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Volunteer Firefighters Retirement Fund of New Mexico

GASB Statement No. 67 Supplemental Report
Prepared as of June 30, 2016

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Section I - Introduction

The Governmental Accounting Standards Board issued Statement No. 67 (GASB 67), "Financial Reporting for Pension Plans," in June 2012. GASB 67's effective date is for plan years beginning after June 15, 2013. This report, prepared as of June 30, 2016 (the Measurement Date), presents information to assist PERA in meeting the requirements of GASB 67. Much of the material provided in this report is based on the data, assumptions and results of the annual actuarial valuation of the Volunteer Firefighters Retirement Fund (the Fund) as of June 30, 2015. The June 30, 2015 liabilities were rolled-forward to produce the June 30, 2016 liabilities used in this report. The actuarial assumptions used are included in Appendix A.

Among the assumptions needed for the liability calculation is a Single Equivalent Interest Rate (SEIR). To determine the SEIR, the FNP must be projected into the future for as long as there are anticipated benefits payable under the plan's provision applicable to the membership and beneficiaries of the Plan on the Measurement Date. If the FNP is projected to not be depleted at any point in the future, which is the current result for the Fund, the long term expected rate of return on plan investments expected to be used to finance the benefit payments may be used as the SEIR.

If, however, in a future year, the FNP is projected to be depleted, the SEIR is determined as the single rate that will generate a present value of benefit payments equal to the sum of the present value determined by discounting all projected benefit payments through the date of depletion by the long term expected rate of return, and the present value determined by discounting those benefits after the date of depletion by a 20-year tax-exempt municipal bond (rating AA/Aa or higher) rate. The rate used, if necessary, for this purpose is the General Obligation 20-year Municipal Bond Index published monthly by the St. Louis Federal Reserve Bank.

To the best of our knowledge, this supplemental report is complete and accurate. It relies on much of the information contained in the annual actuarial valuations of the Fund. The annual valuation reports should be distributed along with this report to interested parties. The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. Further, the calculations were prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board and, in our opinion, meet the requirements of GASB 67. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Section I - Introduction

The sections that follow provide the results of all the necessary calculations, presented in the order laid out in GASB 67 for note disclosure and Required Supplementary Information (RSI).

Respectfully Submitted,

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Section II – Financial Statement Notes

The material presented herein will follow the order presented in GASB 67. Paragraph numbers are provided for ease of reference.

The information required by paragraphs 30(a)(1)-(3) are to be supplied by PERA.

The data required by paragraph 30(a)(4) regarding the Plan membership were furnished by PERA. The following table summarizes the membership of the Plan as of June 30, 2015, the Actuarial Valuation Date.

Membership

Category	Number
Inactive Members or Their Beneficiaries Currently Receiving Benefits	1,004
Inactive Members Entitled to But Not Yet Receiving Benefits	657
Active Members	8,136
Total	9,797

The information required by paragraphs 30(a)(5)-(6) as well as paragraphs 30(b)-(f) are to be supplied by PERA. The information required by paragraph 31(a) is provided in the following table. As stated above, the Net Pension Liability is equal to the Total Pension Liability minus the Plan's Net Position. That result as of June 30, 2016 is presented in the table below.

Calculation of the Net Pension Liability (NPL) as of Fiscal Year Ending June 30, 2016	
Total Pension Liability	48,935,662
Plan's Fiduciary Net Position	61,049,688
Net Pension Liability	(12,114,026)
Ratio of Fiduciary Net Position to Total Pension Liability	124.76%

Section II – Financial Statement Notes

Paragraph 31(b) requires information regarding the actuarial assumptions used to measure the TPL. The actuarial assumptions utilized in developing the TPL are those contained in Appendix A of this report. Please refer to the actuarial valuation reports for the summary of the benefits provided through the Fund.

Long-Term Expected Rate of Return

The long-term expected rate of return on pension plan investments was determined using statistical analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and most recent best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Global Equity	43.5%	7.39%
Risk Reduction & Mitigation	21.5	1.79
Credit Oriented Fixed Income	15.0	5.77
Real Assets	20.0	7.35
Total	100.0%	

Discount rate. A select and ultimate rate of return assumption has been adopted funding purposes. The rate is 7.25% for the first 10 years (select period) and 7.75% for all other years (ultimate). The equivalent blended rate is 7.48% and will be used as the discount rate used to measure the total pension liability. The projection of cash flows used to determine the discount rate assumed that future contributions will be made in accordance with statutory rates. On this basis, the pension plan's fiduciary net position together with the expected future contributions are sufficient to provide all projected future benefit payments of current plan members as determined in accordance with GASB Statement No. 67. Therefore, the 7.48% assumed long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Section II – Financial Statement Notes

Paragraph 31(b)(1)(g) requires disclosure of the sensitivity of the net pension liability to changes in the discount rate. The following presents the net pension liability of the Fund, calculated using the discount rate of 7.48 percent, as well as what the Fund's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.48 percent) or 1-percentage-point higher (8.48 percent) than the current rate:

	1% Increase (8.48%)	Current Discount Rate (7.48%)	1% Decrease (6.48%)
Net Pension Liability	(16,921,173)	(12,114,026)	(6,343,683)

June 30, 2015 is the actuarial valuation date upon which the TPL is based (paragraph 31(c)). Update procedures were used to roll forward the liabilities to the June 30, 2016 Measurement Date.

Section III – Required Supplementary Information

There are several tables of Required Supplementary Information (RSI) that need to be included in the Fund's financial statements. The tables for paragraphs 32(a)-(c) are provided on the following pages. The end of year total pension liability (TPL) was determined by "rolling-forward." This method determines the end of year amount by assuming that there were no changes in the TPL during the year due to actual experience being different than expected for that plan year. The money-weighted rates of return required for paragraph 32(d) are to be determined by PERA's investment professionals.

Actuarial assumptions are contained in Appendix A of this report.

Section III – Required Supplementary Information

SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY
GASB 67 Paragraph 32(a)

	2014	2015	2016	2017	2018
Total pension liability					
Service Cost	1,253,736	1,250,564	1,439,931		
Interest	2,871,904	3,104,991	3,375,898		
Benefit changes	0	0	0		
Difference between expected					
and actual experience	0	874,372	(498,350)		
Changes of assumptions	408,092	0	1,975,872		
Benefit payments	(1,418,943)	(1,633,388)	(1,835,318)		
Refunds of contributions	0	0	0		
Net change in total pension liability	3,114,789	3,596,539	4,458,033		
Total pension liability - beginning	37,766,301	40,881,090	44,477,629		
Total pension liability - ending (a)	40,881,090	44,477,629	48,935,662		
Plan net position					
Contributions - employer	750,000	750,000	750,000		
Contributions - member	0	0	0		
Net investment income	8,919,556	1,093,757	206,024		
Benefit payments	(1,418,943)	(1,633,388)	(1,835,318)		
Administrative expense	(44,316)	(42,596)	(46,902)		
Refunds of contributions	0	0	0		
Other	404,492	12,201	51,385		
Net change in plan net position	8,610,789	179,974	(874,811)		
Plan net position - beginning	53,312,473	61,923,262	62,103,236		
Prior period adjustments	-	-	(178,737)		
Plan net position - beginning, Restated	53,312,473	61,923,262	61,924,499		
Plan net position - ending (b)	61,923,262	62,103,236	61,049,688		
Net pension liability - ending (a) - (b)	(21,042,172)	(17,625,607)	(12,114,026)		

SCHEDULE OF THE NET PENSION LIABILITY
GASB 67 Paragraph 32(b)

	2014	2015	2016	2017	2018
Total pension liability	40,881,090	44,477,629	48,935,662		
Plan net position	61,923,262	62,103,236	61,049,688		
Net pension liability	(21,042,172)	(17,625,607)	(12,114,026)		
Ratio of plan net position to total pension liability	151.47%	139.63%	124.76%		
Covered-employee payroll	N/A	N/A	N/A		
Net pension liability as a percentage of covered-employee payroll	N/A	N/A	N/A		

Section III – Required Supplementary Information

SCHEDULE OF EMPLOYER CONTRIBUTIONS
GASB 67 Paragraph 32(c)

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Statutorily required employer contributions	$750,000	$750,000	$750,000	$750,000	$750,000	$750,000	$750,000	$750,000	$750,000	$750,000
Actual employer contributions	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000
Annual contribution deficiency (excess)	0	0	0	0	0	0	0	0	0	0
Covered-employee payroll	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Actual contributions as a percentage of covered-employee payroll	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Section IV: Notes to the Required Schedules

Summary of Actuarial Methods and Assumptions for Valuation

Actuarial valuation date	June 30, 2015
Actuarial cost method	Entry Age Normal
Amortization method	Level Dollar, Open
Amortization period	30 Years
Asset valuation method	4 Year Smoothed Market Value
Actuarial Assumptions:	
Investment rate of return	7.48% annual rate, net of investment expense
Payroll Growth	N/A
Projected salary increases	N/A

In addition, under paragraph 34, the following should be noted regarding the RSI:

Actuarial assumptions utilized in developing the TPL are those contained in Appendix A of this report. Based on a study of economic assumptions performed in June 2016, the expected investment return assumption for funding valuations was changed to include a select and ultimate inflation rate assumption, resulting in an assumption of 7.25% for the first 10 years and 7.75% for all other years. The equivalent single rate of the select and ultimate assumption is 7.48% which will be used for GASB accounting calculations. Additionally, a demographic experience study was performed for the period July 1, 2010 through July 30, 2015. Based on this study, rates of withdrawal were decreased and the pattern of retirement rates was altered resulting in a decrease of rates at most ages.

There were no changes to the benefit provisions which impact the measurements provided in this supplemental report.

Actuarial Assumptions Used for Determining the Total Pension Liability (TPL)

Assumed Rate of Investment Return. 7.48% per annum net of investment expenses.

Discount Rate for Determining the TPL: 7.48%.

20-Year Municipal Bond Rate as of Measurement Date: N/A.

The rates of separation (effective June 30, 2016) from active membership were as follows:

Sample Ages	Years of Service	Percent of Active Members Separating Within Next Year
ALL	0	18.00%
	1	10.00
	2	8.50
	3	8.00
	4	7.50
25	5 & Over	6.90
30		5.90
35		5.20
40		5.00
45		5.00
50		5.00
55		5.00
60		5.00

The rates of retirement (effective June 30, 2016) from active membership were as follows:

Ages	Percent of Active Members Retiring Within Next Year
55	35.0%
56	25.0
57	20.0
58-59	23.0
60	25.0
61-66	30.0
67-69	45.0
70	100.0

Mortality Assumption: RP-2000 Mortality Tables (Combined table for healthy post-retirement, Employee table for active members, and Disabled table for disabled retirees before retirement age) with projection to 2018 using Scale AA. This assumption includes between 5% and 8% margin sufficient to allow for modest future improvement in the rates of mortality.

Sample Mortality Rates								
Pre-Retirement			Post-Retirement			Disabled		
Age	Male	Female	Age	Male	Female	Age	Male	Female
25	0.0003	0.0002	45	0.0012	0.0008	45	0.0178	0.0056
30	0.0004	0.0002	50	0.0015	0.0012	50	0.0209	0.0085
35	0.0007	0.0004	55	0.0026	0.0024	55	0.0251	0.0143
40	0.0009	0.0005	60	0.0050	0.0046	60	0.0314	0.0200
45	0.0012	0.0008	65	0.0099	0.0089	65	Uses healthy post-retirement rates upon surviving to normal retirement age.	
50	0.0015	0.0012	70	0.0169	0.0153	70		
55	0.0021	0.0022	75	0.0294	0.0243	75		
60	0.0036	0.0036	80	0.0537	0.0404	80		
65	0.0059	0.0053	85	0.0976	0.0695	85		

Miscellaneous and Technical Assumptions

Marriage Assumption:	All members are assumed to be married for purposes of death-in-service benefits. Male spouses are assumed to be three years older than female spouses. At retirement, 90% of members are assumed to be married for purposes of valuing death after retirement benefits.
Pay Increase Timing:	N/A.
Decrement Timing:	Decrements of all types are assumed to occur at the beginning of the year.
Eligibility Testing:	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
Decrement Relativity:	Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.
Decrement Operation:	Neither disability nor withdrawal decrements operate during retirement eligibility.
Incidence of Contributions:	Contributions are assumed to be received in the middle of the year.
Normal Form of Benefit:	A 66-2/3% automatic joint and survivor payment is the assumed normal form of benefit for married members. Straight life is the assumed normal form of benefit for single members.
Benefit Service:	Service nearest the whole year is used to determine the amount of benefit payable.
Average Entry Age:	Age 39.34 was assumed in cases where insufficient data was provided. Active members were assumed to accrue 0.75 years of service credit in each future year.
Non-Vested Inactive Members:	Members with at least 5 years of service and a last reported date within the last 5 years are valued similarly to deferred vested members in order to recognize potential liability these members hold.