



A.040.2000

**Public Pension  
Professionals, Inc.**

---

# **Kern County Employees' Retirement Association**

---

Actuarial Valuation as of December 31, 2000

June 13, 2001

---

**P<sup>3</sup>**

*Actuaries you can understand*

# Table of Contents

<b>HIGHLIGHTS</b>	<b>2</b>
<b>BOARD SUMMARY</b>	<b>3</b>
A. Major Events	3
B. Funded Position – Regular Benefits	6
C. Contribution Rates	10
<b>TECHNICAL INFORMATION</b>	<b>14</b>
A. Asset Information	14
B. Liability Information	20
C. Funded Percentage	23
D. Employer Contribution Rates	27
E. Summary of Major Plan Provisions – General Members	30
F. Member Contribution Rates – General Members	35
G. Summary of Major Plan Provisions – Safety Members	37
H. Member Contribution Rates – Safety Members	42
I. Summary of Actuarial Assumptions and Funding Methods	44
J. Member Information	55
K. Actuarial Certification	65

Section

1

# Highlights

This report presents the results of the December 31, 2000 actuarial valuation of the Kern County Employees' Retirement Association (KCERA). Results from the prior valuation are shown for comparison. All dollar amounts are in millions.

December 31, 2000    December 31, 1999

## Recommended Contribution Rates (as a percentage of pay)

General – County	12.29%	11.60%
General – Districts Electing MOU	15.04%	13.92%
General – Districts Not Electing MOU	9.51%	9.90%
Safety	14.66%	17.05%
Total Plan	12.89%	13.09%

## Funded Status – Regular Benefits

Actuarial Accrued Liability	\$1,389.0	\$1,324.7
Actuarial Value of Assets	\$1,434.9	\$1,325.9
UAAL	(\$45.9)	\$(1.3)
Funded Percentage	103%	100%

## Funded Status – SRBR

Actuarial Accrued Liability	\$54.4	\$56.8
Actuarial Value of Assets	\$157.9	\$141.1
UAAL	(\$103.5)	(\$84.3)
Funded Percentage	290%	249%

## Key Assumptions

Interest Rate	8.00%	8.00%
Average Salary Increase	5.30%	5.30%
Inflation	4.00%	4.00%

P<sup>3</sup>

*Actuaries you can understand*

Section

# 2 Board Summary

This actuarial valuation report has been prepared primarily to review KCERA's funded status and determine the contributions required of the Plan Members and Participating Employers. This is done annually by taking a snapshot of the Plan on the basis of the plan provisions, plan membership, and investments as of the end of each plan year.

## A. Major Events

The major events affecting the contribution rates and funded position of the Plan primarily fall into four categories:

- Investments
- Demographics,
- Assumptions and Methodology, and
- Benefits.

### Investments

Empirical evidence suggests that over 90% of the return achieved by a portfolio is due to the allocation of assets within that portfolio. As of December 31, 2000, KCERA's target asset allocation was:

Domestic Equities	35.0%
International Equities	20.0%
Fixed Income	35.0%
Real Estate	5.0%
Alternative Investments	5.0%
Cash	0.0%

During the past year, Plan investments suffered a loss of approximately 2.8% on a market value basis. The impact of the investment loss was reduced by the use of an asset smoothing technique. Due to the asset smoothing technique, the return on an actuarial basis was approximately 11.0%. This was more than the Plan's assumed rate of 8.0%. This resulted in an investment gain of approximately \$153.3 million net of investment expenses and an actuarial gain to the plan of approximately \$30.7 million. Detailed information regarding plan investments is shown in the Asset Information subsection in the Technical Information section of the report.

## Demographics

The number of active members increased by 4.8% from 7,138 to 7,484. The average pay reported to us decreased by 6.3%. This caused the total covered payroll to drop by 1.4% to \$283.2 million.

The number of retired members and beneficiaries receiving pension checks increase by 3.7% from 4,159 to 4,314, and the average monthly benefit check increased by 3.2% to \$1,210.

## Assumptions and Methodology

### Matching Prior Results

This marks the first valuation performed for KCERA by Public Pension Professionals, Inc (P<sup>3</sup>). As part of the transition from the prior actuary, we received the data used in the prior valuation along with information related to the benefits valued and the assumptions employed in that valuation. We attempted to match the liabilities developed by the prior actuary and were able to get within 1.5% of their calculations of the Present Value of Benefits and the Actuarial Accrued Liability.

### Change in Asset Smoothing Methodology

Prior to the December 31, 2000 actuarial valuation, the Retirement System used one asset value to determine its reserves (and the amount allocated semi-annually to the Supplemental Retiree Benefit Reserve), and another asset value to determine the employer contribution rate.

At the May 2001 Retirement Board meeting, we made a series of recommendations to adjust the actuarial value of assets. These reformations, effective with the December 31, 2000 actuarial valuation, were that the asset values be consolidated into a consistent value. We recommended that a one-time adjustment be made to each of the values, bringing them to market value as of that date. Moving forward, we recommended that a five-year spread gain method be adopted. Under this method, differences between expected investment return and actual investment return (net of investment fees) would be spread over 10 semi-annual periods.

The initial impact of this change will be to decrease the actuarial value of assets by \$19,760,091. This reduction is less than 1.5% of the total assets as of that date.

Detailed information regarding the impact of these changes on the Plan's funded percentage are shown in the Funded Percentage section in the Technical Information section of this report.

---

**P<sup>3</sup>**

*Actuaries you can understand*

## Benefits

There were no changes in plan provisions affecting Regular Plan benefits that took effect during the current year.

## Future Issues

The County adopted an improved benefit formula for Safety Members beginning January 1, 2001. This formula, commonly referred to as 3% at 50, improves retirement benefits by as much as 50% for some plan members. Since this benefit improvement took effect after the valuation date, it is not included in the calculation of the funded position or the recommended contribution rates shown in this report. To help with budgeting, we have calculated what these results would have been if the 3%-at-50 benefit were included.

In addition, the County has looked at an increase in the maximum cost-of-living increase that can be provided from Regular Plan reserves. If implemented, this maximum would increase from the current level of 2% per year, up to 2.5% per year. To help with budgeting, we have calculated what results would have been if the maximum COLA were increased to 2.5%.

## B. Funded Position – Regular Benefits

For purposes of this analysis, we will be distinguishing between several types of benefits provided to KCERA members under the plan provisions adopted by the County and those provided under Article 5.5. In order to limit the repetition of benefit descriptions and sources of payments, we will refer to these benefits by the following names:

- **SRBR Benefits** – These are the Supplemental Retiree Benefit Reserve benefits provided under Article 5.5. These will include both Approved Benefits and Future Benefits.
  - **Approved Benefits** – These are the SRBR benefits that have already been approved by the Retirement Board. They include all Tier I, Tier II and Death Benefits; as well as the Tier III benefits approved through December 31, 2000.
  - **Future Benefits** – These are the SRBR benefits expected to be approved in future years in order to maintain the 80% purchasing power goal.
- **Regular Benefits** - The benefits provided under the non-SRBR section of KCERA. These will include both Basic Benefits and COLA Benefits.
  - **Basic Benefits** – All formula benefits provided under the Regular portion of KCERA. These include service retirement benefits, survivor continuance, disability benefits, and refunds of member contributions. Basic Benefits do not include cost-of-living adjustments.
  - **COLA Benefits** – These are the cost-of-living adjustments provided under the Regular portion of KCERA. They include cost-of-living increases paid on service retirement benefits, disability benefits and survivor benefits.

The primary target liability for KCERA is the Actuarial Accrued Liability for Regular Plan Benefits. The **Actuarial Accrued Liability (AAL)** is the portion of the Present Value of Benefits attributed to the past. In other words,

- If current plan benefits had always been in place, and
- If the current assumptions had always been in place, and
- If the plan had always been funded under the current funding method, and
- If plan experience had always matched the assumptions, then

The Actuarial Value of Assets would be equal to the Actuarial Accrued Liability. It is the value often used as a funding target.

---

**P<sup>3</sup>**

*Actuaries you can understand*

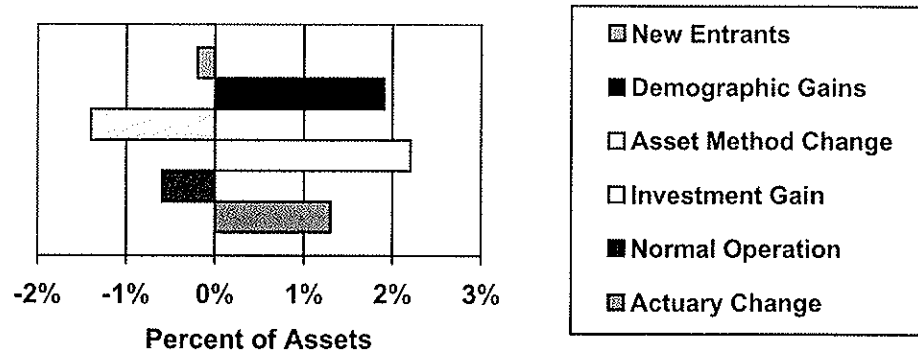
The Plan's funded percentage for Regular Benefits is 103.3%. It is calculated by dividing the Actuarial Value of Assets (\$1,434.9 million) by the Actuarial Accrued Liability (\$1,389.0 million).

### Impact of Major Events

The funded percentage increased from 100.1% in 1999 to 103.3% in 2000. This increase can be attributed primarily to the following events.

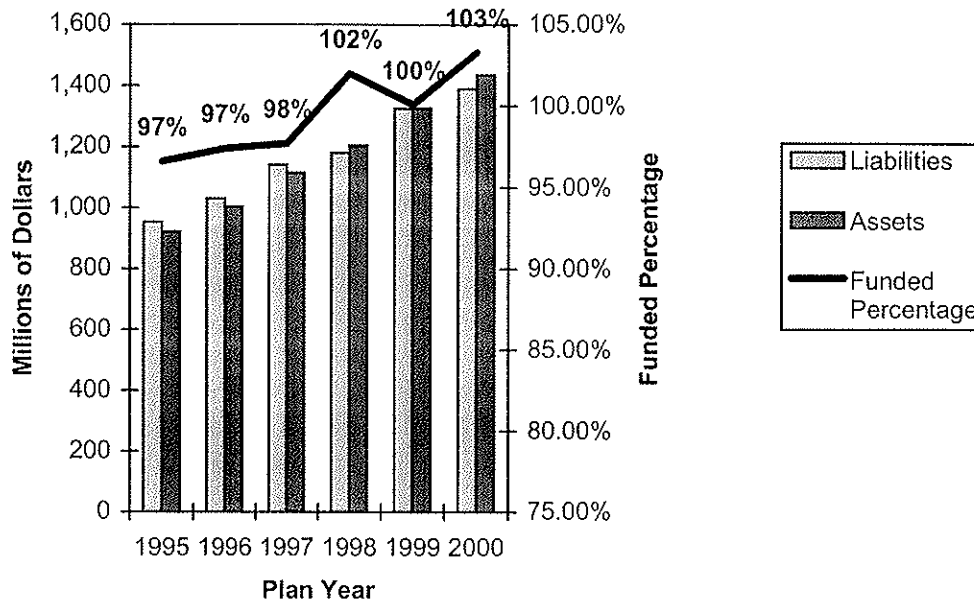
- Changes from prior actuary increased the funded percentage by 1.3%.
- Normal operation of plan decreased the funded percentage by 0.6%.
- Investment gains increased the funded percentage by 2.2%.
- Change in asset value to market decreased the funded percentage by 1.4%
- Demographic gains due to lower salaries than expected and refinements in data preparation raised the funded percentage by 1.9%.
- New entrants into KCERA lowered the funded percentage by 0.2%.

### Impact of Major Events on Funded Percentage





**History of Funded Position**



**History of Funded Position**

Dollar amounts in Millions	Actuarial Accrued Liability	Actuarial Value of Assets	Funded Percentage
2000	\$1,389.0	\$1,434.9	103.3%
1999	\$1,324.7	\$1,325.9	100.1%
1998	\$1,179.8	\$1,203.7	102.0%
1997	\$1,140.0	\$1,113.9	97.7%
1996	\$1,029.6	\$1,003.1	97.4%
1995	\$952.9	\$920.7	96.6%

Background information on the development of these funded percentages is included in the Technical Information section later in this report.



*Actuaries you can understand*

## Impact of Future Changes

In order to assist employers with budgeting the impact of plan changes on future funded percentages, we determined the impact on this year's funded percentage under two alternative benefit scenarios. The first shows what the funded percentage would be if the 3%-at-50 benefit were included in this year's valuation results.

The second scenario shows what the funded percentage would be if a 2.5% maximum COLA were included in this year's valuation results. That scenario also includes an assumption of \$64.7 million being allocated from the SRBR to help fund the supplemental COLA.

	<b>Actuarial Accrued Liability</b>	<b>Actuarial Value of Assets</b>	<b>Funded Percentage</b>
<b>Current Results</b>	\$1,389.0	\$1,434.9	103.3%
<b>With 3%-at-50 Benefit for Safety</b>	\$1,444.7	\$1,434.9	99.3%
<b>With 2.5% COLA</b>	\$1,511.1	\$1,499.6	99.2%

## C. Contribution Rates

Each year, recommended contribution rates are determined separately for members and employers. Member contribution rates are calculated as a percentage of the member's pay, on the basis of the member's age at entry into System, the classification of the member, the Plan's economic assumptions and the member's life expectancy at the retirement age specified for this purpose in the County Employees Retirement Law of 1937 (1937 Act). There were no changes in any of the component elements affecting member contribution rates. We do not recommend any change in the member contribution rates for the coming year. A list of the member rates by age at entry for each of the classifications is included in the Technical Information section at the back of this report.

Employer contributions are determined as the sum of two elements: the Normal Cost and an Amortization of the Unfunded Actuarial Accrued Liability.

The **Normal Cost (NC)** is the portion of the Present Value of Benefits attributed to the current year. In other words,

- If current plan benefits had always been in place, and
- If the current assumptions had always been in place, and
- If plan experience had always matched the assumptions, then

A contribution equal to the Normal Cost would be sufficient to keep the plan right on target, at 100% funding.

In the normal course of operating a retirement plan, there are a number of reasons why the plan may be someplace other than at 100% funding.

- **Plan Amendments** – These are changes in the benefits that are to be paid to plan members, such as the improvement to the 3%-at-50 plan.
- **Assumption Changes** – Periodically, the plan actuaries and trustees adjust their expectation for the future. This happened last year when they changed the investment return, inflation and demographic assumptions.
- **Methodology Changes** – Every few years, the actuary recommends a refinement in its actuarial methodology. An example of this would be a change in the actuarial value of assets currently being recommended.
- **Gain or Loss** – Each year actual plan experience is different than the experience expected under the plan assumptions. When actual experience reduces the Unfunded Actuarial Accrued Liability, it is called a gain. When plan experience increases the Unfunded Actuarial Accrued Liability, it is called a loss.

The amount that the funding is off target is added to the NC (when behind target) or reduced from the NC (when ahead of target) over a series of years.

---

**P<sup>3</sup>**

*Actuaries you can understand*

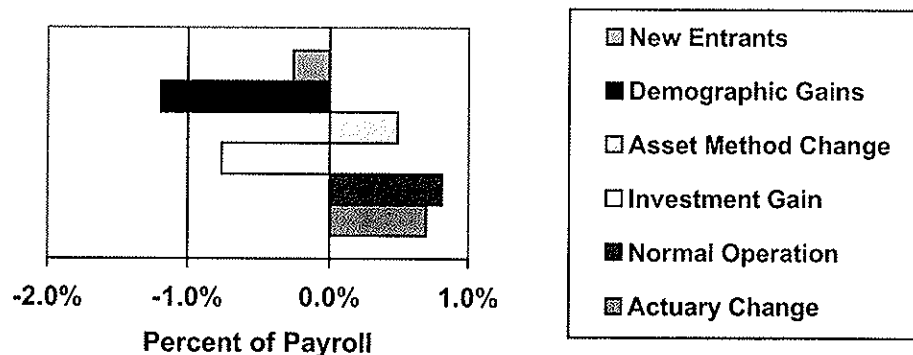
Changes in UAL due to Golden Handshake programs are amortized as a level percentage of payroll over a three-year period. All other changes are amortized as a level percentage of payroll over a 21-year period. This amortization period is scheduled to decrease each year.

### Impact of Major Events

The Employer Contribution rate decreased from 13.09% of pay in 1999 to 12.89% of pay in 2000. This decrease can be attributed primarily to the following events.

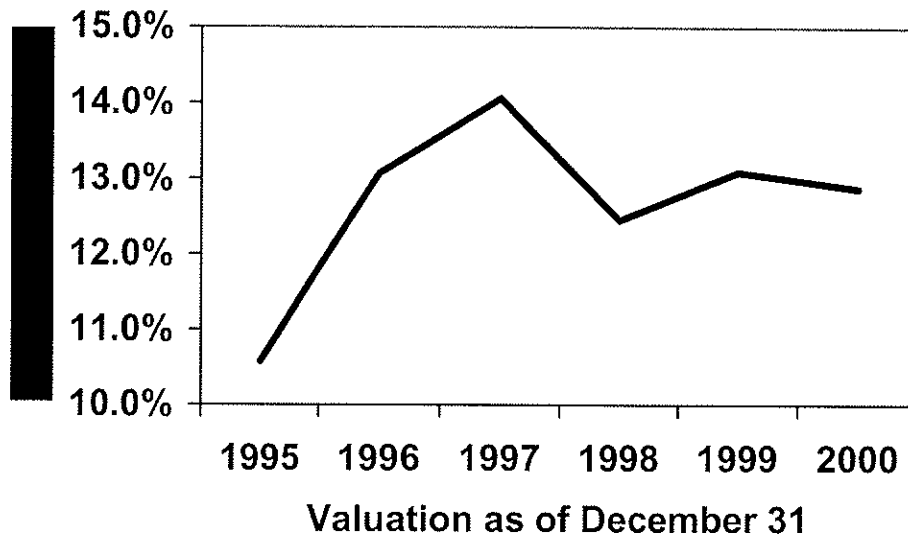
- Changes from prior actuary increased rates by 0.70% of pay.
- Normal operation of plan increased contributions by 0.81% of pay.
- Investment gains lowered contributions from 0.76% of pay.
- Change in asset value to market increased contributions by 0.49%.
- Demographic gains due to lower salaries than expected and refinements in data preparation lowered contribution rates by 1.19% of pay.
- New entrants into KCERA lowered contribution rates by 0.26%.

#### Impact of Major Events on Employer Contribution Rate



**History of Contribution Rates**

**History of Contribution Rates**



**History of Contribution Rates**

Valuation as of 12/31	General – County	General – District Electing MOU	General – District Not Electing MOU	Safety	All Members
2000	12.29%	15.04%	9.51%	14.66%	12.89%
1999	11.60%	13.92%	9.90%	17.05%	13.09%
1998	11.62%	13.50%	9.39%	14.69%	12.45%
1997	13.02%	10.78%	15.35%	16.93%	14.06%
1996	12.10%	12.08%	12.08%	15.67%	13.07%
1995	8.27%	10.11%	10.11%	16.65%	10.58%

**P<sup>3</sup>**

*Actuaries you can understand*

## Impact of Future Changes

In order to assist employers with budgeting the impact of plan changes on future contribution rates, we determined the impact on this year's contribution rates under two alternative benefit scenarios. The first shows what the contribution rates would be if the 3%-at-50 benefit were included in this year's recommended rates. Under this scenario, Safety Contribution Rates would increase from 14.7% of payroll to 23.2% of payroll. This would bring the average contribution rate up to 15.2% of payroll.

The second scenario shows what the contribution rates would be if a 2.5% maximum COLA were included in this year's recommended contribution rates. That scenario also includes an assumption of \$64.7 million being allocated from the SRBR to help fund the supplemental COLA. Under this second scenario, the average contribution rate for KCERA would increase to 16.0% of payroll.

---

**P<sup>3</sup>**

*Actuaries you can understand*

Section

**3**

# Technical Information

## **A. Asset Information**

Prior to the December 31, 2000 actuarial valuation, the Retirement System used one asset value to determine its reserves (and the amount allocated semi-annually to the Supplemental Retiree Benefit Reserve), and another asset value to determine the employer contribution rate.

Effective with the December 31, 2000 actuarial valuation, we recommend that these asset values be consolidated into a consistent value. We recommend that a one-time adjustment be made to each of the values, bringing them to market value as of that date. Moving forward, we recommend that a five-year spread gain method be adopted. Under this method, differences between expected investment return and actual investment return (net of investment fees) would be spread over 10 semi-annual periods.

The initial impact of this change will be to decrease the actuarial value of assets by \$19,760,091. This reduction is less than 1.5% of the total assets as of that date.

In this section, we show the development of the actuarial value of assets under the prior smoothing method. The reconciliation and historical information shown in this section is also shown on the basis of the prior smoothing method.

---

**P<sup>3</sup>**

*Actuaries you can understand*

**Reconciliation of Assets for the Year Ended December 31, 2000**

	<b>Book Value</b>	<b>Market Value</b>	<b>Actuarial Value</b>
<b>Beginning of Year</b>	<b>\$1,252,057,731</b>	<b>\$1,673,422,215</b>	<b>\$1,467,052,681</b>
Contributions – Employers	56,418,720	56,418,720	56,418,720
Contributions – Members	6,583,204	6,583,204	6,583,204
Gross Investment Income	103,556,131	(40,437,671)	153,292,578
Investment Expenses	(6,523,354)	(6,523,354)	n/a
Benefits paid to participants	(68,977,600)	(68,977,600)	(68,977,600)
Administrative Expenses	(1,800,324)	(1,800,324)	(1,800,324)
<b>End of Year</b>	<b>\$1,341,314,508</b>	<b>\$1,618,685,190</b>	<b>\$1,612,569,259</b>
Estimated Return (net of expenses)	7.79%	-2.82%	10.95%

The Actuarial Value of Assets is shown on the basis of the prior smoothing method. Effective with this valuation, this value shall be adjusted on a one-time basis to market value. The net impact of this adjustment will be to decrease the estimated return (net of expenses) on the Actuarial Value of Assets to 9.54%.

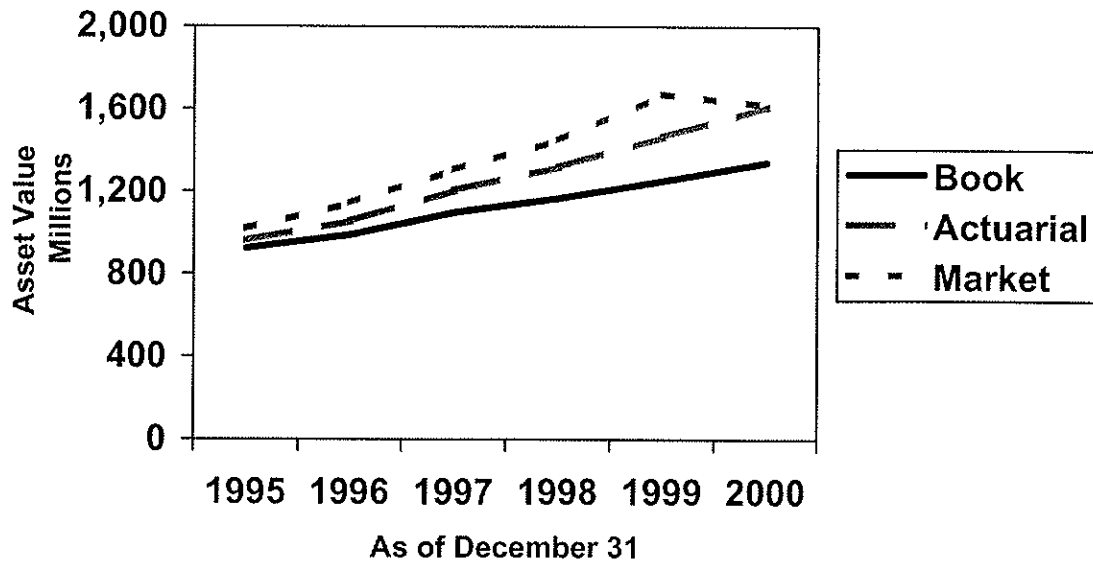


## Historical Asset Values

### Asset Values as of December 31

Year	Book Value	Market Value	Actuarial Value
1995	\$923,331,320	\$1,018,813,176	\$960,399,212
1996	\$989,173,479	\$1,144,777,444	\$1,056,051,996
1997	\$1,097,096,694	\$1,306,925,405	\$1,206,647,089
1998	\$1,166,248,306	\$1,449,358,816	\$1,319,481,827
1999	\$1,252,057,731	\$1,673,422,215	\$1,467,052,681
2000	\$1,341,314,508	\$1,618,685,190	\$1,612,569,259

### Comparison of Asset Values



The asset values are shown in a manner consistent with the reports of the prior actuary. The Market Value and Book Value include the Supplemental Retiree Benefit Reserve and the Contingency Reserve. The Actuarial Value of Asset includes the Supplemental Retiree Benefit Reserve, but not the Contingency Reserve.

**P<sup>3</sup>**

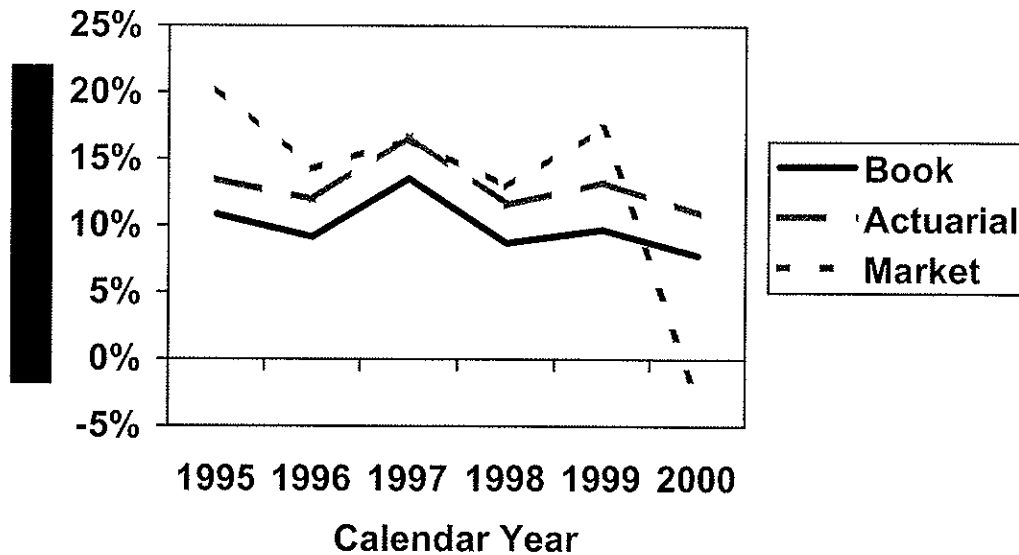
*Actuaries you can understand*

## Historical Rates of Investment Return

### Estimated Investment Return for the Year Ended December 31

Year	Book Value	Market Value	Actuarial Value
1995	10.82%	20.24%	13.46%
1996	9.17%	14.26%	11.95%
1997	13.53%	16.46%	16.75%
1998	8.68%	12.93%	11.54%
1999	9.70%	17.41%	13.29%
2000	7.79%	-2.82%	10.95%

### Comparison of Investment Return



The estimated rates of investment return for the years 1995 through 1999 are taken from the reports of the prior actuary, and have been calculated gross of investment expenses. The rates of return for the year 2000 have been calculated net of investment fees.

**P<sup>3</sup>**

*Actuaries you can understand*

**Development of Actuarial Value of Assets (Prior Method)**

**Development of Adjusted Value of Assets as of December 31, 2000**

	Market Value	Book Value
1. Actual Value	\$1,618,685,190	\$1,341,314,508
2. Asset Adjustments		
a. SRBR	157,936,450	157,936,450
b. Contingency Reserves	<u>25,876,022</u>	<u>25,876,022</u>
c. Total Adjustments: (a) + (b)	183,812,472	183,812,472
3. Adjusted Asset Value: (1) – (2c)	\$1,434,872,718	\$1,157,502,036

**Development of Average Ratio of Adjusted Market Value to Adjusted Book Value as of December 31, 2000**

Year Ended December 31	Adjusted Market Value	Adjusted Book Value	Ratio
2000	1,434,872,718	1,157,502,036	1.2396
1999	1,498,829,333	1,077,464,849	1.3911
1998	1,320,936,383	1,037,825,873	1.2728
1997	1,201,120,353	991,291,642	1.2117
1996	1,080,353,564	924,749,599	1.1683
Average Ratio			<b>1.2567</b>

**Development of Actuarial Value of Assets**

1. Adjusted Book Value of Assets as December 31	\$1,157,502,036
2. Average Ratio	1.2567
3. Actuarial Value, net of adjustments: (1) x (2)	1,454,632,809
4. SRBR	157,936,450
5. Total Actuarial Value: (3) + (4)	\$1,612,569,259

**P<sup>3</sup>**

*Actuaries you can understand*

## Statement of Reserves and Fund Balances

	December 31, 2000	December 31, 1999
Member Deposit Reserves		
General Members	102,200,898	94,039,362
District Members	8,675,882	7,941,309
Safety Members	<u>61,208,041</u>	<u>57,651,985</u>
Subtotal	172,084,820	159,632,656
Employers Advance Reserves		
General Members	212,254,864	188,929,760
District Members	13,648,340	12,390,492
Safety Members	<u>193,845,779</u>	<u>180,689,374</u>
Subtotal	419,748,983	382,009,626
Cost-of-Living Reserves		
General Members	198,556,929	178,607,979
District Members	3,074,266	2,584,388
Safety Members	<u>160,465,334</u>	<u>145,089,668</u>
Subtotal	362,096,529	326,282,035
Retired Member Reserves		
General Members	302,054,451*	281,393,396*
District Members	10,264,253*	9,562,160*
Safety Members	<u>164,346,942</u>	<u>150,816,151</u>
Subtotal	476,665,646	441,771,707
Supplemental Retiree Benefit Reserves	157,936,450	141,124,438
Contingency Reserve	25,876,022	33,468,444
Total Reserves	1,614,408,450	1,484,288,906
Other		
Over/Under Reserved Benefits	4,276,740	189,133,309
Current Earnings	-	-
Total Other	4,276,740	189,133,309
Total Fund Balance	1,618,685,190	1,673,422,215

\* The allocation of Member Deposit Reserves, Employers Advance Reserves and Cost of Living Reserves was supplied by KCERA. KCERA also split the Retired Member Reserves between General and Safety Members. The allocation of Retired Member Reserves between General and District Members for 1999 was performed by the prior actuary. The allocation of Retired Member Reserves between General and District Members for 2000 was calculated to be the same ratio as the 1999 split.

**P<sup>3</sup>**

*Actuaries you can understand*

## B. Liability Information

### Present Value of Projected Benefits

	Basic	COLA	Total
<b>1. Retirees and Beneficiaries</b>			
A. General			
i. County			
a. Regular Benefits	286,096,620	102,401,688	388,498,308
b. Golden Handshake	<u>203,316</u>	<u>45,900</u>	<u>249,216</u>
c. All Benefits	286,299,936	102,447,588	388,747,524
ii. Districts	<u>12,075,756</u>	<u>3,594,768</u>	<u>15,670,524</u>
iii. Total	298,375,692	106,042,356	404,418,048
B. Safety	<u>173,922,588</u>	<u>72,710,364</u>	<u>246,632,952</u>
C. All Retirees and Beneficiaries	472,298,280	178,752,720	651,051,000
<b>2. Deferred Vested Members</b>			
A. General			
i. County	28,755,827	5,211,040	33,966,867
ii. Districts	<u>0</u>	<u>0</u>	<u>0</u>
iii. Total	28,755,827	5,211,040	33,966,867
B. Safety	<u>3,956,813</u>	<u>816,257</u>	<u>4,773,070</u>
C. All Deferred Vested	32,712,640	6,027,297	38,739,937
<b>2. Active Members</b>			
A. General			
i. County	525,330,940	102,012,212	627,343,152
ii. Districts	<u>31,793,363</u>	<u>6,229,473</u>	<u>38,022,836</u>
iii. Total	557,124,303	108,241,685	665,365,988
B. Safety	<u>346,228,696</u>	<u>72,850,323</u>	<u>419,079,019</u>
C. All Active Members	903,352,999	181,092,008	1,084,445,007
<b>3. All Members</b>			
A. General			
i. County			
a. Regular Benefits	840,183,387	209,624,940	1,049,808,327
b. Golden Handshake	<u>203,316</u>	<u>45,900</u>	<u>249,216</u>
c. All Benefits	840,386,703	209,670,840	1,050,057,543
ii. Districts	<u>43,869,119</u>	<u>9,824,241</u>	<u>53,693,360</u>
iii. Total	884,255,822	219,495,081	1,103,750,903
B. Safety	<u>524,108,097</u>	<u>146,376,944</u>	<u>670,485,041</u>
C. All Members	1,408,363,919	365,872,025	1,774,235,944

**Actuarial Accrued Liability**

	Basic	COLA	Total
<b>1. Retirees and Beneficiaries</b>			
A. General			
i. County			
a. Regular Benefits	286,096,620	102,401,688	388,498,308
b. Golden Handshake	<u>203,316</u>	<u>45,900</u>	<u>249,216</u>
c. All Benefits	286,299,936	102,447,588	388,747,524
ii. Districts	<u>12,075,756</u>	<u>3,594,768</u>	<u>15,670,524</u>
iii. Total	298,375,692	106,042,356	404,418,048
B. Safety	<u>173,922,588</u>	<u>72,710,364</u>	<u>246,632,952</u>
C. All Retirees and Beneficiaries	472,298,280	178,752,720	651,051,000
<b>2. Deferred Vested Members</b>			
A. General			
i. County	28,755,827	5,211,040	33,966,867
ii. Districts	<u>0</u>	<u>0</u>	<u>0</u>
iii. Total	28,755,827	5,211,040	33,966,867
B. Safety	<u>3,956,813</u>	<u>816,257</u>	<u>4,773,070</u>
C. All Deferred Vested	32,712,640	6,027,297	38,739,937
<b>2. Active Members</b>			
A. General			
i. County	327,382,882	64,181,371	391,564,253
ii. Districts	<u>17,828,278</u>	<u>3,546,003</u>	<u>21,374,281</u>
iii. Total	345,211,160	67,727,374	412,938,534
B. Safety	<u>236,685,002</u>	<u>49,569,232</u>	<u>286,254,234</u>
C. All Active Members	581,896,162	117,296,606	699,192,768
<b>3. All Members</b>			
A. General			
i. County			
a. Regular Benefits	642,235,329	171,794,099	814,029,428
b. Golden Handshake	<u>203,316</u>	<u>45,900</u>	<u>249,216</u>
c. All Benefits	642,438,645	171,839,999	814,278,644
ii. Districts	<u>29,904,034</u>	<u>7,140,771</u>	<u>37,044,805</u>
iii. Total	672,342,679	178,980,770	851,323,449
B. Safety	<u>414,564,403</u>	<u>123,095,853</u>	<u>537,660,256</u>
C. All Members	1,086,907,082	302,076,623	1,388,983,705

**Normal Cost**

<b>In Dollars</b>	<b>Basic</b>	<b>COLA</b>	<b>Total</b>
<b>1. General</b>			
A. County	19,442,559	4,673,533	24,116,092
B. District			
i. Electing MOU	485,233	109,239	594,472
ii. Not Electing MOU	512,691	197,534	710,225
iii. Total	997,924	306,773	1,304,697
C. All General Members	20,440,483	4,980,306	25,420,789
<b>2. Safety</b>	11,464,855	2,718,503	14,183,358
<b>3. All Members</b>			
A. County	30,907,414	7,392,036	38,299,450
B. District			
i. Electing MOU	485,233	109,239	594,472
ii. Not Electing MOU	512,691	197,534	710,225
iii. Total	997,924	306,773	1,304,697
C. All Members	31,905,338	7,698,809	39,604,147
<b>As a Percent of Pay</b>	<b>Basic</b>	<b>COLA</b>	<b>Total</b>
<b>1. General</b>			
A. County	9.97%	2.40%	12.37%
B. District			
i. Electing MOU	11.69%	2.63%	14.32%
ii. Not Electing MOU	6.35%	2.45%	8.79%
iii. Total	8.16%	2.51%	10.67%
C. All General Members	9.86%	2.40%	12.27%
<b>2. Safety</b>	15.07%	3.57%	18.65%
<b>3. All Members</b>			
A. County	11.40%	2.73%	14.13%
B. District			
i. Electing MOU	11.69%	2.63%	14.32%
ii. Not Electing MOU	6.35%	2.45%	8.79%
iii. Total	8.16%	2.51%	10.67%
C. All Members	11.26%	2.72%	13.98%

**P<sup>3</sup>**

*Actuaries you can understand*

## C. Funded Percentage

### Basic Benefits

	General – County	General – Districts	Safety
1. Actuarial Accrued Liability			
a. Regular Benefits	642,235,329	29,904,034	414,564,403
b. Golden Handshakes	203,316	-	-
c. Total	642,438,645	29,904,034	414,564,403
2. Actuarial Value of Assets	618,353,259	32,685,897	420,654,552
3. Unfunded Actuarial Accrued Liability			
a. Regular Benefits	23,882,070	(2,781,863)	(6,090,149)
b. Golden Handshakes	203,316	-	-
c. Total	24,085,386	(2,781,863)	(6,090,149)
4. Amortization of Unfunded Actuarial Accrued Liability			
a. Regular Benefits	1,647,814	(191,943)	(420,208)
b. Golden Handshakes	71,725	-	-
c. Total	1,719,539	(191,943)	(420,208)
5. Funded Percentage	96.3%	109.3%	101.5%

**P<sup>3</sup>**

*Actuaries you can understand*



**COL Benefits**

	<b>General – County</b>	<b>General – Districts</b>	<b>Safety</b>
1. Actuarial Accrued Liability			
a. Regular Benefits	171,794,099	7,140,771	123,095,853
b. Golden Handshakes	45,900	-	-
c. Total	171,839,999	7,140,771	123,095,853
2. Actuarial Value of Assets	199,150,512	3,083,456	160,945,042
3. Unfunded Actuarial Accrued Liability			
a. Regular Benefits	(27,356,413)	4,057,315	(37,849,189)
b. Golden Handshakes	45,900	-	-
c. Total	(27,310,513)	4,057,315	(37,849,189)
4. Amortization of Unfunded Actuarial Accrued Liability			
a. Regular Benefits	(1,887,537)	279,946	(2,611,517)
b. Golden Handshakes	16,192	-	-
c. Total	(1,871,345)	279,946	(2,611,517)
5. Funded Percentage	115.9%	43.2%	130.7%

**P<sup>3</sup>**

*Actuaries you can understand*

**Total Regular Benefits**

	<b>General – County</b>	<b>General – Districts</b>	<b>Safety</b>
1. Actuarial Accrued Liability			
a. Regular Benefits	814,029,428	37,044,805	537,660,256
b. Golden Handshakes	249,216	-	-
c. Total	814,278,644	37,044,805	537,660,256
2. Actuarial Value of Assets	817,503,770	35,769,353	581,599,594
3. Unfunded Actuarial Accrued Liability			
a. Regular Benefits	(3,474,342)	1,275,452	(43,939,338)
b. Golden Handshakes	249,216	-	-
c. Total	(3,225,126)	1,275,452	(43,939,338)
4. Amortization of Unfunded Actuarial Accrued Liability			
a. Regular Benefits	(239,723)	88,004	(3,031,725)
b. Golden Handshakes	87,917	-	-
c. Total	(151,806)	88,004	(3,031,725)
5. Funded Percentage	100.4%	96.6%	108.2%

**P<sup>3</sup>**

*Actuaries you can understand*

## Supplemental Retiree Benefit Reserve

### *Approved Liabilities*

1. Retirees and Beneficiaries	44,491,992
2. Active Members	9,898,476
3. All Members	54,390,468

*Available Reserves* 157,936,450

*Funded Percentage* 290.0%

---

**P<sup>3</sup>**

*Actuaries you can understand*

## D. Employer Contribution Rates

### Basic Benefits

	General – County	General – Districts Electing MOU	General – District Not Electing MOU	Safety
1. Normal Cost				
a. Dollars	19,442,559	485,233	512,691	11,464,855
b. Percent of Pay	9.97%	11.69%	6.35%	15.07%
2. Amortization of Unfunded Actuarial Accrued Liability				
a. Dollars	1,719,539	(65,170)	(126,773)	(420,208)
b. Percent of Pay	0.88%	(1.57%)	(1.57%)	(0.55%)
3. Employer Contribution				
a. Dollars	21,162,098	420,063	385,918	11,044,647
b. Percent of Pay	10.85%	10.12%	4.78%	14.52%

Overall Average Rate = 11.65%

**P<sup>3</sup>**

*Actuaries you can understand*

## COL Benefits

	General – County	Districts Electing MOU	District Not Electing MOU	Safety
1. Normal Cost				
a. Dollars	4,673,533	109,239	197,534	2,718,503
b. Percent of Pay	2.40%	2.63%	2.45%	3.57%
2. Amortization of Unfunded Actuarial Accrued Liability				
a. Dollars	(1,871,345)	95,050	184,897	(2,611,517)
b. Percent of Pay	(0.96%)	2.29%	2.29%	(3.43%)
3. Employer Contribution				
a. Dollars	2,802,188	204,289	382,431	106,986
b. Percent of Pay	1.44%	4.92%	4.73%	0.14%

Overall Average Rate = 1.21%

**P<sup>3</sup>**

*Actuaries you can understand*

### Total Contribution Rates

	General – County	Districts Electing MOU	District Not Electing MOU	Safety
1. Normal Cost				
a. Dollars	24,116,092	594,472	710,225	14,183,358
b. Percent of Pay	12.37%	14.32%	8.79%	18.65%
2. Amortization of Unfunded Actuarial Accrued Liability				
a. Dollars	(151,806)	29,880	58,124	(3,031,725)
b. Percent of Pay	(0.08%)	0.72%	0.72%	(3.99%)
3. Employer Contribution				
a. Dollars	23,964,286	624,352	768,349	11,151,633
b. Percent of Pay	12.29%	15.04%	9.51%	14.66%

Overall Average Rate = 12.89%

**P<sup>3</sup>**

*Actuaries you can understand*

## **E. Summary of Major Plan Provisions – General Members**

**Membership:** Employment (at least 50% of full-time) with County or participating District. Enter on first day of the first pay period after entrance into service.

**Final Average Salary (FAS):** Highest one-year average

### **Service Retirement**

**Code Section:** 31676.14

**Eligibility:** 10 years of service and age 50, or 30 years of service regardless of age, or age 70 regardless of service.

**Benefit:** 1.667% of FAS per year of service times RAF

**Retirement Age Factor (RAF):** Adjustment factor for benefit commencing at age other than 52. Sample factors:

<b>Age</b>	<b>Factor</b>
50	.8850
55	1.1686
60	1.4638
65	1.5668

**Integration with Social Security:** Benefits based on first \$350 of monthly FAS are reduced by 1/3. Benefits for some District members are not integrated with Social Security.

**Maximum Benefit:** 100% of FAS

**Normal Form of Benefit:** Life annuity; 60% continuance to spouse after death of member. If there is no surviving spouse, the benefit is paid to eligible children.

**P<sup>3</sup>**

*Actuaries you can understand*

### **Nonservice Connected Disability**

<b>Eligibility:</b>	5 years of service.
<b>Disabled Definition:</b>	Unable to perform their own job.
<b>Benefit:</b>	20% of FAS, plus 2% of FAS for each year of service is excess of 5, but not more than 40% of FAS
<b>Normal Form of Benefit:</b>	Life annuity; 60% continuance to spouse after death of member. If there is no surviving spouse, the benefit is paid to eligible children.

### **Service Connected Disability**

<b>Eligibility:</b>	First day of work
<b>Disabled Definition:</b>	Disability is substantially caused by employment and unable to perform their own job.
<b>Benefit:</b>	50% of salary, but not less than Service Retirement benefit (if eligible at time of commencement).
<b>Normal Form of Benefit:</b>	Life annuity; 100% continuance to spouse after death of member. If there is no surviving spouse, the benefit is paid to eligible children.

### **Nonservice Connected Death**

<b>Before eligible for Nonservice Connected Disability or Service Retirement:</b>	Refund of employee contributions with interest, plus 1 month's salary for each year of service (maximum 6 months' salary).
---	---

**P<sup>3</sup>**

*Actuaries you can understand*



salary).

**After eligible for Nonservice  
Connected Disability or Service  
Retirement:**

60% of Nonservice Connected Disability Benefit or Service Retirement Benefit the member would have received for retirement on day of death payable to surviving eligible spouse for the life of the spouse. If there is no surviving spouse, the benefit is paid to eligible children.

**Service Connected Death**

**Eligibility:**

First day of work

**Benefit:**

50% of salary, but not less than Service Retirement benefit (if eligible at time of commencement).

**Normal Form of Benefit:**

Life annuity to spouse after death of member. If there is no surviving spouse, the benefit is paid to eligible children.

**Deferred Service Retirement**

**Eligibility:**

5 years of service

**Additional requirement:**

Must leave contributions on deposit

**Benefit:**

Same as service retirement benefit

**FAS:**

If reciprocity provisions apply, includes compensation earned at reciprocal agency.

**Normal Form of Benefit:**

Same as service retirement benefit

**P<sup>3</sup>**

*Actuaries you can understand*

## Withdrawal

<b>Eligibility:</b>	First day of work
<b>Other Requirement:</b>	Forfeits right to receive other benefit from retirement system.
<b>Benefit:</b>	Accumulated contributions with interest
<b>Form of Benefit:</b>	Lump sum

## Cost of Living Benefits

<b>Timing:</b>	Annually, effective April 1 based on change in Consumer Price Index for the preceding calendar year.
<b>Maximum:</b>	2% per year.

## Member Contributions

<b>Basic:</b>	Contribution is set by a table adopted by the Retirement Board designed to be sufficient to provide an average annuity, at age 55, equal to 1/120 of the final compensation of members.
<b>COLA:</b>	None
<b>Percentage of Full Contribution Payable by Member:</b>	For County employees (and employees of Districts adopting the MOU) hired on or after Payroll Period 97-14: <ul style="list-style-type: none"><li>• 100% of the Full Contribution Rate for their first 5 years of service.</li><li>• No employee contributions are required after attaining 5 years of service.</li></ul>

For County employees (and employees of Districts adopting the MOU) hired before Payroll Period 97-14:

- 50% of the Full Contribution Rate for their first 5 years of service.
- No employee contributions are required after attaining 5 years of service.

For employees of Districts not adopting the MOU, 50% of Full Contribution Rate for first 30 years of service.

***Integration with Social Security:***

Members integrated with Social Security pay 2/3 of the full rate on first \$350 of pay each month.

***Other Provisions:***

Rates based on age at entry into System

## F. Member Contribution Rates – General Members

Member contribution rates are calculated as a percentage of the member's pay, on the basis of the member's age at entry into System, the classification of the member, the Plan's economic assumptions and the member's life expectancy at the retirement age specified for this purpose in the County Employees Retirement Law of 1937 (1937 Act). There were no changes in any of the component elements affecting member contribution rates. The following rates for General Members have been calculated by the prior actuary and presented here without audit by Public Pension Professionals.

### Full Member Contribution Rates (Integrated)

Age	Rate on First \$350 of Monthly Compensation	Rate on Compensation in Excess of \$350 per Month	Age	Rate on First \$350 of Monthly Compensation	Rate on Compensation in Excess of \$350 per Month
20	4.85%	7.28%	38	5.91%	8.86%
21	4.89%	7.33%	39	5.99%	8.99%
22	4.92%	7.38%	40	6.08%	9.12%
23	4.95%	7.42%	41	6.17%	9.26%
24	4.98%	7.47%	42	6.27%	9.41%
25	5.01%	7.52%	43	6.37%	9.55%
26	5.07%	7.60%	44	6.47%	9.70%
27	5.12%	7.68%	45	6.56%	9.84%
28	5.17%	7.76%	46	6.65%	9.98%
29	5.23%	7.84%	47	6.75%	10.13%
30	5.28%	7.92%	48	6.85%	10.27%
31	5.35%	8.03%	49	6.95%	10.42%
32	5.43%	8.14%	50	7.04%	10.56%
33	5.51%	8.26%	51	7.14%	10.71%
34	5.58%	8.37%	52	7.24%	10.86%
35	5.65%	8.48%	53	7.34%	11.01%
36	5.74%	8.61%	54	7.44%	11.16%
37	5.83%	8.74%			



*Actuaries you can understand*

**Full Member Contribution Rates (Non-Integrated)**

Contribution		Contribution	
Age	Rate	Age	Rate
20	7.28%	38	8.86%
21	7.33%	39	8.99%
22	7.38%	40	9.12%
23	7.42%	41	9.26%
24	7.47%	42	9.41%
25	7.52%	43	9.55%
26	7.60%	44	9.70%
27	7.68%	45	9.84%
28	7.76%	46	9.98%
29	7.84%	47	10.13%
30	7.92%	48	10.27%
31	8.03%	49	10.42%
32	8.14%	50	10.56%
33	8.26%	51	10.71%
34	8.37%	52	10.86%
35	8.48%	53	11.01%
36	8.61%	54	11.16%
37	8.74%		

**P<sup>3</sup>**

*Actuaries you can understand*

## **G. Summary of Major Plan Provisions – Safety Members**

<b>Membership:</b>	Employment (at least 50% of full-time) with County. Enter on first day of the first pay period after entrance into service.
<b>Final Average Salary (FAS):</b>	Highest one-year average

### **Service Retirement**

<b>Code Section:</b>	31664 (This will change to 31664.1 beginning January 1, 2001. The change will be reflected in the next actuarial valuation).								
<b>Eligibility:</b>	10 years of service and age 50, or 20 years of service regardless of age.								
<b>Benefit:</b>	2.000% of FAS per year of service times RAF								
<b>Retirement Age Factor (RAF):</b>	Adjustment factor for benefit commencing at age other than 50. Sample factors: <table><thead><tr><th>Age</th><th>Factor</th></tr></thead><tbody><tr><td>45</td><td>.7805</td></tr><tr><td>50</td><td>1.0000</td></tr><tr><td>55</td><td>1.3099</td></tr></tbody></table>	Age	Factor	45	.7805	50	1.0000	55	1.3099
Age	Factor								
45	.7805								
50	1.0000								
55	1.3099								
<b>Integration with Social Security:</b>	Benefits based on first \$350 of monthly FAS are reduced by 1/3. Benefits for some District members are not integrated with Social Security.								
<b>Maximum Benefit:</b>	100% of FAS								
<b>Normal Form of Benefit:</b>	Life annuity; 60% continuance to spouse after death of member. If there is no surviving spouse, the benefit is paid to eligible children.								

**P<sup>3</sup>**

*Actuaries you can understand*

### **Nonservice Connected Disability**

<b>Eligibility:</b>	5 years of service.
<b>Disabled Definition:</b>	Unable to perform their own job.
<b>Benefit:</b>	20% of FAS, plus 2% of FAS for each year of service is excess of 5, but not more than 40% of FAS
<b>Normal Form of Benefit:</b>	Life annuity; 60% continuance to spouse after death of member. If there is no surviving spouse; the benefit is paid to eligible children.

### **Service Connected Disability**

<b>Eligibility:</b>	First day of work
<b>Disabled Definition:</b>	Disability is substantially caused by employment and unable to perform their own job.
<b>Benefit:</b>	50% of salary, but not less than Service Retirement benefit (if eligible at time of commencement).
<b>Normal Form of Benefit:</b>	Life annuity; 100% continuance to spouse after death of member. If there is no surviving spouse, the benefit is paid to eligible children.

### **Nonservice Connected Death**

<b>Before eligible for Nonservice Connected Disability or Service Retirement:</b>	Refund of employee contributions with interest, plus 1 month's salary for each year of service (maximum 6 months' salary).
---	---

**P<sup>3</sup>**

*Actuaries you can understand*

salary).

***After eligible for Nonservice  
Connected Disability or Service  
Retirement:***

60% of Nonservice Connected Disability Benefit or Service Retirement Benefit the member would have received for retirement on day of death payable to surviving eligible spouse for the life of the spouse. If there is no surviving spouse, the benefit is paid to eligible children.

### **Service Connected Death**

***Eligibility:***

First day of work

***Benefit:***

50% of salary, but not less than Service Retirement benefit (if eligible at time of commencement).

***Normal Form of Benefit:***

Life annuity to spouse after death of member. If there is no surviving spouse, the benefit is paid to eligible children.

### **Deferred Service Retirement**

***Eligibility:***

5 years of service

***Additional requirement:***

Must leave contributions on deposit

***Benefit:***

Same as service retirement benefit

***FAS:***

If reciprocity provisions apply, includes compensation earned at reciprocal agency.

***Normal Form of Benefit:***

Same as service retirement benefit

---

**P<sup>3</sup>**

*Actuaries you can understand*



## Withdrawal

<b>Eligibility:</b>	First day of work
<b>Other Requirement:</b>	Forfeits right to receive other benefit from retirement system.
<b>Benefit:</b>	Accumulated contributions with interest
<b>Form of Benefit:</b>	Lump sum

## Cost of Living Benefits

<b>Timing:</b>	Annually, effective April 1 based on change in Consumer Price Index for the preceding calendar year.
<b>Maximum:</b>	2% per year.

## Member Contributions

<b>Basic:</b>	Contribution is set by a table adopted by the Retirement Board designed to be sufficient to provide an average annuity, at age 50, equal to 1/100 of the final compensation of members.
<b>COLA:</b>	None
<b>Percentage of Full Contribution Payable by Member:</b>	For County employees hired on or after Payroll Period 97-14: <ul style="list-style-type: none"><li>• 100% of the Full Contribution Rate for their first 5 years of service.</li><li>• No employee contributions are required after attaining 5 years of service.</li></ul> For County employees hired before

**P<sup>3</sup>**

*Actuaries you can understand*

Payroll Period 97-14:

- 50% of the Full Contribution Rate for their first 5 years of service.
- No employee contributions are required after attaining 5 years of service.

***Integration with Social Security:***

Members integrated with Social Security pay 2/3 of the full rate on first \$350 of pay each month.

***Other Provisions:***

Rates based on age at entry into System

---

**P<sup>3</sup>**

*Actuaries you can understand*

## H. Member Contribution Rates – Safety Members

Member contribution rates are calculated as a percentage of the member's pay, on the basis of the member's age at entry into System, the classification of the member, the Plan's economic assumptions and the member's life expectancy at the retirement age specified for this purpose in the County Employees Retirement Law of 1937 (1937 Act). There were no changes in any of the component elements affecting member contribution rates. The following rates for Safety Members have been calculated by the prior actuary and presented here without audit by Public Pension Professionals.

### Full Member Contribution Rates (Integrated)

Age	Rate on First \$350 of Monthly Compensation	Rate on Compensation in Excess of \$350 per Month	Age	Rate on First \$350 of Monthly Compensation	Rate on Compensation in Excess of \$350 per Month
20	5.44%	8.16%	35	6.45%	9.68%
21	5.49%	8.24%	36	6.55%	9.83%
22	5.55%	8.32%	37	6.65%	9.98%
23	5.60%	8.40%	38	6.76%	10.14%
24	5.65%	8.48%	39	6.86%	10.29%
25	5.71%	8.56%	40	6.96%	10.44%
26	5.77%	8.66%	41	7.07%	10.60%
27	5.85%	8.77%	42	7.17%	10.76%
28	5.91%	8.87%	43	7.28%	10.92%
29	5.99%	8.98%	44	7.39%	11.08%
30	6.05%	9.08%	45	7.49%	11.24%
31	6.13%	9.20%	46	7.61%	11.41%
32	6.21%	9.32%	47	7.72%	11.58%
33	6.29%	9.44%	48	7.83%	11.75%
34	6.37%	9.56%	49	7.95%	11.92%

**P<sup>3</sup>**

*Actuaries you can understand*

**Full Member Contribution Rates (Non-Integrated)**

Contribution		Contribution	
Age	Rate	Age	Rate
20	8.16%	35	9.68%
21	8.24%	36	9.83%
22	8.32%	37	9.98%
23	8.40%	38	10.14%
24	8.48%	39	10.29%
25	8.56%	40	10.44%
26	8.66%	41	10.60%
27	8.77%	42	10.76%
28	8.87%	43	10.92%
29	8.98%	44	11.08%
30	9.08%	45	11.24%
31	9.20%	46	11.41%
32	9.32%	47	11.58%
33	9.44%	48	11.75%
34	9.56%	49	11.92%

**P<sup>3</sup>**

*Actuaries you can understand*

## I. Summary of Actuarial Assumptions and Funding Methods

This actuarial valuation report has been prepared in accordance with generally accepted actuarial principles and practices. The major assumptions and methods used in this valuation are as follows:

### Economic Assumptions

<i>Interest:</i>	8.0% per year.
<i>Salary Increase – Total Payroll:</i>	4.0 % per year
<i>Salary Increase – Individual:</i>	Rates varying by age, as shown in Schedule 1.
<i>Inflation:</i>	4.0% per year.
<i>Employee Contribution Interest Crediting Rate:</i>	8.0% per year.

### Demographic Assumptions

#### *Post-retirement mortality:*

- *Service Retirement - General:* 1994 Group Annuity Mortality, with ages set forward two years for male and female members. Life Expectancies are shown in Schedules 2.
- *Service Retirement - Safety:* 1994 Group Annuity Mortality for males, with no age adjustment. Life Expectancies are shown in Schedules 3.
- *Disability Retirement:* 1981 Disability Mortality. Life Expectancies are shown in Schedules 4.
- *Spouse:* 1994 Group Annuity Mortality, with ages set forward two years for male and female beneficiaries.

**P<sup>3</sup>**

*Actuaries you can understand*

---

<b><i>Withdrawal (termination with refund of member contributions):</i></b>	Rates varying by age, as shown in Schedule 5 (for General males), 6 (for General females) and 7 (for Safety).
<b><i>Vested Termination (termination with retirement pension deferred to age 60):</i></b>	Rates varying by age, as shown in Schedule 5 (for General males), 6 (for General females) and 7 (for Safety). Members are assumed to join a reciprocal agency immediately after termination.
<b><i>Pre-retirement mortality:</i></b>	Rates varying by age, as shown in Schedule 5 (for General males), 6 (for General females) and 7 (for Safety). Separate rates for ordinary death, service related death, and death while eligible.
<b><i>Service Disability:</i></b>	Rates varying by age, as shown in Schedule 5 (for General males), 6 (for General females) and 7 (for Safety).
<b><i>Ordinary Disability:</i></b>	Rates varying by age, as shown in Schedule 5 (for General males), 6 (for General females) and 7 (for Safety).
<b><i>Service Retirement:</i></b>	Rates varying by age, as shown in Schedule 5 (for General males), 6 (for General females) and 7 (for Safety).
<b><i>Form of Payment:</i></b>	Life annuity for single members. 60% contingent annuity for married members (100% contingent annuity if receiving service-related disability).  SRBR benefits for married members are all assumed to be paid as a 60% contingent annuity.
<b><i>Percentage Married at Retirement:</i></b>	80% of male active members and 50% of female active members assumed married at retirement.
<b><i>Spouse Ages</i></b>	For active members reaching retirement, wives are assumed to be four years younger than husbands.  Where spousal information was included

---

for retirees, that information was used. If the age of the spouse was not provided, we have assumed that all spouses are still alive, and that female spouses are four years younger than their husbands.

## Actuarial Methods

**Funding Method:**

Projected Unit Credit Funding Method

**Amortization Period:**

The Unfunded Actuarial Accrued Liability is generally amortized as a level percentage of payroll over a 29-year period beginning in 1992. The amortization period for the current valuation is 21 years.

Additional UAAL incurred through the granting of Golden Handshake agreements are amortized over a three-year period from the year in which they were granted.

**Actuarial Value of Assets:**

The market value of assets is adjusted to recognize, over a five-year period, investment earnings greater than (or less than) the assumed investment return. Details are shown in the Asset Information Section of the report.

This is a change from the previous actuarial valuation. In that valuation, the actuarial value of assets was the book value of assets adjusted for the five-year average ratio of adjusted market value to adjusted book value.

In both valuations, the actuarial value, market value and book value are net of amounts allocated to the Supplemental Retiree Benefit Reserve and the Contingency Reserve.

---

**P<sup>3</sup>**

*Actuaries you can understand*

---

## Data Sources

***Asset Data:***

The asset information is taken directly from statements furnished by the Retirement Office and used without audit.

***Member Data:***

The member data is supplied by the Retirement Office. It is reviewed for reasonableness and consistency, but no audit was performed. Public Pension Professionals is not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations.



**Schedule 1**  
**Assumed Rate of Salary Increase**

Age	General Members	Safety Members
20	10.0%	8.0%
21	10.0%	7.5%
22	10.0%	7.5%
23	8.0%	7.0%
24	8.0%	7.0%
25	8.0%	7.0%
26	8.0%	6.5%
27	8.0%	6.5%
28	8.0%	6.0%
29	7.0%	6.0%
30	7.0%	6.0%
31	7.0%	6.0%
32	7.0%	6.0%
33	5.5%	6.0%
34	5.5%	6.0%
35	5.5%	5.0%
36	5.5%	5.0%
37	5.5%	5.0%
38	5.0%	5.0%
39	5.0%	5.0%
40	5.0%	5.0%
41	5.0%	5.0%
42	5.0%	5.0%
43	5.0%	5.0%
44	5.0%	5.0%
45	5.0%	5.0%
46	5.0%	5.0%
47	5.0%	5.0%
48	5.0%	5.0%
49	5.0%	5.0%
50	5.0%	5.0%
51	5.0%	5.0%
52	5.0%	5.0%
53	5.0%	5.0%
54	5.0%	5.0%
55	5.0%	5.0%
56	5.0%	5.0%
57	5.0%	5.0%
58	5.0%	5.0%
59	5.0%	5.0%
60	5.0%	
61	5.0%	
62	5.0%	
63	5.0%	
64	5.0%	
65	5.0%	
66	5.0%	
67	5.0%	
68	5.0%	
69	5.0%	

---

**P<sup>3</sup>**

*Actuaries you can understand*

**Schedule 2**  
**Life Expectancies at Sample Ages**  
**Nondisabled General Members**

Age	Male	Female	Age	Male	Female
20	57.21	61.94	70	12.98	15.76
21	56.25	60.96	71	12.35	15.03
22	55.28	59.97	72	11.75	14.31
23	54.32	58.99	73	11.16	13.61
24	53.36	58.01	74	10.58	12.93
25	52.39	57.03	75	10.02	12.26
26	51.43	56.05	76	9.48	11.61
27	50.48	55.07	77	8.96	10.99
28	49.52	54.08	78	8.47	10.38
29	48.56	53.10	79	8.01	9.80
30	47.60	52.13	80	7.57	9.24
31	46.64	51.15	81	7.15	8.70
32	45.68	50.17	82	6.74	8.18
33	44.73	49.19	83	6.36	7.68
34	43.77	48.22	84	5.98	7.21
35	42.81	47.24	85	5.62	6.75
36	41.85	46.27	86	5.28	6.33
37	40.89	45.30	87	4.95	5.92
38	39.93	44.33	88	4.65	5.55
39	38.97	43.37	89	4.37	5.20
40	38.02	42.40	90	4.11	4.87
41	37.07	41.44	91	3.87	4.57
42	36.12	40.48	92	3.65	4.29
43	35.18	39.51	93	3.45	4.03
44	34.24	38.56	94	3.27	3.78
45	33.30	37.60	95	3.11	3.56
46	32.37	36.64	96	2.96	3.35
47	31.44	35.69	97	2.83	3.15
48	30.51	34.74	98	2.71	2.98
49	29.59	33.79	99	2.59	2.81
50	28.68	32.84	100	2.48	2.66
51	27.78	31.90	101	2.37	2.52
52	26.88	30.97	102	2.27	2.39
53	25.99	30.03	103	2.18	2.28
54	25.11	29.11	104	2.12	2.20
55	24.24	28.18	105	2.07	2.13
56	23.38	27.27	106	2.04	2.08
57	22.54	26.36	107	2.02	2.04
58	21.70	25.47	108	2.01	2.02
59	20.88	24.59	109	2.00	2.00
60	20.07	23.72	110	2.00	2.00
61	19.28	22.86	111	1.99	1.99
62	18.51	22.02	112	1.98	1.98
63	17.76	21.19	113	1.97	1.97
64	17.03	20.38	114	1.94	1.94
65	16.31	19.59	115	1.88	1.88
66	15.61	18.80	116	1.75	1.75
67	14.93	18.03	117	1.50	1.50
68	14.27	17.27	118	1.00	1.00
69	13.61	16.51			

General Members – 1994 Group Annuity Mortality, set forward 2 years

**P<sup>3</sup>**

*Actuaries you can understand*

**Schedule 3**  
**Life Expectancies at Sample Ages**  
**Nondisabled Safety Members**

Age	Male	Age	Male
20	59.15	70	14.27
21	58.18	71	13.61
22	57.21	72	12.98
23	56.25	73	12.35
24	55.28	74	11.75
25	54.32	75	11.16
26	53.36	76	10.58
27	52.39	77	10.02
28	51.43	78	9.48
29	50.48	79	8.96
30	49.52	80	8.47
31	48.56	81	8.01
32	47.60	82	7.57
33	46.64	83	7.15
34	45.68	84	6.74
35	44.73	85	6.36
36	43.77	86	5.98
37	42.81	87	5.62
38	41.85	88	5.28
39	40.89	89	4.95
40	39.93	90	4.65
41	38.97	91	4.37
42	38.02	92	4.11
43	37.07	93	3.87
44	36.12	94	3.65
45	35.18	95	3.45
46	34.24	96	3.27
47	33.30	97	3.11
48	32.37	98	2.96
49	31.44	99	2.83
50	30.51	100	2.71
51	29.59	101	2.59
52	28.68	102	2.48
53	27.78	103	2.37
54	26.88	104	2.27
55	25.99	105	2.18
56	25.11	106	2.12
57	24.24	107	2.07
58	23.38	108	2.04
59	22.54	109	2.02
60	21.70	110	2.01
61	20.88	111	2.00
62	20.07	112	2.00
63	19.28	113	1.99
64	18.51	114	1.98
65	17.76	115	1.97
66	17.03	116	1.94
67	16.31	117	1.88
68	15.61	118	1.75
69	14.93	119	1.50

General Members – 1994 Group Annuity Mortality, males

---

**P<sup>3</sup>**

*Actuaries you can understand*

**Schedule 4**  
**Life Expectancies at Sample Ages**  
**Disabled Members**

Age	General Members	Safety Members
20	35.69	49.79
21	35.03	48.89
22	34.37	47.98
23	33.73	47.08
24	33.10	46.18
25	32.48	45.29
26	31.87	44.39
27	31.26	43.51
28	30.67	42.62
29	30.08	41.74
30	29.50	40.86
31	28.93	39.98
32	28.37	39.11
33	27.81	38.24
34	27.26	37.38
35	26.71	36.52
36	26.17	35.66
37	25.64	34.81
38	25.11	33.95
39	24.59	33.11
40	24.07	32.27
41	23.56	31.43
42	23.06	30.59
43	22.56	29.76
44	22.07	28.93
45	21.58	28.11
46	21.09	27.30
47	20.61	26.48
48	20.13	25.68
49	19.66	24.88
50	19.18	24.09
51	18.71	23.30
52	18.25	22.53
53	17.79	21.76
54	17.33	21.00
55	16.87	20.27
56	16.41	19.56
57	15.95	18.90
58	15.49	18.28
59	15.03	17.70
60	14.57	17.14
61	14.10	16.61
62	13.63	16.09
63	13.16	15.58
64	12.68	15.08
65	12.20	14.59
66	11.71	14.11
67	11.22	13.63
68	10.72	13.16
69	10.23	12.68

General Members – 1981 Disability Mortality

Safety Members – 1981 Disability Mortality for Safety

---

**P<sup>3</sup>**

*Actuaries you can understand*

**Schedule 5**  
**Probability of Separation from Active Service**  
 (Number separating at each age per 10,000 working at that age)

**General Members - Male**

Age	Ordinary Withdrawal (Refund)	Vested Termination	Ordinary Death	Service Death	Death While Eligible	Ordinary Disability	Service Disability	Service Retirement
20	2,340	125	3	1	-	-	1	-
21	2,025	125	3	1	-	-	1	-
22	1,755	125	3	1	-	-	1	-
23	1,530	125	3	1	-	-	1	-
24	1,440	125	3	1	-	-	1	-
25	1,350	125	3	1	1	2	1	-
26	1,269	125	3	1	1	2	1	-
27	1,197	125	3	1	1	2	1	-
28	1,134	125	3	1	1	2	1	-
29	1,080	125	3	1	1	2	1	-
30	1,026	125	4	1	1	2	2	-
31	963	125	4	1	1	3	2	-
32	900	125	4	1	1	3	2	-
33	837	125	4	1	1	3	2	-
34	783	125	4	1	1	4	2	-
35	738	125	5	1	2	4	2	-
36	711	125	5	1	2	5	4	-
37	684	125	5	1	2	5	6	-
38	657	125	6	1	2	6	8	-
39	630	125	6	1	3	7	10	-
40	585	125	7	1	3	12	12	-
41	531	125	8	1	3	14	14	-
42	477	125	9	1	3	16	17	-
43	432	125	10	1	4	17	19	-
44	396	125	11	1	4	18	22	-
45	360	125	12	2	5	19	24	-
46	350	125	13	2	6	19	27	-
47	338	125	14	2	8	20	30	-
48	317	125	15	2	10	22	33	-
49	300	125	16	2	12	24	35	-
50	300	125	17	2	14	26	38	500
51	300	125	19	2	16	28	39	400
52	300	125	20	2	18	30	42	400
53	300	125	21	2	20	34	44	400
54	300	125	23	2	22	38	46	400
55	300	125	25	3	24	42	49	1,200
56	270	125	27	3	27	47	51	900
57	240	125	29	3	30	52	54	1,200
58	210	125	31	3	33	57	56	1,400
59	180	125	33	3	36	61	59	1,600
60	150	125	35	4	39	65	62	2,000
61	120	125	37	4	42	70	66	2,500
62	90	125	39	5	46	74	69	3,500
63	60	125	41	5	50	77	72	2,500
64	30	125	43	6	54	81	75	2,500
65	-	-	45	6	58	-	80	4,000
66	-	-	47	7	62	-	-	3,000
67	-	-	49	8	66	-	-	3,000
68	-	-	51	9	70	-	-	3,000
69	-	-	53	10	74	-	-	3,000
70	-	-	-	-	-	-	-	10,000

**P<sup>3</sup>**

*Actuaries you can understand*

**Schedule 6**  
**Probability of Separation from Active Service**  
 (Number separating at each age per 10,000 working at that age)

**General Members - Female**

Age	Ordinary Withdrawal (Refund)	Vested Termination	Ordinary Death	Service Death	Death While Eligible	Ordinary Disability	Service Disability	Service Retirement
20	2,385	125	2	-	-	-	2	-
21	2,205	125	2	-	-	-	2	-
22	2,070	125	2	-	-	-	2	-
23	1,935	125	2	-	-	-	2	-
24	1,800	125	2	-	-	-	2	-
25	1,710	125	2	-	1	3	2	-
26	1,620	125	2	-	1	3	2	-
27	1,530	125	2	-	1	3	2	-
28	1,440	125	2	-	1	4	2	-
29	1,350	125	3	-	1	4	2	-
30	1,269	125	3	-	1	4	2	-
31	1,197	125	3	-	1	5	2	-
32	1,125	125	3	-	1	5	2	-
33	1,062	125	3	-	1	6	2	-
34	999	125	3	-	1	7	2	-
35	945	125	3	-	1	8	2	-
36	900	125	4	-	1	9	2	-
37	855	125	4	-	1	10	4	-
38	819	125	4	-	1	11	4	-
39	774	125	4	-	1	12	6	-
40	729	125	4	-	1	14	6	-
41	684	125	5	-	1	16	6	-
42	639	125	6	-	1	18	8	-
43	594	125	7	-	1	20	10	-
44	549	125	8	-	1	23	14	-
45	504	125	9	-	2	25	14	-
46	469	125	10	-	2	27	17	-
47	432	125	12	-	2	29	20	-
48	394	125	14	-	2	31	24	-
49	300	125	15	-	2	34	27	-
50	300	125	17	-	2	38	29	500
51	300	125	19	-	2	42	30	400
52	300	125	20	-	3	48	34	400
53	300	125	22	-	3	55	38	400
54	300	125	24	-	4	63	40	400
55	300	125	26	-	4	71	41	1,200
56	270	125	27	-	5	79	43	900
57	240	125	29	-	6	86	44	1,200
58	210	125	31	-	7	93	48	1,400
59	180	125	32	-	8	99	51	1,600
60	150	125	34	-	9	106	54	1,700
61	120	125	36	-	10	111	57	1,900
62	90	125	37	-	11	116	59	3,000
63	60	125	39	-	12	119	62	2,500
64	30	125	41	-	13	122	64	2,500
65	-	-	43	-	14	-	67	4,000
66	-	-	44	-	15	-	-	3,000
67	-	-	46	-	16	-	-	3,000
68	-	-	48	-	17	-	-	3,000
69	-	-	50	-	18	-	-	3,000
70	-	-	-	-	-	-	-	10,000

**P<sup>3</sup>**

*Actuaries you can understand*

**Schedule 7**  
**Probability of Separation from Active Service**  
 (Number separating at each age per 10,000 working at that age)

**Safety Members**

Age	Ordinary Withdrawal (Refund)	Vested Termination	Ordinary Death	Service Death	Death While Eligible	Ordinary Disability	Service Disability	Service Retirement
20	1,000	35	2	2	-	-	10	-
21	900	35	2	2	1	-	11	-
22	800	35	2	2	1	-	12	-
23	700	35	2	2	1	-	13	-
24	600	35	2	2	1	-	14	-
25	550	35	2	2	1	10	16	-
26	500	35	2	2	1	10	18	-
27	450	35	2	2	1	10	20	-
28	400	35	2	3	1	10	22	-
29	350	35	2	3	1	10	25	-
30	348	35	3	3	2	10	30	-
31	338	35	3	3	2	10	36	-
32	328	35	3	3	2	10	44	-
33	318	35	3	3	2	15	51	-
34	308	35	3	4	2	15	58	-
35	296	35	3	4	3	20	65	-
36	285	35	3	4	3	20	71	-
37	273	35	3	4	4	25	77	-
38	262	35	3	4	4	25	84	-
39	250	35	3	5	4	27	91	-
40	238	35	4	5	5	29	94	-
41	227	35	4	5	5	31	99	-
42	215	35	4	5	6	33	105	-
43	204	35	4	5	6	35	111	-
44	192	35	4	5	7	35	118	-
45	180	35	5	6	7	37	125	100
46	169	35	5	6	8	37	132	50
47	157	35	5	6	8	40	140	50
48	146	35	6	6	9	43	148	100
49	134	35	6	6	11	45	156	250
50	122	35	7	6	13	48	165	800
51	116	35	8	7	16	50	174	600
52	110	35	9	7	19	55	183	700
53	105	35	10	8	22	58	192	800
54	100	35	11	8	25	60	201	900
55	-	-	12	8	29	65	210	3,500
56	-	-	13	9	34	68	219	1,750
57	-	-	14	10	39	70	228	3,000
58	-	-	15	10	44	73	237	3,250
59	-	-	16	11	49	78	246	3,750
60	-	-	-	-	-	-	-	10,000

**P<sup>3</sup>**

*Actuaries you can understand*

## J. Member Information

### Active Participants

#### General Members

<b>County</b>	<b>December 31, 1999</b>	<b>December 31, 2000</b>
Number	N/A	5,617
Average Age	N/A	44.5
Average Service	N/A	9.7
Percent Male	N/A	30.6%
Average Annual Pay	N/A	\$34,716
Total Covered Payroll	N/A	\$195,000,107

#### **Districts Electing MOU**

	<b>December 31, 1999</b>	<b>December 31, 2000</b>
Number	N/A	99
Average Age	N/A	46.6
Average Service	N/A	11.1
Percent Male	N/A	81.8%
Average Annual Pay	N/A	\$41,943
Total Covered Payroll	N/A	\$4,152,340

#### **Districts Not Electing MOU**

	<b>December 31, 1999</b>	<b>December 31, 2000</b>
Number	N/A	187
Average Age	N/A	42.5
Average Service	N/A	6.4
Percent Male	N/A	65.8%
Average Annual Pay	N/A	\$43,195
Total Covered Payroll	N/A	\$8,077,389

**P<sup>3</sup>**

*Actuaries you can understand*



<b>Total General</b>	<b>December 31, 1999</b>	<b>December 31, 2000</b>
Number	5,642	5,903
Average Age	44.6	44.5
Average Service	9.8	9.6
Percent Male	33.2%	32.6%
Average Annual Pay	\$37,541	\$35,106
Total Covered Payroll	\$211,804,416	\$207,229,836

### Safety Members

	<b>December 31, 1999</b>	<b>December 31, 2000</b>
Number	1,496	1,581
Average Age	41.3	41.3
Average Service	13.3	13.1
Percent Male	83.5%	83.1%
Average Annual Pay	\$50,432	\$48,104
Total Covered Payroll	\$75,446,382	\$76,052,708

### Total Active Members

	<b>December 31, 1999</b>	<b>December 31, 2000</b>
Number	7,138	7,484
Average Age	43.9	43.8
Average Service	10.5	10.3
Percent Male	43.7%	43.3%
Average Annual Pay	\$40,242	\$37,852
Total Covered Payroll	\$287,250,798	\$283,282,544

---

**P<sup>3</sup>**

*Actuaries you can understand*

## Terminated Vested Participants

### General Members

	<i>December 31, 1999</i>	<i>December 31, 2000</i>
Number	712	746
Average Age	45.5	45.7
Percent Male	N/A	41.8%

### Safety Members

	<i>December 31, 1999</i>	<i>December 31, 2000</i>
Number	88	79
Average Age	42.1	43.7
Percent Male	N/A	79.0%

### All Members

	<i>December 31, 1999</i>	<i>December 31, 2000</i>
Number	800	825
Average Age	45.1	45.5
Percent Male	N/A	45.4%

## Retired Participants

### General Members

#### **Service Retirements and Beneficiaries**      **December 31, 1999**      **December 31, 2000**

Number	2,764	2,868
Average Age	71.1	71.2
Percent Male	N/A	43.3%
Average Monthly Benefit	\$970	\$1,013

#### **Disabled**      **December 31, 1999**      **December 31, 2000**

Number	533	511
Average Age	60.7	60.9
Percent Male	N/A	36.8%
Average Monthly Benefit	\$977	\$1,003

#### **Total General**      **December 31, 1999**      **December 31, 2000**

Number	3,297	3,379
Average Age	69.4	69.6
Percent Male	N/A	43.3%
Average Monthly Benefit	\$971	\$1,012

**P<sup>3</sup>**

*Actuaries you can understand*

## Safety Members

### ***Service Retirements and Beneficiaries***      ***December 31, 1999***      ***December 31, 2000***

Number	601	544
Average Age	65.6	66.3
Percent Male	N/A	72.4%
Average Monthly Benefit	\$2,024	\$2,130

### ***Disabled***      ***December 31, 1999***      ***December 31, 2000***

Number	261	391
Average Age	55.2	58.4
Percent Male	N/A	74.7%
Average Monthly Benefit	\$1,744	\$1,648

### ***Total Safety***      ***December 31, 1999***      ***December 31, 2000***

Number	862	935
Average Age	62.4	65.1
Percent Male	N/A	73.3%
Average Monthly Benefit	\$1,939	\$1,928

---

**P<sup>3</sup>**

*Actuaries you can understand*

## Total Members

### ***Service Retirements and Beneficiaries***      ***December 31, 1999***      ***December 31, 2000***

Number	3,365	3,412
Average Age	70.2	69.8
Percent Male	41.9%	41.7%
Average Monthly Benefit	\$1,158	\$1,191

### ***Disabled***      ***December 31, 1999***      ***December 31, 2000***

Number	794	902
Average Age	58.9	70.5
Percent Male	54.3%	53.2%
Average Monthly Benefit	\$1,229	\$1,283

### ***Total Retirees***      ***December 31, 1999***      ***December 31, 2000***

Number	4,159	4,314
Average Age	68.0	70.5
Percent Male	43.9%	44.1%
Average Monthly Benefit	\$1,172	\$1,210

---

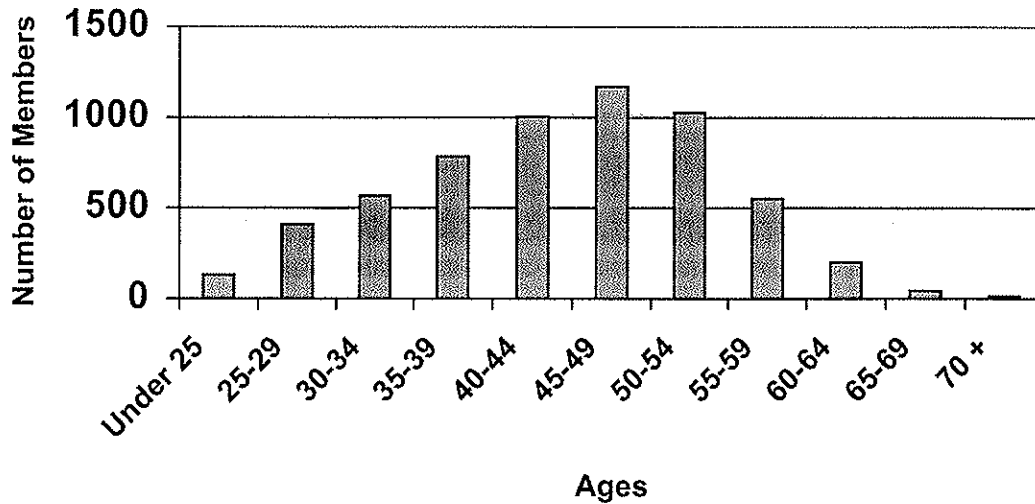
**P<sup>3</sup>**

*Actuaries you can understand*

### Active General Members by Age and Service as of December 31, 2000

<u>Service</u> >>	<u>Under</u> 1	1-4	5-9	10-14	15-19	20-24	25-29	30 +	Total
<u>Age</u> Under 25	90	41	-	-	-	-	-	-	131
25-29	173	198	36	1	-	-	-	-	408
30-34	112	247	159	47	2	-	-	-	567
35-39	93	222	196	192	76	4	-	-	783
40-44	81	223	224	230	174	70	1	-	1,003
45-49	79	243	239	239	174	143	45	6	1,168
50-54	60	176	178	211	155	114	102	32	1,028
55-59	26	93	107	110	75	60	38	44	553
60-64	6	26	49	52	24	17	13	14	201
65-69	2	5	9	12	4	6	6	2	46
70 +	-	-	3	4	4	2	-	2	15
<b>Total</b>	722	1,474	1,200	1,098	688	416	205	100	5,903

### Active General Members by Age



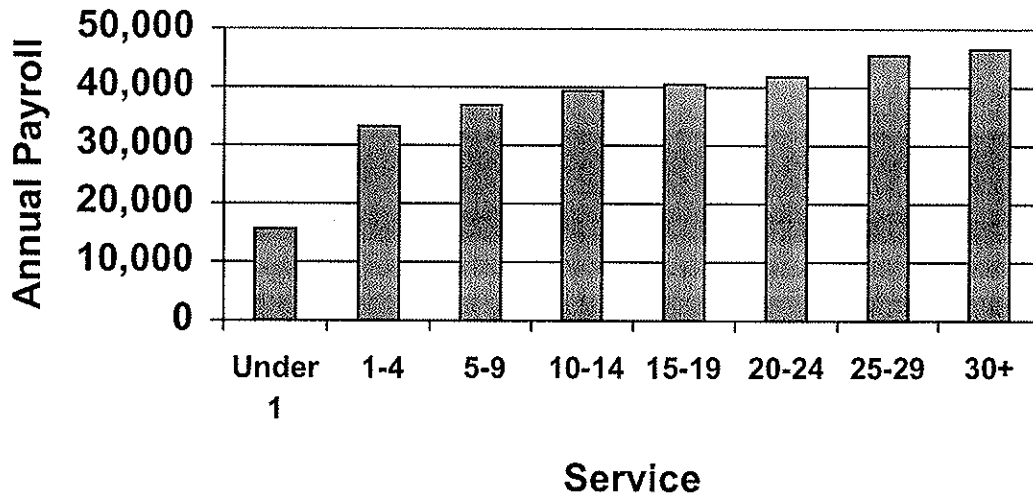
**P<sup>3</sup>**

*Actuaries you can understand*

### Average Annual Compensation for General Members by Age and Service as of December 31, 2000

Service >>	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30 +	Total
<b>Age</b>									
Under 25	12,776	24,646	-	-	-	-	-	-	16,491
25-29	15,659	31,679	31,150	23,508	-	-	-	-	24,819
30-34	15,945	32,278	36,312	32,183	34,569	-	-	-	30,183
35-39	15,719	32,904	35,250	37,304	34,960	32,600	-	-	32,727
40-44	15,628	34,057	38,045	40,554	42,038	38,993	38,326	-	36,682
45-49	16,116	34,056	36,589	40,237	42,212	43,330	42,948	44,141	37,370
50-54	19,272	34,383	38,910	41,632	41,353	44,583	46,495	40,808	39,357
55-59	14,163	37,467	37,685	39,378	39,592	39,570	45,916	48,725	38,786
60-64	7,390	29,963	37,009	35,278	38,154	39,354	41,737	51,587	36,422
65-69	43,064	55,530	45,009	41,182	27,667	28,204	55,739	68,832	43,805
70 +	-	-	30,570	48,108	26,566	26,249	-	38,635	34,678
<b>Total</b>	15,652	33,258	36,949	39,417	40,548	41,835	45,538	46,518	35,106

### General Member Pay by Service



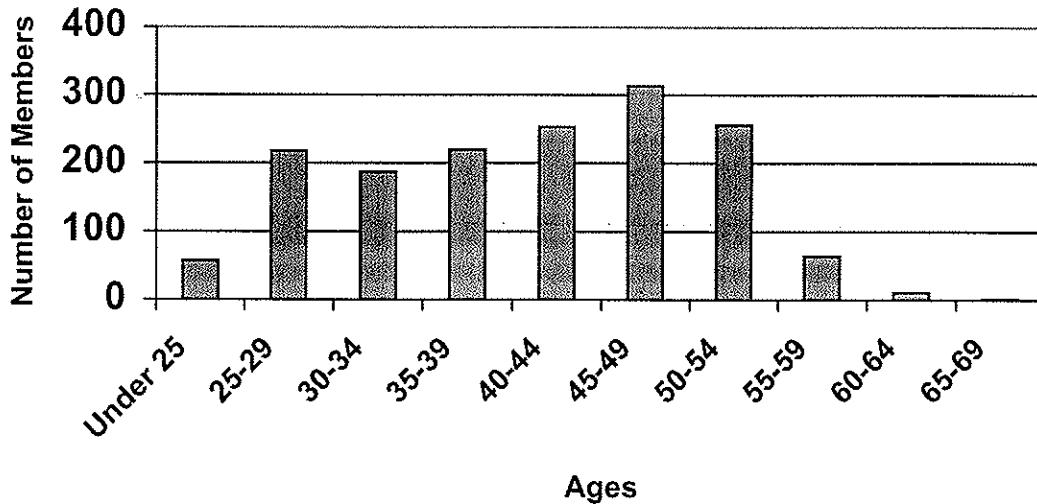
**P<sup>3</sup>**

Actuaries you can understand

### Active Safety Members by Age and Service as of December 31, 2000

Service >>	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30 +	Total
<b>Age</b>									
Under 25	34	23	-	-	-	-	-	-	57
25-29	41	143	34	-	-	-	-	-	218
30-34	25	78	58	26	-	-	-	-	187
35-39	9	43	34	101	33	-	-	-	220
40-44	8	21	19	78	102	25	-	-	253
45-49	1	10	13	35	73	124	57	-	313
50-54	1	10	9	40	31	49	92	24	256
55-59	1	4	5	12	2	11	18	11	64
60-64	1	2	3	1	-	-	-	4	11
65-69	-	-	1	-	-	1	-	-	2
70 +	-	-	-	-	-	-	-	-	-
<b>Total</b>	121	334	176	293	241	210	167	39	1,581

### Active Safety Members by Age



**P<sup>3</sup>**

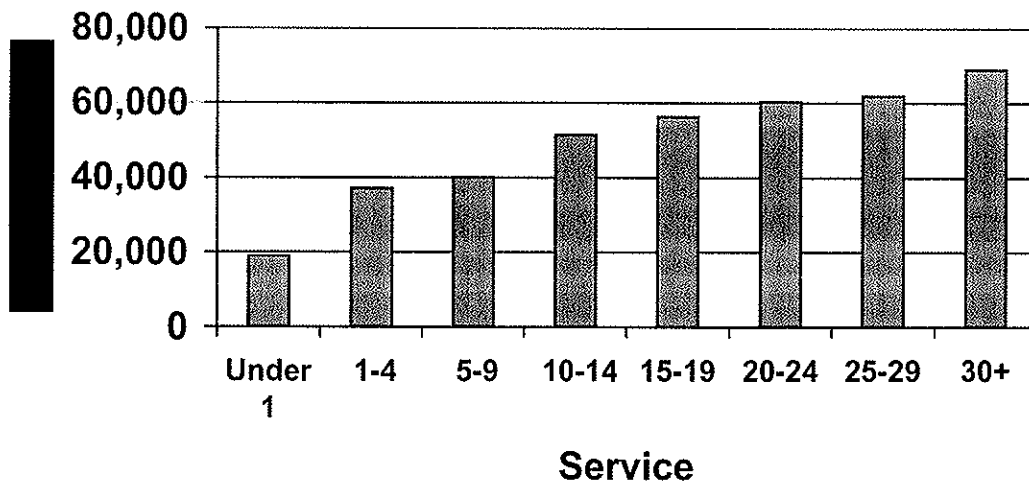
*Actuaries you can understand*



### Average Annual Compensation for Safety Members by Age and Service as of December 31, 2000

<u>Service</u> >>	<u>Under</u> 1	1-4	5-9	10-14	15-19	20-24	25-29	30 +	Total
<u>Age</u> Under 25	15,543	34,414	-	-	-	-	-	-	23,158
25-29	18,691	36,524	37,359	-	-	-	-	-	33,300
30-34	23,067	37,696	39,803	51,250	-	-	-	-	38,278
35-39	16,010	38,075	40,882	51,481	56,226	-	-	-	46,484
40-44	25,490	40,067	41,856	51,121	56,552	61,386	-	-	51,901
45-49	14,540	39,413	40,856	53,755	56,286	61,271	62,618	-	57,818
50-54	7,614	35,767	43,494	51,954	56,043	58,088	62,381	70,978	58,051
55-59	18,133	39,086	39,586	44,612	48,862	57,412	57,465	65,083	52,927
60-64	34,259	30,782	39,221	41,464	-	-	-	68,187	47,973
65-69	-	-	38,704	-	-	46,042	-	-	42,373
70 +	-	-	-	-	-	-	-	-	-
<b>Total</b>	18,959	37,135	40,005	51,385	56,298	60,268	61,932	69,030	48,104

### Safety Member Pay by Service



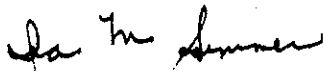
**P<sup>3</sup>**

*Actuaries you can understand*

## **K. Actuarial Certification**

The valuation has been conducted in accordance with generally accepted actuarial principles and practices.

The actuarial assumptions employed in the development of the recommended contribution rates were selected to be individually reasonable (taking into account the experience of the Plan and reasonable expectations) and which, in combination, offer the actuary's best estimate of anticipated experience under the Plan.



Ira M. Summer, F.S.A, E.A.  
Public Pension Professionals, Inc.

June 2001

---

**P<sup>3</sup>**

*Actuaries you can understand*