

**Ft. Lupton Fire Protection District  
Pension Fund**

**Actuarial Review as of  
As of January 1, 2011**

Prepared By:

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Ft. Lupton Fire Protection District  
Pension fund

Actuarial Review as of January 1, 2011

Certification of Actuarial Valuation

This actuarial valuation was prepared based on benefits that are available in accordance with Colorado State statutes. It has also been prepared in accordance with generally accepted actuarial principles. This study was prepared to demonstrate that the current benefits, as described in this report, can be supported by the fund.

This study is based on member and fund data as reported by the Ft. Lupton Fire Protection District.

To the best of my knowledge, the information supplied in this study is complete and accurate and reflects the plan provisions, assumptions, funding method and data as specified in this study. Therefore this valuation fully and fairly discloses the actuarial position of the fund as of January 1, 2011.

ACTUARIAL SOLUTIONS CORP.



Frank J. Dobis, FSA, MAAA  
Enrolled Actuary

Ft. Lupton Fire Protection District  
Pension fund

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Summary of Principal Plan Provisions

Eligibility for Normal Retirement Pension: Age 50 with 20 years of volunteer service.

Eligibility for Early Retirement Pension: Age 50 with 10 years of volunteer service.

Benefits:

Normal Retirement:	\$42.50 per month per year of service. Maximum pension is \$1,275.00 per month. based on 30 years of volunteer service.
Temporary Disability:	None
Permanent Disability:	None
Death Before Retirement:	50% of firefighters earned pension with 10 or more years of service at the date of death and the following benefit: A lump sum funeral benefit equal to two times the monthly pension the member had earned at the date of death.
Death After Retirement:	50% of the retiree's benefit and a lump sum funeral benefit equal to two times the monthly pension payments the retiree was receiving on the date of death.
Service Pension:	\$42.50 per month per year of service commencing at age 50 for inactive firefighters with at least 10 years of service.

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Investment Return: 5.00%  
(Changed from 6.20% used in the prior study)

Mortality After Retirement: 1994 Group Annuity Table

Pre-Retirement Mortality: 1994 Group Annuity Table

Turnover: T-9 Table

Disability: None

Retirement: All fire fighters are assumed to retire upon attainment of age 50, completion of 10 years of service or January 1, 2011 whichever is later.

Actuarial Cost Method: Entry Age Normal

Expenses: Assumed investment return shown above is net of a  
from the pension fund.

Marriage: 90% of active firefighters are assumed to be married. Female spouse:  
of an active firefighter assumed to be 3 years younger than their male  
spouse. Male spouses are assumed to 3 years older.

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Covered Participants

Valuation Period	<u>Current</u>	<u>Prior</u>
Active	<i>OK</i> 45	44
Average age	35.46	35.46
Average service	5.02	5.02
Normal retired drawing pensions <i>34 = 50 J+S 36 = 50 J+S/L</i>	38	32
Total monthly payments	26,036	23,675
Average monthly payment	685	740
Average Age	62.5	
Disabled retired drawing pensions	0	0
Total monthly payments	0	0
Average monthly payment	0	0
Beneficiaries drawing pensions <i>11 (Betty Brand not added)</i>	9	8
Total monthly payments	3,698	3,273
Average monthly payment	411	409
Average Age	77.9	
Vested retired not yet drawing pensions <i>OK</i>	7	11
Total monthly payments	3,357	5,525
Average monthly payment	480	502
Average Age	40.7	
 Total members included	 99	 95

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Assets and Expected Revenue as of January 1, 2011:

Value of the Fund as of January 1, 2011	\$3,689,874
Accrued interest	<u>0</u>
Fair Market Value of the Fund as of January 1, 2011	<u>\$3,689,874</u>

Expected Revenues:	<u>District</u>	<u>State</u>	<u>Total</u>
2009	\$224,023	\$57,682	<u>\$281,705</u>
2010	\$286,446	\$57,682	<u>\$344,128</u>
2011	\$222,877	\$57,682	<u>\$280,559</u>

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Actuarial Review As of January 1, 2011

	Current Benefit Level	Proposed Benefit
Actuarial Present Value of Future Benefits	<u>\$42.50</u>	<u>\$45</u>
Active	1,554,691	1,646,143
Normal retired drawing pensions	4,029,852	4,291,627
Disabled retired drawing pensions		
Beneficiaries drawing pensions	371,600	393,459
Vested retired not yet drawing pensions	<u>418,098</u>	<u>442,692</u>
Total	6,374,241	6,773,921
Entry Age Normal Accrued Liability	5,947,681	6,297,545
Fund Balance as of January 1, 2011	3,689,874	3,689,874
Unfunded Accrued Liability	2,257,807	2,607,671
Amortization Payment over 20 years	172,545	196,983
Current Service Cost	84,652	89,632
Annual Required Contribution at beginning of year	257,197	286,615
<b><i>Annual Required Contribution as of the end of the year</i></b>	<b><i>270,057</i></b>	<b><i>300,946</i></b>
Approximate number of years from the valuation date over which the current contribution in excess of the Current Service Cost will amortize the Unfunded Accrued Liability	16.5	21.50
Actuarially Sound (amortization period derived above must be 20 years or less)	<b>Yes</b>	<b>No</b>



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**GASB Statement Number 25**

Schedule of Funding Progress

Actuarial Value of Assets	\$3,689,874
Actuarial Accrued Liability	5,947,681
Excess of Assets over Accrued Liability	(2,257,807)
Funded Ratio	62%

Schedule of Employer Contributions

Annual Required Contribution	270,057
Percentage Contributed	100%

**GASB Statement Number 27**

Estimated Net Pension Obligation as of January 1,	\$0
Estimated Annual Required Contribution	270,057
Estimated Contribution for Plan Year	280,559
Estimated Net Pension Obligation as of December 31,	\$0

The Net Pension Obligation shown above is a standardized disclosure measure of the difference between the cumulative annual pension costs and contributions made to the Pension Fund since transition to this reporting standard. The Annual Required Contribution is a disclosure measure of the annual pension cost.

Both standardized measures are calculated as of January 1, 2011, in accordance with Statement #25 and Statement #27 of the Governmental Accounting Standards Board (GASB). Actuarial assumptions used are the same as those used for the valuation of plan liabilities and are identical to those shown on page 2 of this report.

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Actuarial Review As of January 1, 2011

	Proposed Elimination of Members <u>with &lt; 10 years</u>	Proposed \$45 Benefit <u>Level</u>
Actuarial Present Value of Future Benefits		
Active	857,541	907,985
Normal retired drawing pensions	4,029,852	4,266,902
Disabled retired drawing pensions		-
Beneficiaries drawing pensions	371,600	393,459
Vested retired not yet drawing pensions	<u>418,098</u>	<u>442,692</u>
Total	5,677,091	6,011,038
 Entry Age Normal Accrued Liability	 5,634,036	 5,965,450
 Fund Balance as of January 1, 2011	 3,689,874	 3,689,874
 Unfunded Accrued Liability	 1,944,162	 2,275,576
 Amortization Payment over 20 years	 148,576	 173,903
 Current Service Cost	 12,838	 13,593
 Annual Required Contribution at beginning of year	 161,414	 187,496
 <b><i>Annual Required Contribution as of the end of the year</i></b>	 <b><i>169,484</i></b>	 <b><i>196,871</i></b>
 Approximate number of years from the valuation date over which the current contribution in excess of the Current Service Cost will amortize the Unfunded Accrued Liability	          8.5	          11.5
 Actuarially Sound (amortization period derived above must be 20 years or less)	          <b>Yes</b>	          <b>Yes</b>
 Assumes there will not be State contribution in future years		

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Summary of Principal Plan Provisions  
\$300 Benefit

Eligibility for Normal Retirement Pension: Age 50 with 20 years of volunteer service.

Eligibility for Early Retirement Pension: Age 50 with 10 years of volunteer service.

Amount of Pension:

Normal Retirement:	\$15.00 per month per year of service maximum of 20 years.
Temporary Disability:	None
Permanent Disability:	None
Death Before Retirement:	50% of earned pension with 10 years of service
Death After Retirement:	50% of the retiree's benefit.
Funeral Benefit	\$100 Lump sum payment
Service Accrual Pension:	Member who leaves the department with at least 10 years of service is entitled to a monthly benefit of \$15 per month per year of service commencing at age 50.

Ft. Lupton Fire Protection Distirct  
Pension Fund

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\$300 Benefit

Actuarial Present Value of Future Benefits

Active	\$493,636
Normal retired drawing pensions	\$1,414,046
Disabled retired drawing pensions	\$0
Beneficiaries drawing pensions	\$131,153
Vested retired not yet drawing pensions	\$147,564
 Total	 \$2,186,399
 Fund Balance as of January 1, 2011	 \$3,689,874
 Present Value of future Normal Cost	 -\$1,503,475
 Average Temporary annuity	 4.3778
 Annual Required Contribution as of the beginning of the year	 \$0
 Annual Required Contribution as of the end of the year	 \$0
 Actuarially Sound	 <b>Yes</b>

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Summary and Conclusions

The fund is actuarially sound for the benefit outlined on page 1 based on the assumptions outlined on page 2 and the expected contributions on page 4. In particular we have assumed that the long term rate of return on the on the fund will average 5.0% per year. The rate of return is net of all expenses that are paid from the fund such as accounting and actuarial fees. fees.

It appears that the fund has earned at approximately 8.0% per year since the last study. If the actual average annual return over future years is much less than 5.0% the fund could eventually not be actuarially sound.

Based on the actuarial assumptions outlined on page 2 the fund would not be actuarially sound for a benefit level of \$45 per month per year of service for a maximum of 30 years.

