Defined Benefit Fire Protection District
Special Review

Compliance Update

December 15, 2003

In response to the deterioration of the funded status of several defined benefit fire protection districts (FPD), the Joint Committee on Public Employee Retirement (JCPER) retained the actuarial firm of Gabriel, Roeder & Smith (GRS) in early 2002 to review and verify the concerns of the JCPER staff and to provide the Committee with specific recommendations.

Of particular concern was the impact on the pension fund assets due to lump sum distribution payments provided by 7 of the 10 fire protection districts. With the discount rate used in the calculation of lump sum distributions decreasing with the 30-year treasury rate, individual lump sum payments were increasing. (Lump sum discount rates for the FPDs in the special review have ranged from a low of 5.6% to a high of 12%). The combined effects of lump sum payments, decreasing investment returns and contributions limited by property tax levies have resulted in funded ratio trends which have been pointing markedly downward.

As noted in GRS report's general findings, funded ratios for some of the FPDs in the study have been deteriorating. To address this trend, the following recommendations were made:

> **Reporting**: In order to have a full understanding of the FPD's funded status and financial progress, GRS recommended that actuaries provide valuation reports that are geared toward public sector pension plans rather than private sector plans (as has been the practice for some FPDs). Furthermore, GRS recommended that the FPDs provide the disclosures required to satisfy the public pension plan reporting standards established under the Governmental Accounting Standards Board Statements 25 and 27. Valuation results based on the "entry age normal" actuarial funding method and the provision of 5-year cash flow projections were requested.
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> **Funding**: In order to address the overall financial health of the plans, shorter periods to amortize unfunded actuarial liabilities (UAL) were recommended. Specifically, GRS recommended a period of no more than 10 years for plans less than 60% funded and no more than 20 years for plans between 60% and 79% funded. Plans funded at 80% or more were encouraged to amortize over a period not to exceed 30 years.
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> **Monitoring**: In order to better determine when deterioration of a plan's funded status may call for further intervention, GRS recommended that FPD's be required to submit actuarial reports on an annual basis to the JCPER and comply with above-mentioned recommendations.

In response to the Special Review, the JCPER contacted each district plan individually with recommendations specific to their plan status. The following charts compare plan conditions for the plan year prior to recommendations and the current plan year.

Concerning the actuarial method used to calculate liabilities and contributions, 2 of the 3 plans using an Aggregate method changed to the Entry Age Normal method.

Concerning reporting as outlined in accordance with GASB Statement No. 25, of the 6 plans requested to comply with GASB, 4 have included this reporting in their current valuation.

In order to assess the future fiscal condition of the plans, five year cash flow projections were requested for further analysis. Cash flow projects were to include expected revenue (contributions and expected income) and expenditures (benefit payments, lump sum distributions and/or annuity purchases). Only 3 plans provided this information in 2002.

General recommendations in the GRS special review included accelerated contribution based on decreased amortization periods. There were no changes made in amortization used by any of the plans.

Overall, the funded ratios have continued to deteriorate on a market value basis, with only 2 plans (Fenton and Valley Park) improving their ratios in 2002, both of which are using 10 year amortization periods thereby accelerating contribution payments. Market values for 6 plans declined in 2002, while 2 showed no change when compared to 2001 ratios.

On an actuarial basis, 2 plans (Affton & Metro West) showed significant decline in actuarial value due largely to a change in the actuarial method. Five plans showed no significant difference in their actuarial funded status. *(Excluded from these figures was Eureka FPD. This plan continues to use an Aggregate method despite the JCPER recommendation to change to a more appropriate method.)*

Although the recommended contributions have been made on both a dollar and percent of payroll basis for 7 of the 10 plans, it is becoming increasingly more difficult for FPD's to meet this obligation. While investment income may return to normal rate of return patterns, assessed valuations are not expected to rise in most districts. Attempts over the last three years to increase the tax levy for pension obligations have failed.

National Pension Reform

The U.S. Senate has been considering proposed changes to pension fund rules since the House passed its version (H.R. 3108) in late summer 2003. Prior to the winter holiday adjournment, two key elements within the reform bill were still being debated. The first was the immediate issue as to whether the 2001 temporary discount rate relief legislation, which sunsets in December 2003, should be renewed. The second, long-term concern was whether the now-obsolete 30-year treasury bill rate should be replaced with a long-term corporate bond rate. While Congress had been pushing to get a pension reform bill passed before Congress adjourned for the December holidays, Senate leaders agreed on December 9, 2003 to postpone the legislation until at least late January 2004.

Defined Benefit Fire Protection District Pension Plans - Special Review Compliance Update

	Market Value	Actuarial Value	Liabilities	2002 MV	2002 AV	2001 MV	2001 AV	2002 Amortization Period
Affton	$ 2,879,687	$ 3,283,302	$ 5,569,772	52%	59%	98%	100%	30 Years
Blackjack	$ 3,065,733	$ 2,848,050	$ 6,393,038	48%	45%	44%	44%	20 Years
Eureka	$ 3,541,049	$ 3,258,982	$ 3,258,982	109%	100%	100%	83%	N/A
Fenton	$ 13,742,812	$ 15,246,113	$ 15,835,974	87%	96%	87%	95%	10 Years
Florissant Valley	$ 5,909,050	$ 4,930,290	$ 11,450,222	52%	43%	52%	42%	30 Years
Mehlville	$ 29,631,205	$ 36,965,918	$ 40,690,510	73%	91%	83%	94%	30 Years
Metro West	$ 17,406,905	$ 17,518,333	$ 27,875,629	62%	63%	94%	100%	30 Years
Mid-County	$ 521,464	$ 526,786	$ 1,236,158	42%	43%	45%	45%	20 Years
Rock Community	$ 2,583,713	$ 3,125,880	$ 3,872,974	67%	81%	80%	88%	20 Years
Valley Park	$ 1,563,428	$ 1,213,342	$ 1,347,375	116%	90%	118%	80%	10 Years

	Recommended Contribution Rate % 2002	Recommended Contribution Rate % 2001	PY 2001 $ Contribution Recommended	PY 2001 $ Contribution Actual	Percent Contributed
Affton	19.64%	17.20%	$ 269,409	$ 233,242	87%
Blackjack	19.67%	19.13%	$ 483,378	$ 619,896	128%
Eureka	13.95%	14.06%	$ 176,443	$ 177,000	100%
Fenton	24.83%	23.42%	$ 808,119	$ 900,000	111%
Florissant Valley	26.20%	21.50%	$ 689,664	$ 698,029	101%
Mehlville	17.58%	16.81%	$ 1,623,811	$ 1,611,393	99%
Metro West	32.24%	29.38%	$ 1,675,691	$ 1,365,888	82%
Mid-County	8.58%	11.54%	$ 126,404	$ 118,134	93%
Rock Community	10.63%	9.42%	$ 208,768	$ 200,000	96%
Valley Park	13.09%	14.87%	$ 148,208	$ 186,165	126%

Actuarial Notes:

Affton: Actuary recommends serious consideration be given to an increase in contributions through tax revenues or employee contributions.

Blackjack: There was a decrease in normal costs due to the retirement of 2 participants. Actuary's letter notes that "plan continues to be severely underfunded relative to benefits accrued to date."

Eureka: Plan reported no UAAL during Plan Year 2002. During Plan Year 2002, approximately 41% of employer contributions were a result of demutualization by the Plan Administrator (Principal Financial Group).

Florissant Valley: The actuary notes that "The plan continues to be severely underfunded relative to benefits accrued to date." Florissant Valley FPD employees contribute 1% of salaries to plan. The employer contributes 25.2% for total contribution rate of 26.2% for PY 2002.

Metro West: Plan benefits increased more than expected due to an average salary increase of 9%. Contributions are now about $600,000 less than necessary to support promised benefits. In PY 2002, plan changed from an Aggregate to an Entry Age Normal actuarial method.

Mid-County: Split DB/DC plan. Assets shown include only those from the DB plan.

Rock Community: Actuarial Loss in PY 2002 attributable to investment returns less than expected, average salary increases higher than expected (8.4% vs 5.0%) and 3 new entrants.

Note: All Plans noted above are "non-contributory" for plan participants except for Florissant Valley FPD.
No changes were made by any plan relating to the UAAL amortization period.

Defined Benefit Fire Protection District Pension Plans - Special Review Compliance Update

2002	Lump Sum Option [1]	GASB Disclosures [2]	Actuarial Method [3]	5 year Cash Flow Projections [4]	Investment Rate of Return		Salary Increase	
					Assumed Rate	Actual Rate	Assumed	Actual
Affton	YES (7.50% discount rate)	YES	Entry Age Normal	YES	7.50%	-12.80%	4.50%	9.70%
Blackjack	YES (12% discount rate)	YES	Entry Age Normal	NO	7.00%	-6.62%	5.00%	N/P
Eureka	NO	NO	Aggregate	YES	6.50%	N/P	3.00%	N/P
Fenton	YES (7.50% discount rate)	YES	Frozen Entry Age	No	8.00%	3.30%	5.50%	N/P
Florissant Valley	YES [5]	YES	Entry Age Normal	NO	6.75%	-3.23%	4.00%	N/P
Mehlville	YES (8% discount rate)	YES	Entry Age Normal	NO	8.00%	-7.51%	6.50%	1.40%
Metro West	NO	YES	Entry Age Normal	YES	7.50%	-6.70%	5.00%	9.00%
Mid-County	YES (5.6% discount rate)	NO	Entry Age Normal	NO	7.00%	N/P	Actual experience	N/P
Rock Community	NO	YES	Projected Unit Credit	NO	7.50%	-7.52%	5.00%	8.40%
Valley Park	YES (7.5% discount rate)	YES	Projected Unit Credit	NO	7.50%	4.70%	4.00%	N/P

1: Although a policy recommendation in the GRS study, no changes were made to Lump Sum discount rates by any of the plans noted above in 2002.

2: A policy recommendation in the GRS study was for plans to provide financial disclosures in accordance with GASB Statement #25. In Plan Year 2001, 4 of the 10 plans were in full compliance with the requirement. In Plan Year 2002, 8 of 10 plans were in full compliance.

3: Except for Affton and Metro West FPDs (both of which changed from an Aggregate to an Entry Age Normal actuarial method), all plans continued to use the same actuarial method in PY '02 vs PY '01. In 2001, 7 of 10 plans used one of the actuarial valuation methods recommended in the GRS study. In 2002, this had improved to 9 of the 10 plans.

4: The GRS Special Review called for five year cash flow projections to include expected revenue (contributions and expected income) and expenditures (benefit payments, lump sum distributions and/or annuity purchases). Only 3 of the 10 plans provided this information in Plan Year 2002.

5: Florissant Valley FPD uses a "lump sum conversion factor" of 165 X Monthly Accrued Benefit. If conversion factors are favorable to members, there will be experience losses for the plan.

N/P - Information not provided.