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ACTUARIAL COST STATEMENT FOR PROPOSED CHANGES FOR THE COMMUNITY FIRE PROTECTION DISTRICT DEFINED BENEFIT PENSION PLAN

Prepared and Presented April 15, 2014

This actuarial statement is to disclose the financial impact of the Substantial Proposed Changes to the Community Fire Protection District Defined Benefit Pension Plan in accordance with the Plan Amendment to be adopted which will be retroactively effective January 1, 2014. This statement is prepared using the actuarial assumptions and methods employed in the last annual actuarial valuation in accordance with R.S.Mo. § 105.665.

Proposed Changes

Pension Benefit Formula and Normal Retirement Date

Increase the Normal Retirement Benefit from 56% of the Participant's Average Monthly Compensation to 60% of the Participant's Average Monthly Compensation.

Change the Normal Retirement Date from the first day of the month coincident with or immediately following a Participant's Age 62 to the first day of the month coincident with or immediately following a Participant's Age 62 or Age 60 with 20 Years of Credited Service, if earlier.

Application of Benefit Formula Change

The change will be applied to future and past service.

Actuarial Analysis

The following display reflects Level Normal Cost, Amortization of the Unfunded Accrued Liability and the Total Annual Cost all calculated as of the end of the Plan Year both as a dollar amount and a percentage of compensation. The three columns provided are (1) the Current Plan, (2) the Proposed Formula and the Proposed Normal Retirement Date, described above, and (3) the Difference being the actuarial loss due to the increase in benefits.



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	<u>Current Plan</u>		<u>Proposed Improvement</u>		<u>Difference</u>	
Normal Cost	713,479	12.04%	774,958	13.08%	61,479	1.04%
Amortization of Unfunded Accrued Liability						
10 years	0	0.00%	0	0.00%	0	0.00%
20 years	0	0.00%	0	0.00%	0	0.00%
30 years	0	0.00%	0	0.00%	0	0.00%
Total Annual Cost						
10 years	713,479	12.04%	774,958	13.08%	61,479	1.04%
20 years	713,479	12.04%	774,958	13.08%	61,479	1.04%
30 years	713,479	12.04%	774,958	13.08%	61,479	1.04%

Projected Unit Credit method is used for the calculations above. The normal costs are almost same because some participants meet the new retirement eligibility and their costs are dropped to 0. The Accrued Liability is totally offset by the Plan Assets before and after amending the Plan. Therefore, the Unfunded Accrued Liability is 0 in both the Current Plan and with the Proposed Improvement.

In order to demonstrate the actual costs of the benefit improvement, we have calculated the Normal Costs and Accrued Liabilities by using Aggregate Cost Method shown below:

	<u>Current Plan</u>		<u>Proposed Improvement</u>		<u>Difference</u>	
Aggregate Cost	282,303	4.76%	736,341	12.43%	454,038	7.66%

The expected total contributions are \$1,013,043 which equal 17.10% of active participants' payroll. These contributions are sufficient to fund the proposed change in benefit. Therefore, no additional contributions are mandated by the proposed change.

Because this Plan is taking in more than needed, this proposed change will not impair the ability of the Plan to meet its obligations to pay benefits.

The Actuarial Accrued Liability under the Projected Unit Credit Cost Method after this change will be \$22,182,655 which Plan Assets are \$22,968,764 resulting in a Plan Funded Percentage of 103.54%.

All of the results in this report were based on the following Actuarial Methods and Assumptions which are the same as those used in the most recent Actuarial Valuation Report.



Cost Method:

Projected Unit Credit (PUC) Funding Method - Under this method, the Normal Cost is based exclusively on plan liabilities. The PUC Funding Method allocates the projected benefit of each participant over the participant's period of service - from hire to assumed retirement.

The Unfunded Accrued Liability equals the Accrued Liability less the Actuarial Value of Assets. Increases and decreases in the Unfunded Accrued Liability cause the plan to establish amortization bases. Level annual payments are charged and/or credited to the plan until the bases are fully amortized or until the plan reaches the Full-Funding Limit. The type of base and the date established determine the amount of the payment and the number of years of amortization.

Each experience gain or loss is amortized over the next following 15 years.

Valuation of Assets

All Assets are valued at Market Value

Mortality Rates

Pre-Retirement : 1994 Group Annuity Reserving Mortality male table,
set back 6 years for females

Post-Retirement : 1994 Group Annuity Reserving Mortality male table,
set back 6 years for females

Salary Appreciation

Increase Rate: 4.0% per annum: compounded annually

Assumed Retirement Age

Age 62 or Age 60 with 20 Years of Credited Service



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Termination prior to Retirement other than Death

T-1 Actuary's Table

<u>Age</u>	<u>Probability of Termination</u>
20	0.054417
30	0.037056
40	0.011306
50 & over	0.000000

Expense Load

\$85,000 is the assumed annual expense

To the best of my knowledge and belief, this valuation report is complete and accurate; and in my opinion the actuarial assumptions in the aggregate are reasonable expectations and represent my best estimate of anticipated experience under the Plan.

Ekon Benefits

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