



**Public Employees  
Retirement Association  
of New Mexico**

**Annual Actuarial Valuation  
June 30, 2003**



November 7, 2003

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

Dear Board Members:

This report contains the results of an actuarial valuation of the statutory obligations associated with PERA benefits and their relationship to the Association's statutory funding resources.


The valuation was made as of June 30, 2003 using financial and individual people information furnished by the Association.


The report is divided into parts and sections as follows:

- **Section 1** Purpose of the Valuation, Valuation Results, Comments and Conclusions
- **Section 2** Summary of Financial and People Information
- **Section 3** Summary of Benefit Provisions
- **Section 4** Summary of Actuarial Cost Methods, Estimates of Future Fiscal and People Activities, and Definitions of Technical Terms
- **Section 5** Information for Governmental Accounting Standards Board Statements No. 25 and No. 27

This report was prepared under the supervision of a Member of the American Academy of Actuaries with significant experience valuing public employee retirement plans.

Respectfully submitted,

  
Kenneth G. Alberts

  
Norman S. Losk, FSA.

KGA:bd

# TABLE OF CONTENTS

## **Section 1 - Valuation Results and Conclusions**

Purpose of the Actuarial Valuation	1
Statutory Obligations	2
Sources of Funding	3
Sources of Obligations	4
Statutory Obligations by Division	5
Statutory Contribution Rates	6
Utilization of Contribution Rates	7
Funding Progress Indicators	9
Comments	11
Conclusions	12
Statutory Reserve Transfers	13
Experience Gain/Loss	14

## **Section 2 - Summary of Financial and People Information**

Fiscal Information	15
Funding Value of Assets	16
Allocation of Assets by Division	17
Retirants and Beneficiaries	18
Former Members	22
Active Members	23

## **Section 3 - Summary of Benefit Provisions**

Benefit Provision Summary	33
Contribution Rates	37

## **Section 4 - Cost Methods, Experience Estimates, and Definitions**

Actuarial Cost Methods	38
Experience Estimates	39
Definitions	46

## **Section 5 - GASB Statements No. 25 and No. 27**

Required Supplementary Information	48
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## Section 1

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**Purpose of Valuation**  
**Valuation Results**  
**Comments and Conclusions**

## PURPOSE OF THE ACTUARIAL VALUATION

### PERA statutory obligations are:

- pension payments to current and future retired members, vested former members and survivor pension beneficiaries
- refunds of member contributions to non-vested former members
- administrative and investment expenses incurred in the operation of PERA

### PERA statutory funding resources are:

- member contributions (fixed statutory rates)
- affiliated public employer contributions (fixed statutory rates)
- investment earnings of PERA assets

The basic funding objective of PERA is to avoid transfers of the cost of statutory obligations between generations of taxpayers. This objective will be realized if the PERA funding resources are sufficient to finance:

- costs allocated to the current year attributable to service rendered by PERA members in the current year (Normal Cost)
- costs allocated to prior years attributable to service rendered by PERA members in prior years (Unfunded Actuarial Accrued Liability)

Board policy is to finance unfunded actuarial accrued liability over a period not to exceed 30 years. This policy was adopted in October of 1996.

The actuarial valuation measures: (1) the relationship between PERA obligations and funding resources to determine if the funding objective is being met; and (2) the contribution rate needed to comply with the 30 year objective for financing the unfunded actuarial accrued liability.

## PERA STATUTORY OBLIGATIONS -- JUNE 30, 2003

The statutory obligations of PERA were calculated to have an actuarial present value of \$12,297,651,897 on June 30, 2003. The funding value of PERA assets available to meet these obligations totaled \$8,971,080,804.

Retired members	\$ 5,049,491,478	none	\$ 5,049,491,478
Vested Former members	186,378,252	none	186,378,252
Active members	3,980,075,754	\$ 3,081,706,413	7,061,782,167
<hr/>			
Total Actuarial Obligation	9,215,945,484	\$ 3,081,706,413	\$ 12,297,651,897
Less Funding Value of Assets	8,971,080,804		
<b>Unfunded Actuarial Accrued Liability</b>	<b>\$244,864,680</b>		

Actuarial Accrued Liability	Future Normal Cost	Actuarial Present Value of Statutory Obligations
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Derivation of the funding value of assets is shown on page 16.

The report excludes Legislative Division reported assets of \$5,247,678 (\$5,826,618 funding value) and the corresponding statutory obligations. An actuarial valuation of Legislative assets and statutory obligations is detailed in a separate report.

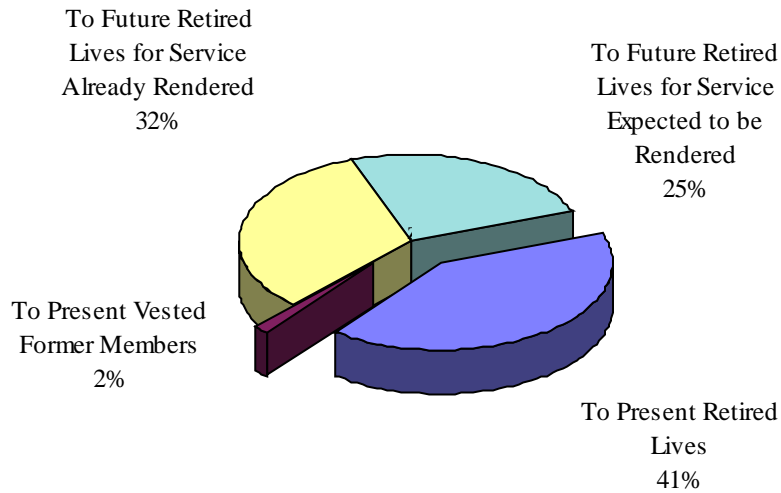
@ Currently the actuarial value (AV) of assets exceeds the market value by \$891,958,386. The AV of assets is based on a smoothing method which phases in the difference between the assumed rate of return and the actual rate of return each year over a four year period (see page 16). There are currently three years of losses that have yet to be completely

*recognized (phased in). Recognition of the remainder of those losses over the next three years could have a downward impact on the funding status.*

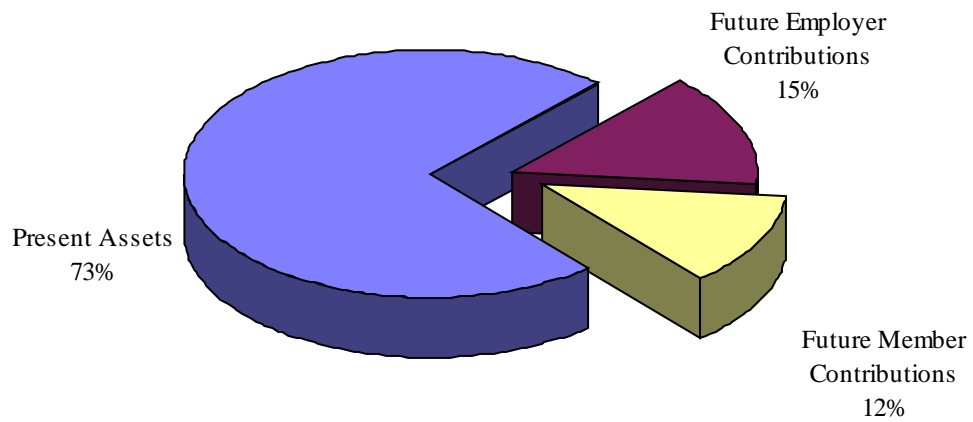


### STATUTORY OBLIGATIONS AND SOURCES OF FUNDS JUNE 30, 2003

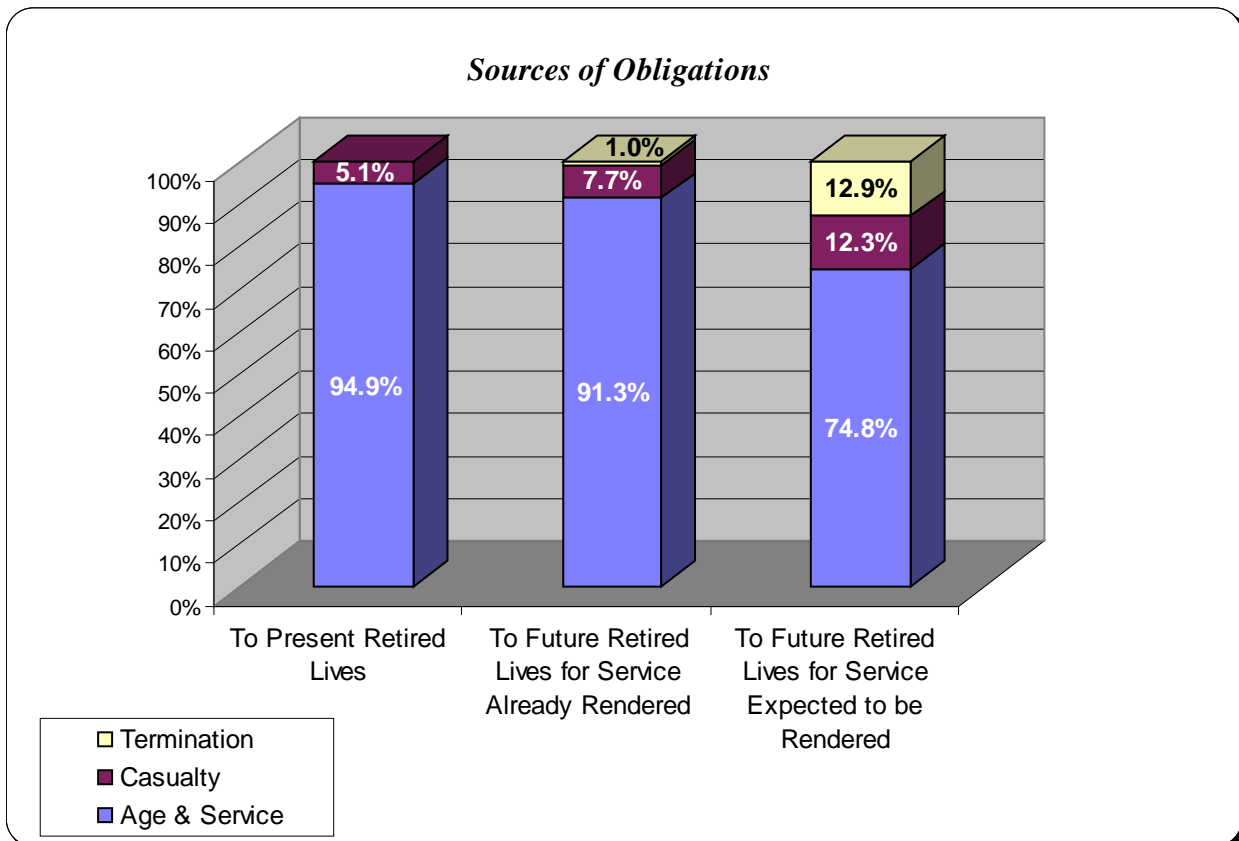
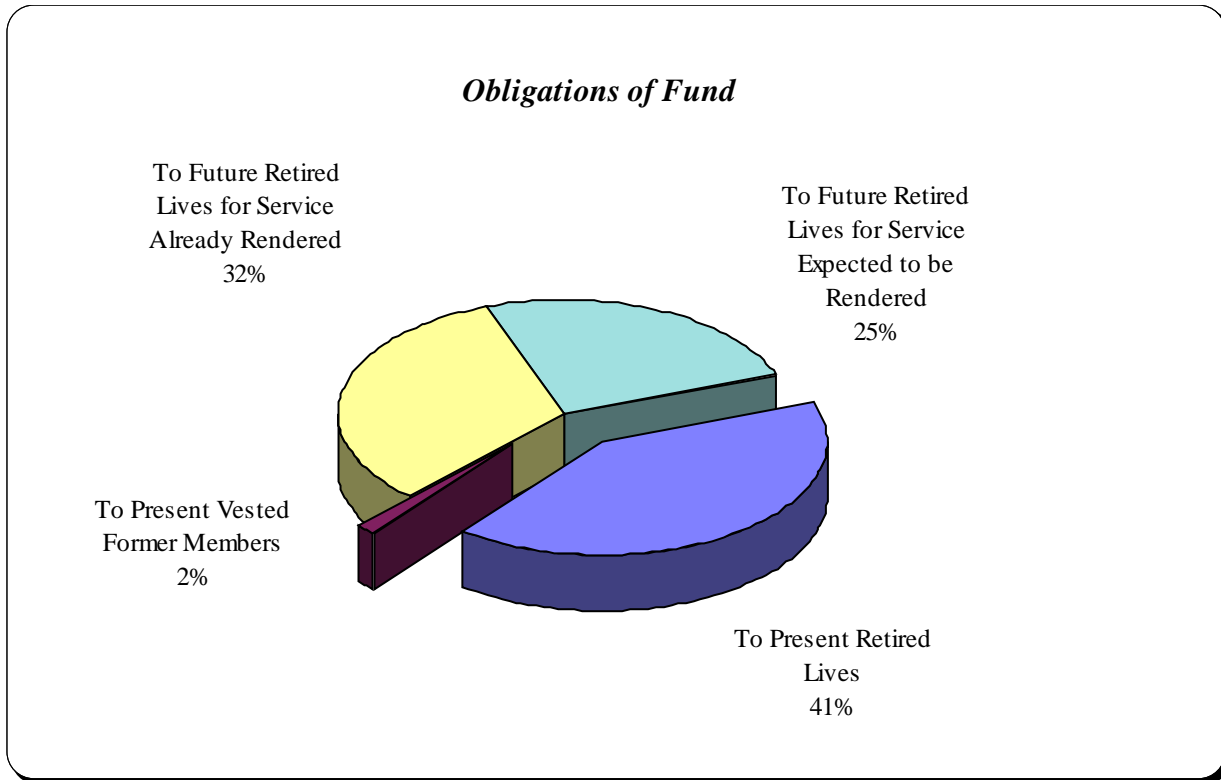
#### *Obligations of Funds*



#### *Sources of Funds*



## STATUTORY OBLIGATIONS JUNE 30, 2003



## ACTUARIAL PRESENT VALUE OF STATUTORY OBLIGATIONS BY DIVISION JUNE 30, 2003

The actuarial present value of statutory obligations and funding value of assets, by PERA division, is as follows:

Division and Coverage Plans	Accrued Liability		Future Normal Cost	APV of Statutory Obligations	Assets
	Retired	Active*			
<b>STATEDIVISION</b>					
General coverage plan	\$2,448,673,878	\$2,014,683,905	\$1,392,601,130	\$5,855,958,913	\$3,796,352,279
Less Funding Value of Assets	2,448,673,878	1,347,678,401			
Unfunded Act. Accr. Liab	none	667,005,504			
Police/Corrections coverage plan	213,324,522	238,556,741	148,153,729	600,034,992	631,739,543
Less Funding Value of Assets	213,324,522	418,415,021			
Unfunded Act. Accr. Liab	none	(179,858,280)			
<b>MUNICIPAL DIVISION</b>					
General coverage plan	1,337,083,714	1,368,591,331	1,067,737,788	3,773,412,833	2,824,747,052
Less Funding Value of Assets	1,337,083,714	1,487,663,338			
Unfunded Act. Accr. Liab	none	(119,072,007)			
Police coverage plan	628,847,417	352,934,109	285,416,154	1,267,197,680	1,145,661,536
Less Funding Value of Assets	628,847,417	516,814,119			
Unfunded Act. Accr. Liab	none	(163,880,010)			
Fire coverage plan	421,561,947	191,687,920	187,797,612	801,047,479	572,580,393
Less Funding Value of Assets	421,561,947	151,018,446			
Unfunded Act. Accr. Liab	none	40,669,474			
<b>PERA TOTALS</b>					
All coverage plans	\$5,049,491,478	\$4,166,454,006	\$3,081,706,413	\$12,297,651,897	\$8,971,080,803
Less Funding Value of Assets	5,049,491,478	3,921,589,325			
Unfunded Act. Accr. Liab	none	\$ 244,864,681			

\* Including vested former members.

@ Currently the actuarial value (AV) of assets exceeds the market value by \$891,958,386. The AV of assets is based on a smoothing method which phases in the difference between the assumed rate of return and the actual rate of return each year over a four year period (see page 16). There are currently three years of losses that have yet to be completely recognized (phased in). Recognition of the remainder of those losses over the next three years could have a downward impact on the funding status.

## STATUTORY CONTRIBUTION RATES

PERA member and employer contribution rates are defined by statute in terms of percents of active member payroll. The following rates were in effect on June 30, 2003:

Division and Coverage Plan	Contribution Rates	
	Member	Employer
STATE DIVISION		
General coverage Plan 3	7.42%	16.59%
Police and Adult Corrections Plan 1	7.60	25.10
Hazardous Duty (Juvenile Correctional Officer) Plan 2	4.78	25.72
Weighted average for Police/Corrections*	7.26	25.17
MUNICIPAL DIVISION		
General coverage Plans		
Plan 1	7.00	7.00
Plan 2	9.15	9.15
Plan 3	13.15	9.15
Plan 4	15.65	11.65
Detention Officer Plan 1	16.65	16.65
Weighted average*	11.50	9.22
Police coverage Plans		
Plan 1	7.00	10.00
Plan 2	7.00	15.00
Plan 3	7.00	18.50
Plan 4	12.35	18.50
Plan 5	16.30	18.50
Weighted average*	15.45	18.12
Fire coverage Plans**		
Plan 1	8.00	11.00
Plan 2	8.00	17.50
Plan 3	8.00	21.25
Plan 4	12.80	21.25
Plan 5	16.20	21.25
Weighted average*	16.07	21.18

\* PERA financial records do not provide an asset breakdown by coverage plan which necessitates the use of a weighted average contribution rate for the purpose of comparing assets to the actuarial accrued liability and determining the financing period for the unfunded actuarial accrued liability.

\*\* These contribution rates include the 1% increase pursuant to 1998 legislation.

## UTILIZATION OF STATUTORY CONTRIBUTION RATES -- JUNE 30, 2003 STATE DIVISION

The following schedule indicates utilization of the member and employer funding resource in meeting the actuarial present value of PERA statutory obligations and the financing period applicable to the unfunded actuarial accrued liability.

	General	Police/Corrections
<b>FUNDING RESOURCE</b>		
Members	7.42%	7.26%
Affiliated Public Employers	16.59%	25.17%
Total Funding Resource (Weighted Average)	24.01%	32.43%
<b>UTILIZATION OF FUNDING RESOURCE</b>		
Normal Cost:		
Age & Service	16.57%	21.00%
Disability	1.15%	2.23%
Pre-retirement Survivors	1.33%	1.01%
Refunds	0.83%	1.26%
Total Normal Cost	19.87%	25.49%
Unfunded Actuarial Accrued Liability	4.14%	6.94%
Total Utilized	24.01%	32.43%

### UNFUNDED ACTUARIAL ACCRUED LIABILITY

#### FINANCING PERIOD\*

Current Valuation	35 years	# years
Last Year's Valuation	18 years	# years
From 6/30/1990 Valuation	65 years	20 years
Change Since Last Year's Valuation	17 years	+ years**

#### FUNDING POLICY OBJECTIVE@

0.42%	0.00%
-------	-------

\* The number of years required to fund the unfunded actuarial accrued liability based on current statutory contribution rates and allocation of liability to accrued service in accordance with the individual entry-age actuarial cost method.

@ The additional percent-of-payroll funding resource needed to finance the unfunded actuarial accrued liability over 30 years.

# There was no unfunded actuarial accrued liability in the Police/Corrections division.

\*\* Change is not measurable - only direction of change can be determined (i.e., positive or negative).

## UTILIZATION OF STATUTORY CONTRIBUTION RATES -- JUNE 30, 2003 MUNICIPAL DIVISION

The following schedule indicates utilization of the member and employer funding resource in meeting the actuarial present value of PERA statutory obligations and the financing period applicable to the unfunded actuarial accrued liability.

	General	Police	Fire
<b>FUNDING RESOURCE</b>			
Members	11.50%	15.45%	16.07%
Affiliated Public Employers	9.22%	18.12%	21.18%
Total Funding Resource (Weighted Average)	20.72%	33.57%	37.25%
<b>UTILIZATION OF FUNDING RESOURCE</b>			
Normal Cost:			
Age & Service	14.79%	24.99%	26.64%
Disability	0.97%	1.96%	1.96%
Pre-retirement Survivors	1.41%	1.41%	1.65%
Refunds	1.23%	1.07%	0.46%
Total Normal Cost	18.40%	29.43%	30.71%
Unfunded Actuarial Accrued Liability	2.32%	4.14%	6.54%
Total Utilized	20.72%	33.57%	37.25%

### UNFUNDED ACTUARIAL ACCRUED LIABILITY

#### FINANCING PERIOD\*

Current Valuation	# years	# years	16 years
Last Year's Valuation	# years	# years	2 years
From 6/30/1990 Valuation	43 years	91 years	90 years
Change Since Last Year's Valuation	+ years**	+ years**	14 years

#### FUNDING POLICY OBJECTIVE@

0.00%                      0.00%                      0.00%

\* The number of years required to fund the unfunded actuarial accrued liability based on current statutory contribution rates and allocation of liability to accrued service in accordance with the individual entry-age actuarial cost method.

@ The additional percent-of-payroll funding resource needed to finance the unfunded actuarial accrued liability over 30 years.

\*\* Change is not measurable - only direction of change can be determined (i.e., positive or negative).

# There was no unfunded actuarial accrued liability in the Municipal General and Municipal Police divisions.

## FUNDING PROGRESS

No all-encompassing measure of funding progress and funded status exists. The schedule on the next page shows four indicators. It is important to keep the *Interpretive Note* in mind when assessing the indicators for prior years.

**First Indicator** - the trend in the financing period for the unfunded actuarial accrued liability. The financing period is expected to remain steady or slowly decrease in the absence of benefit enhancements.

**Second Indicator** – prior to 1999, the ratio of assets available to finance benefits to the actuarial present value of credited projected benefits (APVCPB). The APVCPB is independent of the actuarial cost method selected to implement the PERA basic funding objective and was the basis of the Pension Benefit Obligation used for financial reporting under Statement No. 5, Governmental Accounting Standards Board. Beginning in 1999, the actuarial accrued liability based on the entry-age actuarial cost method used for funding purposes is used rather than the APVCPB. This is in conformance with Statement No. 25 of the Governmental Accounting Standards Board, which supercedes Statement No. 5.

The ratio is expected to remain steady or slowly increase in the absence of benefit enhancements.

**Third Indicator** - the ratio of the unfunded APVCPB to active member payroll. Under the PERA basic funding objective, the unfunded APVCPB is controlled in terms of inflation-adjusted dollars and should not increase in relationship to active member payroll in the absence of benefit enhancements or a diminishing work force size.

**Fourth Indicator** - the experience gain (loss) realized during the year preceding the actuarial valuation, expressed as a percent of the actuarial accrued liability at the beginning of the year. Gains and losses are expected to offset each other over long periods of time.

**Interpretive Note** - *PERA benefits have undergone a long series of legislated enhancements. Each time benefits were enhanced the funded status of PERA was diminished because the benefit obligation was immediately increased but the offsetting assets were only gradually increased by the higher contributions of members and/or affiliated public employers. A similar diminishment occurs each time a previously legislated coverage plan is adopted by an affiliated public employer.*

**FUNDING PROGRESS INDICATORS -- HISTORICAL COMPARISON**  
**(DOLLAR AMOUNTS IN THOUSANDS)**

Valuation Date	FIRST INDICATOR	Funding Value of Assets	APVCPB @	SECOND INDICATOR	Unfunded APVCPB	Valuation Payroll	THIRD INDICATOR
	Financing Period #			Percent Funded			Payroll Ratio
1978	18 yrs.	\$ 270,782	\$ 287,716	94%	\$ 16,934	\$ 257,423	7%
1979	19	309,046	356,894	87	47,848	281,849	17
1980	20	355,247	420,874	84	65,627	317,301	21
1981	57	422,581	644,489	66	221,908	375,226	59
1982	31	510,426	753,770	68	243,344	416,655	58
1983	32	636,764	921,331	69	284,567	465,053	61
1984	29	763,783	1,020,245	75	256,462	485,408	53
1985	45	899,133	1,280,402	70	381,269	584,280	65
1986	45	1,077,411	1,431,839	75	354,428	572,685	62
1987*							
1988	55	1,447,499	1,937,662	75	490,163	644,664	76
1989	63	1,649,238	2,207,009	75	557,771	682,245	82
1990	57	1,865,707	2,472,000	75	606,294	760,639	80
1991	57	2,104,450	2,730,199	77	625,749	825,006	76
1992	50	2,399,346	2,981,655	80	582,309	843,915	69
1993	40	2,696,511	3,202,244	84	505,733	909,242	56
1994	43	2,974,816	3,641,320	82	666,504	943,330	71
1995	38	3,364,452	4,240,843	79	876,391	1,043,575	84
1996	40	3,845,138	4,688,085	82	842,947	1,098,636	77
1997	30	4,560,312	5,171,481	88	611,169	1,102,082	55
1998	13	5,487,476	5,604,745	98	117,269	1,146,991	10
1999	9	6,490,295	6,548,103	99	57,808	1,200,565	5
2000	4	7,522,348	7,112,380	106	(409,968)	1,253,305	(33)
2001	7	8,302,820	7,876,575	105	(426,245)	1,318,275	(32)
2002	10	8,763,444	8,498,752	103	(264,692)	1,396,209	(19)
2003	18	8,971,081	9,173,650	98	202,569	1,437,357	14
2003**	17	8,971,081 @@	9,215,945	97	244,864	1,437,357	17

\* No actuarial valuation performed

\*\* Plan Change.

# In calculating this aggregate number, only assets up to the accrued liabilities for each division were considered.

@ Beginning in 1999 based on accrued liability used for funding purposes, consistent with GASB Statement No. 25.

@@ Currently the actuarial value (AV) of assets exceeds the market value by \$891,958,386. The AV of assets is based on a smoothing method which phases in the difference between the assumed rate of return and the actual rate of return each year over a four year period (see page 16). There are currently three years of losses that have yet to be completely recognized (phased in). Recognition of the remainder of those losses over the next three years could have a downward impact on the funding status.





**COMMENT A**

Methods and assumptions used in the June 30, 2003 were unchanged from the prior valuations. Additional assumptions were utilized for service related retirement, to value benefits under the new Corrections and Detention Coverage Plans. Please see page 43 for details.

**COMMENT B**

In aggregate, fund experience was less favorable than expected, producing an experience loss for the year ending June 30, 2003. The primary sources of the experience loss were a rate of return on the funding value of assets less than assumed (3% vs. 8%) and retirements greater than assumed. Losses were partially offset by gains due to pay increases (members who were active at the beginning and end of the year had pay increases of 4.7% compared with an assumed increase of 7.9%). In addition, PERA was able to provide estimated benefits for many more of the deferred members than in past years. While this resulted in a small loss, it also resulted in a more accurate measure of liabilities for those members.

The funding value of assets uses a smoothing technique that smoothes gains and losses out over a four year period. One quarter of this year's investment loss has been recognized in this year's funding value and one quarter of it will be recognized in each of the next three years. Past gains that have yet to be fully recognized in the funding value partially offset this year's and last year's losses.

In aggregate, the system had an experience loss of \$546 million. Of that, \$435 was related to the investment loss and \$111 million was related to losses on liabilities. The liability loss is approximately 1.3% of beginning of year accrued liability.

**COMMENT C**

Looking ahead to next year we can see that we have a loss of \$511 million for three of the four years of investment activity that will flow into the recognized gain/loss in next year's actuarial value of assets. Essentially this means that if the fund earns exactly 8% on investments during the 2003/04 and the 2004/05 fiscal years and incurs no other liability gains or losses (an unlikely situation) then the 6/30/2004 - 6/30/2005 valuation results will each show a loss of approximately \$511 million. If a loss of this magnitude does occur next year, we believe that effect will approximate the following:

- Overall PERA funding ratio will drop to approximately 92%
- Overall PERA amortization period will increase to around 36 years
- State General amortization period will increase to near 65 years
- Municipal General funding ratio will drop below 100%
- Municipal Police funding ratio will drop from 117% to approximately 110%
- Municipal Fire amortization will increase to around 37 years

## Comment D

Legislation passed in 2003 created 2 new coverage plans: State Police and Adult Corrections Officers Coverage Plan 1 and Municipal Detention Officers Coverage Plan 1. Members covered under these plans are now eligible for the same benefits as State Police members were entitled to prior to the legislation. The main changes for members newly covered are:

- 3.0% benefit multiplier
- 80% of final average compensation maximum benefit
- 1.2 years of service credit for each year of service rendered
- 7.6% and 16.65% of pay member contribution rates for Corrections and Detention Officers, respectively

Data submitted for the proposal valuations were used to identify the members affected by the benefit changes in the June 30, 2003 valuation data.

Members must have 18 months of service credit earned after June 30, 2004 under these plans in order to receive the increased benefits. These changes resulted in an increase in PERA aggregate accrued liability of \$42 million.

## CONCLUSIONS

Our conclusions based on the June 30, 2003 annual actuarial valuation of PERA are as follows:

- PERA funding status remained strong during the year ended June 30, 2003, with the aggregate funding ratio of accrued valuation assets to accrued liabilities at 97.3%. This is the measure used by Governmental Accounting Standards Board Statement No. 25 for financial reporting.
- Future funding progress will be primarily determined by rates of investment earnings and salary increases. Retirement rates are also expected to have a significant impact in all Divisions. Of lesser but important influence are mortality decreases and member withdrawals.
- PERA has an actuarial balance between resources and obligations.
- Future ability to properly monitor PERA's actuarial balance is dependent upon continued diligence with respect to data quality and a period of benefit stability permitting derivation of underlying benefit utilization patterns.
- A temporary increase in contribution rates may be necessary over the next couple of years in order to prevent the overall PERA amortization period from exceeding the 30-year target established by Board policy and maintain a strong funding status.

## STATUTORY RESERVE TRANSFERS

NMSA 10-11-126.B. provides:

- B. Each year following receipt of the report of the annual actuarial valuation, the excess, if any, of the reported actuarial present value of pensions being paid and likely to be paid to retired members and survivor pension beneficiaries and residual refunds likely to be paid to refund beneficiaries of retired members and to survivor pension beneficiaries over the balance in the retirement reserve fund (RRF) shall be transferred to the retirement reserve fund from the employers accumulation fund (EAF).

Division	Reported Fund Balances**	Actuarial Present Value of Pensions Being Paid	Transfer
STATE GENERAL			
MCF*	\$ 512,272,905		
EAF	719,035,032		\$(260,840,539)
RRF	2,187,833,339	\$2,448,673,878	260,840,539
STATE POLICE/CORRECTIONS			
MCF	\$ 40,444,420		
EAF	269,843,553		0
RRF	258,681,024	213,324,522	0
MUNICIPAL GENERAL			
MCF	\$ 612,857,678		
EAF	713,490,471		(119,355,726)
RRF	1,217,727,988	1,337,083,714	119,355,726
MUNICIPAL POLICE			
MCF	\$ 174,101,971		
EAF	295,231,979		(66,354,403)
RRF	562,493,014	628,847,417	66,354,403
MUNICIPAL FIRE			
MCF	\$ 93,862,473		
EAF	40,912,210		(40,648,645)
RRF	380,913,302	421,561,947	40,648,645
<b>TOTAL</b>	<b>\$8,079,701,359</b>		

\* *Members contribution fund.*

\*\* *At market value.*

**EXPERIENCE GAIN (LOSS) -- YEAR ENDED JUNE 30, 2003**  
**(DOLLAR AMOUNTS IN THOUSANDS)**

DERIVATION	State Division		Municipal Division			Totals
	General	Pol / H.D.	General	Police	Fire	
(1) UAAL at start of year	\$ 434,710	\$(229,355)	\$(258,629)	\$(216,469)	\$ 5,051	\$( 264,692)
(2) Normal Cost for year (NC x Pays from 2002 val'n)	138,188	11,153	95,489	23,491	13,912	282,233
(3) EE and ER contributions (net of refunds)	(157,441)	(19,914)	(96,728)	(39,799)	(23,416)	(337,298)
(4) Interest Accrual	34,007	(18,699)	(20,740)	(17,970)	24	(23,378)
(5) Expected UAAL before changes	449,464	(256,815)	(280,608)	(250,747)	(4,429)	(343,135)
(6) Effect of assumption changes	0	0	0	0	0	0
(7) Effect of benefit changes #	(16,666)	43,227	15,734	0	0	42,295
(8) Effect of new employers and plan coverage shifts	0	0	0	0	0	0
(9) Expected UAAL after changes	432,798	(213,588)	(264,874)	(250,747)	(4,429)	(300,840)
(10) Actual UAAL	667,006	(179,858)	(119,072)	(163,880)	40,669	244,865
(11) Gain (Loss)	(234,208)	(33,730)	(145,802)	(86,867)	(45,098)	(545,705)
(12) As % of beginning of year AAL	(5.63%)	(8.78%)	(5.87%)	(9.65%)	(7.95%)	(6.42%)

AAL represents actuarial accrued liability.

UAAL represents unfunded actuarial accrued liability.

Note: Numbers may not add due to rounding to nearest \$1,000's.

# Effect of State Police and Adult Correctional Officer Member Coverage Plan and Municipal Detention Officer Member Coverage Plan, Some members covered under these new plans had previously been reported under State General Coverage Plan 3. Effective with this valuation, liabilities for those members were moved to the State Police/Hazardous Duty division.

## Section 2

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### Summary of Financial and People Information Used for the Valuation

## SUMMARY OF FISCAL INFORMATION FURNISHED FOR THE VALUATION

	6-30-03	6-30-02
Fund balance beginning of year	<b>\$7,824,829,633</b>	<b>\$7,999,047,423</b>
<b>Revenues</b>		
a. Member contributions	146,589,464	140,856,619
b. Employer contributions	213,712,566	204,734,125
c. Purchases of service	3,224,480	2,976,083
d. Investment Income		
1. Adjustments of inv to market value	161,421,761	(418,591,091)
2. Interest, dividends, etc.	250,831,693	269,703,263
3. Realized gains/(losses)	(121,713,633)	(12,309,525)
e. Other Income	2,535,827	3,206,076
f. Total revenues	\$656,602,158	\$190,575,550
<b>Expenditures</b>		
a. Pensions paid	349,178,208	318,441,086
b. Refunds of member contributions	25,985,842	25,624,513
c. Administrative and investment expenses	21,318,705	20,727,741
d. Total expenditures	\$ 396,482,755	\$ 364,793,340
Audit Adjustment	0	0
Fund balance end of year (Market value)	<b>\$8,084,949,036</b>	<b>\$7,824,829,633</b>
<b>ASSETS AND LIABILITIES</b>	<b>2003</b>	<b>2002</b>
Cash & Receivables	\$34,303,450	\$ 33,774,584
Property & Equipment	892,442	989,324
Building	15,500,000	15,500,000
Short Terms & Accruals	(59,120,267)	567,029,401
US Gov't & Agency Securities	1,878,807,290	2,031,364,184
Corporate Bonds	4,023,590,194	2,819,907,421
Corporate Stocks	956,223,833	1,062,166,470
International Stocks	1,234,306,678	1,293,495,960
Other Investments	445,416	602,288
Net Assets	\$ 8,084,949,036	\$ 7,824,829,632

Fiscal information was furnished by PERA prior to availability of audited financial statements and may differ from information contained in the audited financial statements.

## DERIVATION OF FUNDING VALUE OF RETIREMENT SYSTEM ASSETS

	Fiscal Years Ending June 30,				
	1999	2000	2001	2002	2003
A. Funding Value Beginning of Year	\$5,490,941,333	\$6,494,486,751	\$7,527,280,315	\$8,308,210,019	\$8,725,679,753
B. Market Value End of Year	7,299,968,088	8,152,748,384	7,999,047,423	7,650,611,843	8,084,949,036
C. Market Value Beginning of Year	6,340,544,208	7,299,968,088	8,152,748,384	7,999,047,423	7,650,611,843
D. Non-Investment Net Cash Flow	32,982,104	18,691,769	15,664,683	4,501,228	(11,637,540)
E. Investment Income					
E1. Market Total: B - C - D	926,441,776	834,088,527	(169,365,644)	(352,936,808)	445,974,733
E2. Amount for Immediate Recognition	446,634,626	526,151,649	608,078,109	664,836,851	697,588,879
E3. Amount for Phased-In Recognition E1-E2	479,807,150	307,936,878	(777,443,753)	(1,017,773,659)	(251,614,146)
F. Phased-In Recognition of Investment Income					
F1. Current Year: 0.25 x E3	119,951,788	76,984,220	(194,360,938)	(254,443,415)	(62,903,537)
F2. First Prior Year	154,611,842	119,951,788	76,984,220	(194,360,938)	(254,443,415)
F3. Second Prior Year	136,402,296	154,611,842	119,951,788	76,984,220	(194,360,938)
F4. Third Prior Year	110,362,961	136,402,296	154,611,842	119,951,788	76,984,220
F5. Total Recogn. Phased -In Investment Gain	521,328,887	487,950,146	157,186,912	(251,868,345)	(434,723,670)
G. Audit Adjustment Phase-In	2,599,801	0	0	0	0
H. Funding Value End of Year: A + D + E2 + F5 +G	6,494,486,751	7,527,280,315	\$8,308,210,019	\$8,725,679,753	\$8,976,907,422
Difference between Market & Funding Value	805,481,337	625,468,069	(309,162,596)	(1,075,067,910)	(891,958,386)
I. Recognized Rate of Return	17.62%	15.59%	10.16%	4.97%	3.01%

Asset information was furnished by PERA prior to availability of audited financial statements and may differ from information contained in the audited financial statements.





## ALLOCATION OF FUNDING VALUE OF ASSETS BY DIVISION -- JUNE 30, 2003

Fund information was furnished by PERA prior to availability of audited financial statements and may differ from information contained in the audited financial statements.

	State Division			Municipal Division			PERA Totals
	General	Police	Legislative	General	Police	Fire	
Member Contribution Fund	\$ 512,272,905	\$ 40,444,420	\$ 124,517	\$ 612,857,678	\$ 174,101,971	\$ 93,862,473	\$1,433,663,964
Employer Accumulation Fund	719,035,032	269,843,553	3,000,224	713,490,471	295,231,979	40,912,210	2,041,513,469
Retirement Reserve Fund	2,187,833,339	258,681,024	2,122,936	1,217,727,988	562,493,014	380,913,302	4,609,771,603
<b>Total Fund Balances</b>	<b>3,419,141,276</b>	<b>568,968,997</b>	<b>5,247,677</b>	<b>2,544,076,137</b>	<b>1,031,826,964</b>	<b>515,687,985</b>	<b>8,084,949,036</b>
Funding Value Adjustment	377,211,003	62,770,546	578,941	280,670,915	113,834,572	56,892,408	891,958,386
<b>Total Funding Value of Assets</b>	<b>\$3,796,352,279</b>	<b>\$631,739,543</b>	<b>\$5,826,618</b>	<b>\$2,824,747,052</b>	<b>\$1,145,661,536</b>	<b>\$572,580,393</b>	<b>\$8,976,907,422</b>

*The funding value adjustment is the difference between the funding value of assets derived on page 16 and the total fund balance at market value. It was allocated to funding groups in proportion to the Total Fund Balances.*



## SUMMARY OF RETIRED MEMBER AND SURVIVOR PENSION BENEFICIARY INFORMATION

There were 16,917 retired members and 2,713 survivor beneficiaries reported for the June 30, 2003 valuation, involving an annual pension payroll of \$371,097,620. The distribution by division and group was:

STATE DIVISION	Retired Members			Survivor Pension Benefit		
	No.	Annual Pension	Avg. Age	No.	Annual Pension	Avg. Age
General	9,021	\$172,637,589	66.8	1,365	\$ 13,443,849	69.3
Police/Haz Duty	543	13,762,146	62.2	103	1,443,705	57.1
Totals	9,564	186,399,735	66.5	1,468	14,887,554	68.4
<b>MUNICIPAL DIVISION</b>						
General	5,186	91,214,656	66.7	965	9,031,241	68.2
Police	1,284	38,666,652	56.8	182	2,655,564	60.3
Fire	883	26,475,860	58.7	98	1,766,358	66.8
Totals	7,353	156,357,168	64.0	1,245	13,453,163	66.9
<b>PERA TOTALS</b>	<b>16,917</b>	<b>\$342,756,903</b>	<b>65.4</b>	<b>2,713</b>	<b>\$28,340,717</b>	<b>67.8</b>

Retired member and survivor pension beneficiaries added during the year ended June 30, 2003 and included in the preceding schedule totaled 1,439 with an annualized pension payroll of \$31,157,368. The distribution by division and group was:

STATE DIVISION	Retired Members			Survivor Pension Benefit		
	No.	Annual Pension	Avg. Age	No.	Annual Pension	Avg. Age
General	618	\$13,721,536	57.0	111	\$1,438,517	66.0
Police/Haz Duty	35	940,447	53.7	7	101,984	65.4
Totals	653	14,661,983	56.8	118	1,540,501	65.9
<b>MUNICIPAL DIVISION</b>						
General	402	8,217,179	57.6	68	718,591	63.7
Police	117	3,837,567	48.8	16	281,856	62.3
Fire	61	1,819,457	48.6	4	80,236	71.0
Totals	580	\$13,874,202	54.9	88	\$1,080,683	63.8
<b>PERA TOTALS</b>	<b>1,233</b>	<b>\$28,536,185</b>		<b>206</b>	<b>\$2,621,183</b>	

**RETIRED MEMBERS AND SURVIVOR PENSION BENEFICIARIES  
HISTORICAL DEVELOPMENT OF PENSION PAYROLL**

June 30	Pension Recipients		Pension Payroll		
	Number	Percent Increase (1)	Annual Amount	Percent Increase (1)	Average Amount
1955	217	n.a.%	\$ 251,900	n.a.%	\$ 1,161
1960	593	22.3	717,200	23.3	1,209
1965	1,072	12.6	1,440,800	15.0	1,344
1970	1,730	10.0	2,949,300	15.4	1,705
1975	2,883	10.8	6,885,000	18.5	2,388
1980	4,252	8.1	12,896,700	13.4	3,033
1985	6,698	9.5	37,478,500	23.8	5,595
1990	10,216	8.8	92,567,196	19.8	9,061
1995	13,028	5.0	158,150,864	11.3	12,139
1996	13,400	4.5	169,346,648	10.6	12,638
1997	14,631	5.5	201,694,430	12.4	13,785
1998	15,440	6.1	226,128,019	13.2	14,646
1999	16,370	5.7	253,914,635	12.3	15,511
2000	17,181	5.7	280,495,600	12.1	16,326
2001	18,037	6.1	309,090,461	12.8	17,136
2002	18,724	5.1	337,043,554	10.8	18,001
2003	19,630	4.9	371,097,620	10.4	18,905

(1) Annual rate of increase during the preceding 5 years.

**RETIRED MEMBERS AND SURVIVOR PENSION BENEFICIARIES  
DISPLAYED BY TYPE OF PENSION BEING PAID -- JUNE 30, 2003**

Type of Pension	Number	Pension	Average
<i>Normal Retirement Pensions</i>			
Single life pension terminating on death (options A, 1, and 2)	7,421	\$145,632,816	\$19,624
Two life 100% survivor pension (options B and 3)			
Retired member recipient	6,162	129,782,362	21,062
Survivor recipient	1,271	15,362,758	12,087
Two life 50% survivor pension (options C and 4)			
Retired member recipient	2,532	56,101,177	22,157
Survivor recipient	520	3,847,245	7,399
Single life with temporary child survivor pension (option D)			
Retired member recipient	116	3,007,387	25,926
Child recipient	-	-	-
<b>Total Normal Retirement Pensions</b>	<b>18,022</b>	<b>\$353,733,745</b>	<b>\$19,628</b>
<i>Disability Retirement Pensions</i>			
Single life pension terminating on death (options A, 1, and 2)	200	\$ 2,363,364	\$11,817
Two life 100% survivor pension (options B and 3)			
Retired member recipient	407	4,791,457	11,773
Survivor recipient	97	983,391	10,138
Two life 50% survivor pension (options C and 4)			
Retired member recipient	82	1,046,112	12,757
Survivor recipient	16	77,140	4,821
Single life with temporary child survivor pension (option D)			
Retired member recipient	14	126,352	9,025
Child recipient	-	-	-
<b>Total Disability Retirement Pensions</b>	<b>816</b>	<b>9,387,816</b>	<b>11,505</b>
<b>Pre-retirement Survivor Pensions</b>	<b>792</b>	<b>7,976,059</b>	<b>10,071</b>
<b>Total Pensions Being Paid</b>	<b>19,630</b>	<b>\$371,097,620</b>	<b>\$18,905</b>

**RETIRED MEMBERS AND SURVIVOR BENEFICIARIES  
DISPLAYED BY ATTAINED AGE - JUNE 30, 2003**

Attained Ages	State Division		Municipal Division		Totals	
	No.	Annual Pensions	No.	Annual Pensions	No.	Annual Pensions
Under 20	30	\$ 146,044	25	\$ 188,720	55	\$ 334,764
20-24	7	49,242	3	45,668	10	94,910
25-29	10	73,986	8	113,761	18	187,747
30-34	24	228,423	18	204,869	42	433,292
35-39	27	285,283	33	353,532	60	638,815
40-44	125	1,954,842	221	5,809,178	346	7,764,020
45-49	486	11,316,920	649	17,909,043	1,135	29,225,963
50-54	1,118	29,362,781	1,068	29,211,700	2,186	58,574,481
55-59	1,431	35,770,469	1,130	30,253,139	2,561	66,023,608
60-64	1,633	34,057,298	1,228	27,062,867	2,861	61,120,165
65-69	1,829	32,244,937	1,389	23,892,671	3,218	56,137,608
70-74	1,538	23,833,823	1,121	16,437,042	2,659	40,270,865
75-79	1,254	17,255,020	882	11,390,535	2,136	28,645,555
80-84	823	9,413,332	485	4,649,125	1,308	14,062,457
85-89	452	3,608,369	228	1,688,035	680	5,296,404
90-94	178	1,326,202	81	465,800	259	1,792,002
95 & Over	67	360,320	29	134,644	96	494,964
<b>Grand Total</b>	<b>11,032</b>	<b>\$201,287,291</b>	<b>8,598</b>	<b>\$169,810,329</b>	<b>19,630</b>	<b>\$371,097,620</b>

**FORMER MEMBERS DISPLAYED BY DIVISION  
JUNE 30, 2003**

**VESTED FORMER MEMBERS**

State Division	Estimated Number	Average Age	Average Service
General	1,786	49.6	9.6
Police/Corrections	83	43.8	10.4
Total State Division	1,869	49.3	9.6
Municipal Division			
General	1,115	49.0	9.9
Police	99	43.4	10.1
Fire	22	43.9	10.2
Total Municipal Division	1,236	48.4	9.9
<b>Total PERA</b>	<b>3,105</b>	<b>49.0</b>	<b>9.7</b>

**OUTSTANDING REFUNDS**

Division	Estimated Number	Accumulated Contributions
State Division		
General	28	\$ 97,473.00
Police/Corrections	1	9,836.00
Total State Division	29	\$ 107,309.00
Municipal Division		
General	40	208,786.00
Police	-	-
Fire	-	-
Total Municipal Division	40	\$ 208,786.00
<b>Total PERA</b>	<b>69</b>	<b>\$ 316,095.00</b>



**ACTIVE MEMBERS DISPLAYED BY DIVISION AND COVERAGE PLAN  
JUNE 30, 2003**

Divisions/Coverage Plan	Number	Payroll	Averages*		
			Age	Service	Pay
State Division					
General	20,820	\$ 704,491,713	43.3	8.5	\$ 33,837
Police	548	20,827,327	35.7	10.1	38,006
Corrections	1,256	36,303,229	38.7	9.2	28,904
<b>Total State Division</b>	<b>22,624</b>	<b>761,622,269</b>	<b>42.9</b>	<b>8.6</b>	<b>33,664</b>
Municipal Division					
General Cov. Plan 1	2,657	72,363,301	41.5	6.9	27,235
General Cov. Plan 2	5,085	141,745,455	42.9	7.5	27,875
General Cov. Plan 3	8,932	292,349,797	42.7	9.4	32,731
General Cov. Plan 4	621	17,095,453	43.6	7.4	27,529
Detention Officers Plan 1	736	20,440,716	39.6	6.5	27,773
Total General	18,031	543,994,722	42.5	8.3	30,170
Police Cov. Plan 1	108	3,067,170	40.1	5.9	28,400
Police Cov. Plan 2	64	1,725,995	38.7	6.5	26,969
Police Cov. Plan 3	44	1,292,704	39.0	7.9	29,380
Police Cov. Plan 4	106	3,722,597	38.9	9.2	35,119
Police Cov. Plan 5	1,809	73,981,308	37.9	10.3	40,896
Total Police	2,131	83,789,775	38.1	9.9	39,319
Fire Cov. Plan 1	13	293,538	31.4	4.7	22,580
Fire Cov. Plan 2	6	146,137	29.6	5.7	24,356
Fire Cov. Plan 3	8	241,772	31.0	2.0	30,222
Fire Cov. Plan 4	4	131,946	34.1	9.6	32,986
Fire Cov. Plan 5	1,141	47,137,047	37.8	10.5	41,312
Total Fire	1,172	47,950,440	37.6	10.4	40,913
<b>Total Municipal Division</b>	<b>21,334</b>	<b>675,734,937</b>	<b>41.8</b>	<b>8.6</b>	<b>31,674</b>
<b>Total PERA</b>	<b>43,958</b>	<b>\$ 1,437,357,206</b>	<b>42.4</b>	<b>8.6</b>	<b>\$ 32,698</b>

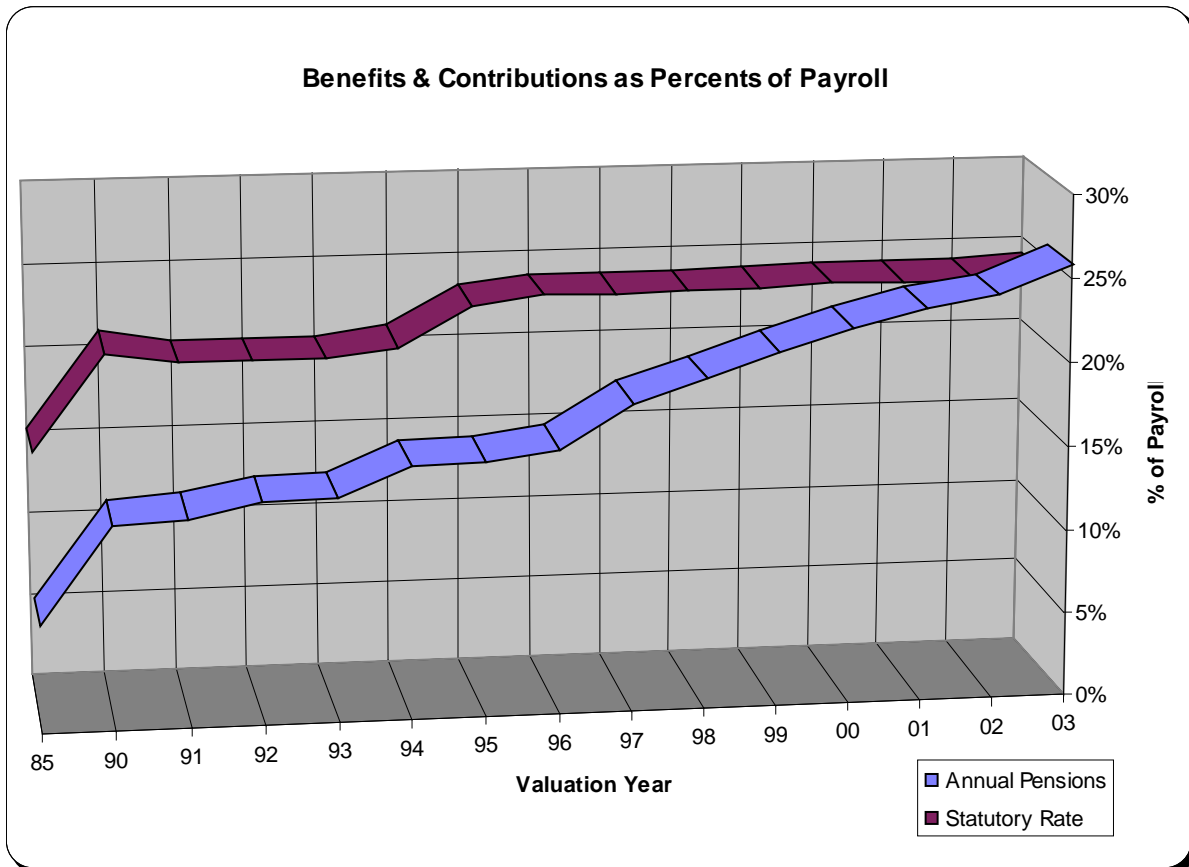
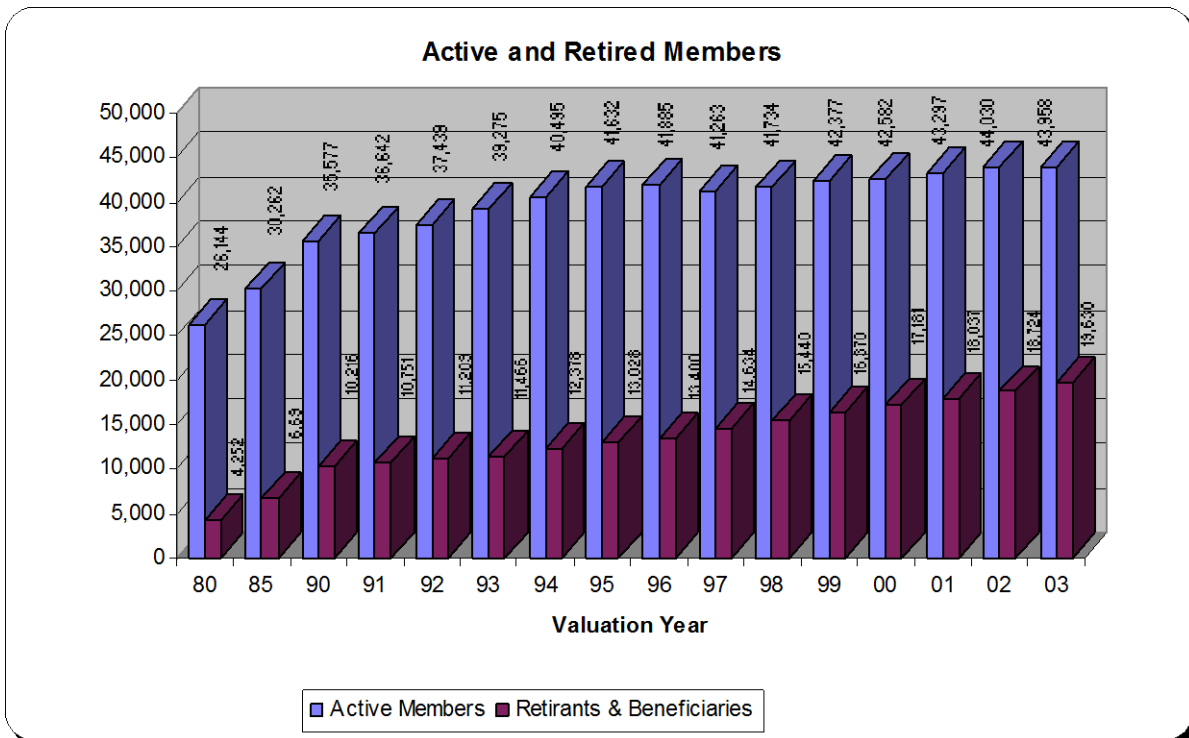
\* Averages are shown because of general interest. The valuation process utilizes individual information.

**ACTIVE MEMBERS -- HISTORICAL DEVELOPMENT**

June 30	Number	Payroll	Averages*		
			Age	Service	Pay
1956	8,632	\$ 28,998,712	n.a.	n.a.	\$3,359
1966	16,286	76,447,968	n.a.	n.a.	4,694
1972	18,148	127,685,808	n.a.	n.a.	7,036
1976	24,713	208,275,180	n.a.	n.a.	8,428
1980	26,144	317,301,000	39.2	6.9	12,137
1981	27,499	375,226,000	39.1	7.0	13,645
1982	27,251	416,655,000	39.6	7.4	15,290
1983	28,232	465,053,000	39.4	7.3	16,473
1984	28,071	485,408,000	39.2	7.4	17,292
1985	30,262	584,280,000	39.2	7.5	19,307
1986	31,092	572,685,000	39.9	7.5	18,419
1987#					
1988	32,620	644,663,769	39.3	7.2	19,763
1989	33,400	682,244,826	39.4	7.2	20,426
1990	35,577	760,639,320	39.6	7.4	21,380
1991	36,642	825,005,795	39.8	7.5	22,515
1992	37,439	843,978,100	39.9	7.5	22,543
1993	39,275	909,241,989	40.5	7.6	23,151
1994	40,495	943,330,328	40.6	7.7	23,295
1995	41,632	1,043,574,707	40.7	7.9	25,067
1996	41,885	1,098,635,667	41.1	8.3	26,230
1997	41,263	1,102,082,081	41.2	8.3	26,708
1998	41,692	1,146,991,018	41.3	8.2	27,511
1999	42,377	1,200,564,605	41.4	8.2	28,331
2000	42,582	1,253,305,021	41.6	8.3	29,433
2001	43,297	1,318,274,516	41.8	8.3	30,447
2002	44,030	1,396,209,000	42.1	8.4	31,710
2003	43,958	1,437,357,206	42.4	8.6	32,698

\* Averages are shown because of general interest. The valuation process utilizes individual information.

# No actuarial valuation was performed.



**ACTIVE MEMBERS**  
**STATE DIVISION BY ATTAINED AGE AND YEARS OF SERVICE**  
**JUNE 30, 2003**

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	No.	Valuation Payroll
15-19	42	-	-	-	-	-	-	42	\$ 1,018,925
20-24	860	19	-	-	-	-	-	879	19,764,816
25-29	1,478	355	10	-	-	-	-	1,843	47,835,764
30-34	1,598	895	350	9	-	-	-	2,852	84,949,452
35-39	1,224	747	743	304	17	-	-	3,035	98,537,708
40-44	1,224	760	739	678	356	6	-	3,763	131,534,266
45-49	1,090	688	693	569	451	95	2	3,588	129,836,911
50-54	897	573	652	501	359	87	8	3,077	115,470,255
55-59	612	409	479	401	293	52	17	2,263	85,356,443
60	73	55	71	68	29	8	2	306	11,511,131
61	57	62	73	59	29	7	7	294	10,615,894
62	43	45	47	43	12	9	1	200	7,429,461
63	28	42	40	20	5	-	-	135	4,827,097
64	20	23	24	2	9	3	-	81	2,978,574
65	17	24	21	10	3	4	2	81	2,982,977
66	11	8	14	10	2	1	1	47	1,932,186
67	10	13	6	3	1	1	-	34	1,204,319
68	9	2	10	2	1	-	1	25	839,538
69	7	4	2	2	-	-	1	16	733,364
70	2	1	3	3	4	-	-	13	480,727
71	4	1	1	-	1	-	-	7	256,101
72	8	-	2	-	1	-	-	11	398,509
73	1	1	4	-	-	-	-	6	201,632
74	2	2	1	-	-	-	-	5	110,574
75	3	-	3	1	-	-	1	8	277,891
76	1	2	1	-	-	-	2	6	256,586
77	-	-	-	-	-	-	-	-	-
78	1	-	-	-	1	-	-	2	79,687
79	2	-	2	-	1	-	-	5	201,481
<b>Totals</b>	<b>9,324</b>	<b>4,731</b>	<b>3,991</b>	<b>2,685</b>	<b>1,575</b>	<b>273</b>	<b>45</b>	<b>22,624</b>	<b>\$ 761,622,269</b>

**ACTIVE MEMBERS STATE DIVISION  
JUNE 30, 2003**

Service Years	Active Member Count			Active Member Pays	
	Males	Females	Total	Total	Average
0	1,023	1,444	2,467	\$ 70,828,174	\$ 28,710
1	961	1,161	2,122	57,869,144	27,271
2	818	967	1,785	50,637,298	28,368
3	702	848	1,550	45,899,890	29,613
4	675	725	1,400	42,895,100	30,639
5	524	683	1,207	37,531,911	31,095
6	405	472	877	29,746,669	33,919
7	330	394	724	24,520,006	33,867
8	426	507	933	31,744,059	34,024
9	506	484	990	34,353,647	34,701
10	439	465	904	32,277,151	35,705
11	403	370	773	29,012,981	37,533
12	403	430	833	31,820,470	38,200
13	405	339	744	28,092,864	37,759
14	379	358	737	28,293,044	38,389
15 & Up	2,395	2,183	4,578	186,099,861	40,651
<b>Totals</b>	<b>10,794</b>	<b>11,830</b>	<b>22,624</b>	<b>\$ 761,622,269</b>	<b>\$ 33,664</b>

**ACTIVE MEMBERS**  
**MUNICIPAL DIVISION BY ATTAINED AGE AND YEARS OF SERVICE**  
**JUNE 30, 2003**

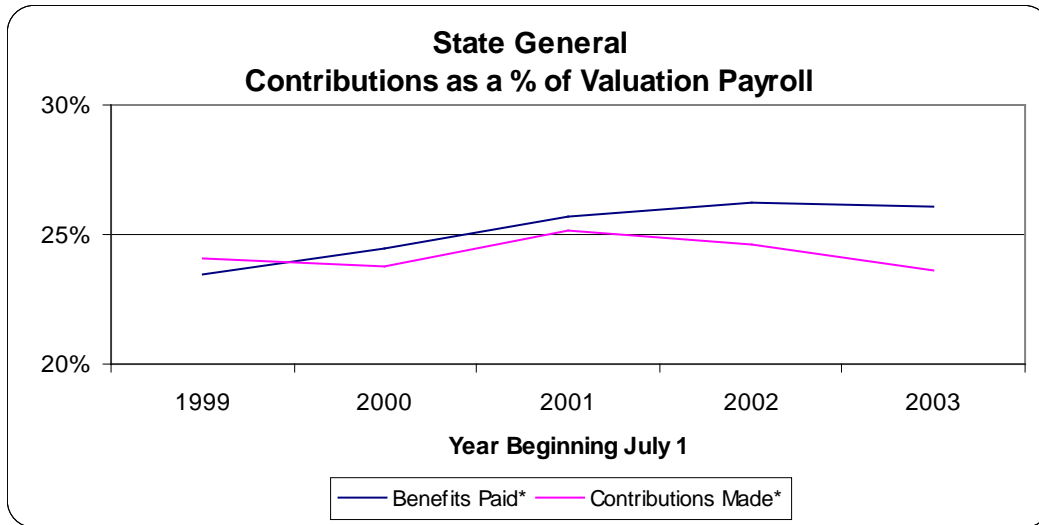
Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	No.	Valuation Payroll
15-19	51	-	-	-	-	-	-	51	\$ 978,129
20-24	944	15	-	-	-	-	-	959	22,473,892
25-29	1,524	441	9	-	-	-	-	1,974	52,653,712
30-34	1,655	1,072	389	7	-	-	-	3,123	90,857,976
35-39	1,058	841	755	450	13	-	-	3,117	101,477,825
40-44	1,084	710	768	782	327	9	-	3,680	124,848,629
45-49	877	606	571	554	400	56	-	3,064	104,560,151
50-54	693	481	450	403	329	83	5	2,444	83,518,593
55-59	452	302	357	298	218	44	20	1,691	57,629,658
60	52	57	52	47	35	8	1	252	8,433,012
61	54	55	46	51	23	9	4	242	7,767,070
62	43	40	34	20	13	6	1	157	5,072,433
63	32	32	22	20	11	3	-	120	3,673,185
64	28	28	16	18	10	2	-	102	2,916,052
65	23	19	14	4	6	3	-	69	1,953,727
66	15	12	9	9	2	-	2	49	1,265,042
67	18	11	7	3	4	2	3	48	1,229,551
68	8	10	8	4	3	-	1	34	951,748
69	7	7	5	5	1	1	1	27	750,100
70	11	3	4	3	1	-	-	22	566,273
71	6	4	5	-	-	-	2	17	382,220
72	6	5	2	1	5	-	-	19	462,370
73	4	4	7	-	-	1	-	16	293,610
74	5	3	4	-	-	-	1	13	269,993
75	3	2	3	1	-	-	-	9	154,396
76	5	3	1	1	1	-	-	11	189,921
77	3	1	1	-	-	-	-	5	107,076
78	1	1	-	-	-	-	-	2	24,840
79	5	4	5	1	1	1	-	17	273,753
<b>Totals</b>	<b>8,667</b>	<b>4,769</b>	<b>3,544</b>	<b>2,682</b>	<b>1,403</b>	<b>228</b>	<b>41</b>	<b>21,334</b>	<b>\$675,734,937</b>

**ACTIVE MEMBERS MUNICIPAL DIVISION  
JUNE 30, 2003**

Service Years	Active Member Count			Active Member Pays	
	Males	Females	Total	Total	Average
0	1,284	1,096	2,380	\$ 63,074,271	\$ 26,502
1	1,135	763	1,898	45,249,404	23,841
2	1,100	691	1,791	45,211,491	25,244
3	843	553	1,396	36,841,595	26,391
4	789	413	1,202	33,329,618	27,728
5	738	370	1,108	32,119,203	28,988
6	643	339	982	29,277,334	29,814
7	644	288	932	29,024,950	31,143
8	571	315	886	27,961,614	31,559
9	583	278	861	27,711,464	32,185
10	456	214	670	22,331,516	33,331
11	474	205	679	23,521,538	34,641
12	475	212	687	24,300,694	35,372
13	543	230	773	29,157,318	37,720
14	534	201	735	28,061,000	38,178
15 & Up	3,052	1,302	4,354	178,561,927	41,011
<b>Totals</b>	<b>13,864</b>	<b>7,470</b>	<b>21,334</b>	<b>\$675,734,937</b>	<b>\$31,674</b>

**State General Division**

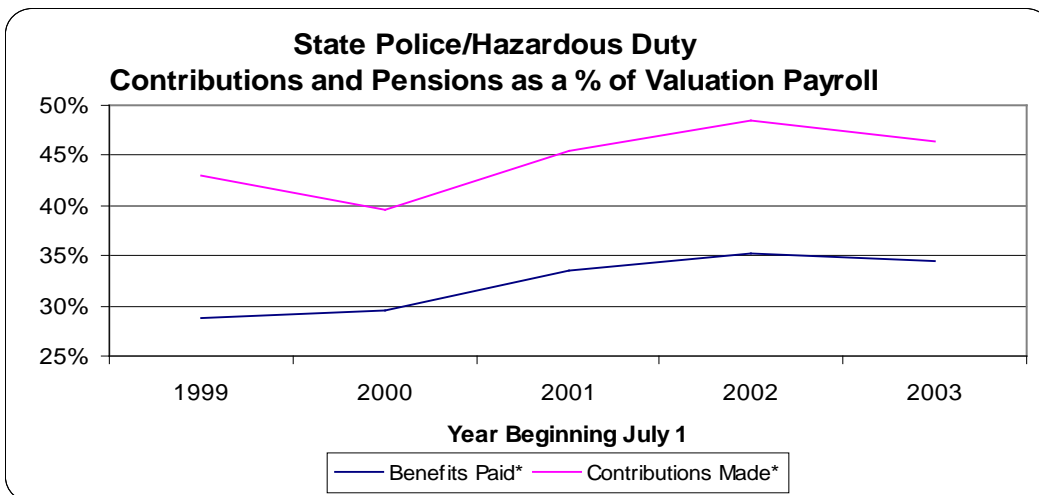
Year Beginning July 1,	Prior June 30 Valuation Payroll	Benefits Paid*		Contributions Made*	
		Dollars	% of Val Pay	Dollars	% of Val Pay
1999	\$550,442,610	\$129,234,642	23.48%	\$132,330,360	24.04%
2000	581,855,790	142,536,772	24.50%	138,315,298	23.77%
2001	607,374,322	155,937,504	25.67%	152,849,983	25.17%
2002	642,701,705	168,692,266	26.25%	158,412,415	24.65%
2003	698,626,579	181,992,344	26.05%	164,948,041	23.61%



\*Benefits paid include refunds. Contributions made include service purchases.

**State Police/Corrections Division**

Year Beginning July 1,	Prior June 30 Valuation Payroll	Benefits Paid*		Contributions Made*	
		Dollars	% of Val Pay	Dollars	% of Val Pay
1999	\$39,352,589	\$11,365,084	28.88%	\$16,951,300	43.08%
2000	41,567,067	12,279,427	29.54%	16,484,254	39.66%
2001	39,215,882	13,180,233	33.61%	17,852,316	45.52%
2002	40,399,940	14,197,401	35.14%	19,589,208	48.49%
2003	44,346,818	15,266,699	34.43%	20,537,182	46.31%

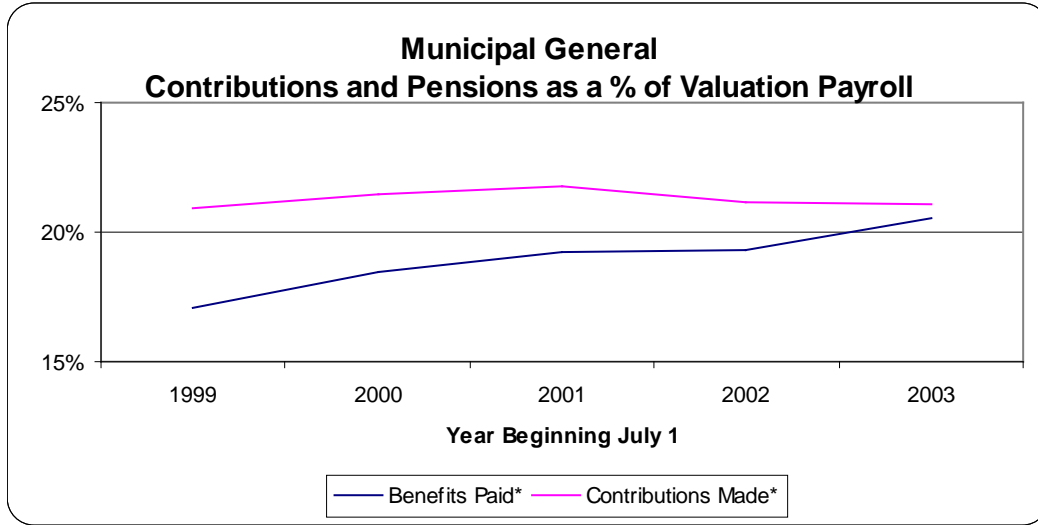


\*Benefits paid include refunds. Contributions made include service purchases.



**Municipal General Division**

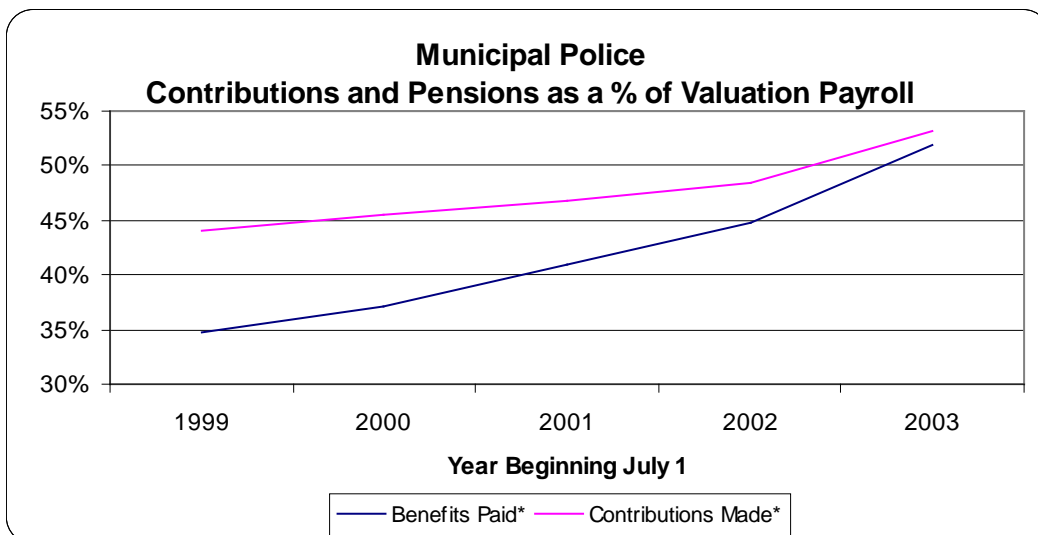
Year Beginning July 1,	Prior June 30 Valuation Payroll	Benefits Paid*		Contributions Made*	
		Dollars	% of Val Pay	Dollars	% of Val Pay
1999	\$437,341,401	\$74,755,609	17.09%	\$91,464,051	20.91%
2000	454,028,899	83,947,791	18.49%	97,331,885	21.44%
2001	475,745,977	91,318,357	19.19%	103,481,792	21.75%
2002	506,026,384	97,877,822	19.34%	107,160,858	21.18%
2003	527,857,221	108,367,775	20.53%	111,157,484	21.06%



\*Benefits paid include refunds. Contributions made include service purchases.

**Municipal Police Division**

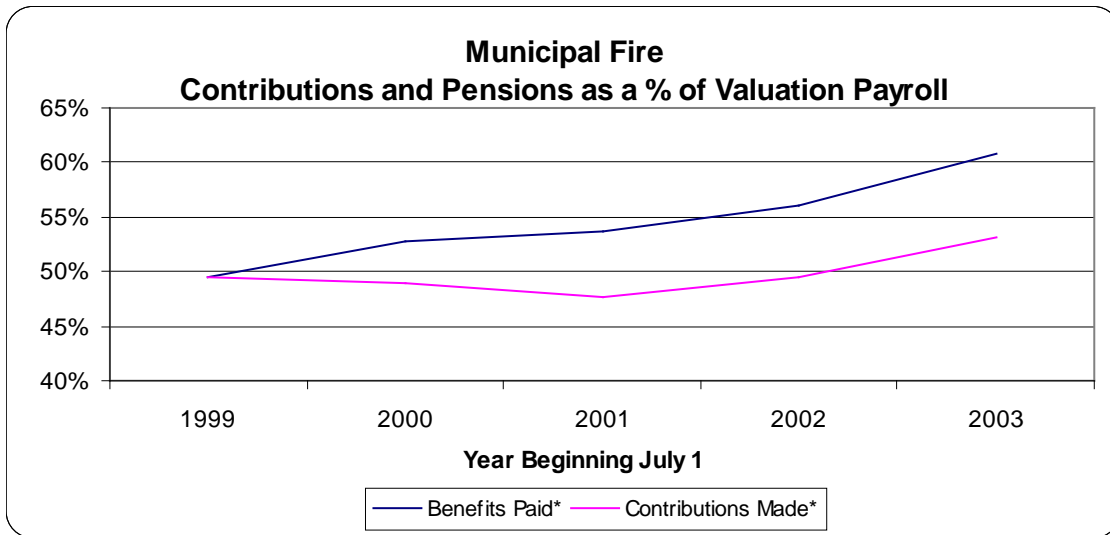
Year Beginning July 1,	Prior June 30 Valuation Payroll	Benefits Paid*		Contributions Made*	
		Dollars	% of Val Pay	Dollars	% of Val Pay
1999	\$79,313,544	\$27,515,732	34.69%	\$34,973,334	44.10%
2000	80,903,851	30,030,646	37.12%	36,803,948	45.49%
2001	81,903,288	33,605,401	41.03%	38,248,938	46.70%
2002	83,409,907	37,407,611	44.85%	40,347,363	48.37%
2003	80,091,903	41,619,437	51.96%	42,518,040	53.09%



\*Benefits paid include refunds. Contributions made include service purchases.

**Municipal Fire Division**

Year	Prior June 30 Beginning July 1, Valuation Payroll	Benefits Paid*		Contributions Made*	
		Dollars	% of Val Pay	Dollars	% of Val Pay
1999	\$40,540,874	\$20,061,958	49.49%	\$20,057,876	49.48%
2000	42,208,998	22,242,092	52.70%	20,689,892	49.02%
2001	45,065,551	24,175,958	53.65%	21,458,884	47.62%
2002	45,736,582	25,609,513	55.99%	22,645,384	49.51%
2003	45,386,480	27,617,507	60.85%	24,123,863	53.15%



*\*Benefits paid include refunds. Contributions made include service purchases.*

## Section 3

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### Summary of Benefit Provisions

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## SUMMARY OF BENEFIT PROVISIONS - - JUNE 30, 2003

### NORMAL RETIREMENT ELIGIBILITY CONDITIONS

Applicable to all members:

- Any age with 25 or more years of credited service; or
- Age 60 or older with 20 or more years of credited service; or
- Age 61 or older with 17 or more years of credited service; or
- Age 62 or older with 14 or more years of credited service; or
- Age 63 or older with 11 or more years of credited service; or
- Age 64 or older with 8 or more years of credited service; or
- Age 65 or older with 5 or more years of credited service.

Applicable to police and fire members under one of the following coverage plans:

- Municipal Police Coverage Plan 3
- Municipal Police Coverage Plan 4
- Municipal Police Coverage Plan 5
- Municipal Fire Coverage Plan 3
- Municipal Fire Coverage Plan 4
- Municipal Fire Coverage Plan 5

Any age with 20 or more years of credited service.

### NORMAL RETIREMENT PENSION AMOUNT

The amount of normal retirement pension is based on:

- Final average salary, which is the average of salary for the 36 consecutive months of credited service producing the largest average;
- Credited service (years and months); and the
- Coverage plan.

The pension accrual factor and maximum pension, as a percent of final average salary, under each coverage plan are:

<b>Coverage Plan</b>	<b>Pension Factor Per Year of Credited Service</b>	<b>Maximum Pension as Percent of Final Average Salary</b>
State General Member Coverage Plan 3	3.0%	80%
State Police and Adult Corrections Officers Member Coverage Plan 1	3.0	80
Hazardous Duty (Juvenile Corrections Officer) Coverage Plan 2	3.0	100
Municipal General Member Coverage Plan 1	2.0	60
Coverage Plan 2	2.5	75
Coverage Plan 3	3.0	80
Coverage Plan 4	3.0	80
Municipal Detention Officer Coverage Plan 1	3.0	80
Municipal Police Member Coverage Plan 1	2.0	60
Coverage Plan 2	2.5	100
Coverage Plan 3	2.5	100
Coverage Plan 4	3.0	80
Coverage Plan 5	3.5	80
Municipal Fire Member Coverage Plan 1	2.0	60
Coverage Plan 2	2.5	100
Coverage Plan 3	2.5	100
Coverage Plan 4	3.0	80
Coverage Plan 5	3.5	80

### **VESTED TERMINATION OF MEMBERSHIP (EMPLOYMENT)**

Termination of employment and membership with at least 5 years of credited service. Accumulated member contributions must be left on deposit. Payment of the pension is available upon eligibility for normal retirement. In addition, certain disability and survivor pension provisions apply.

## **NORMAL AND OPTIONAL FORMS OF PAYMENT**

The normal form of payment is for life. Optional contingent survivor beneficiary forms of payment are available on an actuarial equivalent basis. Pension payments can never aggregate less than the member's accumulated contributions.

## **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 50% of final average salary, or, if larger, 80% of the accrued normal retirement pension. The amount of pension payable to each eligible child is an equal share of 25% of final average salary. If there is not an eligible spouse or the eligible spouse dies, and if there are 2 or more eligible children, the amount of pension payable to each eligible child is an equal share of 50% of final average salary. An eligible child is an unmarried natural or adopted child who is under age 18 years. 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.

## **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 30% of final average salary, or if larger, 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, with each other child, of 25% of final average salary, or, if greater, 50% of accrued normal retirement pension. An eligible child is an unmarried natural or adopted child who is under age 18 years. 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.

**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 line-of-duty. The amount of disability pension is the accrued normal retirement pension at time of disability retirement. If the disability is in line-of-duty, the credited service used is the amount that would have been acquired when first eligible for normal retirement.

**COST-OF-LIVING INCREASES**

Pensions are increased each July 1 by 3% if retirement has been in effect for at least 2 full calendar years. If retired on account of disability or if at least age 65, the 2 calendar year waiting period is reduced to 1 full calendar year.

**SERVICE CREDIT**

Members in the State Police and Adult Corrections Officers Coverage Plan and members in the Municipal Detention Officers Coverage Plan receive 1.2 years of credited service for each year of service rendered.

## CONTRIBUTIONS BY MEMBERS AND EMPLOYERS

Contributions by members and affiliated public employers are at the following rates.

	Percent of Salary Member	Contribution Rate Employer
State General Member Coverage Plan 3	7.42%	16.59%
State Police Member and Adult Correctional Officer Member Coverage Plan 1	7.60	25.10
Hazardous Duty (Juvenile Corrections) Member Coverage Plan 2	4.78	25.72
Municipal General Member Coverage Plan 1	7.00	7.00
Municipal General Member Coverage Plan 2	9.15	9.15
Municipal General Member Coverage Plan 3	13.15	9.15
Municipal General Member Coverage Plan 4	15.65	11.65
Municipal Detention Officer Member Coverage Plan 1	16.65	16.65
Municipal Police Member Coverage Plan 1	7.00	10.00
Municipal Police Member Coverage Plan 2	7.00	15.00
Municipal Police Member Coverage Plan 3	7.00	18.50
Municipal Police Member Coverage Plan 4	12.35	18.50
Municipal Police Member Coverage Plan 5	16.30	18.50
Municipal Fire Member Coverage Plan 1	8.00	11.00
Municipal Fire Member Coverage Plan 2	8.00	17.50
Municipal Fire Member Coverage Plan 3	8.00	21.25
Municipal Fire Member Coverage Plan 4	12.80	21.25
Municipal Fire Member Coverage Plan 5	16.20	21.25

Interest is credited to member contributions, on each June 30, at the rates set annually by the Retirement Board. The current rate is 5.25%.



## Section 4

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**Description of Actuarial Cost Methods**  
**Summary of Estimates of Future**  
**Experience Used for the Valuation**  
**Definitions of Technical Terms**

## 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 the PERA 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 member are sufficient to accumulate the value of the member's pension at time of retirement.
- (ii) Each annual normal cost is a constant percentage of the member's year-by-year projected pensionable compensation.

The individual entry-age actuarial cost method allocates the actuarial present value of each member's projected benefits on a level basis over the member's pensionable compensation between the entry age of the member and the pattern of projected exit ages.

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 accrued assets from the actuarial accrued liability determines the unfunded actuarial accrued liability. The period of time needed to finance the unfunded actuarial accrued liability with current statutory contribution rates is determined using a level percent of payroll amortization technique.

Active member payroll was projected to increase 5.0% a year for the purpose of determining the financing period. This estimate is consistent with the base rate of increase in salaries used to calculate actuarial present values.

## **ESTIMATES FOR FUTURE PERA EXPERIENCE USED FOR THE VALUATION**

Funding objective contribution requirements and actuarial present values are calculated by applying estimates of future plan activities (actuarial assumptions) to the benefit provisions and people information of PERA, using the actuarial cost methods described on the previous page.

The principal areas of activity which require estimates are:

- (i) long-term rates of investment return to be generated by the assets of PERA.
- (ii) patterns of pay increases to members.
- (iii) rates of mortality among members, retired members, and beneficiaries.
- (iv) rates of withdrawal of active members.
- (v) rates of disability among active members.
- (vi) the age patterns of actual retirements.

In making a valuation, the monetary effect of each activity is calculated for as long as a present covered person survives - - - a period of time which can be as long as a century.

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Actual activities of PERA will not coincide exactly with estimated activities, due to the nature of the activities. Each valuation provides a complete recalculation of estimated future activities and takes into account the effect of past differences between estimated and actual activities. The result is a continual series of adjustments (usually small). From time to time one or more of the estimates are modified to reflect experience trends (but not random or temporary year to year fluctuations).

The estimates of future INFLATION, REAL INVESTMENT RETURN in excess of inflation and SALARY INCREASES were first used for the June 30, 1985 actuarial valuation. The fiscal estimates are used in combination with the demographic estimates to determine the present value of amounts expected to be paid in the future.

**Inflation.** Four and one-half percent per annum, compounded annually. This is the rate at which growth in the supply of money and credit is assumed to exceed growth in the supply of goods and services. It may be thought of as the rate of depreciation of the purchasing power of the dollar. There are a number of indices for measuring the inflation rate. The recent inflation rate, as measured by the Consumer Price Index, has been:

	Year Ended June 30					Average for		
	2003	2002	2001	2000	1999	Last 5 Yrs.	Last 10 Yrs.	Last 30 Yrs.
Actual	2.1%	1.1%	3.2%	3.7%	2.0%	2.4%	2.4%	4.9%

**Real Investment Return.** Three and one-half percent per annum, compounded annually. This is the rate of return (net of administrative and investment expenses) to be produced by investing a pool of assets in an inflation-free environment.

In the following schedules, State Corrections includes Adult Corrections Officers and Juvenile Corrections Officers. Municipal General includes Municipal Detention Officers.

**Salary Increases.** Salary increases occur in recognition of (i) individual merit and longevity, (ii) inflation-related depreciation of the purchasing power of salaries, and (iii) and other factors such as productivity gains and competition from other employers for personnel. A schedule of long-term rates of increase is used to project salaries from valuation salaries to final average salaries upon which pensions are based. Sample rates follow:

			Annual Rates of Salary Increase for Sample Years of Service				
			1	5	10	15	20
<b>Attributable to:</b>							
General Increase in Wage Level Due to:							
	Inflation		4.5%	4.5%	4.5%	4.5%	4.5%
	Other Factors		0.5	0.5	0.5	0.5	0.5
	State General		9.0	3.0	2.0	1.0	0.5
	State Police		10.0	8.0	6.2	5.0	2.0
	State Corrections		9.5	2.2	1.5	0.5	0.5
	Municipal General		8.0	4.0	1.7	1.0	0.5
	Municipal Police		10.0	3.7	3.7	2.5	2.5
	Municipal Fire		10.5	7.7	4.7	2.0	2.2

**Mortality Table.** The 2000 Group Annuity Mortality Table (1971 GAM projected), set back 2 years for men and 7 years for women for healthy lives. Special disabled mortality is used for disabled lives.

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

<b>Retired Life Non-Disabled Mortality Table</b>						
	<b>Present Value of</b>		<b>Present Value of</b>		<b>Future Life</b>	
<b>Sample</b>	<b>\$1 Monthly for Life</b>		<b>\$1.00/Mo. for Two Years</b>		<b>Expectancy Years</b>	
<b>Ages</b>	<b>Men</b>	<b>Women</b>	<b>Men</b>	<b>Women</b>	<b>Men</b>	<b>Women</b>
40	\$143.69	\$147.07	\$197.99	\$206.58	39.41	44.22
45	139.09	143.69	187.52	197.99	34.67	39.41
50	133.15	139.09	175.25	187.52	30.06	34.67
55	125.85	133.15	161.34	175.25	25.67	30.06
60	116.89	125.85	145.67	161.34	21.50	25.67
65	105.91	116.89	128.13	145.67	17.57	21.50
70	93.21	105.91	109.43	128.13	13.99	17.57
75	79.97	93.21	91.19	109.43	10.91	13.99
80	66.37	79.97	73.63	91.19	8.29	10.91
85	53.86	66.37	58.33	73.63	6.23	8.29

<b>Retired Life Disabled Mortality Table</b>						
	<b>Present Value of</b>		<b>Present Value of</b>		<b>Future Life</b>	
<b>Sample</b>	<b>\$1 Monthly for Life</b>		<b>\$1.00/Mo. for Two Years</b>		<b>Expectancy Years</b>	
<b>Ages</b>	<b>Men</b>	<b>Women</b>	<b>Men</b>	<b>Women</b>	<b>Men</b>	<b>Women</b>
40	\$117.97	\$145.01	\$155.18	\$201.37	27.71	41.25
45	118.90	140.94	154.36	191.71	26.19	36.49
50	115.65	135.50	147.56	180.13	23.65	31.83
55	110.58	128.78	138.32	166.93	20.89	27.36
60	104.12	120.72	127.39	152.27	18.11	23.16
65	96.18	110.99	114.90	135.95	15.36	19.18
70	86.79	99.18	101.11	117.83	12.71	15.45
75	76.18	85.84	86.48	98.87	10.25	12.08
80	64.75	71.36	71.65	79.77	8.02	9.13
85	53.12	57.15	57.36	62.20	6.09	6.72

**Rates of Retirement.** These rates are used to measure the probability of an eligible member retiring at the indicated ages or indicated service.

Percents Retiring at Indicated Ages (by Coverage Plan)								
Retirement Ages	State General		State	State	Municipal General		Municipal	Municipal
	Male	Female	Police	Corrections	Male	Female	Police	Fire
60	25%	30%	20%	20%	25%	10%	20%	10%
61	25	35	20	20	30	15	20	10
62	50	50	40	20	30	25	40	50
63	35	35	50	30	30	25	20	50
64	35	35	50	40	30	25	25	50
65	60	40	100	80	40	35	100	100
66	30	35		50	25	25		
67	30	50		100	20	15		
68	30	20			15	20		
69	35	35			15	20		
70	20	30			20	20		
71	20	30			10	25		
72	20	30			10	25		
73	20	20			15	25		
74	20	20			50	50		
75	100	100			100	100		

Percents Retiring at Indicated Service (by Coverage Plan)								
Retirement Service	State General		State	State	Municipal General		Municipal	Municipal
	Male	Female	Police	Corrections	Male	Female	Police	Fire
20	%	%	10%	%	%	%	10%	10%
21			10				10	10
22			10				6	10
23			10				6	10
24			10				6	10
25	10	10	10	40	5	5	10	10
26	10	10	10	60	5	5	10	10
27	10	10	10	50	10	5	15	10
28	10	10	10	50	5	5	15	10
29	10	10	50	50	5	5	30	10
30	20	10	100	50	5	10	100	10
31	10	18		50	10	10		10
32	20	10		50	10	10		50
33	10	10		50	100	100		50
34	10	35		100				50
35	15	35						100
36	25	100						
37	100	100						
38								
39								
40								

It was assumed that in addition to the State Corrections rates, Adult Corrections Officers would have a 25% probability of retiring upon attaining 20-24 years of service. Municipal Detention Officers were assumed to retire in accordance with the Municipal Fire rates.

**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 members who are within the retirement rate range. Separation rates are presumed to be service related during the first 5 to 7 years of employment and age related thereafter.

Sample Ages	Years of Svc	Percent of Active Members Terminating During Year										
		State General		State Police	State Corrections		Municipal General		Municipal Police		Municipal Fire	
		Men	Women		Men	Women	Men	Women	Men	Women	Men	Women
All	0	35.0%	33.0%	12.0%	44.0%	20.0%	35.0%	40.0%	30.0%	25.0%	15.0%	10.0%
	1	20.0	18.0	4.0	35.0	55.0	20.0	20.0	15.0	10.0	10.0	25.0
	2	12.0	13.0	3.0	25.0	13.0	11.0	13.0	9.0	10.0	5.0	10.0
	3	11.0	11.0	6.0	20.0	20.0	9.5	11.0	9.0	12.0	4.0	8.0
	4	8.0	9.0	4.5	9.0	20.0	7.0	8.0	9.0	5.0	3.5	7.0
	5	n/a	5.0	4.5		10.0	5.0	5.5				
	6			4.5		10.0						
	7					10.0						
20	Over Select Period	8.0	10.0	1.5	9.0	6.0	2.0	12.0	10.0	10.0	3.6	3.6
25		5.6	6.5	1.5	9.0	6.0	2.0	7.8	6.5	6.5	3.6	3.6
30		4.2	4.2	1.5	7.0	6.0	2.0	5.0	4.1	4.1	2.8	2.8
35		3.3	2.9	1.5	4.8	6.0	2.0	3.4	2.5	2.5	1.9	1.9
40		2.5	2.2	1.5	3.3	6.0	2.0	2.7	1.5	1.5	1.3	1.3
45		2.0	2.0	1.5	2.2	6.0	2.0	2.4	1.0	1.0	0.9	0.9
50		1.7	1.9	1.5	1.8	6.0	2.0	2.3	0.9	0.9	0.7	0.7
55		1.6	1.5	1.5	1.8	6.0	2.0	1.9	0.9	0.9	0.7	0.7
60		1.6	1.5	1.5	1.8	6.0	2.0	1.8	0.9	0.9	0.7	0.7
65		1.6	1.5	1.5	1.8	6.0	2.0	1.8	0.5	0.5	0.7	0.7



**Rates of Disability.** The rates are used to measure the probabilities of active members becoming disabled. Rates for sample ages follow.

Sample Ages	Percent Becoming Disabled at Indicated Ages		
	State General and Municipal General	State Corrections	State Police/ Municipal Police/Fire
20	0.04%	0.14%	0.15%
25	0.05	0.18	0.18
30	0.06	0.20	0.20
35	0.08	0.28	0.29
40	0.13	0.42	0.42
45	0.19	0.64	0.65
50	0.31	1.04	1.05
55	0.55	1.84	1.84
60	0.92	3.06	3.06
65	0.99	3.30	3.30

**Administrative and Investment Expenses.** All expenses are deducted from gross investment income.

**Active Member Group Size.** The valuation is based on a stationary group size.

## 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 benefits payments and the actuarial present value of future normal costs. Also referred to as “accrued liability” or “prior service liability.”

***Actuarial Experience Estimates.*** Estimates of expected future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Demographic estimates (rates of mortality, disability, turnover and retirement) are generally based on past experience, modified for projected changes in conditions. Fiscal estimates (salary increases, inflation and real investment return) consist of the underlying rates in an inflation-free environment plus a provision for a long-term average rate of inflation.

***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. Sometimes referred to as the “actuarial valuation cost method.”

***Actuarial Equivalent.*** A single amount or series of amounts of equal actuarial present value to another single amount or series of amounts, computed on the basis of appropriate actuarial experience estimates.

***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. Also referred to as “present value.”

**Actuary.** A person who is trained in the applications of probability and compound interest to problems in business and finance that involve payment of money in the future, contingent upon the occurrence of future events.

**Amortization.** Paying off an interest-discounted 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. Sometimes referred to as “current service cost.”

**Unfunded Actuarial Accrued Liability.** The difference between the actuarial accrued liability and the funding value of assets. Sometimes referred to as “unfunded past service liability,” “unfunded accrued liability” or “unfunded supplemental present value.”

Most retirement systems have an unfunded actuarial accrued liability. An amount arises each time new benefits are added, an affiliated public employer adopts a new coverage plan, and an experience loss occurs.

The existence of an unfunded actuarial accrued liability is not in itself bad, any more than a mortgage on a house is bad. An unfunded actuarial accrued liability does not represent a debt that is payable today. What is important is control of the amount of unfunded actuarial accrued liability and the trend in the amount (after due allowance for devaluation of the dollar from inflation and deliberate actions affecting the amount).

## Section 5

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**Disclosures and Supplementary  
Information Required by  
Statements No. 25 and No. 27  
of the Governmental  
Accounting Standards Board**

## Actuarial Accrued Liability

The actuarial accrued liability is a measure intended to help users assess (i) a pension fund's funded status on a going concern basis, and (ii) progress being made toward accumulating the assets needed to pay benefits as due. Allocation of the actuarial present value of projected benefits between past and future service was based on service using the individual entry-age actuarial cost method. Assumptions, including projected pay increases, were the same as used to determine the System's level percent of payroll annual required contribution between entry-age and assumed exit age. Entry-age was established by subtracting credited service from current age on the valuation date.

The preceding methods comply with the financial reporting standards established by the Governmental Accounting Standards Board.

The entry age actuarial accrued liability was determined as part of an actuarial valuation of the plan as of June 30, 2003. Significant actuarial assumptions used in determining the entry age actuarial accrued liability include (a) a rate of return on the investment of present and future assets of 8.00% per year compounded annually, (b) projected salary increases of 5.0% per year compounded annually (4.5% attributable to inflation and 0.5% attributable to productivity), and (c) additional projected salary increases of 0.0% to 10.5% per year attributable to seniority/merit.

Actuarial Accrued Liability:	
Active members	\$3,980,075,754
Retired members and beneficiaries currently receiving benefits	5,049,491,478
Vested terminated members not yet receiving benefits	<u>186,378,252</u>
Total Actuarial Accrued Liability	9,215,945,484
Actuarial Value of Assets (market value was \$8,084,949,036)	<u>8,971,080,804</u>
Assets in Excess of Actuarial Accrued Liability	\$ 244,864,680

During the year ended June 30, 2003, the Plan experienced a net change of \$717,193,802 in the actuarial accrued liability. Of that amount \$42,295,264 was due to plan changes. There were no changes in actuarial assumptions during the year.

@ Currently the actuarial value (AV) of assets exceeds the market value by \$891,958,386. The AV of assets is based on a smoothing method which phases in the difference between the assumed rate of return and the actual rate of return each year over a four year period (see page 16). There are currently three years of losses that have yet to be completely recognized (phased in). Recognition of the remainder of those losses over the next three years could have a downward impact on the funding status.

## REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year ended June 30,	Actuarial Valuation Date	Annual Required Contribution
1994	6/30/1993	\$125,240,793
1995	6/30/1994	136,944,079
1996	6/30/1995	158,085,666
1997	6/30/1996	162,495,955
1998	6/30/1997	165,248,661
1999	6/30/1998	174,324,518
2000	6/30/1999	182,000,473
2001	6/30/2000	196,544,110
2002	6/30/2001	204,734,125
2003	6/30/2002	213,712,566
2004	6/30/2003*	206,835,702

\* *Projected amount: Actual required contribution dollar amount will be based on the statutory contribution rate and the actual pensionable payroll for the period.*

## REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability-EA	Unfunded Actuarial Accrued Liability	Funded Ratio	Covered Payroll	UAAL as a Percent of Covered Payroll
6/30/1994	\$2,974,815,939	\$3,976,512,076	\$1,001,696,137	74.8%	\$ 943,330,328	106.2%
6/30/1995	3,364,452,385	4,646,242,538	1,281,790,153	72.4%	1,043,574,707	122.8%
6/30/1996	3,845,137,772	5,054,258,029	1,209,120,257	76.1%	1,098,635,667	110.1%
6/30/1997	4,560,312,444	5,558,679,193	998,366,749	82.0%	1,102,082,081	90.6%
6/30/1998	5,487,475,524	6,000,438,884	512,963,360	91.5%	1,146,991,018	44.7%
6/30/1999	6,490,295,227	6,548,102,870	57,807,643	99.1%	1,146,991,019	5.0%
6/30/2000	7,522,348,007	7,112,379,662	(409,968,345)	105.8%	1,253,305,021	-
6/30/2001	8,302,819,833	7,876,574,893	(426,244,939)	105.4%	1,318,274,517	-
6/30/2002	8,763,443,681	8,498,751,682	(264,691,999)	103.1%	1,396,209,000	-
6/30/2003	8,971,080,804	9,173,650,220	202,569,416	97.8%	1,437,357,206	14.1%
6/30/2003*	8,971,080,804	9,215,945,484	244,864,680	97.3%	1,437,357,206	17.0%

\* *Plan Change.*

@ *Currently the actuarial value (AV) of assets exceeds the market value by \$891,958,386. The AV of assets is based on a smoothing method which phases in the difference between the assumed rate of return and the actual rate of return each year over a four year period (see page 16). There are currently three years of losses that have yet to be completely recognized (phased in). Recognition of the remainder of those losses over the next three years could have a downward impact on the funding status.*

## NOTES TO REQUIRED SUPPLEMENTARY INFORMATION SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

Valuation Date	June 30, 2003
Actuarial Cost Method	Individual Entry Age
Amortization Method	Level Percent of Payroll, open
Remaining Amortization Period	17 years
Asset Valuation Method	4-year smoothed market

### Actuarial Assumptions:

Investment Rate of Return*	8.00%
Projected Salary Increases*	5.00% - 15.50%
*Includes Inflation at	4.50%
Cost-of-Living Adjustments	3.00%

Valuation Date	June 30, 2003
Actuarial Cost Method	Individual Entry Age
Amortization Method	Level Percent of Payroll, open
Remaining Amortization Period	17 years
Asset Valuation Method	4-year smoothed market
Actuarial Assumptions:	
Investment Rate of Return*	8.00%
Projected Salary Increases*	5.00% - 15.50%
*Includes Inflation at	4.50%
Cost-of-Living Adjustments	3.00%

November 7, 2003 FX

Mr. Terry Slattery, Executive Director  
New Mexico PERA  
1120 Paseo de Peralta  
Santa Fe, New Mexico 87501

Dear Mr. Slattery:

Enclosed are 25 copies of the final June 30, 2003 actuarial valuation report of PERA New Mexico.

Sincerely yours,

Kenneth G. Alberts

KGA:kga  
Enclosures

cc: Mr. Kurt Weber, Deputy Executive Secretary  
Ms. Mary Frederick, Deputy Executive Secretary  
Ms. Lee Ann Rael, Comptroller  
Ms. Susan Pittard, General Council  
Deloitte & Touche, LLP (+ 1 report copy)  
Attn: Mr. Dan Whitnah, Senior Manager  
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