884	$65,789,524	82.31%	$42,315,396	155.47%
5/1/2004	$318,841,561	$384,247,836	$65,406,275	82.98%	$43,920,060	148.92%
5/1/2005	$332,415,711	$392,856,425	$60,440,714	84.62%	$45,700,578	132.25%
5/1/2006	$381,404,249	$434,033,285	$52,629,036	87.87%	$47,022,072	111.92%
5/1/2007	$412,407,949	$447,939,116	$35,531,167	92.07%	$49,420,823	71.90%
5/1/2008	$447,209,064	$478,734,450	$31,525,386	93.41%	$51,168,515	61.61%
5/1/2009	$348,489,209	$500,193,509	$151,704,300	69.67%	$53,612,509	282.96%
5/1/2010	$435,427,953	$516,599,916	$81,171,963	84.29%	$51,934,305	156.30%

** Not less than zero.*

APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Firefighters' Pension System
Table of Plan Coverage

	5/1/2009	5/1/2010	% change
Active Members in Valuation			
Number	931	903	-3.0%
Average Age	38.91	39.68	2.0%
Average Service	13.07	13.79	5.5%
Total Payroll	$53,612,509	$51,934,305	-3.1%
Average anticipated payroll	$57,586	$57,513	-0.1%
Account Balance	$59,926,966	$57,841,800	-3.5%
Eligible to Retire On:			
Normal Pension	85	72	-15.3%
Deferred Pension	431	448	3.9%
Total Active Vested Members	516	520	0.8%
Vested Terminated Members	0	1	N/A
Deaths During the Plan Year	43	21	-51.2%
Pensioners:			
Number in Pay Status			
Retirees	390	386	-1.0%
Duty Disabled Retirees	78	81	3.8%
Non-duty Disabled Retirees	179	190	6.1%
Total	**647**	**657**	**1.5%**
Average Age	67.0	67.3	0.4%
Average Monthly Benefit	$2,864	$2,980	4.0%
Beneficiaries in Pay Status*	209	206	-1.4%
Members Due Refunds	6	5	-16.7%
New Disabilities	8	19	137.5%
Eligible to Retire on Normal Pension	3	13	333.3%

**Widows, QDROs, and Children*

APPENDIX A
MEMBERSHIP INFORMATION

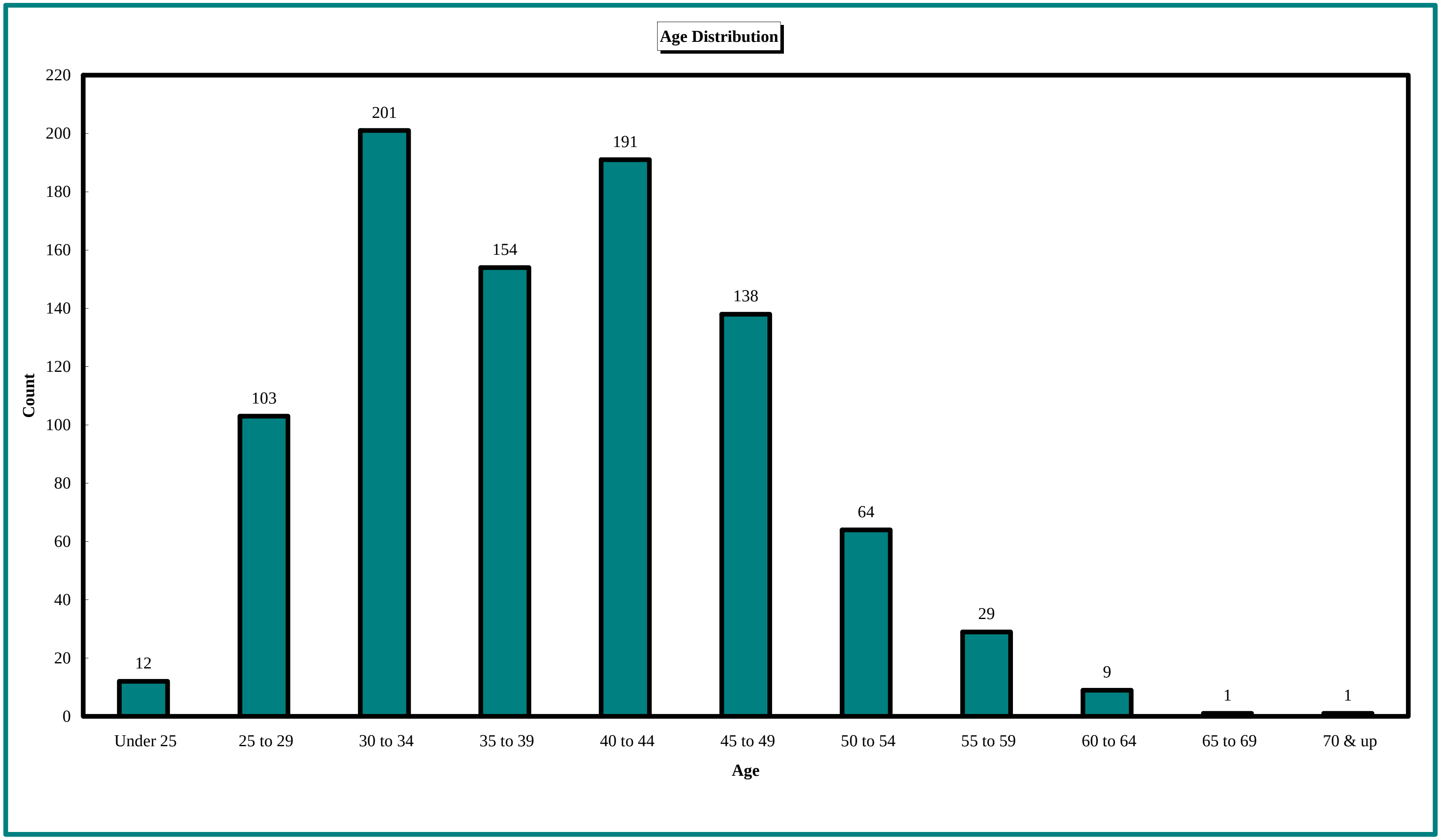
Kansas City Firefighters' Pension Plan Distribution of Active Members by Age and Service as of May 1, 2010

COUNTS BY AGE/SERVICE

	Service										
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
Under 25	0	12	0	0	0	0	0	0	0	0	12
25 to 29	0	49	54	0	0	0	0	0	0	0	103
30 to 34	0	40	138	23	0	0	0	0	0	0	201
35 to 39	0	1	55	60	38	0	0	0	0	0	154
40 to 44	1	0	28	46	72	44	0	0	0	0	191
45 to 49	0	0	4	14	46	74	0	0	0	0	138
50 to 54	0	0	0	2	0	27	1	34	0	0	64
55 to 59	0	0	0	1	1	0	0	23	4	0	29
60 to 64	0	0	1	0	0	0	0	5	2	1	9
65 to 69	0	0	0	0	0	0	0	0	0	1	1
70 & up	0	0	0	0	0	0	0	0	0	1	1
Total	1	102	280	146	157	145	1	62	6	3	903

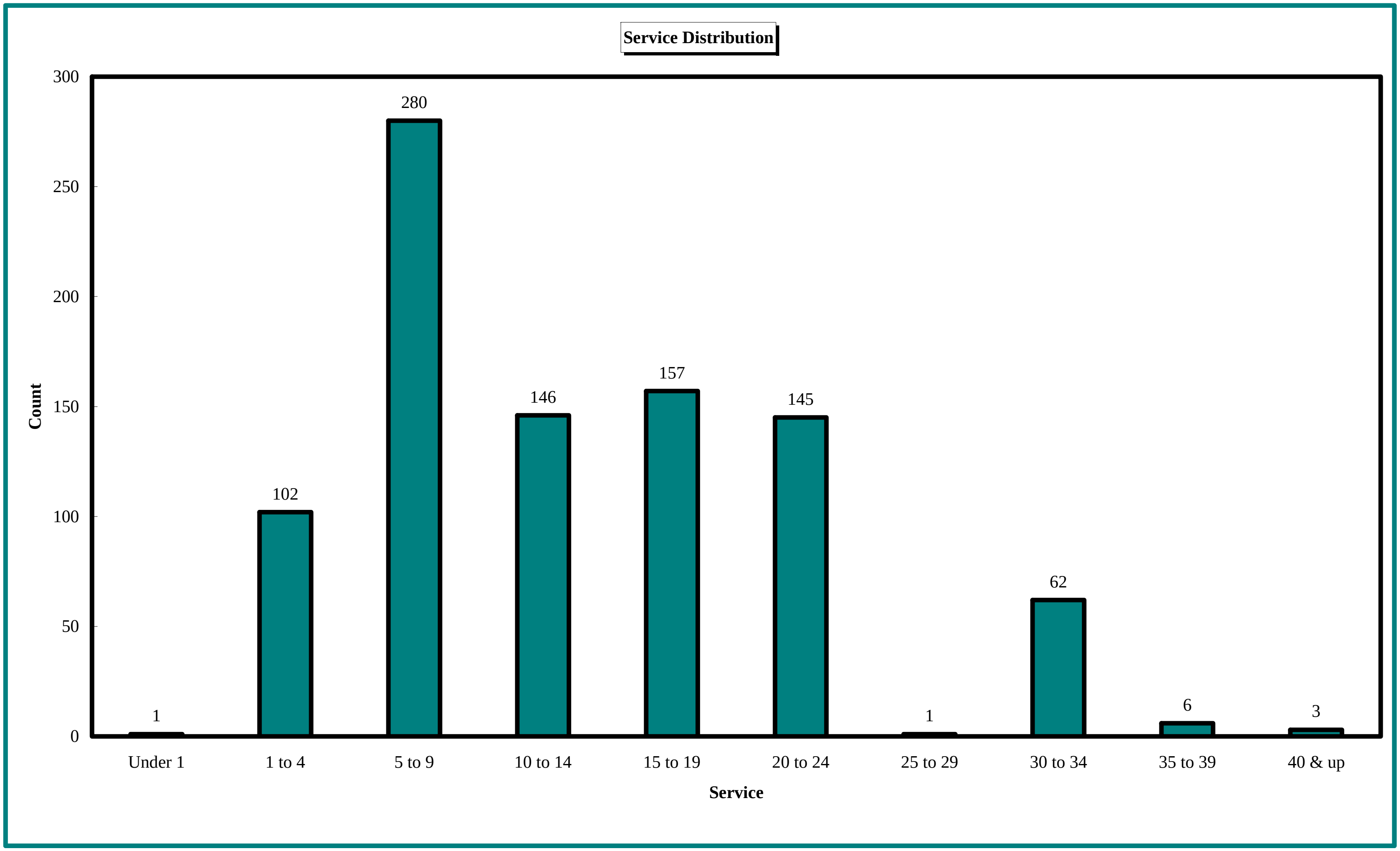
APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Firefighters' Pension Plan Distribution of Active Members by Age as of May 1, 2010



APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Firefighters' Pension Plan Distribution of Active Members by Service as of May 1, 2010



APPENDIX A
MEMBERSHIP INFORMATION

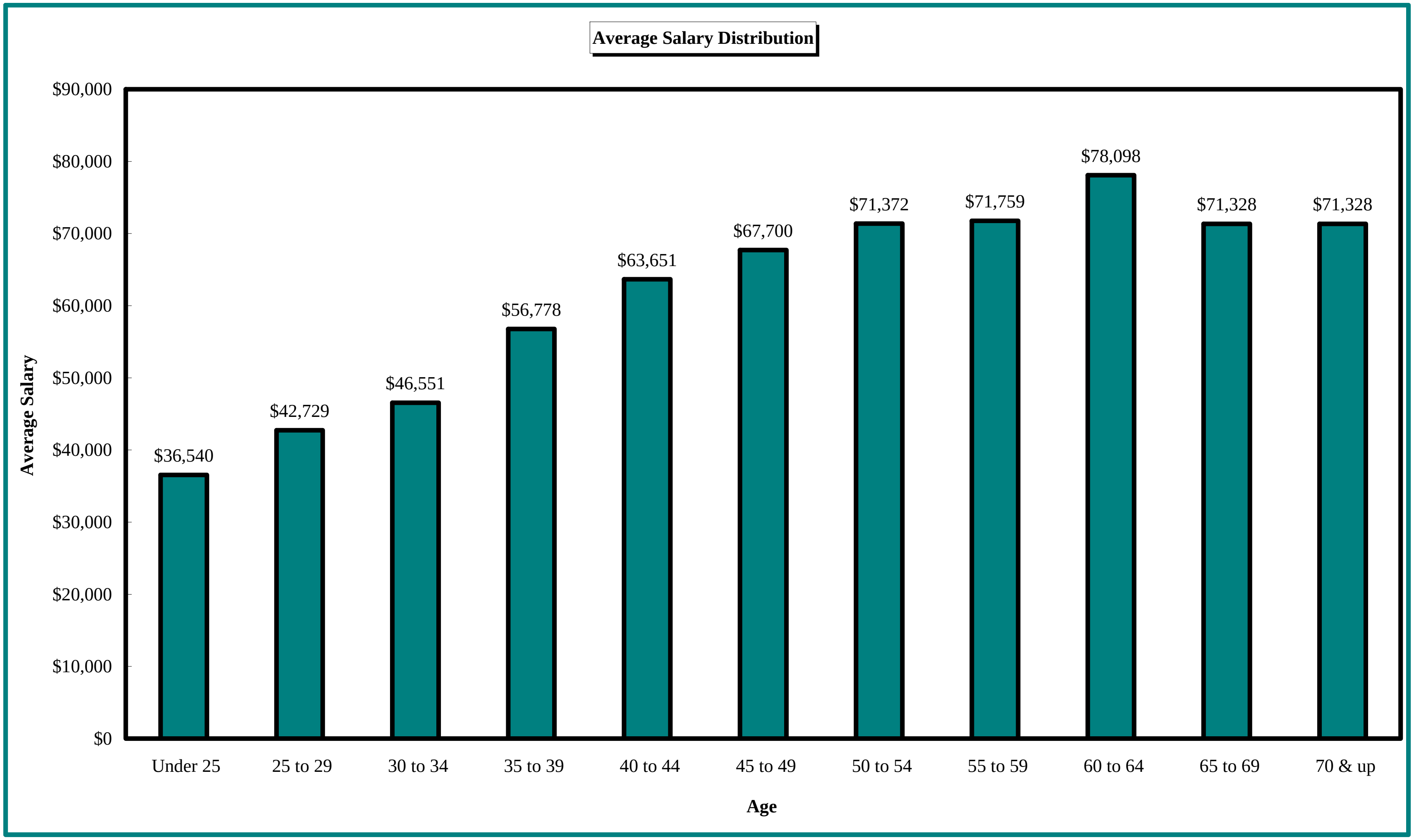
Kansas City Firefighters' Pension Plan Distribution of Active Members by Age and Service as of May 1, 2010

AVERAGE SALARY BY AGE/SERVICE

	Service										
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
Under 25	$0	$36,540	$0	$0	$0	$0	$0	$0	$0	$0	$36,540
25 to 29	$0	$37,944	$47,070	$0	$0	$0	$0	$0	$0	$0	$42,729
30 to 34	$0	$38,304	$46,983	$58,300	$0	$0	$0	$0	$0	$0	$46,551
35 to 39	$0	$38,640	$48,879	$59,130	$64,973	$0	$0	$0	$0	$0	$56,778
40 to 44	$43,848	$0	$50,447	$60,267	$66,151	$71,950	$0	$0	$0	$0	$63,651
45 to 49	$0	$0	$49,620	$59,975	$66,925	$70,621	$0	$0	$0	$0	$67,700
50 to 54	$0	$0	$0	$57,120	$0	$71,826	$63,984	$72,068	$0	$0	$71,372
55 to 59	$0	$0	$0	$61,500	$67,212	$0	$0	$71,559	$76,608	$0	$71,759
60 to 64	$0	$0	$153,204	$0	$0	$0	$0	$67,138	$71,328	$71,328	$78,098
65 to 69	$0	$0	$0	$0	$0	$0	$0	$0	$0	$71,328	$71,328
70 & up	$0	$0	$0	$0	$0	$0	$0	$0	$0	$71,328	$71,328
Total	$43,848	$37,927	$48,136	$59,427	$66,099	$71,249	$63,984	$71,482	$74,848	$71,328	$57,513

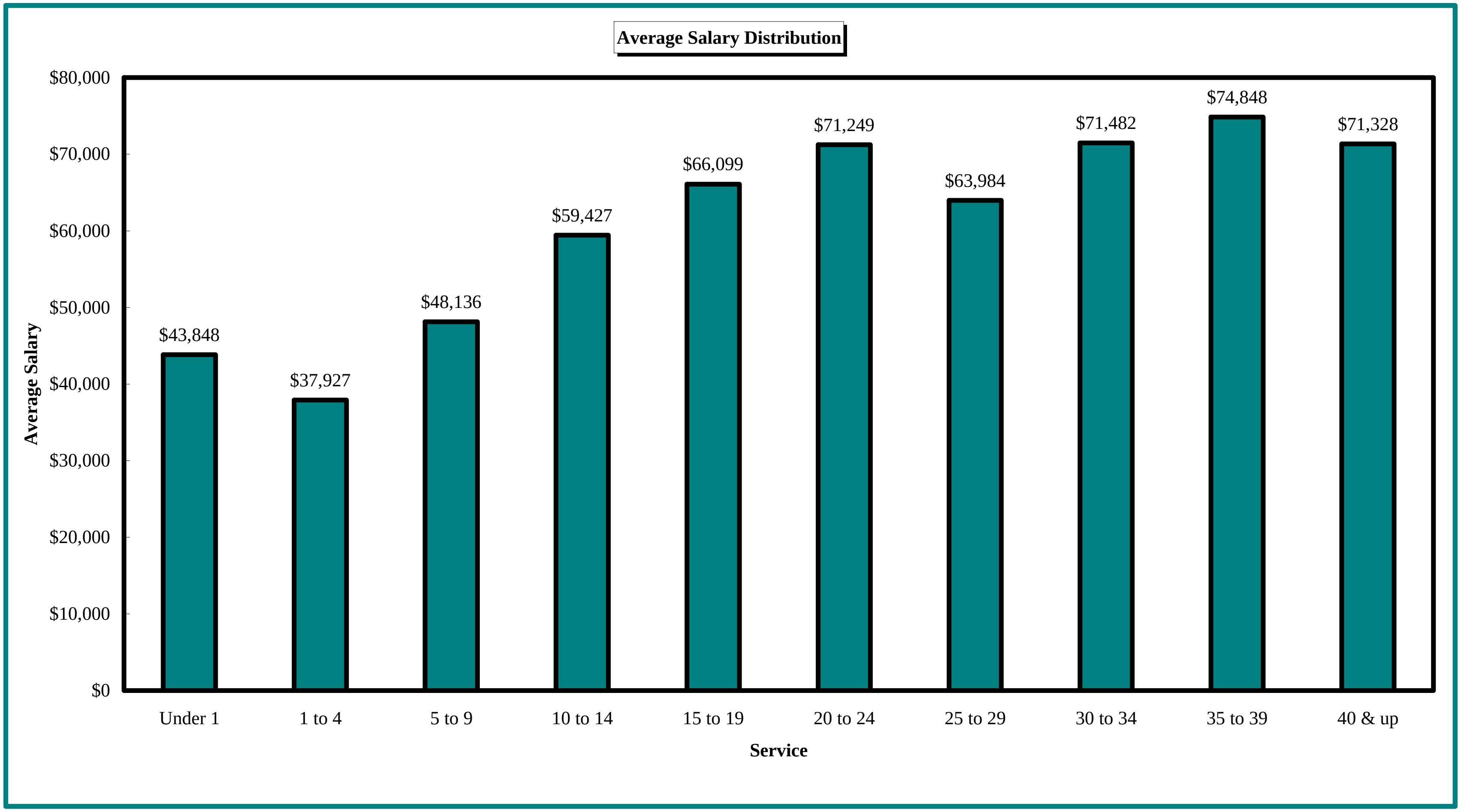
APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Firefighters' Pension Plan Distribution of Active Members by Age as of May 1, 2010



APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Firefighters' Pension Plan Distribution of Active Members by Service as of May 1, 2010



APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Firefighters' Pension System
Pensions in Payment Status by Type and Monthly Amount

Monthly Amount	Total	Normal	Early	Disability	Vested	Widows & QDROs	Children
Total	**863**	**366**	**1**	**271**	**19**	**198**	**8**
Under $500	38	0	0	0	5	26	7
$500-1,000	94	2	0	9	7	75	1
1,000-1,500	78	18	0	14	2	44	0
1,500-2,000	101	58	0	20	1	22	0
2,000-2,500	86	62	0	9	3	12	0
2,500-3,000	105	59	0	40	0	6	0
3,000-3,500	179	85	0	87	1	6	0
3,500-4,000	72	31	1	38	0	2	0
4,000-4,500	50	21	0	26	0	3	0
4,500-5,000	39	21	0	17	0	1	0
5,000 & over	21	9	0	11	0	1	0

During the year ended April 30, 2010 there were 33 new pensions awarded (3 Normal, 1 Vested, 19 Disabled, and 10 Widows, QDROs, and Children)

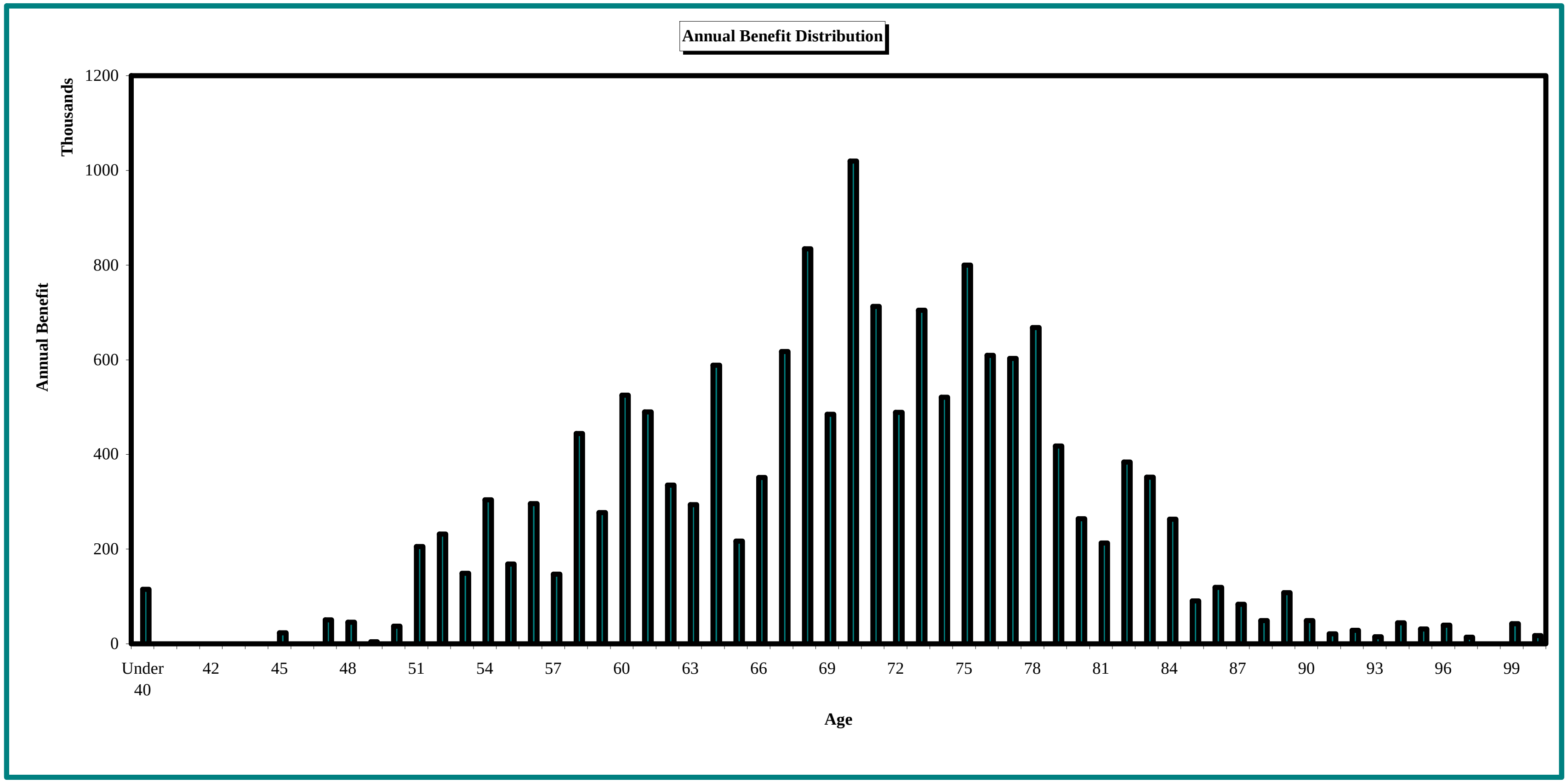
APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Firefighters' Pension Plan Distribution of Retired Members and Survivors as of May 1, 2010

Age	Count	Annual Benefit	Age	Count	Annual Benefit
<25	10	$57,635	73	26	$704,578
25	2	$30,564	74	19	$520,653
26	1	$7,211	75	28	$799,816
27	3	$19,875	76	22	$609,414
28	0	$0	77	24	$602,880
29	0	$0	78	27	$668,151
30	0	$0	79	19	$417,660
31	0	$0	80	15	$264,361
32	0	$0	81	10	$212,955
33	0	$0	82	25	$383,989
34	0	$0	83	20	$352,095
35	0	$0	84	13	$263,213
36	0	$0	85	6	$90,626
37	0	$0	86	6	$119,272
38	0	$0	87	5	$83,432
39	0	$0	88	3	$48,935
40	0	$0	89	9	$108,267
41	0	$0	90	5	$49,117
42	0	$0	91	2	$21,143
43	0	$0	92	2	$28,701
44	0	$0	93	1	$15,002
45	1	$23,391	94	3	$44,614
46	0	$0	95	1	$31,349
47	2	$50,631	96	1	$39,319
48	1	$45,634	97	2	$13,962
49	1	$4,268	98	0	$0
50	1	$37,035	99	2	$42,648
51	6	$205,316	100	1	$17,691
52	7	$231,746	101	0	$0
53	4	$148,830	102	0	$0
54	9	$303,992	103	0	$0
55	4	$168,708	104	0	$0
56	9	$296,054	105	0	$0
57	5	$147,139	106	0	$0
58	10	$444,299	107	0	$0
59	8	$277,298	108	0	$0
60	16	$525,521	109	0	$0
61	12	$489,938	110	0	$0
62	9	$335,220	111	0	$0
63	10	$293,985	112	0	$0
64	19	$588,441	113	0	$0
65	7	$217,279	114	0	$0
66	11	$351,279	115	0	$0
67	18	$617,261	116	0	$0
68	24	$834,239	117	0	$0
69	15	$484,999	118	0	$0
70	27	$1,019,775	119	0	$0
71	24	$712,771	120	0	$0
72	19	$489,068			
			Totals	592	$16,013,245

APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Firefighters' Pension Plan Distribution of Retired Members and Survivors as of May 1, 2010



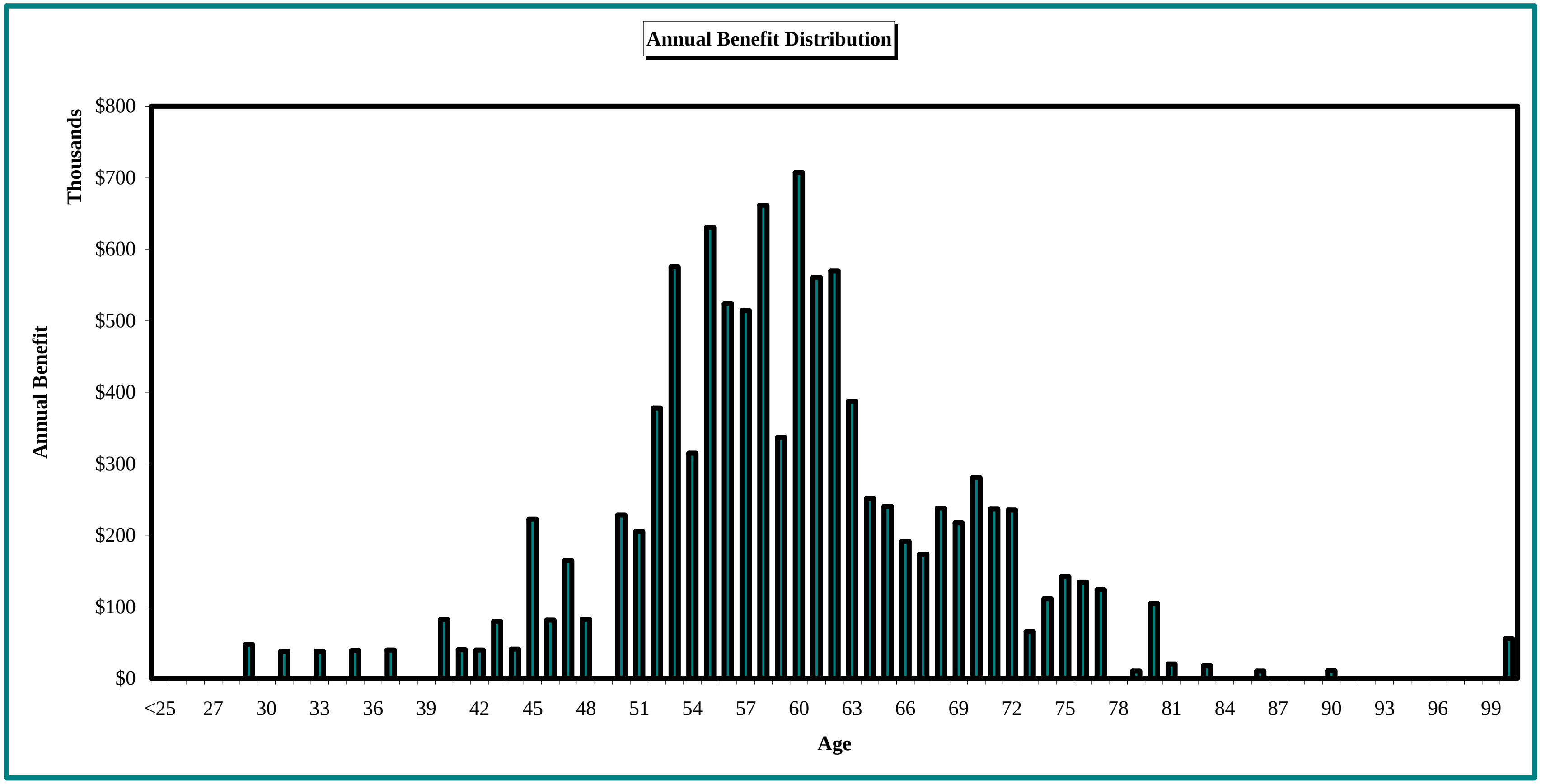
APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Firefighters' Pension Plan Distribution of Disabled Members as of May 1, 2010

Age	Count	Annual Benefit	Age	Count	Annual Benefit
<25	0	$0	73	3	$65,280
25	0	$0	74	4	$111,262
26	0	$0	75	7	$142,423
27	0	$0	76	5	$134,571
28	0	$0	77	6	$123,885
29	1	$47,263	78	0	$0
30	0	$0	79	1	$9,881
31	1	$37,229	80	3	$104,525
32	0	$0	81	1	$19,855
33	1	$37,506	82	0	$0
34	0	$0	83	1	$17,267
35	1	$38,510	84	0	$0
36	0	$0	85	0	$0
37	1	$39,516	86	1	$10,016
38	0	$0	87	0	$0
39	0	$0	88	0	$0
40	2	$81,718	89	0	$0
41	1	$39,591	90	1	$10,128
42	1	$39,559	91	0	$0
43	2	$79,441	92	0	$0
44	1	$40,707	93	0	$0
45	5	$222,394	94	0	$0
46	2	$81,092	95	0	$0
47	4	$164,268	96	0	$0
48	2	$82,559	97	0	$0
49	0	$0	98	0	$0
50	5	$228,265	99	0	$0
51	5	$205,035	100	1	$55,058
52	9	$377,852	101	0	$0
53	14	$575,073	102	0	$0
54	8	$314,649	103	0	$0
55	15	$630,764	104	0	$0
56	11	$524,001	105	0	$0
57	11	$514,231	106	0	$0
58	15	$661,611	107	0	$0
59	9	$337,041	108	0	$0
60	18	$707,052	109	0	$0
61	13	$560,209	110	0	$0
62	12	$569,827	111	0	$0
63	9	$387,404	112	0	$0
64	6	$251,204	113	0	$0
65	7	$240,332	114	0	$0
66	5	$191,260	115	0	$0
67	5	$173,496	116	0	$0
68	6	$237,695	117	0	$0
69	5	$217,305	118	0	$0
70	9	$280,538	119	0	$0
71	8	$236,408	120	0	$0
72	7	$235,386			
			Totals	271	$10,492,142

APPENDIX A
MEMBERSHIP INFORMATION

Kansas City Firefighters' Pension Plan Distribution of Disabled Members as of May 1, 2010



APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

A. Demographic Assumptions

1. Mortality Rates

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

Disabled: 1983 Group Annuity Mortality Table

	Mortality (sample rates)	
Age	**Male**	**Female**
20	0.04%	0.02%
25	0.05%	0.03%
30	0.06%	0.03%
35	0.09%	0.05%
40	0.12%	0.07%
45	0.22%	0.10%
50	0.39%	0.16%
55	0.61%	0.25%
60	0.92%	0.42%

2. Disability and Withdrawal Rates

Rates before Retirement (sample rates)		
Age	**Disability**	**Withdrawal**
20	0.03%	2.50%
25	0.05%	2.50%
30	0.13%	1.69%
35	0.30%	1.05%
40	0.60%	0.75%
45	1.12%	0.75%
50	1.90%	0.52%
55	4.50%	---
60	7.60%	---

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

3. Percentage of Disability Retirements that are Duty Related

Disability Retirement Rates (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

4. Retirement Rates for Active Employees

Rates of 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

5. Retirement Age for Inactive Vested Members

50

6. Unknown Data for Members

Same as those exhibited by members with similar known characteristics

7. Percent Married

94% of active participants

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

8. Age of Spouse

Females four years younger than males

9. Eligible Children

None

10. Net Investment Return

7.75% net of investment fees and administrative expenses, including inflation at 3.00%

11. Salary Increase

Age	Rate (%)
Less than 25	3.0%
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%

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

B. Actuarial Methods

1. Funding Method

Entry Age Normal Actuarial Cost Method: Entry age is the age at the time the participant commenced employment. Normal cost and actuarial 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.

2. 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 at least 80% but no more than 120% of the market value.

3. Amortization of Unfunded Actuarial Liability/(Surplus)

30-year layered amortization method – level percent of pay. Under the layered approach, the May 1, 2008 unfunded actuarial liability is written down over a 30-year period and all future changes to the unfunded actuarial liability establish new 30-year amortization periods. Payroll is expected to increase 3.0% per year.

4. Changes in Assumptions

None.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

1. Plan Year

May 1 through April 30

2. Membership

All Firefighters become members as a condition of employment. Membership begins on the first day of employment.

3. 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.

4. Contributions

Pension System:	Members 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, 2001, 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.

5. Normal Retirement

Age Requirement:	None.
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.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

6. Duty Disability Benefit

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, 2010 is $5,125.

7. 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.

8. 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.

9. Withdrawal (Refund) Benefits

Age Requirement:	None.
Service Requirement:	Less than 10 years of creditable service.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

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.

10. Pre-Retirement Duty Death Benefits

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 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 Contribution:	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 City or to a named beneficiary.

11. Pre-Retirement Non-duty Death Benefits

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,

APPENDIX C
SUMMARY OF PLAN PROVISIONS

	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 City or to a named beneficiary.

12. 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 contribution are guaranteed. In addition, a lump-sum funeral benefit of $2,000 is paid.

13. 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.

14. Changes since Last Valuation

There have been no changes in the Plan provisions since the preceding actuarial valuation.