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New Mexico Magistrate Retirement Fund

GASB Statement No. 67 Supplemental Report
Prepared as of June 30, 2018

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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, 2018 (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, 2017. The Board adopted new economic and mortality assumptions after the valuation date but prior to the measurement date. The June 30, 2017 liabilities were rolled-forward using these new assumptions to produce the June 30, 2018 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 determined using the Municipal Bond Index published by the Bond Buyer.

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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Consulting Actuary

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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, 2017, 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	13
Active Members	65
Total	180

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, 2018 is presented in the table below.

Calculation of the Net Pension Liability (NPL) as of Fiscal Year Ending June 30, 2018	
Total Pension Liability	$69,089,967
Plan's Fiduciary Net Position	32,092,452
Net Pension Liability	36,997,515
Ratio of Fiduciary Net Position to Total Pension Liability	46.45%

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, 2018 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%	7.48%
Risk Mitigation	21.5	2.37
Credit Oriented Fixed Income	15.0	5.47
Real Assets	20.0	6.48
Total	100.0%	

Discount rate. Previously, a select and ultimate rate of return assumption had been adopted for funding purposes but new economic assumptions were adopted for the June 30, 2018 valuations including the change to a 7.25% static rate. The discount rate used to measure the total pension liability for the Magistrate Fund is 5.21 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 5.21% 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 7.25% and the 20-year tax-exempt municipal bond rate of 3.89% 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 5.21 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 (4.21 percent) or 1-percentage-point higher (6.21 percent) than the current rate:

	1% Increase (6.21%)	Current Discount Rate (5.21%)	1% Decrease (4.21%)
Net Pension Liability	$30,257,881	$36,997,515	$45,081,231

June 30, 2017 is the actuarial valuation date upon which the TPL is based (paragraph 31(c)). The TPL was calculated as of June 30, 2017 using the new economic and mortality assumptions adopted by the Board. Standard update procedures were used to roll forward the liabilities to the June 30, 2018 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	$ 1,536,910	$ 1,353,643
Interest	3,688,653	3,444,833	3,452,435	3,191,559	3,486,404
Benefit changes	(7,527,733)	0	0	0	0
Difference between expected and actual experience	0	6,703,398	1,571,377	(1,538,854)	(237,450)
Changes of assumptions	(7,643,920)	0	8,831,831	(8,114,224)	2,874,007
Benefit payments	(3,689,881)	(3,955,687)	(3,976,586)	(3,966,314)	(3,951,032)
Refunds of contributions	(15,477)	(4,918)	(14,805)	0	(63,274)
Net change in total pension liability	$ (13,760,005)	$ 7,135,356	$10,982,177	$ (8,890,923)	$ 3,462,298
Total pension liability - beginning	$ 70,161,064	$56,401,059	$63,536,415	$74,518,592	$65,627,669
Total pension liability - ending (a)	$ 56,401,059	$63,536,415	$74,518,592	$65,627,669	$69,089,967
Plan net position					
Contributions - employer	$ 793,044	$ 936,602	$ 1,280,104	$ 1,282,356	$ 1,231,917
Contributions - member	266,120	489,642	586,992	603,362	580,290
Net investment income	5,199,209	579,091	69,508	3,289,637	2,155,789
Benefit payments	(3,689,881)	(3,955,687)	(3,976,586)	(3,966,314)	(3,951,032)
Administrative expense	(24,275)	(22,660)	(23,735)	(25,004)	(26,591)
Refunds of contributions	(15,477)	(4,918)	(14,805)	0	(63,274)
Other	216,853	(19,486)	26,885	3,037	13,607
Net change in plan net position	$ 2,745,593	$ (1,997,416)	$ (2,051,637)	$ 1,187,074	$ (59,294)
Plan net position - beginning	$ 32,439,317	$35,184,910	$33,187,494	$31,038,048	$32,225,122
Prior period adjustments	$ -	$ -	$ (97,809)	$ -	$ (73,376)
Plan net position - beginning, Restated	$ 32,439,317	$35,184,910	$33,089,685	$31,038,048	$32,151,746
Plan net position - ending (b)	$ 35,184,910	$33,187,494	$31,038,048	$32,225,122	$32,092,452
Net pension liability - ending (a) - (b)	$ 21,216,149	$30,348,921	$43,480,544	$33,402,547	$36,997,515

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	$65,627,669	$69,089,967
Plan net position	35,184,910	33,187,494	31,038,048	32,225,122	32,092,452
Net pension liability	21,216,149	30,348,921	43,480,544	33,402,547	36,997,515
Ratio of plan net position to total pension liability	62.38%	52.23%	41.65%	49.10%	46.45%
Covered-employee payroll	$3,515,567	$5,065,798	$5,243,101	$5,633,125	$5,638,423
Net pension liability as a percentage of covered-employee payroll	603.49%	599.09%	829.29%	592.97%	656.17%

Section III – Required Supplementary Information

SCHEDULE OF EMPLOYER CONTRIBUTIONS
GASB 67 Paragraph 32(c)

	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Actuarially determined contributions	$1,587,780	$1,576,148	$1,462,825	$1,966,543	$1,992,392	$2,286,413	$1,793,261	$2,013,684	$1,698,108	$1,151,061
Actual employer contributions	1,231,917	1,282,356	1,280,104	936,602	793,044	805,337	676,073	894,644	825,317	1,000,180
Annual contribution deficiency (excess)	$355,863	$293,792	$182,721	$1,029,941	$1,199,348	$1,481,076	$1,117,188	$1,119,040	$872,791	$150,881
Covered-employee payroll	$5,638,423	$5,633,125	$5,243,101	$5,065,798	$3,515,567	$3,136,834	$3,213,712	$3,405,121	$3,519,570	$4,128,599
Actual contributions as a percentage of covered-employee payroll	21.85%	22.76%	24.42%	18.49%	22.56%	25.67%	21.04%	26.27%	23.45%	24.23%

Section IV: Notes to the Required Schedules

Summary of Actuarial Methods and Assumptions for Valuation

Actuarial valuation date	June 30, 2017
Actuarial cost method	Entry Age Normal
Amortization method	Level Percent of Payroll, Open
Amortization period	30 years
Asset valuation method	4 Year Smoothed Market Value
Actuarial Assumptions:	
Investment rate of return	7.25% annual rate, net of investment expense, SEIR 5.21%
Payroll Growth	3.00%
Projected salary increases	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 changed from 5.48% to 5.21%. Additionally, the Board adopted updated economic and mortality assumptions as follows:

Assumption	Previous	Current
Rate of Inflation	a select & ultimate rate of 2.25% and 2.75%	2.50% static rate
Investment Rate of Return	a select & ultimate rate of 7.25% and 7.75%	7.25% static rate
Rate of Payroll Growth	a select & ultimate rate of 2.75% and 3.25%	3.00% static rate
Administrative Expenses	0.45% of payroll	0.50% of payroll

New mortality assumptions were adopted for the June 30, 2018 valuation as follows: RPH-2014 Blue Collar mortality table with female ages set forward one year. Future improvement in mortality rates is assumed using 60% of the MP-2017 projection scale generationally.

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 these changes.

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)

<u>Economic Assumptions</u> **(effective with June 30, 2018 valuation)**

Assumed Rate of Investment Return. 7.25%, net of investment expenses.

Discount Rate for Determining the TPL: 5.21%.

20-Year Municipal Bond Rate as of Measurement Date: 3.89%.

Price Inflation. 2.50% per annum, compounded annually.

Salary Increases. Annual salaries of active members are assumed to increase at an annual rate of 3.5% per year.

Administrative Expenses. 0.50% of payroll.

<u>Demographic Assumptions</u>

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
45-59	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 (8 if initially became a member on or after July 1, 2014) or more years of service, provided that the member had a minimum of 5 or 8 years of service under the Magistrate Retirement Fund.

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

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Appendix A: Actuarial Assumptions

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
60	7.50

Mortality Assumption (effective with June 30, 2018 valuation). RPH-2014 Blue Collar mortality table with female ages set forward one year. Future improvement in mortality rates is assumed using 60% of the MP-2017 projection scale generationally.

Sample Mortality Rates (Base Rates)								
Pre-Commencement			Post-Commencement			Post-Commencement		
Age	Male	Female	Age	Male	Female	Age	Male	Female
25	0.000733	0.000244	35	0.001793	0.001169	80	0.053460	0.042932
30	0.000717	0.000317	40	0.002156	0.001611	85	0.088524	0.072752
35	0.000797	0.000417	45	0.003275	0.002671	90	0.146859	0.125111
40	0.000958	0.000598	50	0.005604	0.004235	95	0.223428	0.197901
45	0.001455	0.001013	55	0.007342	0.005165	100	0.313988	0.291040
50	0.002490	0.001685	60	0.009893	0.006890	105	Disabled retirees use the same assumption as healthy lives.		
55	0.004071	0.002510	65	0.014089	0.010092	110			
60	0.006743	0.003606	70	0.021101	0.016038	115			
65	0.011612	0.005456	75	0.032952	0.026199	120			

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: Withdrawal decrements do not 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.