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PERA

Public Employees
Retirement Association
of New Mexico

INVESTED IN TOMORROW.

**Legislative Division of the
Public Employees Retirement Association of New Mexico
Annual Actuarial Valuation
as of June 30, 2017**





Cavanaugh Macdonald

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The experience and dedication you deserve

October 26, 2017

The Retirement Board
Public Employees Retirement Association
Santa Fe, New Mexico

Members of the Board:

We have conducted the annual actuarial valuation of the Legislative Division of the Public Employees Retirement Association (PERA) of New Mexico as of June 30, 2017; the results of the valuation are contained in the following report. The annual valuation is used to determine the contribution requirement that is necessary to fund the annual normal cost and fully amortize the unfunded actuarial accrued liability with annual payments over a 30-year period. The results of this valuation apply to the fiscal year beginning July 1, 2017 and ending June 30, 2018 (FY 2018). Information contained in our report for plan years prior to June 30, 2010 is based upon valuations performed by the association's prior actuary.

In performing the valuation, we relied on data supplied by the Public Employees Retirement Association (PERA) and performed limited tests on the data for consistency and reasonableness. In determining the Plan's liabilities, future events, such as investment returns, deaths, retirements, etc., are anticipated based upon the set of actuarial assumptions as approved by the Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

This actuarial valuation was performed to determine the adequacy of statutory contributions to fund the plan. The asset values used to determine unfunded liabilities and funded ratios are not market values but less volatile market related values. A smoothing technique is applied to market values to determine the market related values. The unfunded liability amounts and funded ratios using the market value of assets would be different. The interest rate used for determining liabilities is based on the expected return on assets. Therefore, liability amounts in this report cannot be used to assess a settlement of the obligation.

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This is to certify that the undersigned are members of the American Academy of Actuaries and have experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Plan.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read 'John J. Garrett'.

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

A handwritten signature in blue ink, appearing to read 'Jonathan T. Craven'.

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



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Section I: Board Summary



The table below summarizes the results of the June 30, 2017 actuarial valuation as compared with the prior year.

Table I-1: Comparative Summary of Principal Results

Valuation Date	June 30, 2017	June 30, 2016
Actuarial Accrued Liability (AAL)		
Active Members	\$ 9,951,522	\$ 11,084,795
Deferred Vested Members	284,209	418,390
Retired Members and Survivors	<u>17,820,955</u>	<u>16,439,766</u>
Total	\$ 28,056,686	\$ 27,942,951
Actuarial Value of Assets	\$ 42,479,371	\$ 40,450,852
Funded Ratio	151.4%	144.8%
Unfunded Actuarial Accrued Liability (UAAL) (AAL - Actuarial Value of Assets)	\$ (14,422,685)	\$ (12,507,901)
Calculation of Required Contribution (Fiscal Year Ending)		
Normal Cost	June 30, 2018	June 30, 2017
Retirement	\$ 728,503	\$ 789,913
Pre-Retirement Survivors	<u>11,192</u>	<u>12,423</u>
Total Normal Cost	\$ 739,695	\$ 802,336
Less Expected Member Contribution	<u>66,600</u>	<u>73,200</u>
Employer Normal Cost	\$ 673,095	\$ 729,136
Expected Administrative Expenses	6,000	6,000
UAAL Amortization Amount (30 Years)	<u>(1,187,541)</u>	<u>(1,012,641)</u>
Actuarially Determined Contribution (not less than \$0)	\$ -	\$ -



Section I: Board Summary

Summary of Key Findings

The funding policy for the Plan determines the employer contribution required to fund the annual normal cost plus an amount to fully amortize the unfunded actuarial accrued liability (UAAL) over 30 years. This resulting contribution amount is compared to the expected statutory contribution amount to assess the sufficiency of the statutory contribution. The Plan has a significant surplus of assets over liabilities and the actuarially determined contribution for the Plan in the fiscal year ending June 30, 2018 (FY 2018) is \$0. The employer contribution requirement for FY 2017 was also \$0 as determined in the prior valuation.

The normal cost amount decreased from \$802,336 to \$739,695. Beginning with the June 30, 2014 valuation, the annual expected administrative expenses of \$6,000 are included in the calculation of the actuarially determined contribution. The UAAL decreased from \$(12.5) million to \$(14.4) million and results in a decrease to the annual amortization amount from \$(1,012,641) to \$(1,187,541). The Plan's funded ratio has increased from 144.8% to 151.4%. We note the following key findings:

- The Plan experienced an actuarial loss on plan assets of \$34,146. This represents a 0.1% decrease to the funded ratio. Table III-4 provides the calculation of the actuarial investment gain for this year.
- The Plan experienced a net gain of \$319,962 on plan liabilities due to non-investment related experience, which represents a 1.6% increase to the funded ratio.
- The Plan experienced a net gain of \$489,540 on plan liabilities due to the active legislators' assumed per diem rate increasing by less than the assumed rate. This represents a 2.6% increase to the funded ratio.
- The Plan received \$1,000,000 more in contributions than the actuarially determined amount. This represents a 3.6% increase to the funded ratio.

Section II of the report provides summarized information on the membership data used in the valuation. Section III covers the Plan's assets and Section IV covers the Plan's liabilities. The results of the valuation are provided in Section V and the accounting information is in Section VI. The appendices provide additional information on: A) the Plan members, B) the actuarial assumptions and methods, and C) the summary of the benefit provisions of the plan. It is important to note that all information contained in this report for periods prior to June 30, 2010 were produced by a prior actuarial consulting firm.



Section II: Membership Data

Data regarding the membership of the Plan for use in the valuation were furnished by PERA. The following table summarizes the membership data as of June 30, 2017 and is compared with that reported for the prior year.

Table II-1: Summary of Membership Data as of June 30, 2017

Group	June 30, 2017	June 30, 2016
Total Active Members	111	122
Inactive Members*	16	16
Retirees		
Service*	156	152
Disabled	0	0
Beneficiaries	<u>30</u>	<u>30</u>
Total Retirees	186	182
Totals	313	320

* As of June 30, 2017, inactive members include 2 non-vested members and 4 deceased members with contributions on deposit. Service retirees include 1 co-payee.

Table II-2: Deferred Members, Retired Members and Beneficiaries as of June 30, 2017

Group	Number	Total Annual Benefits	Average Annual Benefits	Average Age
Deferred Vested	10	\$ 49,387	\$ 4,939	58.37
Retirees				
Service*	156	1,615,854	10,358	74.94
Disability	0	0	N/A	N/A
Survivors	<u>30</u>	<u>269,012</u>	8,967	79.32
Retiree Totals	186	\$1,884,866	\$ 10,134	75.65
Total	196	\$1,934,253	\$ 9,869	74.77

* Includes 1 co-payee.

Section III: Plan Assets



The following tables provide information on PERA's market value of assets and the development of the actuarial value of assets. The difference between the Fund's total market and actuarial value is allocated to each Division of PERA in relation to the percent of each Division's market value to the market value of the total Fund.

Table III-1: Total PERA Market Value Reconciliation

	June 30, 2017	June 30, 2016
Beginning of Year Market Value	\$ 13,826,658,367	\$ 14,255,528,543
Audit Adjustment	6,447,404	1,177,045
Revised Beginning of Year Market Value	\$ 13,833,105,771	\$ 14,256,705,588
Revenues:		
a. Member Contributions	\$ 264,939,116	\$ 257,624,761
b. Employer Contributions	331,473,332	322,351,997
c. Appropriations	1,000,000	2,400,000
d. Purchases of Service	7,889,996	7,904,417
e. Investment Income		
1. Interest, dividends, etc.	313,099,791	316,381,293
2. Realized/Unrealized gains (losses)	1,240,713,990	(249,588,439)
3. Security lending and other gains (losses)	3,965,163	2,551,424
f. Other Income	470,441	661,825
g. Settlement Award	1,024	11,655,695
g. Total Revenues	\$ 2,163,552,853	\$ 671,942,973
Expenditures:		
a. Benefit Payments	\$ 1,084,818,276	\$ 1,024,399,237
b. Refunds of member contributions	44,396,305	44,937,505
c. Investment expenses	57,020,360	21,899,730
d. Administrative expenses	11,505,774	10,753,722
e. Total Expenditures	\$ 1,197,740,715	\$ 1,101,990,194
End of Year Market Value	\$ 14,798,917,909	\$ 13,826,658,367



Section III: Plan Assets

The actuarial value of assets represents a "smoothed" value developed with the purpose of dampening the impact of market volatility on the assets used in determining valuation results. The actuarial value is first determined for the total PERA assets and is calculated by spreading the recognition of unexpected investment income over four years. The amount of unexpected investment income in each year is the difference between expected actuarial value investment income and actual market value investment income. Table III-2 provides the calculation of the actuarial value of assets for PERA.

**Table III-2: Development of Actuarial Value of Assets as of June 30, 2017
(Total PERA Fund Balance)**

1. Actuarial Value Beginning of Year		\$	14,695,265,225
2. Market Value End of Year			14,798,917,909
3. Revised Market Value Beginning of Year			13,833,105,771
4. Cash Flow			
a. Contributions & Appropriations		\$	597,412,448
b. Service Purchases			7,889,996
c. Benefit Payments and Refunds			(1,129,214,581)
d. Administrative Expenses			(11,505,774)
e. Other			471,465
f. Net		\$	(534,946,446)
5. Investment Income			
a. Market Total (2 - 3 - 4f)		\$	1,500,758,584
b. Assumed Rate			7.25 %
c. Amount for Immediate Recognition			1,046,014,920
d. Amount for Phased-In Recognition			454,743,664
6. Phased-In Recognition of Investment Income			
a. Current Year: $0.25 * 5d$		\$	113,685,916
b. First Prior Year (2015/2016)	$$(1,027,716,151) \times 25\%$		(256,929,038)
c. Second Prior Year (2014/2015)	$\$ (779,713,717) \times 25\%$		(194,928,429)
d. Third Prior Year (2013/2014)	$1,168,148,463 \times 25\%$		292,037,116
e. Total Recognized Investment Gain		\$	(46,134,435)
7. Audit Adjustment		\$	6,447,404
8. Actuarial Value End of Year		\$	15,166,646,668
(1 + 4f + 5c + 6e + 7)			
9. Difference Between Market & Actuarial Values (2 - 8)		\$	(367,728,759)
10. Rate of Return on Actuarial Value			6.97 %
11. Actuarial Value as a Percentage of Market Value			102.48 %



Section III: Plan Assets

The actuarial valuation adjustment is the difference between the actuarial value of assets, derived in Table III-2, and the total PERA fund balances at market value. The adjustment is allocated to each division of PERA in proportion to the total PERA fund balance at market value. The portion allocated to the Legislative Division was approximately 0.28% of the total PERA fund balance and is calculated in Table III-3.

Table III-3: Allocation of Actuarial Value of PERA Assets as of June 30, 2017

	Legislative Division	PERA Totals
Member Contribution Fund	\$ 753,758	\$ 2,518,865,030
Employer Contribution Fund	35,212,696	4,220,357,942
Retirement Reserve Fund	5,482,967	8,059,694,937
Total Fund Balances	\$ 41,449,421	\$ 14,798,917,909
Actuarial Valuation Adjustment	1,029,950	367,728,759
Total Actuarial Value of Assets	\$ 42,479,371	\$ 15,166,646,668

The actuarial valuation assumes the rate of investment return on the assets of the Plan is 7.25% annually for the first 9 years and 7.75% thereafter. This assumption is based upon the reasonable long-term expected return on the assets. In each year, the Plan will experience actuarial gains and losses due to the actual investment return of the assets. Table III-4 provides the calculation of the gain or loss due to the investment experience on the actuarial value of assets for the year ended June 30, 2017.

Table III-4: Actuarial Investment Gain (Loss) for the Year Ended June 30, 2017

1. Beginning of Year Actuarial Value of Assets (AVA)	\$ 40,450,852
2. Employee and Employer Contributions	1,057,700
3. Benefit Payments	(1,866,391)
4. Administrative Expenses	(32,216)
5. Other	1,320
6. Interest $[1 \times 7.25\% + (2 + 3 + 4 + 5) \times 7.25\% \times 0.5]$	2,902,252
7. Expected End of Year AVA	\$ 42,513,517
8. Actual End of Year AVA	42,479,371
9. Actuarial Investment Gain (Loss) (8 - 7)	\$ (34,146)



Section IV: Plan Liabilities

The total actuarial present value of benefits is the value of all future benefits expected to be paid to current members of the Plan as of the valuation date. An actuarial cost method allocates each individual's present value of benefits to past and future years of service. The actuarial accrued liability includes the portion of the active member present value of benefits allocated to past service as well as the entire present value of benefits for retirees, beneficiaries and inactive members. The portion of the actuarial present value allocated to the future service of active members is called the present value of future normal costs. Table IV-1 presents the calculation and allocation of the actuarial present value of benefits.

Table IV-1: Allocation of the Actuarial Present Value of Benefits as of June 30, 2017

	Actuarial Accrued Liability	Present Value of Future Normal Cost	Actuarial Present Value of Benefits
Active Members			
Service Retirement	\$ 9,922,663	\$ 3,157,157	\$ 13,079,820
Disability Retirement	-	-	-
Survivor Benefits	28,859	50,657	79,516
Total for Active Members	\$ 9,951,522	\$ 3,207,814	\$ 13,159,336
Inactive Members	\$ 284,209		\$ 284,209
Retirees and Beneficiaries			
Service Retirements	\$ 15,929,083		\$ 15,929,083
Disability Retirements	-		-
Beneficiaries	1,891,872		1,891,872
Total for Retirees and Beneficiaries	\$ 17,820,955		\$ 17,820,955
Total	\$28,056,686	\$3,207,814	\$31,264,500

Section IV: Plan Liabilities



Under the valuation funding method, an unfunded actuarial accrued liability (UAAL) exists to the extent that the actuarial accrued liability exceeds the actuarial value of assets as presented in Section III. The calculation of the UAAL as of the valuation date is shown in Table IV-2.

Table IV-2: Calculation of the Unfunded Actuarial Accrued Liability and Funded Ratio

	June 30, 2017	June 30, 2016
1. Actuarial Accrued Liability	\$ 28,056,686	\$ 27,942,951
2. Actuarial Value of Assets	<u>42,479,371</u>	<u>40,450,852</u>
3. Unfunded Actuarial Accrued Liability (1 - 2)	\$ (14,422,685)	\$(12,507,901)
Funded Ratio (2 / 1)	151.4%	144.8%

Although the terminology used to describe the excess of the Plan's actuarial accrued liability over the Plan's actuarial value of assets is call the "unfunded" actuarial accrued liability, the actuarially determined contribution in the valuation includes an amortization payment amount sufficient to fully amortize the UAAL within 30 years.

The funded ratio of the Plan is the ratio of the actuarial value of assets to the actuarial accrued liability as of the valuation date. As of June 30, 2017, the funded ratio of the Plan is 151.4% as compared to a ratio of 144.8% as of June 30, 2016. The ratio is a commonly used measure of the funding progress and can be useful in reviewing the historical trend of a plan's funding progress. Such a review should also consider the impact to this measure over the historical period due to changes to plan benefits, changes to the actuarial assumptions and methods, and significant impact that investment experience can have on the ratio over short-term periods. We caution that no single "point in time" measure can provide a universal basis for comparing one plan's funded status to another.



Section IV: Plan Liabilities

The calculation of the Plan's actuarial assets and liabilities requires the use of several assumptions concerning the future experience of the Plan and its members. In each annual valuation, the latest year of actual experience is compared to that expected by the prior valuation. The differences are actuarial gains and losses which decrease or increase the UAAL. Table IV-3 provides the reconciliation of the UAAL.

Table IV-3: Reconciliation of the UAAL

	UAAL	Funded Ratio
1. Beginning of Year	\$ (12,507,901)	144.8 %
2. Normal Cost	802,336	
3. Expected Contributions	(73,200)	
4. Other income + Expenses	30,896	
5. Interest [1 x 7.25% + (2 + 3 + 4) x 7.25% x 0.5]	(879,272)	
6. Expected End of Year	\$ (12,627,141)	143.7 %
7. Actuarial Experience (Gain) / Loss		
Additional Contributions (with interest)	\$ (1,020,188)	3.6 %
Investment Experience	34,146	(0.1)%
Gain due to Per Diem rate increase less than 3%	(489,540)	2.6 %
Liability Experience	(319,962)	1.6 %
Assumption Changes	-	0.0 %
Total Actuarial Experience (Gain) / Loss	\$ (1,795,544)	
8. Actual End of Year (6 + 7)	\$ (14,422,685)	151.4 %



Section V: Actuarial Funding Calculation

Section IV of this report presented the Plan's actuarial accrued liability as the portion of the present value of benefits allocated to past years of service. The portion of the active members' present value of benefits allocated to future years of service is funded through annual normal cost contributions comprised of both active member and employer contributions. The portion of the total annual normal cost amount in excess of the expected amount of active member contributions is the employer portion of the Plan's normal cost. The normal cost amount was developed as of the valuation date and presented in Table V-1.

The employer's minimum contribution necessary to satisfy the funding policy is the dollar amount required to fund the annual normal cost of the Plan and fully amortize the UAAL over 30 years in constant dollar amounts. The calculation of the contribution requirement is provided in Table V-1.

**Table V-1: Calculation of Required Employer Contribution
for Fiscal Year Ending June 30, 2017**

1. Present Value of Future Benefits	\$ 31,264,500
2. Present Value of Future Normal Costs	3,207,814
3. Actuarial Accrued Liability (1 - 2)	\$ 28,056,686
4. Actuarial Value of Assets	42,479,371
5. Unfunded Actuarial Accrued Liability (UAAL) (3 - 4)	\$ (14,422,685)
6. UAAL Amortization Payment (30 years)	(1,187,541)
7. Total Normal Cost	739,695
8. Less: Expected Employee Contribution	66,600
9. Employer Normal Cost (7-8)	673,095
10. Expected Administrative Expenses	6,000
11. Actuarially Determined Contribution (6 + 9 + 10, not less than \$0)	\$ -



Section VI: Accounting Information

The tables provided in this section present information relevant for the annual financial reporting of the Fund. GASB Statement No. 67 required disclosure information will be provided in a separate supplemental report. GASB Statement No. 25 information is provided below.

Table VI-1: GASB Statement No. 25 Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)
6/30/2017	\$ 42,479,371	\$28,056,686	\$(14,422,685)	151.4 %
6/30/2016	40,450,852	27,942,951	(12,507,901)	144.8 %
6/30/2015	36,868,121	26,610,331	(10,257,790)	138.5 %
6/30/2014	33,392,919	25,833,342	(7,559,577)	129.3 %
6/30/2013	28,939,243	25,127,311	(3,811,932)	115.2 %
6/30/2012	25,168,813	27,429,263	2,260,450	91.8 %
6/30/2011	23,508,201	26,347,359	2,839,158	89.2 %
6/30/2010	22,125,806	26,675,356	4,549,550	82.9 %
6/30/2009	21,156,210	24,345,140	3,188,930	86.9 %
6/30/2008	19,999,435	21,414,312	1,414,877	93.4 %
6/30/2007	17,142,953	19,591,914	2,448,961	87.5 %
6/30/2006	13,677,848	19,433,505	5,755,657	70.4 %
6/30/2005	11,026,880	18,198,467	7,171,587	60.6 %
6/30/2004	8,407,702	23,530,656	15,122,954	35.7 %
6/30/2003	5,826,618	7,657,178	1,830,560	76.1 %

Section VI: Accounting Information



Table VI-2: Solvency Test

Valuation Date	Aggregate Accrued Liabilities For				Portion of Accrued Liabilities Covered by Actuarial Value of Assets		
	(1) Active Member Contributions	(2) Retirees, Survivors and Inactive Members	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	(1)	(2)	(3)
6/30/2017	\$ 753,758	\$ 18,105,164	\$ 9,197,764	\$ 42,479,371	100.00%	100.00%	100.00%
6/30/2016	808,856	16,858,156	10,275,939	40,450,852	100.00	100.00	100.00
6/30/2015	744,611	16,230,264	9,635,456	36,868,121	100.00	100.00	100.00
6/30/2014	765,491	14,602,470	10,465,381	33,392,919	100.00	100.00	100.00
6/30/2013	704,324	15,121,069	9,301,918	28,939,243	100.00	100.00	100.00

Table VI-3: Schedule of Retirants Added to and Removed from Rolls

Valuation Date	Added to Rolls		Removed from Rolls		Rolls End of Year		% Increase in Annual Allowances	Average Annual Allowances
	Number Added	Annual Allowances	Number Removed	Annual Allowances	Number	Annual Allowances		
6/30/2017	14	\$ 218,597	10	\$83,281	186	\$ 1,884,866	7.73 %	\$ 10,134
6/30/2016	3	59,052	7	44,779	182	1,749,550	0.82 %	9,613
6/30/2015	20	281,735	12	94,011	186	1,735,277	12.13 %	9,329
6/30/2014	6	58,860	7	89,045	178	1,547,553	(1.91)%	8,694
6/30/2013	24	334,780	8	66,916	179	1,577,738	20.45 %	8,814



Table VI-4: Summary of Actuarial Methods and Assumptions

Valuation Date	June 30, 2017
Actuarial cost method	Entry Age Normal
Amortization method	Level Dollar, Open
Remaining amortization period	30 years
Asset valuation method	4-year Smoothed Market
Actuarial assumptions:	
Investment rate of return*	7.25% for 1st 9 years, 7.75% thereafter
Administrative Expenses	\$6,000 annually
Projected increase in per diem rate	3.00%
Post-retirement benefit increases	2.00% compounded annually
* Includes inflation at 2.25% for 1st 9 years, 2.75% thereafter	

Appendix A: Additional Membership Data



Table A-1: Schedule of Active Participant Data as of June 30, 2017

Nearest Age	Completed Years of Service							Total
	Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30+	
Under 30								
30 to 34	2							2
35 to 39	2							2
40 to 44	6	4						10
45 to 49	5	3						8
50 to 54	15	1	2					18
55 to 59	6	3	1	3	1			14
60	1	1			1			3
61	1	2				1		4
62	2							2
63	3		1					4
64	2		1	1	1	1		6
65	2	2						4
66					1	1		2
67	2	1	2		1		1	7
68	1		2					3
69	1				1		1	3
70	1		2		1		1	5
71								
72	1							1
73			1		1			2
74	2							2
75			1					1
76						1		1
77								
78			1					1
79					1			1
80 & Over	1			1	1		2	5
Total	56	17	14	5	10	4	5	111

Average Age: 59.35

Average Service: 9.00



**Table A-2: Number of Annual Retirement Allowances of Benefit Recipients
as of June 30, 2017**

Type of Pension	Number	Total Annual Benefits	Average Annual Pension
Normal Retirement Pensions			
Single Life Pension Terminating Upon Death	102	\$ 1,015,782	\$ 9,959
Two Life 100% Survivor Pension			
Retired Member Recipient	46	534,221	11,614
Survivor Recipient	17	159,426	9,378
Two Life 50% Survivor Pension			
Retired Member Recipient	8	65,850	8,231
Survivor Recipient	5	21,855	4,371
Total Normal Retirement Pensions	178	\$ 1,797,134	\$ 10,096
Pre-Retirement Survivor Pensions			
Spouse Recipient	8	\$ 87,732	\$ 10,967
Total Pre-Retirement Survivor Pensions	8	\$ 87,732	\$ 10,967
Total Pensions Being Paid	186	\$ 1,884,866	\$ 10,134



Appendix A: Additional Membership Data

Table A-3: Distribution of Participants Receiving Benefits as of June 30, 2017

Attained Age	Retired Member		Survivor Beneficiaries		Totals	
	Number	Annual Pensions	Number	Annual Pensions	Number	Annual Pensions
Under 40			1	\$ 5,043	1	\$ 5,043
40 to 44						
45 to 49	2	\$ 26,221			2	26,221
50 to 54	3	42,645	1	7,149	4	49,794
55 to 59	4	53,043			4	53,043
60 to 64	12	132,780			12	132,780
65 to 69	28	277,841	1	4,991	29	282,832
70 to 74	32	374,834	4	23,884	36	398,718
75 to 79	18	137,269	5	58,737	23	196,006
80 to 84	33	355,693	7	31,994	40	387,687
85 to 89	18	182,999	6	111,646	24	294,645
90 to 94	4	11,220	5	25,568	9	36,788
95 to 99	2	21,309	0	0	2	21,309
100 & Over						
Total	156	\$ 1,615,854	30	\$ 269,012	186	\$ 1,884,866

**Table A-4: Distribution of Retirees by Years of Service at Retirement
(not including Disabled Members, Beneficiaries, and Co-Payees)**

	Years of Credited Service at Retirement							
	Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30+	Total
Average Monthly Benefit*	\$185	\$441	\$797	\$1,023	\$1,250	\$622	\$1,701	\$876
Number of Retirees *	6	35	41	28	20	5	15	150

* Does not include 5 retirees with missing years of service at retirement.



Appendix A: Additional Membership Data

**Table A-5: Distribution of Recent Retiree Ages at Retirement
(not including Disabled Members, Beneficiaries, and Co-Payees)**

	2012-13 Retirees	2013-14 Retirees	2014-15 Retirees	2015-16 Retirees	2016-17 Retirees	All Current Retirees
Number	18	3	17	1	12	155
Average Monthly Benefit at Retirement	\$1,074	\$417	\$1,167	\$1,430	\$1,247	\$675
Average Attained Age at Retirement	62.80	64.97	69.41	60.67	68.89	64.55

Table A-6: Status Reconciliation

	Active Members	Terminated Members*	Pension Recipients			Total
			Service Retired**	Disability Retired	All Beneficiaries	
June 30, 2016	122	16	152	0	30	320
Increase (Decrease) From:						
Service Retirement	(10)	(1)	11			
Disability Retirement						
Deaths			(8)		(2)	(10)
Survivors					2	2
Other Pension Terminations		(1)				(1)
Vested Terminations	(2)	2				
Non-Vested Terminations	(1)					(1)
New Entrants/Rehires	2					2
Data Adjustments			1			1
June 30, 2017	111	16	156	0	30	313

* Includes 10 deferred vested members, 2 terminated members with contributions on deposit and 4 deceased members with contributions on deposit at June 30, 2017.

** Includes 1 co-payee.



Appendix B: Summary of Actuarial Assumptions and Methods

Actuarial Cost Methods Used for the Valuation

An actuarial cost method is a procedure for allocating the actuarial present value of benefits and expenses to time periods. The method used for this valuation is known as the entry age normal level dollar cost method and has the following characteristics:

- i) The total present value of projected benefits of each individual is allocated on a level basis over service from entry age to retirement age. The portion of this present value allocated to the valuation year is the normal cost.
- ii) The actuarial liability is the accumulation of past normal costs on the valuation date.

Board Funding Policy: Amortize the unfunded actuarial accrued liability (the difference between the actuarial accrued liability and accrued assets) over an open 30-year period. This is done in accordance with PERA Board funding objectives adopted October 1996. As of June 30, 2017, funding value of assets exceeded accrued liabilities. The excess was amortized over 30 years and applied as a credit to the computed employer normal cost and expected administrative expenses.

The actuarial value of assets used for funding purposes is derived as follows: prior year total actuarial value of assets for each PERA division is increased by contributions and expected investment income and reduced by refunds, benefit payments and expenses. To this amount 25% of the difference between expected and actual investment income for each of the previous four years is added. The actuarial value of assets for each division is allocated in proportion to the total PERA Fund balance at market value.



Appendix B: Summary of Actuarial Assumptions and Methods

Actuarial Assumptions Used for the Valuation

The rate of investment return (effective June 30, 2017): 7.25% per annum net of investment expenses for the first 9 years, 7.75% thereafter.

Administrative expenses: \$6,000.

The rates of separation from active membership: None.

The rates of active member disability: None.

The rate of increase in the per diem was 3.0% per annum. This assumption was first used in the June 30, 2004 valuation and was based on an observed trend in the per diem rate prior to that valuation. The current assumed per diem rate is \$161.

The rate of retirement from active membership: Members were assumed to retire immediately upon satisfying age and service requirements.

It was assumed that any service rendered by a legislator prior to the valuation date and not already purchased would not be purchased.



Appendix B: Summary of Actuarial Assumptions and Methods

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.

Rates are shown for sample ages in the following schedule. Note that sex distinct mortality rates are used solely for determining the funded status and contribution rate adequacy. All benefit amounts are based on merged gender mortality rates.

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		



Appendix B: Summary of Actuarial Assumptions and Methods

Miscellaneous and Technical Assumptions

Marriage Assumption:	100% of males and 100% of females are assumed to be married for purposes of death-in-service benefits. Male spouses are assumed to be three years older than female spouses.
Pay Increase Timing:	N/A.
Decrement Timing:	Decrements 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.
Incidence of Contributions:	Contributions are assumed to be received at the beginning of the year.
Normal Form of Benefit:	Straight life.
Credited Service:	Service nearest the whole year is used to determine the amount of benefit payable.



Appendix B: Summary of Actuarial Assumptions and Methods

Definitions of Technical Terms

Actuarial Accrued Liability. The difference between the actuarial present value of future benefit payments and the actuarial present value of future normal costs.

Actuarial Cost Method. A mathematical procedure for allocating the dollar amount of the “actuarial present value of future benefit payments” between future normal cost and actuarial accrued liability.

Actuarial Present Value. The amount of funds currently required to provide a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest and by probabilities of payment.

Amortization. Paying off an amount with periodic payments of interest and principal – as opposed to paying off with a lump sum payment.

Experience Gain (Loss). The difference between actual actuarial costs and anticipated actuarial costs – during the period between two valuation dates.

Normal Cost. The actuarial cost allocated to the current year by the actuarial cost method.

Unfunded Actuarial Accrued Liability. The difference between the actuarial accrued liability and the actuarial value of assets. Sometimes referred to as “unfunded accrued liability.”



Appendix C: Summary of Plan Provisions

Voluntary Retirement

Plan 1 and Plan 1 Enhanced:

Age 65 with 5 or more years of credited service; age 64 with 8 or more years of credited service; age 63 with 11 or more years of credited service; age 60 with 12 or more years of credited service; or any age with 14 or more years of credited service.

Plan 2:

Age 65 with 5 or more years of credited service or any age with 10 or more years of credited service.

Superannuation Annuity

Plan 1: \$250 a year times credited service.

Plan 1 Enhanced: \$500 a year times credited service.

Plan 2: 11% of the per diem rate in effect, pursuant to Section 2-1-8 NMSA on the January 1 of the calendar year that the member retires multiplied by 60 and further multiplied by credited service.

Deferred Annuity

A Legislative member who terminates with 5 or more years of credited service may apply for a superannuation annuity upon reaching voluntary retirement date, provided accumulated contributions are not withdrawn. The annuity is based upon Legislative service credit at time of termination.

Survivor Pensions – Death in the Line of Duty

Pensions are paid to the eligible spouse and eligible children if survivor coverage has not been elected under the Elective Survivor Pension Beneficiary provision. The amount of pension payable for life to an eligible spouse is 80% of the accrued normal retirement pension.



Appendix C: Summary of Plan Provisions

Survivor Pensions – Death Not In the Line of Duty

Requires 5 years of credited service. Benefit applies to members and vested former members who have not elected coverage under the Elective Survivor Pension Beneficiary provision. Pensions are paid to an eligible spouse OR eligible children. The amount of pension payable for the life of an eligible spouse is up to 80% of accrued normal retirement pension. An eligible child pension is paid if there is not an eligible spouse or following the death of an eligible spouse. The amount of pension payable to each eligible child is an equal share of 50% of accrued normal retirement pension. An eligible child is an unmarried natural or adopted child who is under age 18. A child's pension terminates upon death, marriage or reaching age 18. The pension of any remaining eligible children is recalculated whenever a child's pension is terminated.

Member's Contributions

Plan 1: \$100 for each year of credited service.
Plan 1 Enhanced: \$200 for each year of credited service
Plan 2: \$600 for each year of credited service.

Elective Survivor Beneficiary Pension

Applicable to members with 5 or more years of credited service and vested former members who have elected option B and designated a survivor pension beneficiary who has an insurable interest. The amount of pension is the amount of accrued normal retirement pension under optional form of payment B (100% continuation to beneficiary).

Disability Retirement

Applicable to members and vested former members with 5 or more years of credited service. The 5 year credited service requirement is waived if the disability is incurred in the line of duty. The amount of disability pension is the accrued normal retirement pension at time of disability retirement. If the disability is in the line of duty, the credited service used is the amount that would have been acquired when first eligible for normal retirement.

State's Contributions

Annual appropriations to finance portions of benefits not financed by members' contributions, determined by actuarial valuation.



Appendix C: Summary of Plan Provisions

Cost-of-Living Increases

Effective July 1, 2014, pensions are increased each July 1 by 2% subject to the following eligibility periods:

- If member retires prior to July 1, 2014, Cost-of-Living Adjustment (COLA) is payable after retirement has been in effect for at least 2 full calendar years.
- If member retires on or after July 1, 2014 but prior to July 1, 2016, COLA is payable after retirement has been in effect for at least 3 full calendar years.
- If member retires on or after July 1, 2016 but prior to July 1, 2017, COLA is payable after retirement has been in effect for at least 4 full calendar years.
- If member retires on or after July 1, 2017, COLA is payable after retirement has been in effect for at least 7 full calendar years.
- If retired on account of disability or if at least age 65, the waiting period is reduced to 1 full calendar year.