



Cavanaugh Macdonald
CONSULTING, LLC

The experience and dedication you deserve



PERA

Public Employees
Retirement Association
of New Mexico

INVESTED IN TOMORROW.

**New Mexico Magistrate Retirement
Fund**

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





TABLE OF CONTENTS

<u>Section</u>	<u>Item</u>	<u>Page No.</u>
I	Introduction	1
II	Financial Statement Notes	3
III	Required Supplementary Information	6
IV	Notes to the Required Schedules	10
Appendix A	Actuarial Assumptions	11



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 New Mexico Magistrate Retirement Fund (the Fund) as of June 30, 2015. The June 30, 2015 liabilities were rolled-forward to produce the June 30, 2016 liabilities. The actuarial assumptions 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, 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,

A handwritten signature in blue ink that reads 'Jonathan T. Craven'.

Jonathan T. Craven, ASA, EA, MAAA, FCA
Senior Actuary

A handwritten signature in blue ink that reads 'John J. Garrett'.

John J. Garrett, ASA, MAAA, FCA
Principal and Consulting Actuary



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	102
Inactive Members Entitled to But Not Yet Receiving Benefits	16
Active Members	60
Total	178

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	\$74,518,592
Plan's Fiduciary Net Position	31,038,048
Net Pension Liability	43,480,544
Ratio of Fiduciary Net Position to Total Pension Liability	41.65%



Section II – Financial Statement Notes

Paragraph 31(b) requires information regarding the actuarial assumptions used to measure the TPL. The economic and mortality assumptions were adopted by the Board for use in the June 30, 2015 actuarial valuation of the Magistrate Fund. Appendix A provides the assumptions used for the measurements contained herein.

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% which is the assumed investment return assumption. The discount rate used to measure the total pension liability is 4.40 percent. 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 not sufficient to provide all projected future benefit payments of current plan members as determined in accordance with GASB Statement No. 67. Therefore, a 4.40% 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. This rate is a blend of the 7.48% and the 20-year tax-exempt municipal bond rate of 3.01% as of the measurement date.



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 4.40 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 (3.40 percent) or 1-percentage-point higher (5.50 percent) than the current rate:

	1% Increase (5.4%)	Current Discount Rate (4.4%)	1% Decrease (3.4%)
Net Pension Liability	\$35,753,785	\$43,480,544	\$52,822,425

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. Impact of changes to the assumptions and benefit terms are appropriately measured and provided in the supplementary information. The money-weighted rates of return required for paragraph 32(d) are to be determined by PERA’s investment professionals.



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	\$ 1,428,353	\$ 947,730	\$ 1,117,925		
Interest	3,688,653	3,444,833	3,452,435		
Benefit changes	(7,527,733)	0	0		
Difference between expected and actual experience	0	6,703,398	1,571,377		
Changes of assumptions	(7,643,920)	0	8,831,831		
Benefit payments	(3,689,881)	(3,955,687)	(3,976,586)		
Refunds of contributions	(15,477)	(4,918)	(14,805)		
Net change in total pension liability	\$ (13,760,005)	\$ 7,135,356	\$10,982,177		
Total pension liability - beginning	\$ 70,161,064	\$56,401,059	\$63,536,415		
Total pension liability - ending (a)	\$ 56,401,059	\$63,536,415	\$74,518,592		
Plan net position					
Contributions - employer	\$ 793,044	\$ 936,602	\$ 1,280,104		
Contributions - member	266,120	489,642	586,992		
Net investment income	5,199,209	579,091	69,508		
Benefit payments	(3,689,881)	(3,955,687)	(3,976,586)		
Administrative expense	(24,275)	(22,660)	(23,735)		
Refunds of contributions	(15,477)	(4,918)	(14,805)		
Other	216,853	(19,486)	26,885		
Net change in plan net position	\$ 2,745,593	\$ (1,997,416)	\$ (2,051,637)		
Plan net position - beginning	\$ 32,439,317	\$35,184,910	\$33,187,494		
Prior period adjustments	\$ -	\$ -	\$ (97,809)		
Plan net position - beginning, Restated	\$ 32,439,317	\$35,184,910	\$33,089,685		
Plan net position - ending (b)	\$ 35,184,910	\$33,187,494	\$31,038,048		
Net pension liability - ending (a) - (b)	\$ 21,216,149	\$30,348,921	\$43,480,544		



Section III – Required Supplementary Information

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

	2014	2015	2016	2017	2018
Total pension liability	\$56,401,059	\$63,536,415	\$74,518,592		
Plan net position	35,184,910	33,187,494	31,038,048		
Net pension liability	21,216,149	30,348,921	43,480,544		
Ratio of plan net position to total pension liability	62.38%	52.23%	41.65%		
Covered-employee payroll	\$3,515,567	\$5,065,798	\$5,243,101		
Net pension liability as a percentage of covered-employee payroll	603.49%	599.09%	829.29%		



Section III – Required Supplementary Information

SCHEDULE OF EMPLOYER CONTRIBUTIONS GASB 67 Paragraph 32(c)

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Actuarially determined contributions	\$1,462,825	\$1,966,543	\$1,992,392	\$2,286,413	\$1,793,261	\$2,013,684	\$1,698,108	\$1,151,061	\$1,029,865	\$943,884
Actual employer contributions	<u>1,280,104</u>	<u>936,602</u>	<u>793,044</u>	<u>805,337</u>	<u>676,073</u>	<u>894,644</u>	<u>825,317</u>	<u>1,000,180</u>	<u>981,000</u>	<u>920,000</u>
Annual contribution deficiency (excess)	\$182,721	\$1,029,941	\$1,199,348	\$1,481,076	\$1,117,188	\$1,119,040	\$872,791	\$150,881	\$48,865	\$23,884
Covered-employee payroll	\$5,243,101	\$5,065,798	\$3,515,567	\$3,136,834	\$3,213,712	\$3,405,121	\$3,519,570	\$4,128,599	\$3,363,342	\$3,464,587
Actual contributions as a percentage of covered-employee payroll	24.42%	18.49%	22.56%	25.67%	21.04%	26.27%	23.45%	24.23%	29.17%	26.55%



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 Percent of Payroll, Open
Amortization period	Solved for based on statutory rates
Asset valuation method	4 Year Smoothed Market Value
Actuarial Assumptions:	
Investment rate of return	7.48% annual rate, net of investment expense, SEIR 4.40%
Payroll Growth	2.75 first 10 years, then 3.25% %
Projected salary increases	3.00 first 10 years, then 3.50%

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

The actuarial assumptions utilized in developing the TPL are those contained in Appendix A of this report. The SEIR rate changes from 5.61% to 4.40%. Additionally, a demographic experience study was performed for the period July 1, 2011 through July 30, 2015. Based on this study, rates of withdrawal and rates of retirement were modified.

The Schedule of Changes in the Net Pension Liability provided on page 7 of this supplemental report provides the impact to the calculation of the TPL due to the change in the SEIR.

Additionally, a demographic experience study was performed for the period July 1, 2011 through July 30, 2015. Based on this study, rates of withdrawal and rates of retirement were modified.

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



Appendix A: Actuarial Assumptions

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

Economic Assumptions (effective with June 30, 2016 valuation)

Assumed Rate of Investment Return. 7.48%, net of investment expenses.

Discount Rate for Determining the TPL: 4.40%.

20-Year Municipal Bond Rate as of Measurement Date: 3.01%.

Price Inflation. 2.48% per annum, compounded annually.

Salary Increases. Annual salaries of active members are assumed to increase at an annual rate of 3.0% per year for the first 10 years and 3.5% thereafter.

Administrative Expenses. 0.45% of payroll.

Demographic Assumptions

Rates of Retirement (effective with June 30, 2016 valuation). These rates are used to measure the probability of an eligible magistrate retiring at the indicated ages.

Ages	Active Magistrates Retiring Within the Year Following Attainment of Indicated Ages
50-59	30 %
60-65	35
66-69	30
70	100

A member was assumed to be eligible for normal retirement after attaining 24 years of service, regardless of age; age 60 with 15 years of service; or age 65 with 5 or more years of service, provided that the member had a minimum of 5 years of service under the Magistrate Retirement Fund.



Appendix A: Actuarial Assumptions

Rates of Disability. Beginning with the June 30, 2008 valuation there are assumed to be no future disabled retirees.

Rates of Separation from Active Membership (effective with June 30, 2016 valuation). The rates are used to measure probabilities of active members terminating that status for a reason other than disability or death. The rates do not apply to magistrates who are eligible for retirement.

Ages	Percent of Active Magistrate Separating Within the Next Year
20	4.00 %
25	4.00
30	4.50
35	5.00
40	5.50
45	6.00
50	6.50
55	7.00

Mortality Assumption. The mortality assumptions are based on the 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	0.0208	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		



Appendix A: Actuarial Assumptions

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, 87% of members are assumed to be married for purposes of valuing death after retirement benefits.
Pay Increase Timing:	Beginning of (Fiscal) year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.
Decrement Timing:	Decrements of all types are assumed to occur at the beginning of 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 continuously throughout the year based upon the computed percent of payroll shown in this report and the actual payroll payable at the time contributions are made.
Benefit Service:	Exact fractional service is used to determine the amount of benefit payable.