



Firemen's Relief and Retirement Fund
City of Lufkin, Texas

Actuarial Valuation Report for
Year Ended December 31, 2010

Retirement Horizons Inc.
June 29, 2011

RETIREMENT
HORIZONS
INCORPORATED

June 29, 2011

Board of Trustees
Firemen's Relief & Retirement Fund
300 East Shepherd Street
Lufkin, Texas 75901

Re: 2010 ACTUARIAL VALUATION

Ladies and Gentlemen:

The Board of Trustees for the Lufkin Firemen's Relief & Retirement Fund retained Retirement Horizons Inc. (RHI) to perform an actuarial valuation as of December 31, 2010. This report summarizes the results of our study including an analysis of current funded status and a projection of valuation results. This report also provides financial accounting and disclosure information in accordance with GASB 25 and 27, organized as follows:

- Section 1 – Valuation Highlights
- Section 2 – Executive Summary
- Section 3 – Actuarial Exhibits
- Section 4 – Valuation Basis

The 2010 actuarial valuation was based upon member census data, asset information and plan provisions provided by the Firemen's Relief & Retirement Fund. RHI prepared the 2010 valuation in accordance with generally accepted actuarial principles and practices, and performed testing as needed to assure the accuracy of the underlying input and the results of the study. We certify the amounts presented in this actuarial report have been determined according to the actuarial assumptions and methods selected by the Board of Trustees with review and concurrence by RHI.

The unfunded actuarial liability was \$16.95 million (37.3% funded status) as of December 31, 2010, compared to \$15.32 million (38.2 % funded status) for the prior valuation as of December 31, 2008. Guidelines issued by the Texas Pension Review Board for actuarial soundness recommend fully amortizing this unfunded liability over a period of 25 to 30 years (maximum of 40 years). Based on results of the 2010 valuation, and provided future plan experience is consistent with the valuation basis, the contribution structure totaling 36.70% of pay effective January 1, 2010, is expected to amortize the unfunded actuarial liability over 53.7 years.

The undersigned are available to respond to any questions regarding the information contained in this report or to provide further details or explanations as needed, respectfully submitted by Retirement Horizons Inc.



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1. Valuation Highlights

FUNDING VALUATION	December 31, 2008	December 31, 2010
Fair Value of Assets	\$7,880,756	\$10,101,470
Average Annual Return: current year ended	-26.1%	11.4%
Average Annual Return: prior year ended	6.3%	13.6%
Actuarial Value of Assets	\$9,456,907	\$10,101,470
Average Annual Return: current year ended	-11.5%	1.3%
Average Annual Return: prior year ended	6.3%	4.1%
Present Value of Projected Benefits	\$29,688,118	\$31,907,752
% funded	31.9%	31.7%
Actuarial Accrued Liability	\$24,777,439	\$27,051,949
% funded	38.2%	37.3%
Unfunded Actuarial Accrued Liability	\$15,320,532	\$16,950,479
% of valuation payroll	369.3%	408.7%
PRB Recommended Funding	\$1,587,806	\$1,728,850
% of valuation payroll	38.3%	40.7%
Remaining UAAL Amortization Period	infinite	53.7 years

DEMOGRAPHICS

Active Participants	77	77
Terminated Participants	6	4
Retired Participants	51	53
Total	134	134
Valuation Payroll	\$4,148,732	\$4,244,377

ASSUMPTIONS AND METHODS

Investment Return	7.50%	7.50%
Salary Scale	3.00%	3.00%
Payroll Growth	2.00%	2.00%
Asset Method	3-Year Smoothing	3-Year Smoothing
Contribution Rates		
- City	17.00%	23.50%
- Firefighters	12.20%	13.20%
- Total	29.20%	36.70%

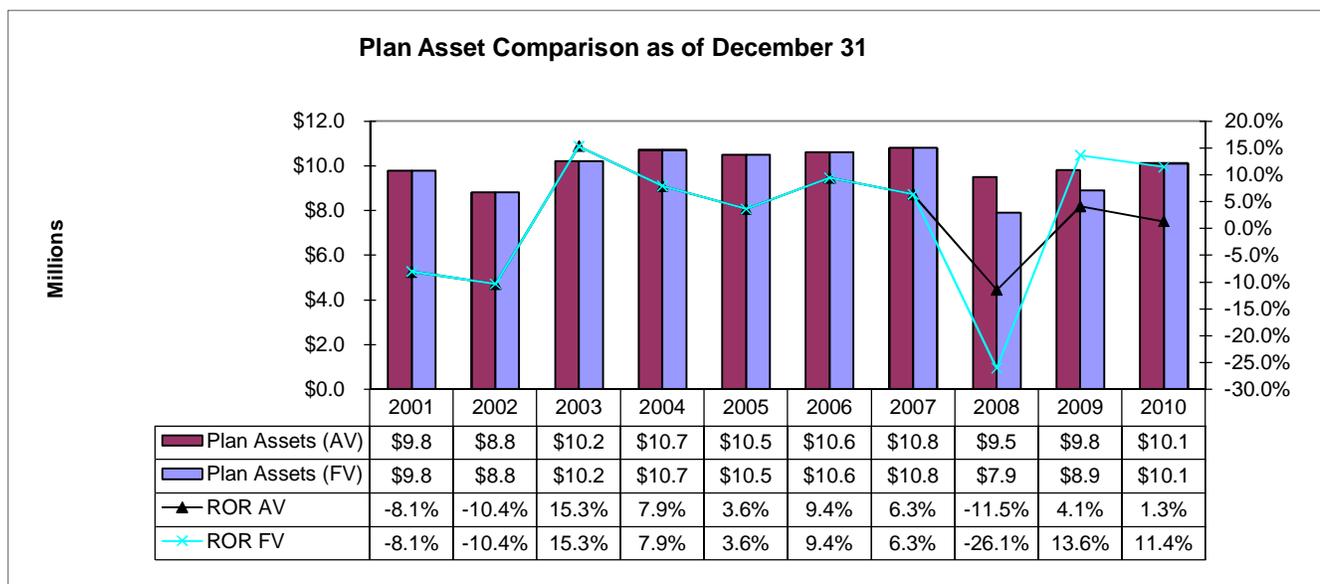
1. Valuation Highlights (continued)

GASB ACCOUNTING VALUATION	Actual December 31, 2010	Projected December 31, 2011
Total Annual Required Contribution (ARC)	\$1,728,850	\$1,771,319
% of covered payroll	41.7%	41.7%
Net Employer Annual Pension Cost (APC)	\$1,195,773	\$1,226,936
% of covered payroll	28.8%	28.3%
Net Pension Obligation	\$2,263,975	\$2,493,483
% of covered payroll	54.6%	57.6%
 ASSUMPTIONS AND METHODS		
Investment Return	7.50%	7.50%
Salary Scale	3.00%	3.00%
Payroll Growth	2.00%	2.00%
Asset Method	3-Year Smoothing	3-Year Smoothing
Contribution Rates		
- City	23.50%	23.50%
- Firefighters	13.20%	13.20%
- Total	36.70%	36.70%

2.1 Plan Asset Values

The *fair value (FV)* of plan assets was \$10.1 million as of December 31, 2010, compared to \$7.9 million for the prior valuation as of December 31, 2008. The net increase of \$2.2 million over the 2-year period was primarily attributable to a net investment income of \$2.1 million and positive net cash flow to the Fund of \$0.1 million (total contributions of \$2.8 million less total disbursements of \$2.7 million). Please see Exhibit 3.1 for more details on the development of the fair value of plan assets.

The net rate of return on the *fair value* of assets was 13.6% for plan year 2009 and 11.4% for plan year 2010. In spite of this recent improvement in Fund performance, the average annual rate of return on fair value was 1.44% over the period 2001-2010, with the Fund failing to earn the 7.5% long-term investment return assumption in 5 of the last 10 years as summarized below.



In response to the financial market meltdown during 2008 and precipitous drop in the fair value of assets, the Fund adopted an asset smoothing method effective December 31, 2008, to spread fluctuations in the rate of return on the fair value of assets compared to the long-range assumption over a 3-year period. The *actuarial value (AV)* of assets is developed as the fair value of assets as of the measurement date plus 2/3rd of the unrecognized (gain)/loss for the current year and 1/3rd of the unrecognized (gain)/loss for the prior year, subject to corridor limits not less than 80% and not greater than 120% of the fair value of assets as of the measurement date. In addition, the AV was re-initialized to the FV as of December 31, 2010.

As developed in Exhibit 3.2, the actuarial value of assets was \$10.1 million as of December 31, 2010, compared to a fair value of \$9.5 million as of December 31, 2008. After application of the 3-year asset smoothing method and full recognition of the 2008 investment loss, the average annual rate of return on the actuarial value of assets was 4.1% for the 2009 plan year and 1.3% for the 2010 plan year, compared to the long-term investment return assumption of 7.5%.

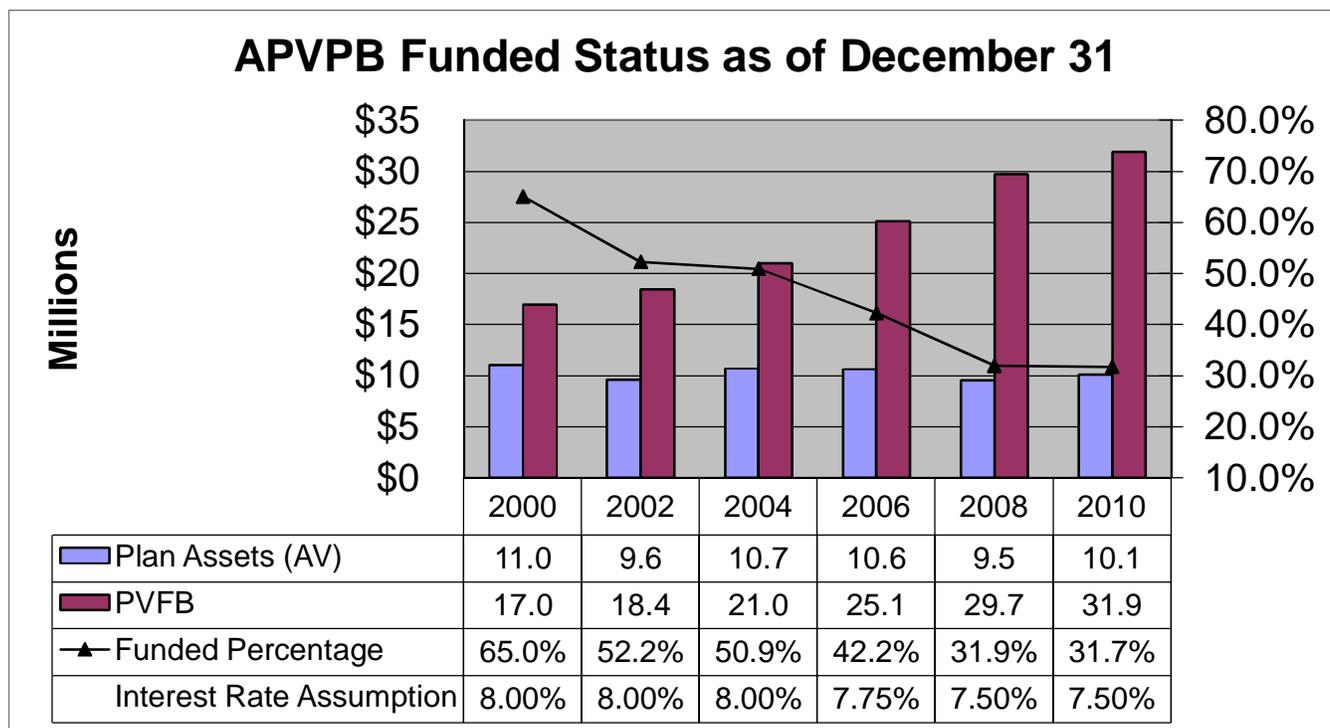
2.2 Actuarial Present Value of Projected Benefits

The true cost of a pension plan is the accumulation of benefit payments less investment income (net of expenses), over the lifetime of the program. In the actuarial valuation process, we use a mathematical model to project the future stream of plan benefits. The model incorporates current plan provisions and member census data, using the actuarial assumptions to predict future events.

Discounting the stream of expected future benefit payments for the time value of money produces the *actuarial present value of projected benefits (APVPB)*. This represents the hypothetical amount of plan assets necessary to fully fund all future plan costs – assuming future plan experience follows the actuarial assumptions. This measure of pension liability includes benefits that have not yet been earned for current employees, based on expected future pay increases as well as projected service, a portion of which will be funded by future contributions.

The total APVPB was \$31.9 million as of December 31, 2010, compared to \$29.7 million for the prior valuation as of December 31, 2008. The net increase of \$2.2 million is primarily attributable to normal operation of the plan. Please see Exhibit 3.3 for more details on the development of the APVPB.

Comparing the actuarial value of plan assets to the APVPB provides one measure of progress in the long-term funding policy. The funded status on this basis remained stable at 31.7% as of December 31, 2010, compared to 31.9% for the prior valuation as of December 31, 2008, with the unfavorable experience in the actuarial value of assets basically offset by the 2010 increase in contributions. As summarized below, the APVPB funded status has dropped from 65.0% to 31.7% over the last 10 years, due to a combination of unfavorable investment performance and movement to more conservative actuarial assumptions:



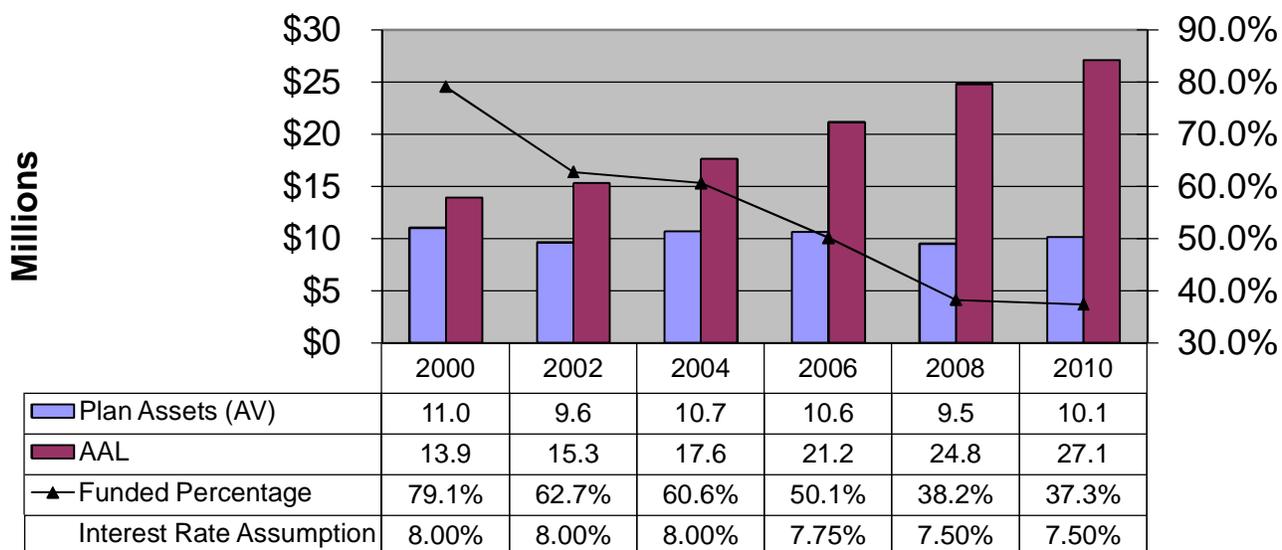
2.3 Actuarial Accrued Liability

As a practical matter, few plan sponsors can afford to fully fund benefits before they have been earned. Generally accepted actuarial principals apply a mathematical formula known as an actuarial cost method to allocate the APVPB over periods of employee service. The portion of cost attributable to periods of employee service rendered prior to the valuation date is the *actuarial accrued liability (AAL)*, and the allocation to the current year is referred to as *normal cost (NC)*.

Comparing AAL to the actuarial value of plan assets provides a more appropriate measure of progress in the long-term funding policy compared to employee services rendered. The *unfunded actuarial accrued liability (UAAL)* was \$17.0 million (37.3% funded status) as of December 31, 2010, compared to \$15.3 million (38.2% funded status) for the prior valuation as of December 31, 2008. Please see Exhibit 3.4 for more details on development of the UAAL.

The net increase in UAAL of \$1.6 million is primarily attributable to full recognition of the 2008 market losses in the actuarial value of assets, although the AAL funded status ratio remained fairly stable due to the 2010 increase in contributions. As summarized below, the UAAL funded status has dropped from 79.1% to 37.3% over the last 10 years, due to a combination of unfavorable investment performance and movement to more conservative actuarial assumptions:

AAL Funded Status as of December 31



2.4 Funding Policy Analysis

Under generally accepted actuarial practice, a sound funding policy should provide monies sufficient to cover the current year normal cost and amortize the unfunded actuarial accrued liability (UAAL) over a reasonable period, which generally should not extend beyond the average future working lifetime of the active members. GASB accounting rules apply a 30-year UAAL amortization period for calculation of the annual required contribution.

Similar guidelines issued by the Texas Pension Review Board recommend a funding policy expected to amortize the UAAL over not more than 40 years, with 25-30 years being a more preferable target. It is important to note the Texas PRB has proposed changes to its actuarial soundness guidelines whereby the preferred target for the expected amortization period would be reduced to a range of 15-25 years, with no plan improvements allowed if the resulting expected amortization period would exceed 25 years.

Based on the 2008 actuarial valuation, the contribution rates in effect at that time totaling 29.20% of pay were not sufficient to amortize the UAAL (infinite period). In response, the City increased its contribution rate from 17.00% to 17.52% as of January 1, 2009, and to 23.50% as of January 1, 2010. The Firefighters also increased their contribution rate from 12.20% to 13.20% effective January 1, 2010, bringing the total contribution rate to 36.70% of pay. These changes were expected to lower the UAAL amortization period to 40 years based on the 2008 valuation – provided that short-term Fund experience was consistent with the long-term actuarial methods and assumptions.

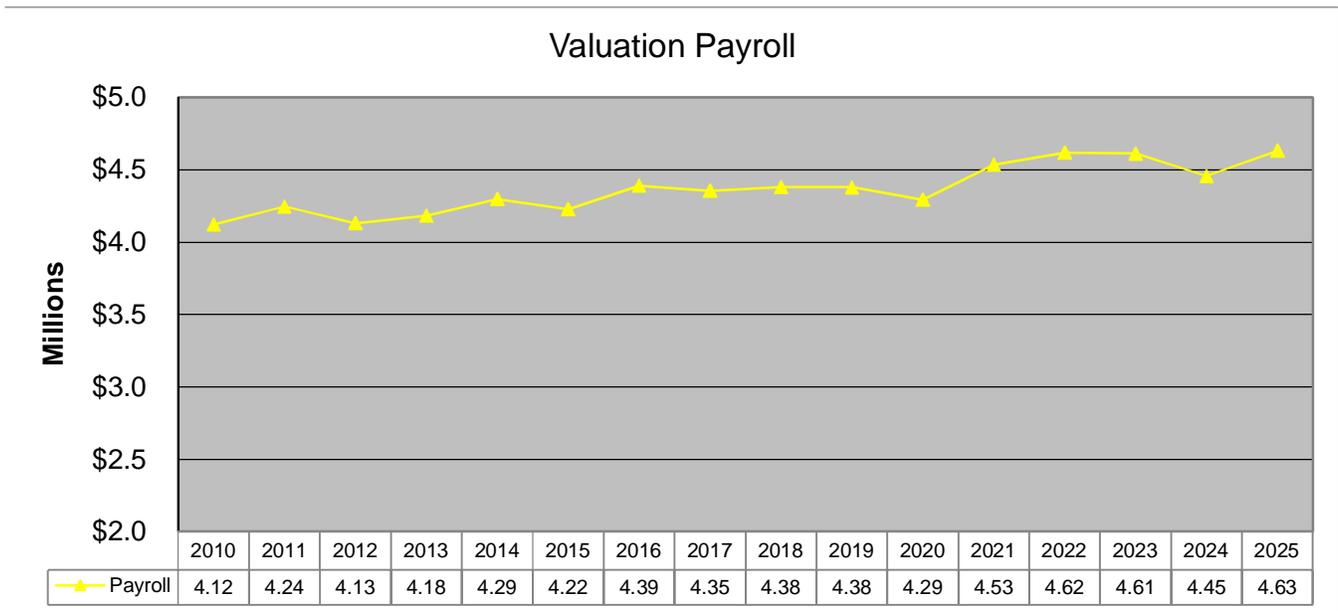
The Fund has definitely made significant progress as develop in Exhibits 3.5 and 3.6, with the UAAL expected amortization improving from an infinite period in the 2008 valuation to 53.7 years in the 2010 valuation. However, the contribution rate increase was not sufficient to achieve the goal of a 40-year expected amortization period, because short-term Fund experience fell short of the long-term actuarial assumptions in two important areas:

- Investment Return: The net rate of return on the *fair value* of assets was 13.6% for 2009 and 11.4% for 2010. However, after applying the 3-year smoothing which includes full recognition of the 2008 investment loss (-26.1% return on fair value), the effective rate of return on the *actuarial value* of assets was reduced to 4.1% for 2009 and 1.3% for 2010. As a result, the Fund failed to achieve the long-term interest rate assumption of 7.5% on the actuarial value of assets for years 2009-2010, with additional actuarial losses increasing the expected amortization period as re-measured in the 2010 actuarial valuation.
- Payroll Growth: The expected amortization period is calculated using the level percentage of pay method, assuming total payroll will grow at a long-term rate of 2.0% per annum, but actual payroll growth averaged only about 1.0% per annum during 2009-2010. This resulted in lower projected contributions to the Fund, with the shortfall compounded into future years. To illustrate the sensitivity of this assumption in the actuarial valuation model, the expected amortization period would decrease to 34.4 years if future payroll growth averaged 3.0% per annum, or increase to an infinite period if the future payroll growth rate was reduced to 1.5% per annum.

2.5 Open Group Forecast Valuation

The measurements of liabilities and costs summarized in the funding policy analysis are based only on the current group of plan members as of the measurement date, what is generally referred to as a closed group valuation. Based on the results from the 2010 valuation, we can project pension plan liabilities and costs using an open group forecast assuming a stable number of active employees.

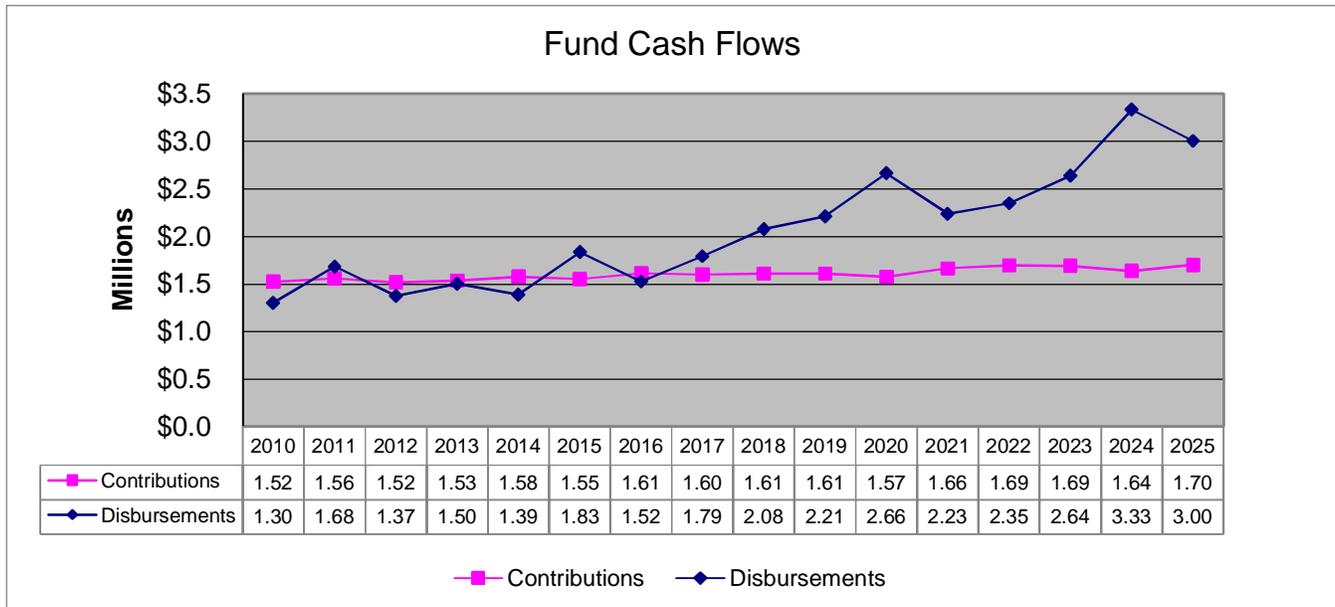
As members of the current workforce exit according to assumed rates of termination, disability, retirement and death, we assume they are replaced by entry-level Firefighters with an average age of 24 and average salary of \$38,000 (current dollars). As illustrated below, total payroll is expected to increase from \$4.1 million to \$4.6 million over the next 15 years.



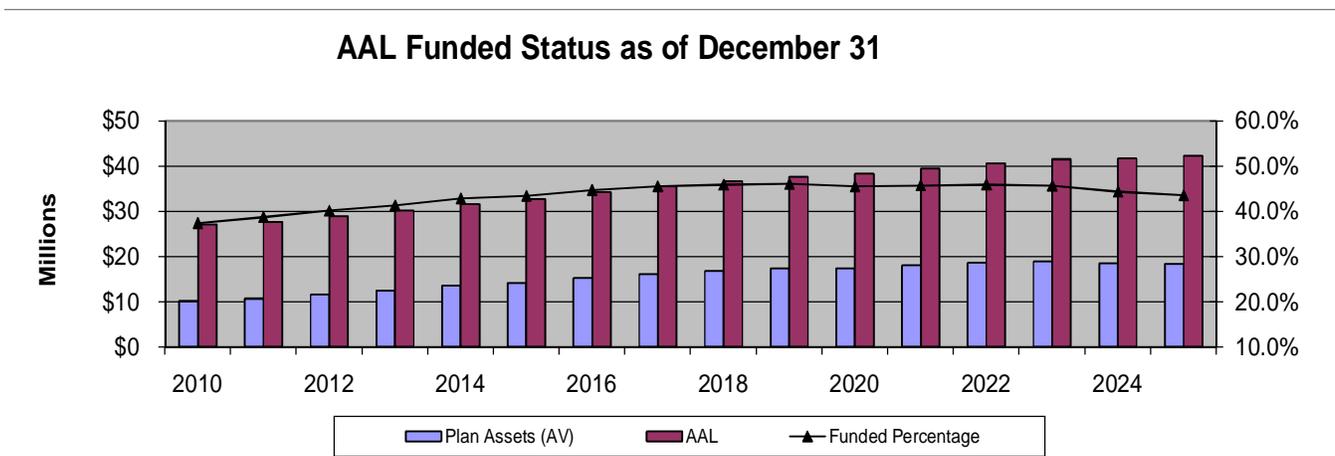
It is important to note that under this projection, although salary increases for individual active employees are assumed to increase at 3.0% per annum, total payroll is expected to increase at an average annual rate of 1.0% over the next 15 years, as more experienced/higher paid Firefighters retire and are replaced by younger/lower paid new hires.

2.5 Open Group Forecast Valuation (continued)

Total contributions are expected to increase from \$1.52 million to \$1.70 million over the next 15 years with total benefit payments expected to increase from \$1.30 million to \$3.00 million over the same time period. As a result, net fund cash flow is expected to decline from a surplus of \$0.22 million to a shortfall of \$1.30 million (including projected DROP payouts) as illustrated below.



Below is a projection of plan assets compared to the AAL, assuming plan experience is consistent with the actuarial assumptions, including an average annual rate of return of 7.5% on the actuarial value of assets. The AAL funded status is projected to increase from 37.3% to a peak of 46.0% over the next 10 years, and then decline slightly as the cash flow gap between total contributions and benefit payments widens at the end of the projection period.

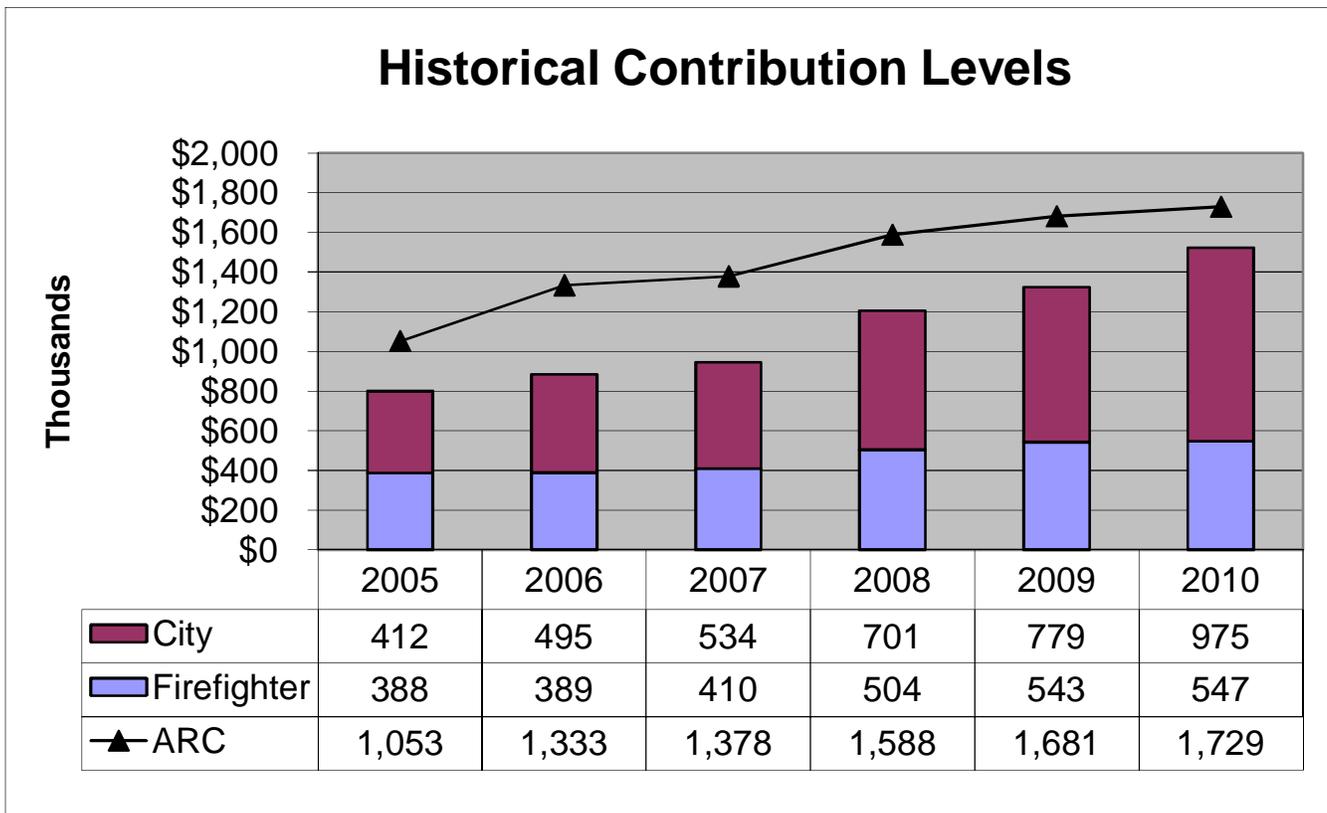


2.6 GASB 25 Accounting Information

To ensure consistent financial reporting and actuarially sound long-term funding policy by the retirement system, GASB 25 requires calculation and disclosure of the *annual required contribution (ARC)*. This minimum funding guideline is calculated as the sum of two components:

- Normal Cost: The portion of APVPB assigned to the current year by the actuarial cost method.
- Amortization Cost: Repayment of the UAAL determined as a level-dollar or level-percent of pay amortization over a maximum period of 40 years (reduced to 30 years after June 15, 2006).

For plans receiving actual contributions more or less than the ARC amount, an additional amortization of the funding excess or deficiency must be included in the ARC calculation for the following year. Please see Exhibit 3.7 for a summary of GASB 25 disclosure information. As the graph below illustrates, total funding by Firefighters and the City has not been sufficient to cover the ARC for the last several years, although the recent increase in contribution rates has narrowed the gap:



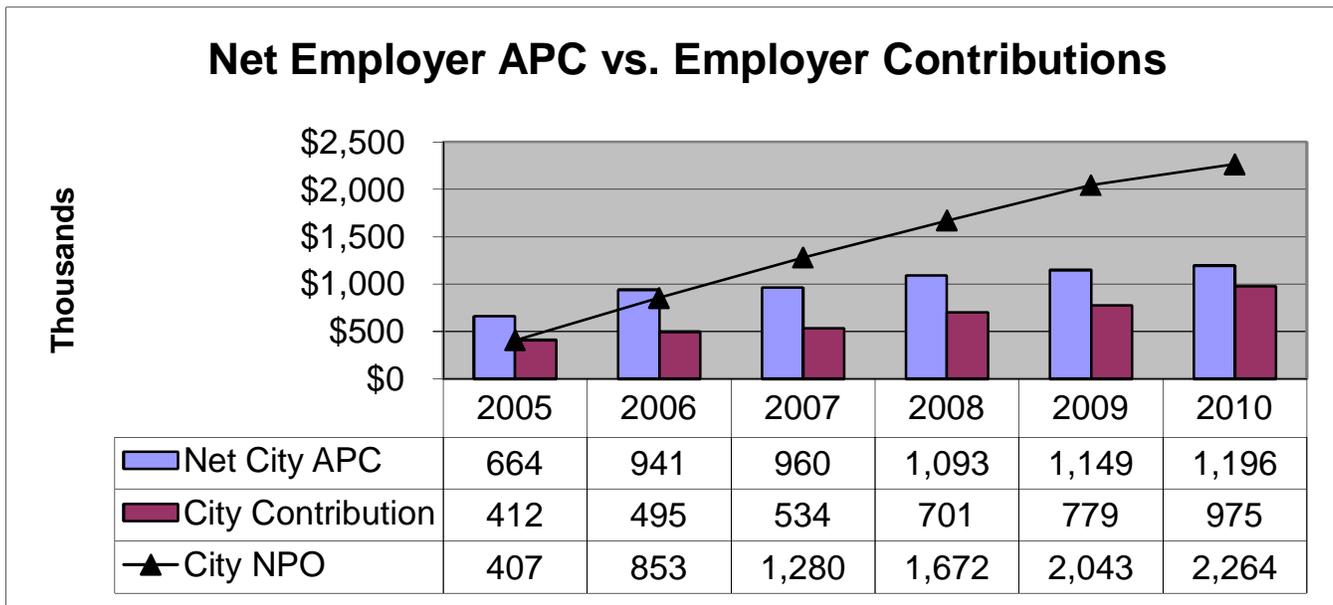
2.7 GASB 27 Accounting Information

In addition to the financial reporting and disclosure required for the retirement plan under GASB 25, the governmental entity sponsoring the retirement program has additional financial reporting and disclosure requirements under GASB 27. This standard generally requires employers to recognize annual pension cost (APC) equal to the GASB 25 annual required contribution (ARC), net of employee contributions.

If actual employer funding is less than (or greater than) the APC, the employer must recognize a liability (or asset) on its balance sheet referred to as the *net pension obligation (NPO)*. This employer balance sheet liability is calculated as the sum of three components:

- Cumulative difference between net employer annual pension cost and actual contributions.
- Interest on the net pension obligation at the rate assumed for the actuarial valuation.
- Adjustment for amortization of any funding shortfall already included in the GASB 25 ARC.

Please see Exhibit 3.8 for a summary of GASB 27 disclosure information. As illustrated below, City contributions have not been sufficient to cover the net APC under GASB 27 for the last several years. This funding shortfall has resulted in an emerging balance sheet liability for the City, increasing to \$2.26 million based on the actuarial valuation as of December 31, 2010:



Based on the 2010 valuation results and provided future plan experience is consistent with the valuation basis, the 2011 contribution rate totaling 36.7% of pay will not be sufficient to cover the net employer APC under GASB 27. Assuming 2011 payroll of \$4.2 million, the projected NPO balance sheet liability is expected to reach \$2.49 million by December 31, 2011.

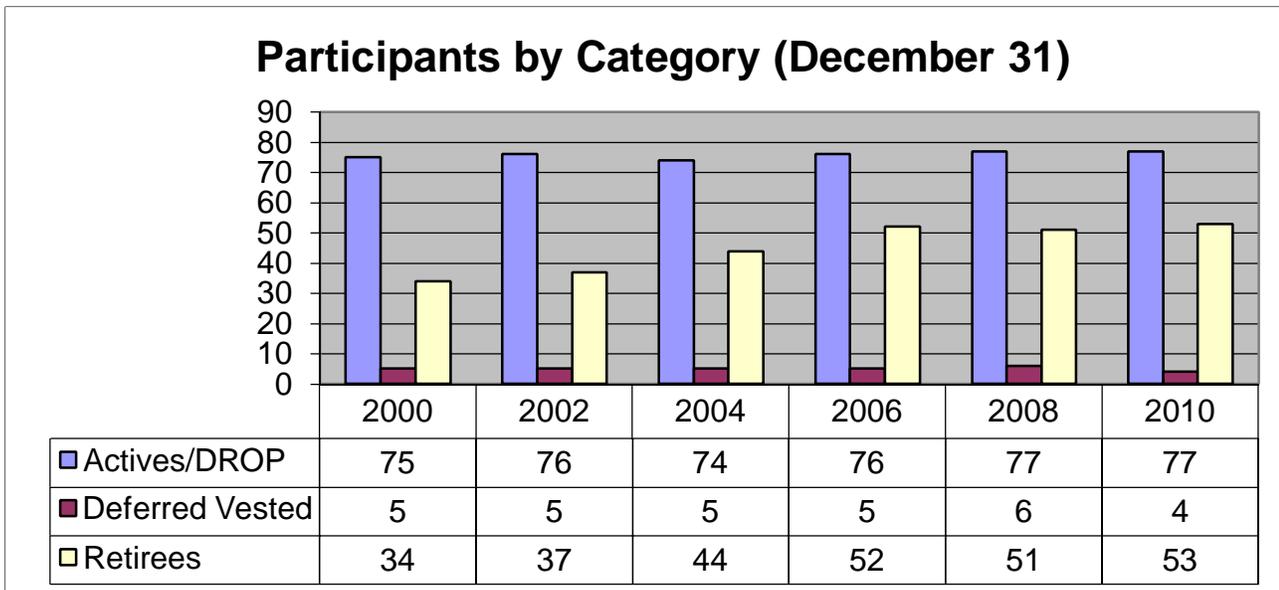
2.8 Membership Demographics

There were 77 active members (including 4 members who elected DROP) covered by the Fund as of December 31, 2010, compared to 77 from the prior valuation as of December 31, 2008. While the total number of active members remained constant, there was a significant rate of turnover (14%) with new hires replacing the exits. Total valuation payroll increased from \$4.15 million to \$4.24 million (about 1.0% annual rate) while average valuation pay increased from \$53,880 to \$55,122 (about 1.0% annual rate). Average age increased from 36.0 years to 36.9 years, while average service increased from 9.7 years to 10.5 years.

The number of inactive members with deferred payments/refunds due decreased from 6 to 4. The number of retired and disabled members in pay status increased from 51 to 53, with the average annual benefit payments decreasing from \$22,544 to \$22,471.

Please see Exhibit 4.1 for a summary of census data used in the valuation as of December 31, 2010, along with prior valuation data as of December 31, 2008. Exhibit 4.2 provides a reconciliation of census data by member group and exhibit 4.3 provides a distribution of active members by age and service.

As indicated in the chart below, the number of active and terminated vested members has remained fairly stable over the last 10 years, but the number of retired and disabled members has increased 55.9% over the same period. There were about 2.21 active members per every retired member receiving payments back in 2000, but this ratio had decreased to 1.45 active members per retired member by 2010:



2.9 Actuarial Methods and Assumptions

Introduction

Sponsoring a defined benefit pension plan is a long-term commitment, with the ultimate cost dependent on a number of financial and demographic variables. The actuarial valuation process uses a mathematical model and applies actuarial assumptions to predict these future events. Periodic updates of the actuarial valuation process are necessary to ensure the model is financially sound, comparing emerging plan asset and liability experience to valuation projections to measure actuarial gains and losses, making adjustments to the long-term actuarial assumptions if appropriate.

Actuarial Standards of Practice (ASOP)

ASOP No. 27 provides a framework for the actuary in providing advice on development of economic actuarial assumptions, but makes an important distinction that the Fund is ultimately responsible for the final selection of these assumptions, at least for purposes of financial accounting disclosures under GASB Nos. 25 and 27. Because no one knows for certain what the future holds with respect to volatile financial markets and a dynamic global economy, ASOP No. 27 emphasizes use of professional judgment to develop a best estimate range for each economic assumption, and then select a specific point within that range.

Under generally accepted actuarial principles, each individual assumption should represent a best estimate of expected long-term experience, and should also be reasonable and realistic in the aggregate. GASB 25 and GASB 27 accounting standards confirm that actuarial assumptions should be based on the actual plan experience (to the extent credible), emphasizing expected long-term future trends rather than giving undue weight to recent past experience.

ASOP No. 35 requires the actuary to use professional judgment in the selection of demographic and other non-economic actuarial assumptions considering the relevant universe of possible choices. It also directs the actuary to consider the specific characteristics of the particular benefit provisions and covered group of the plan being valued.

Reasonable demographic assumptions are defined as those that are expected to appropriately model the contingency being measured without producing any significant cumulative actuarial gains and losses over the measurement period. ASOP No. 35 encourages the use of more sophisticated approaches if appropriate for the situation (e.g. large plans) while also acknowledging that simplified techniques may actually be more accurate in other situations (e.g. small plans).

Please see Exhibit 4.4 for a summary of actuarial assumptions and methods used for the 2010 valuation of the Fund. The amounts presented in this actuarial report have been determined according to the actuarial assumptions and methods selected by the Board of Trustees.

2.9 Actuarial Assumptions and Methods (continued)

Interest Rate

The interest rate is the most powerful assumption in the actuarial valuation process, used to project the average rate of return expected on assets and also used to discount future benefit payments in the actuarial present value calculations. To illustrate the sensitivity, a one-percentage-point increase in the interest rate assumption will generally decrease plan liabilities and cost 15% to 20% based on plan demographics.

The net rate of return on the fair value of assets was +13.6% for plan year 2009 and 11.4% for plan year 2010. The average annual rate of return was 1.44% over the period 2001-2010, with the Fund failing to earn the 7.5% long-term interest assumption in 5 of the last 10 years as illustrated in Section 2.1 of this report. In response to emerging Fund experience and continued financial market uncertainty, the Fund has already taken some important steps to adjust the actuarial methods and assumptions. However, we strongly encourage the Board to review these issues with its new investment advisors, to determine if additional changes are appropriate to better align with their expectations for the Fund.

Salary Scale

The salary scale used to project expected future pay increase for active members is also an important assumption used in actuarial valuation model, having about 50% to 75% of the impact that would result from a change in the interest rate assumption of similar magnitude. The Fund currently assumes a long-term salary scale assumption of 3.00%. However, basic valuation census indicates average valuation pay has increased at an annual rate of about 5.3% over the period 2004-2010, but only 1.0% over 2009-2010.

It is important to note that the salary scale assumption should encompass more than just cost-of-living increases, but should also take into account other sources of pay increases including merit, promotion and periodic changes in the overall compensation structure. We suggest performing a detailed analysis of pay increase experience, to determine if a higher (more conservative) salary scale assumption may be more appropriate.

Amortization Method and Payroll Growth

For the level percent of pay method, the assumption used to project growth in total payroll for calculating amortization of the *UAAL* should not necessarily be the same as the salary scale assumption. Individual members may experience this rate of pay growth as they progress through their careers, but those exiting the workforce (due to termination, retirement, etc.) will in effect be replaced by lower paid entry level employees. Assuming the number of employees remains constant (i.e. no increase in head count), the net growth in total payroll will generally be less than the salary scale and closer to the basic inflation rate.

The level percent of pay amortization method was used, assuming that total payroll will grow at 2.00% per annum. The actual rate of increase averaged about 3.66% during years 2004-2010, but only about 1.0% during years 2009-2010. We suggest performing a detailed analysis of payroll growth rate experience to determine if the long-term assumption should be adjusted.

3.1 Fair Value of Plan Assets

	Asset Values as of December 31		
	2008	2009	2010
A. Fair Value of Plan Assets			
1. Money Markets	\$438,796	\$721,339	\$1,632,872
2. Corporate Bonds	\$1,071,696	\$1,199,303	\$1,074,891
3. Government Participations	\$1,495,078	\$1,491,110	\$0
4. Common Stock	\$2,270,277	\$2,059,823	\$7,362,910
5. International Investments	\$996,942	\$1,126,833	\$0
6. Alternative	\$1,672,525	\$2,334,849	\$22,674
7. Net Accruals	(\$64,558)	(\$77,792)	\$8,123
8. Total Fair Value	<u>\$7,880,756</u>	<u>\$8,855,465</u>	<u>\$10,101,470</u>
B. Change in Fair Value			
	<u>Change</u>	<u>Change</u>	
1. Contributions			
a. Firefighters	\$543,107	\$547,400	
b. City	\$778,632	\$974,537	
c. Total	<u>\$1,321,739</u>	<u>\$1,521,937</u>	
2. Disbursements			
a. Service and Early Retirement	(\$1,062,964)	(\$1,079,397)	
b. Disability (On-Duty)	\$0	(\$6,895)	
c. Spouses Benefits	(\$95,807)	(\$94,168)	
d. QDRO Payments	(\$3,706)	(\$3,705)	
e. Children's Benefits	(\$4,480)	(\$4,480)	
f. Disability (Off-Duty)	\$0	\$0	
g. Drop Lump Sum	(\$126,809)	\$0	
h. Refund of Contributions	(\$118,029)	(\$109,820)	
i. Balance adjustment	\$0	\$0	
j. Total	<u>(\$1,411,795)</u>	<u>(\$1,298,465)</u>	
3. Investment Return			
a. Interest and Dividends	\$190,878	\$255,144	
b. Realized and Unrealized Gain/(Loss)	\$953,364	\$865,154	
c. Plan Expenses	(\$79,477)	(\$97,765)	
d. Total Return	<u>\$1,064,765</u>	<u>\$1,022,533</u>	
4. Net Change			
	<u>\$974,709</u>	<u>\$1,246,005</u>	
5. Average Rate of Return			
a. Average Asset Value	\$7,835,728	\$8,967,201	
b. Income Net of Expenses	\$1,064,765	\$1,022,533	
c. Annual Rate of Return	13.59%	11.40%	
6. Investment Gain/(Loss)			
	\$477,085	\$349,992	

3.2 Actuarial Value of Plan Assets

	Asset Values as of December 31		
	2008	2009	2010
A. Actuarial Value of Assets			
1. Fair Value at Prior Valuation	\$10,861,419	\$7,880,756	\$8,855,465
2. Contributions for Prior Year	\$1,204,330	\$1,321,739	\$1,521,937
3. Disbursements for Prior Year	(\$1,372,779)	(\$1,411,795)	(\$1,298,465)
4. Interest at Valuation Rate on:			
a. Item 1	\$841,760	\$591,057	\$664,160
b. Item 2	\$46,668	\$49,565	\$57,073
c. Item 3	(\$53,195)	(\$52,942)	(\$48,692)
5. Expected Value at Year End	<u>\$11,528,203</u>	<u>\$8,378,380</u>	<u>\$9,751,478</u>
6. Actual Fair Value at Year End	<u>\$7,880,756</u>	<u>\$8,855,465</u>	<u>\$10,101,470</u>
7. Gain/(Loss) [6. - 5.]	(\$3,647,447)	\$477,085	\$349,992
8. Amount Deferred for 2010	N/A	N/A	\$233,328
9. Amount Deferred for 2009	N/A	\$318,057	\$159,028
10. Amount Deferred for 2008	(\$2,431,631)	(\$1,215,816)	N/A
11. Amount Deferred for 2007	(\$50,705)	N/A	N/A
12. Preliminary Actuarial Value	\$10,363,092	\$9,753,224	\$9,709,114
13. Corridor Limits:			
a. 80% of Fair Value	\$6,304,605	\$7,084,372	\$8,081,176
b. 120% of Fair Value	\$9,456,907	\$10,626,558	\$12,121,764
14. Fair Value Reset	\$0	\$0	\$392,356
15. Final Actuarial Value	\$9,456,907	\$9,753,224	\$10,101,470
B. Change in Asset Values			
1. Contributions			
a. Firefighters	\$543,107	\$547,400	
b. City	\$778,632	\$974,537	
c. Total	<u>\$1,321,739</u>	<u>\$1,521,937</u>	
2. Disbursements	(\$1,411,795)	(\$1,298,465)	
3. Investment Return - Net of Expenses			
a. Expected Return	\$705,891	\$739,872	
b. Gain/(Loss) Adjustment	(\$319,518)	(\$615,098)	
c. Corridor Adjustment	\$0	\$0	
d. Total	<u>\$386,373</u>	<u>\$124,774</u>	
4. Net Change	\$296,317	\$348,246	
5. Average Rate of Return			
a. Average Asset Value	\$9,411,879	\$9,864,960	
b. Income Net of Expenses	\$386,373	\$124,774	
c. Annual Rate of Return	4.11%	1.26%	

3.3 Actuarial Present Value of Projected Benefits

	<u>December 31, 2008</u>	<u>December 31, 2010</u>
A. Assumptions		
1. Discount Rate	7.50%	7.50%
2. Mortality	RP 2000 Projected	RP 2000 Projected
B. Present Value of Projected Benefits		
1. Active	\$16,874,894	\$16,369,953
2. Accumulated DROP	\$68,635	\$323,666
3. Terminated Vested	\$346,079	\$470,804
4. Disabled	\$81,310	\$257,412
5. Retired	\$12,317,200	\$14,485,917
6. Total	<u>\$29,688,118</u>	<u>\$31,907,752</u>
C. Change in Present Value of Projected Benefits		<u>Change</u>
1. New Entrants		\$599,208
2. Benefits Accumulated		\$0
3. Benefits Paid		(\$2,710,260)
4. Decrease in Discount Period		\$4,409,321
5. Plan Experience		(\$193,173)
6. Actuarial Assumptions		\$66,750
7. Actuarial Methods		\$0
8. Plan Amendments		\$47,788
9. Net Change		<u><u>\$2,219,634</u></u>
D. Actuarial Value of Assets	\$9,456,907	\$10,101,470
E. Funded Status	31.9%	31.7%
F. Present Value of Future Payroll	\$33,286,300	\$32,434,000
G. Present Value of Future Contributions		
1. Firefighter	\$4,060,929	\$4,281,288
2. City	\$5,831,760	\$7,621,990
3. Total	<u>\$9,892,689</u>	<u>\$11,903,278</u>
H. Actuarial Present Value of Future Funding Required from Other Sources [B(6) - D - G(3)]	\$10,338,522	\$9,903,004

3.4 Actuarial Accrued Liability and Normal Cost

	<u>December 31, 2008</u>	<u>December 31, 2010</u>
A. Assumptions		
1. Discount Rate	7.50%	7.50%
2. Mortality	RP 2000 Projected	RP 2000 Projected
B. Actuarial Accrued Liability (EAN)		
1. Active	\$11,964,215	\$11,514,150
2. Accumulated DROP	\$68,635	\$323,666
3. Terminated Vested	\$346,079	\$470,804
4. Disabled	\$81,310	\$257,412
5. Retired	\$12,317,200	\$14,485,917
6. Total	<u>\$24,777,439</u>	<u>\$27,051,949</u>
C. Actuarial Value of Assets	<u>\$9,456,907</u>	<u>\$10,101,470</u>
D. Unfunded Actuarial Liability	<u><u>\$15,320,532</u></u>	<u><u>\$16,950,479</u></u>
E. Change in Unfunded Actuarial Accrued Liability		<u>Change</u>
1. Contributions		(\$2,843,676)
2. Benefits Accumulated		\$1,243,933
3. Decrease in Discount Period		\$2,316,401
4. Plan Asset Experience		\$958,580
5. Plan Liability Experience		(\$133,366)
6. Actuarial Assumptions		\$58,701
7. Actuarial Methods		\$0
8. Plan Amendments		\$29,374
9. Net Change		<u><u>\$1,629,947</u></u>
F. Funded Status	38.2%	37.3%
G. Present Value of Future Normal Cost	\$4,910,679	\$4,855,803
H. Normal Cost (EAN)	\$599,486	\$635,383
I. Covered Payroll	\$4,148,732	\$4,244,377
J. Normal Cost % of Payroll	14.45%	14.97%

3.5 Funding Policy Guidelines

	<u>December 31, 2008</u>	<u>December 31, 2010</u>
A. Minimum ¹		
1. Normal Cost	\$599,486	\$635,383
2. 40-year Amortization (Level %)	\$893,132	\$988,152
3. Total Funding Policy	<u>\$1,492,618</u>	<u>\$1,623,535</u>
4. Percentage of Payroll	35.98%	38.25%
B. Preferred ²		
1. Normal Cost	\$599,486	\$635,383
2. 30-year Amortization (Level %):	\$988,320	\$1,093,467
3. Total Funding Policy	<u>\$1,587,806</u>	<u>\$1,728,850</u>
4. Percentage of Payroll	38.27%	40.73%
C. Alternative ³		
1. Normal Cost	\$599,486	\$635,383
2. 20-year Amortization (Level %):	\$1,205,560	\$1,333,819
3. Total Funding Policy	<u>\$1,805,046</u>	<u>\$1,969,202</u>
4. Percentage of Payroll	43.51%	46.40%

Notes

- 1 Recommended minimum funding policy under Texas Pension Review Board guidelines based on amortization of Unfunded Actuarial Liability not to exceed 40 years. Preferred funding policy based on maximum amortization period of 25 - 30 years.
- 2 Annual Required Contribution (ARC) under GASB 25 rules originally based on maximum 40 year amortization of Unfunded Actuarial Liability, reducing to 30 years after June 15, 2006.
- 3 Level % amortization amounts assume 2.0% annual growth in payroll; alternative funding policy based on more conservative average career retirement after 20 years of service.

3.6 Expected Amortization Period

	<u>December 31, 2008</u>	<u>December 31, 2010</u>
A. Discount Rate	7.50%	7.50%
B. Present Value Future Compensation (PVFComp)	\$33,286,300	\$32,434,000
C. Present Value Future Contributions (PVFContrb)	\$9,892,689	\$11,903,278
D. Present Value Projected Benefits (PVFB)	\$29,688,118	\$31,907,752
E. Actuarial Accrued Liability (AAL)	<u>\$24,777,439</u>	<u>\$27,051,949</u>
F. Present Value of Future Normal Costs (PVFNC)	\$4,910,679	\$4,855,803
% of PVFComp	14.75%	14.97%
G. PVFContrb available to payoff UAL	\$4,982,010	\$7,047,475
% of PVFComp	14.97%	21.73%
H. Valuation Compensation	\$4,148,732	\$4,244,377
I. Unfunded Actuarial Liability	\$15,320,532	\$16,950,479
J. Current Contribution Available to pay off UAL	\$621,065	\$922,303
K. Expected Amortization Period		
1. Annual Payroll Growth 1.5%	infinity	infinity
2. Annual Payroll Growth 2%	infinity	53.7
3. Annual Payroll Growth 3%	infinity	34.4

3.7 GASB 25 Accounting Information

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll (b-a)/(c)
12/31/2002	\$9,611,084	\$15,317,650	\$5,706,566	62.7%	\$3,226,247	176.9%
12/31/2004	\$10,673,969	\$17,613,892	\$6,939,923	60.6%	\$3,041,650	228.2%
12/31/2006	\$10,612,279	\$21,164,321	\$10,552,042	50.1%	\$3,552,919	297.0%
12/31/2008	\$9,456,907	\$24,777,439	\$15,320,532	38.2%	\$4,148,732	369.3%
12/31/2010	\$10,101,470	\$27,051,949	\$16,950,479	37.3%	\$4,146,970	408.7%

The economic assumptions used for the 12/31/2010 actuarial valuation include:

Investment Return	7.50%
Projected Salary Increases	3.00%
Payroll Growth Assumption	2.00%

3.8 GASB 27 Accounting Information

A. Fund Membership		December 31, 2010
1. Retired members and their beneficiaries		53
2. Vested terminated members		4
3. Active members		77
Electing DROP	4	
Vested	34	
Nonvested	39	
4. Total Fund Membership		134

B. Annual Employer Contribution Requirement

Fiscal Year Ending	Total Annual Required Contribution (ARC)	Member Contributions	Net Employer Annual Pension Cost (APC)	Employer Contributions	Percentage of APC Contributed
12/31/2004	\$ 803,257	\$ 360,849	\$ 442,123	\$ 360,849	81.6%
12/31/2005	\$ 1,052,872	\$ 388,017	\$ 664,257	\$ 412,016	62.0%
12/31/2006	\$ 1,333,453	\$ 388,544	\$ 941,146	\$ 494,984	52.6%
12/31/2007	\$ 1,377,957	\$ 410,319	\$ 959,751	\$ 533,523	55.6%
12/31/2008	\$ 1,587,806	\$ 503,591	\$ 1,093,189	\$ 700,739	64.1%
12/31/2009	\$ 1,680,614	\$ 543,107	\$ 1,149,232	\$ 778,632	67.8%
12/31/2010	\$ 1,728,850	\$ 547,400	\$ 1,195,773	\$ 974,537	81.5%

C. Reconciliation of Net Pension Obligation (NPO)

	2009	2010	2011*
1. Balance at Beginning of Year	\$ 1,672,139	\$ 2,042,739	\$ 2,263,975
2. Annual Pension Cost (APC)			
a. Annual Required Contribution (ARC)	\$ 1,680,614	\$ 1,728,850	\$ 1,771,319
b. Firefighter Contributions	(543,107)	(547,400)	(560,258)
c. Interest on NPO	125,410	153,205	169,798
d. Amortization Adjustment on ARC	(113,685)	(138,882)	(153,923)
e. Total APC	1,149,232	1,195,773	1,226,936
3. City Contributions	(778,632)	(974,537)	(997,428)
4. Balance at End of Year	\$ 2,042,739	\$ 2,263,975	\$ 2,493,483

* Projected assuming no changes from 2010 valuation basis and no actuarial gain/loss.

4.1 Demographic Summary

	<u>December 31, 2008</u>	<u>December 31, 2010</u>
A. Active Members		
1. Number	77	77
2. Valuation payroll	\$4,148,732	\$4,244,377
3. Average pay	\$53,880	\$55,122
4. Average age	36.0	36.9
5. Average service	9.7	10.5
B. Terminated - Refund Due		
1. Number	2	N/A
2. Sum of EE Contributions	\$19,162	N/A
3. Average Refund Due	\$9,581	N/A
C. Deferred vested		
1. Number	4	4
2. Total Retirement Benefits	\$47,267	\$64,578
3. Average benefits	\$11,817	\$16,145
D. Disabled		
1. Number	1	2
2. Total Retirement Benefits	\$6,895	\$22,963
3. Average benefits	\$6,895	\$11,482
E. Retired		
1. Number	50	51
2. Total benefits	\$1,142,844	\$1,167,984
3. Average benefits	\$22,857	\$22,902

4.2 Data Reconciliation

	<u>Active*</u>	<u>Deferred Refund</u>	<u>Deferred Inactive</u>	<u>Disabled</u>	<u>Retired</u>	<u>Total</u>
December 31, 2008 Valuation	77	2	4	1	50	134
Change Due To:						
New hires and rehires	11	0	0	0	0	11
Termination (Vested)	(1)	0	1	0	0	0
Termination (Nonvested)	0	0	0	0	0	0
Retirement	(1)	0	(1)	0	2	0
Disability	0	0	0	0	0	0
Death without beneficiary	0	0	0	0	0	0
Death with beneficiary	0	0	0	0	0	0
Cashouts	(9)	(2)	0	0	0	(11)
Data corrections	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>(1)</u>	<u>0</u>
Net change	<u>0</u>	<u>(2)</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>0</u>
December 31, 2010 Valuation	<u>77</u>	<u>0</u>	<u>4</u>	<u>2</u>	<u>51</u>	<u>134</u>

* 4 active participants were in DROP as of December 31, 2010, compared to 1 from prior valuation.

4.3 Active Members by Age and Service

Attained Age	Years of Service as of December 31, 2010							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30 & up	
Under 25	8	0	0	0	0	0	0	8
25-29	5	3	0	0	0	0	0	8
30-34	5	7	5	0	0	0	0	17
35-39	3	6	6	1	0	0	0	16
40-44	0	2	4	8	0	0	0	14
45-49	0	0	2	2	5	0	0	9
50-54	0	0	0	0	4	0	1	5
55-59	0	0	0	0	0	0	0	0
60 & up	0	0	0	0	0	0	0	0
Total	21	18	17	11	9	0	1	77

39 Not Vested	33 Vested	5 Retirement Eligible
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4.4 Assumptions and Methods

Economic Assumptions

Interest Rates:

- Investment Return 7.50% per annum.
- Salary Increases 3.00% per annum.
- Payroll Growth 2.00% per annum.

Demographic Assumptions

- Mortality RP-2000 tables for males and females projected with Scale AA to the valuation date (1983 Group Annuity table for males and females prior valuation), with sample rates per 100 lives summarized below:

<u>Age</u>	<u>Male</u>	<u>Female</u>
25	0.029	0.014
35	0.068	0.036
45	0.107	0.074
55	0.418	0.306
65	1.041	0.947
75	2.935	2.432

- Termination Table Excess T-3 (over GA-51) from the Actuary's Pension Handbook, with sample rates per 100 lives summarized below:

<u>Age</u>	<u>Rate</u>
25	5.27
30	4.83
35	4.47
40	3.84
45	3.21
50	1.52

- Retirement Active firefighters are assumed to retire at the later of age 53 or 20 years of service (or age on the valuation date, if older). Terminated firefighters entitled to deferred benefits are assumed to retire at age 50 or age on valuation date, if older.

4.4 Assumptions and Methods (continued)

- Disability Active firefighters are assumed to incur disabilities based on experience firefighter rates that vary by age as shown below, with sample rates per 100 lives summarized below:

<u>Age</u>	<u>Rate</u>
25	0.06
30	0.06
35	0.01
40	0.27
45	1.88

Disabled firefighters are assumed to experience higher mortality during their disability as based on the healthy mortality tables set forward 10 years, with sample rates per 100 lives summarized below:

<u>Age</u>	<u>Male Rate</u>
25	0.068
35	0.107
45	0.418
55	1.041
65	2.935

- Loading for Subsidies N/A
- Marital Status 70% of all active firefighters are assumed to be married at the time benefits commence. Males are assumed to be two years older than their spouses.
- Changes in Assumptions The mortality assumption was updated to include projected improvements in life expectancy. There have been no other changes in actuarial assumptions from the prior valuation.

4.4 Assumptions and Methods (continued)

Methods

Valuation Date	December 31, 2010
Asset Valuation Method	Smoothed market value with asset gains and losses recognized over 3-years, equal to the fair value as of the measurement date less $\frac{2}{3}$ rd s of the investment gain/(loss) for the current plan year less $\frac{1}{3}$ rd of the investment gain/(loss) for the prior plan year. The smoothed market value is adjusted to remain within a corridor range of 80% to 120% of fair market value. The actuarial value was re-initialized to the fair market value as of December 31, 2010.
Actuarial Cost Method	The <u>Entry Age Normal Actuarial Cost Method</u> (EAN) is used to develop the ERISA Full Funding limitation. The present value of the projected benefit (PVB) is determined as of the date the member entered the plan (or would have entered if the plan had always been in effect). The present value of future salary (PVFS) is also determined at entry age. The percentage of the PVFS represented by the PVB is the level percent of pay which, if contributed every year, would exactly fund the benefit if the valuation actuarial assumptions were realized. The actuarial accrued liability is the theoretical value of assets which would result from the accumulation of these contributions from the plan entry until the valuation date.
DROP Provision	The present value of future benefits represents the cost in today's dollars of all future benefits to be provided under the terms of the plan to current firefighters, retirees and beneficiaries. The present value of the future DROP benefit was explicitly valued for active members attaining 20 years of service between ages 50 and 53. For current DROP members, the accumulated balance as of the valuation date was assumed to be paid out in the following year. Under this cost method, the present value is allocated as a level percentage of the compensation of the firefighters until assumed retirement.
Changes in Methods	There have been no changes in the actuarial cost methods from the prior valuation.

4.5 Plan Provisions

Effective Date	The Plan was most recently amended and restated effective January 1, 2010.
Eligibility	A firefighter shall become a member when he first becomes employed with the Lufkin Fire Department.
Service	<p>A firefighter receives credit for the number of years and months of employment with the Fire Department. It includes the period of time during which the firefighter pays into and keeps on deposit in the fund the contributions required by this plan.</p> <p>Periods of leave of absence are deemed continuous employment but shall be excluded in determining a member's service, unless the member receives regular compensation during the leave of absence and makes the required contributions based on this compensation.</p>
Compensation	<p>Compensation includes regular salary or wages, longevity and overtime pay, but excludes car allowances and lump sum distributions for unused sick leave or vacation.</p> <p>Highest 36-Month Average Salary is the average of the firefighter's compensation for the 36 consecutive calendar months of service with the department during which his total pay was highest.</p> <p>Highest 60-Month Average Salary is the average of the firefighter's compensation for the 60 consecutive calendar months of service with the department during which his total pay was highest.</p>
Contributions	City contribution rates increased from 17.00% to 17.52% effective January 1, 2009, and to 23.50% effective January 1, 2010. Firefighter contribution rates increased from 12.20% to 13.20% effective January 1, 2010.

4.5 Plan Provisions (continued)

Service Retirement

Attainment of age 50 and completion of 10 years of service (15 years of service if hired after 8/2005).

Each firefighter who retires on or after his retirement eligibility date receives a monthly retirement income equal to the sum of (a) and (b), where:

- (a) A “base” benefit of 3.35% of the Highest 60-Month Average Salary multiplied by the lesser of his years of service or 20 years; plus
- (b) A “longevity” benefit equal to \$66 for each year of service in excess of 20 years.

In no event will a retirement benefit be less than what was vested under a prior plan.

Disability Retirement

An active firefighter who has completed his probationary period is eligible for a disability benefit if he becomes disabled from any cause whatsoever for either physical or mental reasons, except for those causes specified in the plan document.

The disability benefit will commence after the expiration of all vacation and sick leave, and will continue as long as the member remains disabled. However, if the firefighter is less than 15% disabled as determined by at least two doctors, payments will be made for a maximum of five years as such determination is made. Further, disability payments may not begin as long as the firefighter is receiving a Worker’s Compensation benefit which is equal to or larger than \$100 per month.

A disability benefit is equal to the \$100 per month TLFFRA minimum disability benefit from this plan. In addition, the firefighter is provided with disability coverage under a separate disability policy provided to all municipal employees.

The Board of Trustees may require a disabled firefighter to be reevaluated from time to time in order to determine whether he has recovered or whether the percentage of disability has changed. The Board of Trustees may also require the disabled firefighter to provide evidence of income received from other sources during a period of disability.

4.5 Plan Provisions (continued)

If a disabled firefighter with credit for less than 10 years of service recovers to the extent that his disability allowance is terminated, and he does not return to the employ of the Fire Department, an amount equal to the excess, if any, of the firefighter's own contributions over the amount of disability payments which have been made on his behalf will be paid to him in a lump-sum payment.

If a disabled firefighter is age 50 with credit for at least 10 years of service (15 years of service for all firefighters hired on or after August 18, 2005), he may apply for a service retirement.

Vested Termination Benefit

Upon a firefighter's termination, he is eligible for a deferred benefit if he has completed at least 10 years of service (15 years of service for all firefighters hired on or after August 18, 2005) and agrees to leave his contributions in the Fund. The firefighter is not required to make any additional contributions to the Fund after his termination from service.

The benefit is equal to his service retirement benefit determined as of the date of separation from service. Benefits may not commence prior to attainment of age 50.

If a firefighter terminates with less than 10 years of service (15 years of service for all firefighters hired on or after August 18, 2005), he will receive an amount equal to the excess of his own contributions to the fund over the amount of benefits that he has previously received from the fund. A firefighter with 10 or more years of service (15 years of service for all firefighters hired on or after August 18, 2005) may elect a refund of his own contributions; however, he will forfeit his right to all future benefits he otherwise would have been entitled to receive.

4.5 Plan Provisions (continued)

Pre-Retirement Death Benefit

- Spouse
Upon the death of an active firefighter, a benefit is payable to his beneficiaries commencing on the first of the month following his death.
The benefit payable to the surviving spouse of a firefighter is equal to two-thirds of the service retirement benefit the firefighter would have been eligible to receive as of the date of death (without taking into consideration eligibility requirements for service retirement), but not less than 44.67% of his Highest 36-Month Average Salary. This benefit shall be paid until the earlier of remarriage or death. If the spouse remarries or subsequently divorces or again loses her new spouse to death, the spouse's pension shall be reinstated.
- Child
Each surviving unmarried child under age 18 shall receive a benefit equal to 11.17% of the firefighter's Highest 36-Month Average Salary. However, if the firefighter is unmarried or the firefighter's widow dies after being entitled to a benefit, each unmarried child will receive a benefit equal to two-thirds of the firefighter's Highest 36-Month Average Salary, but not less than 44.67% of the Highest 36-Month Average Salary. This death benefit shall be paid until age 18, or continue until age 22 as long as the child remains a full-time student. In addition, benefits are payable after age 18 for as long as a child remains totally disabled.
- Dependent Parents
If no spouse or child is entitled to a pre-retirement death benefit at the time of a firefighter's death, the amount the spouse would have received will be paid to the firefighter's dependent parents.

Post-Retirement Death Benefit

- Spouse
Upon the death of a service retiree or disabled retiree, a benefit is payable to his beneficiaries commencing on the date of death.
The benefit payable to the surviving spouse of a service retiree or disabled retiree is equal to two-thirds of the service retirement or disability retirement benefit the firefighter was receiving as of the date of death. This benefit shall be paid until the earlier of remarriage or death. If the spouse remarries and subsequently divorces or again loses her new spouse to death, the spouse's pension shall be reinstated.

4.5 Plan Provisions (continued)

➤ Child

Each surviving unmarried child under age 18 shall receive a benefit equal to 11.17% of the firefighter's Highest 36-Month Average Salary. However, if the firefighter is unmarried or the firefighter's widow dies after being entitled to a benefit, each unmarried child will receive a benefit equal to two-thirds of the firefighter's Highest 36-Month Average Salary. This death benefit shall be paid until age 18, or continue until age 22 as long as the child remains a full-time student. In addition, benefits are payable after age 18 for as long as a child remains totally disabled.

➤ Dependent Parents

If no spouse or child is entitled to a post-retirement death benefit at the time of a firefighter's death, the amount the spouse would have received will be paid to the firefighter's dependent parents.

Limitation on Death Benefits

The sum of all death benefits payable on behalf of a retired firefighter may not exceed the benefit he was receiving as of the date of his death. The sum of all death benefits payable on behalf of a non-retired firefighter may not exceed the service retirement or disability benefit that he would have been entitled to receive as of his date of death. In the event this limit is exceeded, each beneficiary is reduced pro-rata until the limit is met.

DROP Benefit

A firefighter who is eligible for a service retirement is eligible to elect an alternate form of retirement known as the Deferred Retirement Option Provision ("DROP"). Under the DROP, a firefighter is treated by the fund as if he retired, but he continues to work for the Fire Department in his regular capacity. While participating in the DROP, the City continues making contributions to the fund on the firefighter's behalf. A firefighter may participate in the DROP for a maximum of 6 years.

Each firefighter who elects the DROP has his monthly retirement income benefit calculated as of the date of election. Such monthly benefit will be deferred and will commence at the time of the firefighter's actual retirement from the department. During the time the firefighter is participating in the DROP, his monthly pension amount and his contributions are credited to his DROP account within the fund but no interest is credited.

At the time the firefighter does leave DROP and formally retires, he will begin to receive his monthly retirement income. The firefighter will also be eligible to receive the amount in his DROP account by making an irrevocable election to request payment of his DROP account in either of the methods as follows:

- (a) A lump sum; or
- (b) An amount to be paid in not more than three installments with the first installment beginning not later than 13 months after leaving the DROP and the final installment made not more than 37 months after leaving the DROP.

RETRO DROP Benefit

A firefighter who is eligible for a service retirement with more than 20 years of service is eligible to elect an alternate form of retirement known as the Reverse Deferred Retirement Option Provision (“Reverse DROP”). An eligible firefighter can elect a benefit calculation date that is no earlier than (a) 36 months prior to retirement and (b) age 50 with 20 years of service.

Each firefighter who elects the RETRO DROP will receive two benefits, one payable monthly and the other paid as a lump sum. The monthly benefit is equal to the Service Retirement Benefit the firefighter would have received as of the benefit calculation date under the plan provisions in effect as of that date. The lump sum benefit is equal to the employee’s contributions made between the benefit calculation date and the current retirement date plus the above calculated monthly benefits that otherwise would have been received between the benefit calculation date and the current retirement date.

Changes in Plan Provisions

City contribution rates increased from 17.00% to 17.52% effective January 1, 2009, and to 23.50% effective January 1, 2010. Firefighter contribution rates increased from 12.20% to 13.20% effective January 1, 2010. There have been no other changes in plan provisions since the prior valuation.