



Cavanaugh Macdonald
CONSULTING, LLC

The experience and dedication you deserve



PERA

Public Employees
Retirement Association
of New Mexico

INVESTED IN TOMORROW.

**New Mexico Judicial Retirement Fund
Annual Actuarial Valuation
as of June 30, 2015**





Cavanaugh Macdonald

CONSULTING, LLC

The experience and dedication you deserve

October 29, 2015

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

Members of the Board:

We have conducted the annual actuarial valuation of the New Mexico Judicial Retirement Fund as of June 30, 2015; the results of the valuation are contained in the following report. The annual valuation is used to determine the sufficiency of the statutory contribution rates and, if necessary, the amount required 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, 2015 and ending June 30, 2016 (FY 2016). Information contained in our report for plan years ending prior to June 30, 2010 is based upon valuations performed by the Fund'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 Fund'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: fund 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 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 Fund.

Respectfully submitted,

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

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



TABLE OF CONTENTS

<u>Section</u>	<u>Item</u>	<u>Page No.</u>
I	Board Summary	1
II	Membership Data	3
III	Fund Assets	5
IV	Fund Liabilities	8
V	Actuarial Funding Calculation	11
VI	Accounting Information	12
 <u>Appendices</u>		
A	Additional Membership Data	14
B	Summary of Actuarial Assumptions and Methods	18
C	Summary of Plan Provisions	23



Section I: Board Summary

The table below summarizes the results of the June 30, 2015 actuarial valuation as compared with the prior year.

Table I-1: Comparative Summary of Principal Results

Valuation Date	June 30, 2015	June 30, 2014
Total Annual Payroll	\$ 15,084,263	\$ 13,163,305
Total Valuation Payroll	\$ 15,612,212	\$ 13,624,021
Actuarial Accrued Liability (AAL)		
Active and Deferred Vested Members	\$ 47,095,010	\$ 44,903,133
Retired Members and Survivors	<u>94,186,145</u>	<u>88,443,282</u>
Total	\$ 141,281,155	\$ 133,346,415
Actuarial Value of Assets	\$ 88,249,418	\$ 85,577,431
Funded Ratio	62.5 %	64.2 %
Unfunded Actuarial Accrued Liability (UAAL) (AAL - Actuarial Value of Assets)	\$ 53,031,737	\$ 47,768,984
Calculation of Required Contribution (Fiscal Year Ending)	June 30, 2016	June 30, 2015
Normal Cost		
Retirement	17.87 %	18.78 %
Termination	2.51 %	2.69 %
Pre-Retirement Survivors	0.68 %	0.71 %
Disability	<u>0.00 %</u>	<u>0.00 %</u>
Total Normal Cost	21.06 %	22.18 %
Administrative Expenses	0.45 %	0.45 %
UAAL 30-Year Amortization Rate	<u>19.84 %</u>	<u>20.48 %</u>
Actuarially Determined Contribution Rate	41.35 %	43.11 %
Actuarially Determined Contribution Amount	\$ 6,455,003	\$ 5,873,849
Statutory Contribution Rates		
Employer Contribution Rate	15.00 %	15.00 %
Expected Docket Fees	12.69 %	14.87 %
Member Contribution Rate	<u>10.50 %</u>	<u>10.50 %</u>
Total Statutory Rate	38.19 %	40.37 %
Expected Statutory Amount	\$ 5,962,304	\$ 5,500,017
Deficiency in Statutory Rate	3.16%	2.74%
Deficiency in Expected Statutory Amount	\$ 492,699	\$ 373,832



Section I: Board Summary

Summary of Key Findings

The funding policy for the Fund determines the employer contribution required to satisfy the annual normal cost plus an amount to fully amortize the unfunded actuarial accrued liability (UAAL) over a period not to exceed 30 years. The actuarially determined contribution rate for the Fund in the fiscal year ending June 30, 2016 (FY 2016) is 41.35% of covered payroll. This is a decrease of 1.76% of payroll from the total contribution requirement of 43.11% of covered payroll from the prior valuation.

The total normal cost contribution as a percent of valuation payroll decreased from 22.18% to 21.06%. The UAAL increased from \$47.8 million to \$53.0 million and the annual amortization amount decreased from 20.48% to 19.84% of payroll. The funded ratio of the Fund has decreased from 64.2% to 62.5%. The UAAL and funded ratio are reconciled in Table IV-3. We note the following key findings:

- The Fund experienced an actuarial loss on Fund assets of \$153,551 for the plan year related to the 7.57% investment return on the actuarial value of assets. This represents a .1% decrease to the funded ratio. Table III-3 provides the calculation of the investment loss for this year.
- In addition, the Fund experienced a net increase of \$4,175,132 in liabilities due to non-investment related experience gains. Salary increases that were more than expected was the primary source of this loss. This represents a 1.9% decrease to the funded ratio.
- The Fund received \$102,206 less in contributions than expected. This represents a 0.1% decrease to the funded ratio.
- The financing period for the unfunded liability based upon the statutory contribution rates is 45 years compared with 42 years last year.

Section II of the report provides summarized information on the membership data used in the valuation. Section III covers the Fund's assets and Section IV covers the Fund'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 Fund members, B) the actuarial assumptions and methods, and C) the summary of the benefit provisions of the Fund. 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 Fund for use in the valuation were furnished by PERA. The following tables summarize the membership data as of June 30, 2015 compared with that reported for the prior year.

Table II-1: Summary of Membership Data as of June 30, 2015

Group	June 30, 2015	June 30, 2014
Total Active Members	127	121
Inactive Members		
Deferred Vested	19	20
Other	<u>4</u>	<u>3</u>
Total Inactive Members	23	23
Retirees		
Service*	119	112
Disabled	2	1
Beneficiaries	<u>31</u>	<u>28</u>
Total Retirees	152	141
Totals	302	285

* Includes 8 Co-Payees as of June 30, 2015 and 7 Co-Payees as of June 30, 2014.

Table II-2: Historical Summary of Active Membership Valuation Data

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Change in Average Pay
6/30/2015	127	\$ 15,084,263	\$ 118,774	9.18 %
6/30/2014	121	13,163,305	108,788	1.17 %
6/30/2013	123	13,226,142	107,530	(0.02)%
6/30/2012	118	12,690,503	107,547	(0.05)%
6/30/2011	114	12,266,852	107,604	(0.17)%
6/30/2010	121	13,041,980	107,785	3.55 %

Section II: Membership Data



Table II-3: Deferred Members, Retired Members and Beneficiaries as of June 30, 2015

Group	Number	Total Annual Benefits	Average Annual Benefits	Average Age
Deferred Vested	19	\$ 456,516	\$ 24,027	55.11
Retirees				
Service	119	7,924,953	66,596	70.44
Disability	2	73,195	36,598	63.83
Survivors	<u>31</u>	<u>1,503,351</u>	48,495	75.82
Retiree Totals	152	\$9,501,499	\$ 62,510	71.45
Total	171	\$9,958,015	\$ 58,234	69.63



Section III: Fund Assets

The following tables provide information on the Fund's assets at market value and the development of the actuarial value of assets.

Table III-1: Market Value Reconciliation

	June 30, 2015	June 30, 2014
Beginning of Year Market Value	\$ 91,141,300	\$ 81,518,628
Audit Adjustment	-	485,893
Revised Beginning of Year Market Value	\$ 91,141,300	\$ 82,004,521
Revenues:		
Member Contributions	1,546,335	1,085,631
Docket Fees	1,980,506	2,026,379
Employer Contributions	2,215,770	1,714,407
Purchase of Service	32,845	-
Investment Income		
Interest, dividends, etc.	3,003,021	1,838,310
Realized/Unrealized gains (losses)	(1,311,824)	11,604,820
Security lending	(7,532)	(53,131)
Other Income	(117,558)	84
Settlement Award	150,653	-
Total Revenues	\$ 7,492,216	\$ 18,216,500
Expenditures:		
Benefit Payments	9,373,041	8,770,177
Refunds of Member Contributions	40,197	52,562
Investment Expenses	172,007	193,372
Administrative Expenses	60,019	63,610
Total Expenditures	\$ 9,645,264	\$ 9,079,721
End of Year Market Value	\$ 88,988,252	\$ 91,141,300

The market value rate of return for the plan year is 1.69%. The Fund's cash flow is -4.1 % as a percentage of average market value compared to -4.9% last year.

Section III: Fund 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 of assets has been 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 below provides the calculation of the actuarial value of assets.

Table III-2: Development of Actuarial Value of Assets as of June 30, 2015

1. Actuarial Value Beginning of Year		\$	85,577,431
2. Market Value End of Year			88,988,252
3. Market Value Beginning of Year			91,141,300
4. Cash Flow			
a. Contributions		\$	5,742,611
b. Service Purchases			32,845
c. Benefit Payments and Refunds			(9,413,238)
d. Administrative Expenses			(60,019)
e. Other			33,095
f. Net		\$	(3,664,706)
5. Investment Income			
a. Market Total (2 - 3 - 4f)		\$	1,511,658
b. Assumed Rate			7.75 %
c. Amount for Immediate Recognition			6,490,244
d. Amount for Phased-In Recognition			(4,978,586)
6. Phased-In Recognition of Investment Income			
a. Current Year: 0.25 * 5d		\$	(1,244,647)
b. First Prior Year (2013/2014)	\$	7,153,469 x 25%	1,788,367
c. Second Prior Year (2012/2013)	\$	3,584,166 x 25%	896,042
d. Third Prior Year (2011/2012)	\$	(6,373,252) x 25%	(1,593,313)
e. Total Recognized Investment Gain		\$	(153,551)
7. Audit Adjustment		\$	-
8. Actuarial Value End of Year (1 + 4f + 5c + 6e + 7)		\$	88,249,418
9. Difference Between Market & Actuarial Values (2 - 8)		\$	738,834
10. Rate of Return on Actuarial Value			7.57 %
11. Actuarial Value of Assets as a % of Market Value of Assets			99.2 %



Section III: Fund Assets

The actuarial valuation assumes the rate of investment return on the assets of the Fund is 7.75% annually beginning with the June 30, 2011 valuation. This assumption is based upon the reasonable long-term expected return on the assets. In each year, the Fund will experience actuarial gains and losses due to the actual investment return of the assets. Table III-3 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, 2015.

Table III-3: Actuarial Investment Gain (Loss) for the Year Ended June 30, 2015

1. Beginning of Year Actuarial Value of Assets (AVA)	\$ 85,577,431
2. Employee and Employer Contributions	5,775,456
3. Benefit Payments	(9,413,238)
4. Administrative Expenses	(60,019)
5. Other	33,095
6. Interest [1 x 7.75% + (2 + 3 + 4 + 5) x 7.75% x 0.5]	6,490,244
7. Expected End of Year AVA	88,402,969
8. Actual End of Year AVA	88,249,418
9. Actuarial Investment Gain (Loss) (8 - 7)	\$ (153,551)



Section IV: Fund Liabilities

The total actuarial present value of benefits is the value as of the valuation date of all future benefits expected to be paid to current members of the Fund. 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, 2015

	Actuarial Accrued Liability	Present Value of Future Normal Cost	Actuarial Present Value of Benefits
Active Members			
Service Retirement	\$ 41,696,411	\$ 18,913,357	\$ 60,609,768
Termination Benefits	928,487	2,793,562	3,722,049
Survivor Benefits	894,562	723,131	1,617,693
Disability Retirement	-	-	-
Total for Active Members	\$ 43,519,460	\$ 22,430,050	\$ 65,949,510
Inactive Members	\$ 3,575,550		\$ 3,575,550
Retirees and Beneficiaries			
Service Retirements	\$ 82,137,711		\$ 82,137,711
Beneficiaries	11,193,819		11,193,819
Disability Retirements	854,615		854,615
Total for Retirees and Beneficiaries	\$ 94,186,145		\$ 94,186,145
Total	\$141,281,155	\$ 22,430,050	\$ 163,711,205



Section IV: Fund 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, 2015	June 30, 2014
1. Actuarial Accrued Liability	141,281,155	133,346,415
2. Actuarial Value of Assets	88,249,418	85,577,431
3. Unfunded Actuarial Accrued Liability (1 - 2)	53,031,737	47,768,984
Funded Ratio (2 / 1)	62.5%	64.2%

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

The funded ratio is the ratio of the actuarial value of assets to the actuarial accrued liability (Table IV-1) as of the valuation date. As of June 30, 2015, the funded ratio of the Fund is 62.5% as compared to a ratio of 64.2% as of June 30, 2014. The ratio is a commonly used measure of the funding progress and can be useful in reviewing the historical trend of a Fund's funding progress. Such a review should also consider the impact to this measure over the historical period due to changes to fund benefits, changes to the actuarial assumptions and methods, and the 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: Fund Liabilities

The calculation of the Fund's actuarial assets and liabilities requires the use of several assumptions concerning the future experience of the Fund 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	\$ 47,768,984	64.2 %
2. Normal Cost, including expenses	3,083,765	
3. Expected Contributions	(5,873,849)	
4. Other Income/Expense	26,924	
5. Interest [(1 x 7.75%) + (2 + 3 + 4) x 7.75% x 0.5]	3,595,024	
6. Expected End of Year	\$ 48,600,848	64.6 %
7. Actuarial Experience (Gain) / Loss		
Contribution Shortfall (with interest)	\$ 102,206	(0.1)%
Investment Experience	153,551	(0.1)%
Liability Experience	4,175,132	(1.9)%
Total Actuarial Experience (Gain) / Loss	\$ 4,430,889	
8. End of Year Prior to Plan/Assumption Changes (6 + 7)	\$ 53,031,737	62.5 %
9. Plan Changes	-	
10. Change in Actuarial Assumptions	-	
11. Actual End of Year (8 + 9 + 10)	\$ 53,031,737	62.5 %



Section V: Actuarial Funding Calculation

Section IV of this report presented the Fund'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 actuarially determined contribution rate is the percentage of valuation payroll necessary to fund the annual normal cost of the Fund and fully amortize the UAAL over 30 years. The amount calculated is expected to remain constant over the remaining amortization period and is provided in Table V-1.

Table V-1: Calculation of Actuarially Determined Contribution Rate

	June 30, 2015	June 30, 2014
1. Total Valuation Payroll	\$ 15,612,212	\$ 13,624,021
2. Present Value of Future Benefits	163,711,205	154,002,403
3. Present Value of Future Normal Costs	22,430,050	20,655,988
4. Actuarial Accrued Liability (2 - 3)	\$ 141,281,155	\$ 133,346,415
5. Actuarial Value of Assets	88,249,418	85,577,431
6. Unfunded Actuarial Accrued Liability (UAAL) (4 - 5)	\$ 53,031,737	\$ 47,768,984
7. UAAL Amortization Payment (30 year funding)	\$ 3,097,470	\$ 2,790,084
a. Amortization Payment as a Percent of Payroll (7 / 1)	19.84%	20.48%
8. Total Normal Cost	\$ 3,287,278	\$ 3,022,457
a. Normal Cost as a Percent of Payroll (8 / 1)	21.06%	22.18%
9. Expected Administrative Expenses	\$ 70,255	\$ 61,308
a. Administrative Expense as a Percent of Payroll (9 / 1)	0.45%	0.45%
10. Actuarially Determined Contribution (ADC)	\$ 6,455,003	\$ 5,873,849
a. ADC Rate (7a + 8a + 9a)	41.35%	43.11%
11. Expected Statutory Contribution Rates		
a. Employer Contribution Rate	15.00%	15.00%
b. Expected Docket Fees as a Percent of Payroll	12.69%	14.87%
c. Member Contribution Rate	<u>10.50%</u>	<u>10.50%</u>
d. Total Statutory Contribution Rate (a + b + c)	38.19%	40.37%
12. (Excess)/Shortfall of Statutory Rates (10a - 11d)	3.16%	2.74%



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 Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Annual Payroll (c)	UAAL as a Percentage of Annual Payroll ((b - a) / c)
6/30/2015	\$88,249,418	\$ 141,281,155	\$53,031,737	62.5 %	\$15,084,263	351.6 %
6/30/2014	85,577,431	133,346,415	47,768,984	64.2 %	13,163,305	362.9 %
6/30/2013	80,007,287	143,745,971	63,738,684	55.7 %	13,226,142	481.9 %
6/30/2012	75,506,702	147,922,843	72,416,141	51.0 %	12,690,503	570.6 %
6/30/2011	78,199,003	139,709,488	61,510,485	56.0 %	12,266,852	501.4 %
6/30/2010	79,644,583	130,135,898	50,491,315	61.2 %	13,041,980	387.1 %
6/30/2009	73,161,152	120,840,622	47,679,470	60.5 %	13,011,196	366.4 %
6/30/2008	87,429,745	111,721,411	24,291,666	78.3 %	11,697,421	207.7 %
6/30/2007	82,569,524	104,040,035	21,470,512	79.4 %	11,754,248	182.7 %
6/30/2006	74,003,122	95,216,477	21,213,355	77.7 %	10,059,893	210.9 %

Table VI-2: Solvency Test

Valuation Date	Aggregate Accrued Liabilities For			Actuarial Value of Assets	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)		(1)	(2)	(3)
6/30/2015	\$ 11,063,301	\$ 97,761,695	\$ 32,456,159	\$88,249,418	100.00%	78.95%	0.00%
6/30/2014	10,878,347	93,176,816	29,291,252	85,577,431	100.00	80.17	0.00
6/30/2013	10,484,159	99,609,628	33,652,184	80,007,287	100.00	69.80	0.00
6/30/2012	9,430,314	102,121,251	36,371,278	75,506,702	100.00	64.70	0.00
6/30/2011	9,046,618	95,520,784	35,142,086	78,199,003	100.00	72.40	0.00

Section VI: Accounting Information



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		
6/30/2015	14	\$ 759,235	3	\$ 136,169	152	\$ 9,501,499	7.02%	\$ 62,510
6/30/2014	10	687,978	2	108,230	141	8,878,433	6.99%	62,968
6/30/2013	12	935,944	6	396,548	133	8,298,685	6.95%	62,396
6/30/2012	12	774,812	3	234,997	127	7,759,289	7.48%	61,097
6/30/2011	14	962,927	6	362,843	118	7,219,474	9.07%	61,182

Table VI-4: Summary of Actuarial Methods and Assumptions

Valuation Date	June 30, 2015
Actuarial cost method	Entry Age Normal
Amortization method	Level Percent of Payroll, Open
Payroll Growth Rate	3.50%
Remaining amortization period	30 years
Asset valuation method	4-year Smoothed Market
Actuarial assumptions:	
Investment rate of return*	7.75%
Administrative expenses	0.45% of payroll
Projected salary increases*	4.25%
Post-Retirement Benefit Increases:	0.67% compounded annually
* Includes inflation at 3.0%	



Appendix A: Additional Membership Data

Table A-1: Schedule of Active Participant Data as of June 30, 2015

Nearest Age	Completed Years of Service							Total	Payroll
	Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30+		
30 to 34	1	0	0	0	0	0	0	1	\$ 112,466
35 to 39	1	1	0	0	0	0	0	2	\$ 230,859
40 to 44	5	5	1	0	0	0	0	11	\$ 1,280,406
45 to 49	7	5	2	1	1	0	0	16	\$ 1,888,661
50 to 54	4	6	11	1	2	0	0	24	\$ 2,809,747
55 to 59	4	8	8	6	0	0	0	26	\$ 3,097,806
60	1	0	3	1	0	0	0	5	\$ 606,195
61	1	1	2	1	1	0	0	6	\$ 713,939
62	0	4	1	3	0	0	0	8	\$ 959,965
63	1	1	2	0	0	0	0	4	\$ 475,363
64	0	1	1	1	0	0	0	3	\$ 363,293
65	0	1	0	0	0	0	0	1	\$ 118,394
66	0	1	1	0	1	0	0	3	\$ 361,400
67	0	0	1	0	0	0	0	1	\$ 118,394
68	2	2	3	0	0	0	1	8	\$ 959,275
69	1	1	0	0	0	0	0	2	\$ 236,787
70	0	0	1	0	0	0	0	1	\$ 118,394
71	0	0	0	0	2	0	0	2	\$ 255,778
72	0	1	0	0	0	1	0	2	\$ 252,529
73	0	0	0	0	0	0	0	0	\$ -
74	0	0	0	0	0	0	0	0	\$ -
75	0	0	0	0	0	0	0	0	\$ -
76	0	0	0	0	0	0	0	0	\$ -
77	0	0	0	1	0	0	0	1	\$ 124,613
78	0	0	0	0	0	0	0	0	\$ -
79	0	0	0	0	0	0	0	0	\$ -
80 & Over	0	0	0	0	0	0	0	0	\$ -
Total	28	38	37	15	7	1	1	127	\$15,084,263

Average Age: 56.04

Average Service: 10.44



Appendix A: Additional Membership Data

**Table A-2: Number of Annual Retirement Allowances of Benefit Recipients
as of June 30, 2015**

Type of Pension	Number	Total Annual Benefits	Average Annual Pension
Normal Retirement Pensions			
Two Life 75% Survivor Pension:			
Retired Member Recipient	111	\$7,734,725	\$ 69,682
Survivor Recipient	25	\$1,217,127	\$ 48,685
Co-Payee Recipient	8	\$ 190,228	\$ 23,779
Total Normal Retirement Pensions	144	\$9,142,080	\$ 63,487
Disability Retirement Pensions			
Duty Disability	1	\$ 31,797	\$ 31,797
Non-Duty Disability	1	\$ 41,398	\$ 41,398
Survivor Recipient	0	N/A	N/A
Co-Payee Recipient	0	N/A	N/A
Total Disability Retirement Pensions	2	\$ 73,195	\$ 36,598
Pre-Retirement Survivor Pensions			
Survivor Spouse Recipient	6	\$ 286,224	\$ 47,704
Survivor Child Recipient	0	N/A	N/A
Total Pre-Retirement Survivor Pensions	6	\$ 286,224	\$ 47,704
Total Pensions Being Paid	152	\$9,501,499	\$ 62,510



Appendix A: Additional Membership Data

Table A-3: Distribution of Participants Receiving Benefits as of June 30, 2015

Attained Age	Retired Member		Disabled Member		Survivor Beneficiaries		Totals	
	Number	Annual Pensions	Number	Annual Pensions	Number	Annual Pensions	Number	Annual Pensions
Under 40	0	\$ -	0	\$ -	0	\$ -	0	\$ -
40 to 44	0	0	0	0	0	0	0	0
45 to 49	0	0	0	0	1	66,633	1	66,633
50 to 54	2	67,440	0	0	0	0	2	67,440
55 to 59	7	275,527	0	0	0	0	7	275,527
60 to 64	18	1,237,416	1	41,398	6	186,518	25	1,465,332
65 to 69	43	2,861,542	1	31,797	4	177,326	48	3,070,665
70 to 74	22	1,515,907	0	0	3	198,690	25	1,714,597
75 to 79	9	685,792	0	0	4	180,436	13	866,228
80 to 84	8	522,191	0	0	5	287,889	13	810,080
85 to 89	7	480,314	0	0	3	156,869	10	637,183
90 to 94	3	278,824	0	0	5	248,990	8	527,814
95 to 99	0	0	0	0	0	0	0	0
100 & Over	0	0	0	0	0	0	0	0
Total	119	\$7,924,953	2	\$ 73,195	31	\$1,503,351	152	\$9,501,499

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*	\$ 5,945	\$3,287	\$ 5,185	\$ 6,847	\$ 5,528	\$ 5,320	\$6,988	\$5,823
Average Final Average Salary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of Retirees*	1	12	24	37	8	10	13	105

* Does not include 6 retirees with missing years of service at retirement.

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

	2010-11 Retirees	2011-12 Retirees	2012-13 Retirees	2013-14 Retirees	2014-15 Retirees	All Current Retirees & Beneficiaries
Number	8	8	7	7	9	111
Average Monthly Benefit at Retirement	\$ 5,893	\$ 4,913	\$ 6,429	\$ 5,200	\$ 6,854	\$ 5,260
Average Age at Retirement	62.92	65.78	61.79	62.82	66.25	61.50



Appendix A: Additional Membership Data

Table A-6: Status Reconciliation

	Active Members	Terminated Members *	Pension Recipients			Total
			Service Retired	Disability Retired	All Beneficiaries	
June 30, 2014	121	23	112	1	28	285
Increase (Decrease) From:						
Service Retirement	(6)	(3)	9			
Disability Retirement	(1)			1		
Deaths			(3)			(3)
Survivors					3	3
Co-Payee			1			1
Other Terminations	(1)	1				
Vested Terminations	(3)	3				
Refund of Contributions		(1)				(1)
New Entrants/Rehires	17	(1)				16
Data Adjustments		1				1
June 30, 2015	127	23	119	2	31	302

* Includes 19 deferred vested members and 4 inactive members at June 30, 2015.



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 individual entry-age actuarial cost method and has the following characteristics:

- (i) The annual normal costs for each individual active judge are sufficient to accumulate the value of the judge's pension at time of retirement.
- (ii) Each annual normal cost is a constant percentage of the judge's year-by-year projected pensionable compensation.

The individual entry-age actuarial cost method allocates the actuarial present value of each judge's projected benefits on a level basis over the judge's pensionable compensation between the entry age of the judge and the expected exit ages. Normal cost for each judge is based on the benefits payable to that judge. Since new hires (after July 1, 2005) have lower benefits, the total normal cost for the plan is expected to decrease as pre-2005 members are replaced. Expected administrative expenses of 0.45% of payroll is included in the calculation of the annual contribution requirement.

The portion of the actuarial present value allocated to the valuation year is called the normal cost. The portion of the actuarial present value not provided for by the actuarial present value of future normal costs is called the actuarial accrued liability. Deducting the actuarial value of assets from the actuarial accrued liability determines the unfunded actuarial accrued liability. Unfunded actuarial accrued liability was amortized as a level percent of payroll over 30 years to determine the computed contribution rate. This period is consistent with the policy established by the Retirement Board in October 1996.

Active judge payroll was projected to increase 3.5% per year (4.0% prior to the June 30, 2014 valuation) for the purpose of determining the contribution needed to amortize the unfunded actuarial accrued liability. This estimate is consistent with the base rate of increase in salaries used to calculate actuarial present values.

The actuarial value of assets used for funding purposes is derived as follows: prior year actuarial value of assets 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. As of June 30, 2012, the actuarial value is no longer limited in the degree it can vary from market value by use of a 20% corridor. This change was recommended in the latest experience study and is consistent with the asset valuation method used in the other PERA plans.



Appendix B: Summary of Actuarial Assumptions and Methods

Actuarial Assumptions Used for the Valuation

Economic Assumptions (effective with June 30, 2014 valuation)

Assumed Rate of Investment Return. 7.75%, net of investment expenses.

Price Inflation. 3.0% per annum, compounded annually.

Real Investment Return. 4.75% per annum compounded annually.

Salary Increases. Annual salaries of active members are assumed to increase at an annual rate of 4.25% per year.

Administrative Expenses. 0.45% of payroll.

Demographic Assumptions (effective with June 30, 2012 valuation)

Rates of Retirement. These rates are used to measure the probability of an eligible judge retiring at the indicated ages.

Sample Ages	Percent Retiring During Year Following Attainment of Indicated Ages
50-54	15%
55-61	20
62	25
63-74	15
75+	100

A judge was assumed to be eligible for retirement after satisfying the following conditions:

	Pre 7/2005 Hire Date	Post 7/2005 Hire Date
Early Retirement Eligibility	Age 50 with 18 years of service	N/A
Normal Retirement Eligibility	Age 60 with 15 years of service; or age 65 with 5 years of service	Age 55 with 16 years of service; or age 65 with 5 years of service

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



Appendix B: Summary of Actuarial Assumptions and Methods

Rates of Separation from Active Membership. 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 judges who are eligible for retirement.

Sample Ages	Percent of Active Judges Separating Within the Next Year
20	3.00 %
25	3.00
30	3.00
35	3.00
40	3.00
45	3.00
50	3.00
55	3.00
60	3.00
65	3.00

Mortality Assumption (effective with June 30, 2014 valuation). 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	0.0209	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:	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 86% 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 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:	Disability and mortality decrements operate during the first 5 years of service. Only mortality operates 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.
Normal Form of Benefit:	A 75% automatic joint and survivor payment is the assumed normal form of benefit.
Benefit Service:	Exact fractional service is used to determine the amount of benefit payable.



Appendix B: Summary of Actuarial Assumptions and Methods

Definitions of Technical Terms

Accrued Service. Service credited under the system which was rendered before the date of the actuarial valuation.

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 budgeting 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 funding value of assets. Sometimes referred to as the “unfunded accrued liability.”



Appendix C: Summary of Plan Provisions

Membership

Includes Metropolitan judges and all judges of district courts and justices of the Supreme Court and Court of Appeals. Judges in office on or before July 1, 1980 had the opportunity to choose coverage under the post July 1, 1980 plan upon filing of an irrevocable election prior to December 1, 1980.

Voluntary Retirement

A judge may voluntarily retire:

- 1) At age 65 with 5 or more years of service.
- 2) At age 60 with 15 or more years of service.

For members hired after July 1, 2005:

- 1) At age 65 with 5 or more years of service.
- 2) At age 55 with 16 or more years of service.

Retirement Pension

Pre 7-1-80 plan: 37.5% of one year final average salary plus 7.5% of one year final average salary for each year of service in excess of 5 years. Maximum is 75% of one year final average salary (10 or more years of service). For service credit earned on or after July 1, 2014, 3.5% of five year final average salary with a maximum of 85% of 5 year final average salary.

Post 7-1-80 plan: 37.5% of one year final average salary plus 3.75% of one year final average salary for each year of service in excess of 5 years. Maximum is 75% of one year final average salary (15 or more years of service). For service credit earned on or after July 1, 2014, 3.5% of five year final average salary with a maximum of 85% of 5 year final average salary.

Post 7-1-05 plan: 3.75% of one year final average salary for each year of service. Maximum is 75% of one year final average salary (20 or more years of service). For service credit earned on or after July 1, 2014, 3.5% of five year final average salary with a maximum of 85% of 5 year final average salary.

Early Retirement Pension

Applicable to judges between the ages of 50 and 60 with 18 or more years of service. The pension is equal to 70% of FAS plus ½% of FAS multiplied by the number of complete years the age at retirement exceeds age 50. Members hired after July 1, 2005 are not eligible for early retirement.



Appendix C: Summary of Plan Provisions

Final Average Salary

For service credit earned before June 30, 2014, the salary received during the last 1 year in office prior to retirement. For service credit earned on or after July 1, 2014, the average salary received for the highest 5 year consecutive period.

Deferred Retirement Pension

If judicial service terminates after 5 years of such service, the judge and spouse retain entitlement to benefits of the Fund. Five-year service requirement is waived if the result of a duty-related disability.

Pre 7-1-80 plan: 37.5% of one year final average salary plus 7.5% of one year final average salary for each year of service in excess of 5 years. Maximum is 75% of one year final average salary (10 or more years of service). For service credit earned on or after July 1, 2014, 3.5% of five year final average salary with a maximum of 85% of 5 year final average salary.

Post 7-1-80 plan: 37.5% of one year final average salary plus 3.75% of one year final average salary for each year of service in excess of 5 years. Maximum is 75% of one year final average salary (15 or more years of service). For service credit earned on or after July 1, 2014, 3.5% of five year final average salary with a maximum of 85% of 5 year final average salary.

Post 7-1-05 plan: 3.75% of one year final average salary for each year of service. Maximum is 75% of one year final average salary (20 or more years of service). For service credit earned on or after July 1, 2014, 3.5% of five year final average salary with a maximum of 85% of 5 year final average salary.

Payment of the judge's pension commences upon reaching the age and service requirement for voluntary retirement.

Survivor's Pension – Retired Judges

The surviving spouse of a retired judge receives a pension of 75% of the judge's retirement pension until death. Pension is payable to deceased judge's minor and dependent children if there is no eligible surviving spouse.

Survivor's Pension – Active Judges

Applicable if judge had 5 or more years of service. The surviving spouse would receive 75% of the judge's vested pension until death. Pension is payable to deceased judge's minor and dependent children if there is no eligible surviving spouse.



Appendix C: Summary of Plan Provisions

Disability

Applicable if judge has 5 or more years of service and becomes incapacitated to perform duties of office. The amount of the disability pension is equal to the judge's accrued vested benefit.

Cost-of-Living Increases

Effective July 1, 2014, there will be no COLA increases for 2014 and 2015. Starting July 1, 2016, annual 2% COLA increases will be subject to PERA's certification based on the Fund's current year and projected next year funded ratio being equal to or greater than 100%. At a minimum, a 2% COLA increase will be granted every third year. COLA increases are subject to the following eligibility periods:

- If member retires prior to July 1, 2014, 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, 2015, COLA is payable after retirement has been in effect for at least 3 full calendar years.
- If member retires on or after July 1, 2015 but prior to July 1, 2016, COLA is payable after retirement has been in effect for at least 4 full calendar years.
- If member retires on or after July 1, 2016, 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 above waiting period is reduced to 1 full calendar year.

Judge's Contributions

Members contribute 10.5% of salary.

Refund of Judge's Contributions

If a judge leaves service or dies and no pension becomes payable, the accumulated contributions are refunded or paid to the designated beneficiary.

Public Payments

Payroll based contributions: 15.0% of salary. Dollar Contributions: \$38.00 from each civil case docket fee paid in the district court (increased from \$27.25 effective June 19, 1987) plus \$25.00 from each civil case docket fee and \$10.00 from each civil action jury fee paid in the metropolitan courts.



Appendix C: Summary of Plan Provisions

Other Service

PERA, MRA and ERA service may be combined with Judicial service for purposes of satisfying age and service requirements once a member has attained one month of Judicial service. When combining service, members may retire under the JRA after satisfying either the JRA or PERA age and service requirements for immediate benefits.