



Public Pension  
Professionals, Inc.

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# Kern County Employees' Retirement Association

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Actuarial Valuation as of December 31, 2001



April 30, 2002



*Actuaries you can understand*



# Table of Contents

<b>HIGHLIGHTS</b>	<b>1</b>
<b>BOARD SUMMARY</b>	<b>2</b>
A. Major Events	2
B. Funded Position – Regular Benefits	5
C. Contribution Rates	9
<b>ACCOUNTING INFORMATION</b>	<b>13</b>
A. Schedule of Funding Progress	13
B. Schedule of Employer Contributions	14
C. Development of Net Pension Obligation	15
D. Schedule of Employer Cost	16
<b>TECHNICAL INFORMATION</b>	<b>17</b>
A. Asset Information	17
B. Liability Information	24
C. Funded Percentage	27
D. Employer Contribution Rates	32
E. Summary of Major Plan Provisions – General Members	36
F. Member Contribution Rates – General Members	41
G. Summary of Major Plan Provisions – Safety Members	43
H. Member Contribution Rates – Safety Members	48
I. Summary of Actuarial Assumptions and Funding Methods	50
J. Member Information	61
K. Actuarial Certification	73



Section  
**1** **Highlights**

This report presents the results of the December 31, 2001 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, 2001      December 31, 2000**

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

General – County	13.28%	12.29%
General – Districts Electing MOU	17.82%	15.04%
General – Districts Not Electing MOU	13.68%	9.51%
Safety	27.66%	14.66%
Total Plan	16.96%	12.89%

**Funded Status – Regular Benefits**

Actuarial Accrued Liability	\$1,612.0	\$1,389.0
Actuarial Value of Assets	\$1,508.3	\$1,434.9
UAAL	\$103.7	(\$45.9)
Funded Percentage	94%	103%

**Funded Status – SRBR**

Actuarial Accrued Liability	\$58.0	\$54.4
Actuarial Value of Assets	\$163.6	\$157.9
UAAL	(\$105.6)	(\$103.5)
Funded Percentage	282%	290%

**Key Assumptions**

Interest Rate	8.0%	8.0%
Average Salary Increase	5.6%	5.6%
Inflation	4.0%	4.0%

## 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, 2001, KCERA's target asset allocation was:

Domestic Equities	35%
International Equities	20%
Fixed Income	35%
Real Estate	5%
Alternative Investments	5%

During the past year, Plan investments suffered a loss of approximately 4.1% (\$58.9 million) on a market value basis. The impact of the investment loss on the employer contribution rates and on the funded position of Regular Benefits was reduced by the use of an asset smoothing technique and application of KCERA's Contingency Reserve.

Due to the asset smoothing technique, the return on an actuarial basis was approximately 7.7%. This was only slightly less than the Plan's assumed rate of 8.0%. This resulted in an investment loss on an actuarial basis of approximately \$4.7 million net of expenses. Detailed information regarding plan investments is shown in the Asset Information subsection in the Technical Information section of the report.

## Demographics

There was a significant increase in active payroll during 2001. This increase occurred at both the County and in participating Districts, and was due to a combination of new hires and having fewer terminations than assumed. Overall, the number of active members increased by 7.6% from 7,484 to 8,055. In addition, the average pay reported to us increased by 9.5%. This caused the total covered payroll to increase by 17.8% to \$333.8 million.

Total payments to retirees and beneficiaries increased by approximately 11% during 2001. The number of retired members and beneficiaries receiving pension checks increased by 1.3% from 4,314 to 4,372. New retirements were partially offset by a consolidation of records for retirees with multiple valuation records. The average monthly benefit check increased by 9.6% to \$1,326.

## Assumptions and Methodology

The County has expressed an interest in implementing Section 31617 of the County Employees Retirement Law. Under that section, earnings in excess of the assumed rate would be used to offset COLA contributions. It is our understanding that KCERA is currently researching the legal implications of this election. From an actuarial perspective, we have been asked to review the alignment of reserves so that COLA contributions properly reflect the cost of these benefits. With that in mind, we recommend a realignment of reserves, shown in more detail in the Asset Information subsection in the Technical Information section of the report. The rules for this realignment were:

1. *Reallocate reserves within classifications.* In this way, there would be no cross subsidy (of Safety by General or the County by Districts, for example) created by this realignment.
2. *Equalize the funded percentage of Basic and Cost of Living Benefits.*

This is a one-time change that should only be performed in future years if the reserves appear to have gotten severely out of alignment. This would be shown by significant differences in the funded percentages of Basic and Cost of Living Benefit within classification.

This realignment has no impact on total contribution rates for any classification. It will only reallocate contribution rates between Basic and Cost of Living Benefits. The implementation of 31617 would likely affect future funding of the Supplemental Retiree Benefit Reserve.

## Benefits

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.



## Future Issues

As part of a court settlement, the County has increased the maximum cost-of-living increase that can be provided from Regular Plan reserves from the current level of 2% per year, up to 2.5% per year. This benefit increase will be partly funded using money set aside for this purpose within the Supplemental Retiree Benefit Reserve by the Retirement Board. 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 results would have been if the COLA increase were effective with this valuation.

The Retirement Board is discussing potential changes to its funding policy. Potential changes may affect the way that costs are allocated between participating employers and time periods. The potential impact of these changes is discussed in more detail in a separate report.



## 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, 2001.
  - **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.

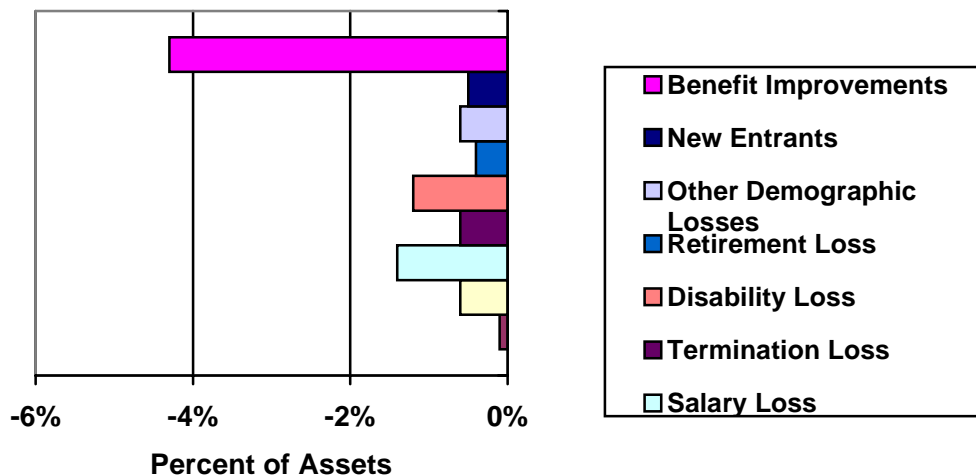
The Plan's funded percentage for Regular Benefits is 93.6%. It is calculated by dividing the Actuarial Value of Assets (\$1,508.3 million) by the Actuarial Accrued Liability (\$1,612.0 million).

## Impact of Major Events

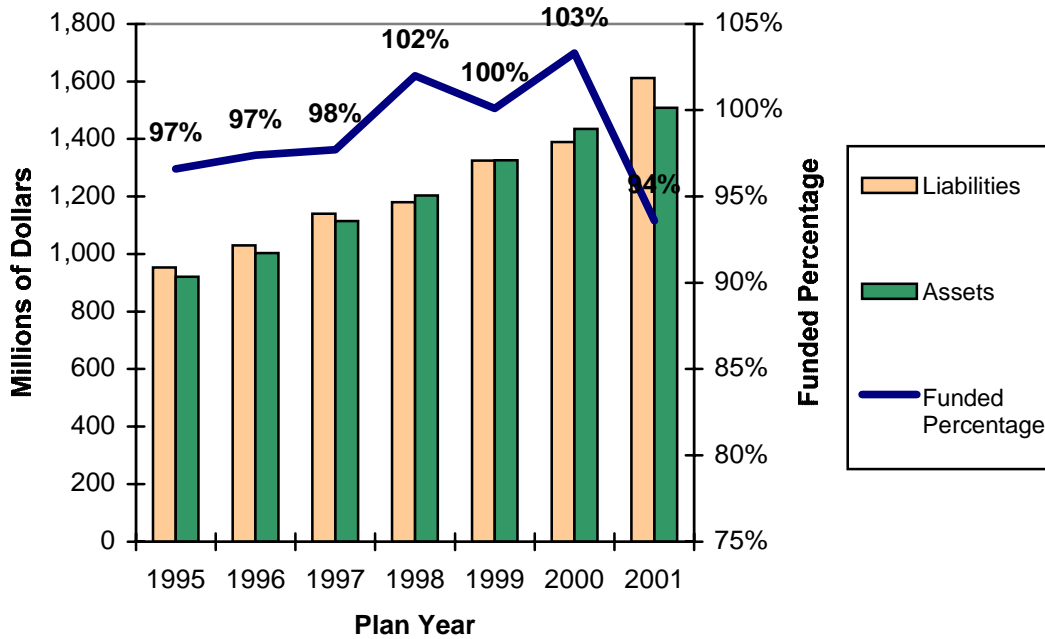
The funded percentage decreased from 103.3% in 2000 to 93.6% in 2001. This decrease can be attributed to the following events.

- Normal operation of plan decreased the funded percentage by 0.1%.
- Investment losses decreased the funded percentage by 0.6%.
- Salary increases greater than assumed decreased the funded percentage by 1.4%.
- Fewer terminations than assumed decreased the funded percentage by 0.6%.
- Benefits paid to new retirees and beneficiaries were greater than assumed. This decreased the funded percentage by 0.4%.
- Disability benefits paid to members who became disabled in the past year were greater than anticipated. This decreased the funded percentage by 1.2%.
- Demographic losses from other sources dropped the funded percentage by 0.6%.
- New entrants into KCERA lowered the funded percentage by 0.5%.
- Improvement in benefits for Safety members decreased the funded percentage by 4.3%

### 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
2001	\$1,612.0	\$1,508.3	93.6%
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.

## 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 an alternative benefit scenario. This 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>	\$1,612.0	\$1,508.3	93.6%
<b>With 2.5% COLA</b>	\$1,686.2	\$1,573.0	93.3%

## 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 two years ago when they changed the investment return, inflation and demographic assumptions.
- **Methodology Changes** – Every few years, the actuary recommends a refinement in its actuarial methodology. This might be a change in the method used to allocate plan liabilities or in the smoothing method used to determine the actuarial value of assets.
- **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.

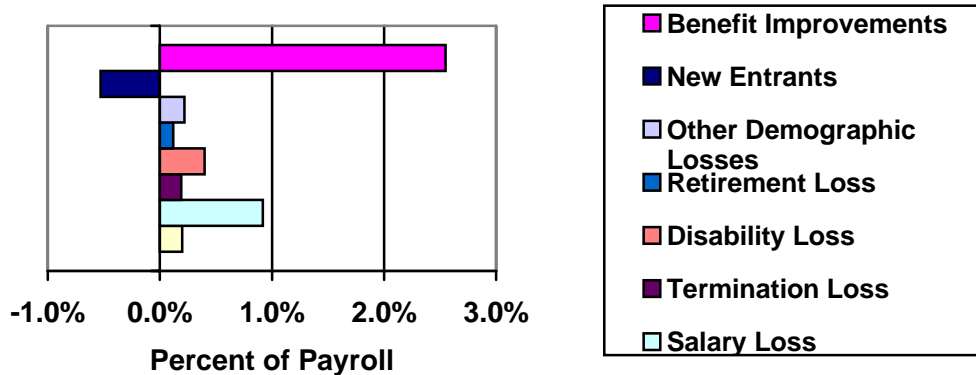
Changes in UAL due to Golden Handshake programs are amortized as a level percentage of payroll over a three-year period. All other changes are amortized as a level percentage of payroll over the period ending December 31, 2021. This amortization period was originally set at 29 years in 1992, and has been reduced to twenty years. This amortization period is scheduled to continue to decrease each year.

## Impact of Major Events

The average Employer Contribution rate increased from 12.89% of pay in 2000 to 16.96% of pay in 2001. This increase can be roughly attributed to the following events.

- Investment losses raised the contributions by 0.2% of pay.
- Salary increases greater than assumed increased contributions by 0.9%.
- Fewer terminations than assumed increased the contribution rate by 0.2%.
- Benefits paid to new retirees and beneficiaries were greater than assumed. This increased the contribution rate by 0.1%.
- Disability benefits paid to members who became disabled in the past year were greater than anticipated. This increased the contribution rate by 0.4%.
- Losses from other sources raised the contribution rate by 0.2%.
- New entrants into KCERA lowered contribution rates by 0.5%, although they did increase the total dollars of contributions due.
- Benefit improvements for Safety members increased the contribution rate for Safety members by 10.3% of Safety pay, and the total contribution rate by 2.6% of pay.

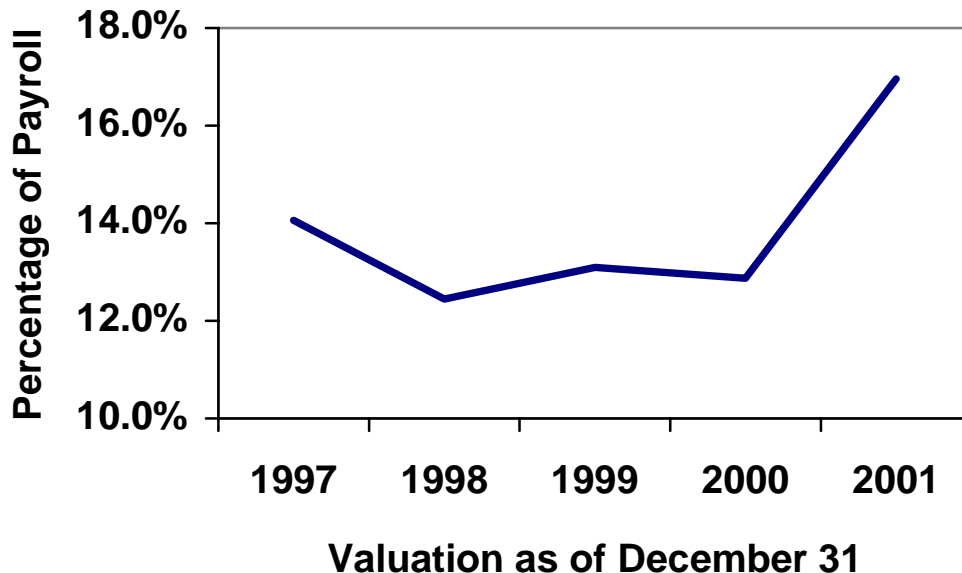
### Impact of Major Events on Employer Contribution Rate



### History of Contribution Rates

Between 1997 and 2000, the contribution rate remained relatively steady thanks to the strong investment performance. The increase this year is primarily due to a combination of salary increases and an improvement in the benefit available to Safety members.

### Average Contribution Rates



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

## History of Contribution Rates

<b>Valuation as of 12/31</b>	<b>General – County</b>	<b>General – District Electing MOU</b>	<b>General – District Not Electing MOU</b>	<b>Safety</b>	<b>All Members</b>
2001	13.28%	17.82%	13.68%	27.66%	16.96%
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%	15.35%	10.78%	16.93%	14.06%

## 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 an alternative benefit scenario. This 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 scenario, the average contribution rate for KCERA would increase to 17.9% of payroll.



# Section 3 Accounting Information

Accounting standards for governmental entities are set by the Governmental Accounting Standards Board (GASB). Statement Number 25 (GAS25) describes the disclosure requirements for the financial statements of the Kern County Employees' Retirement Association (KCERA). These include a Schedule of Funding Progress and a Schedule of Employer Contributions.

The disclosure requirements for the County's financial statements are described in Statement Number 27 (GAS27). These include the development of the Annual Pension Cost and the Net Pension Obligation.

## A. Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c))
12/31/95	\$ 920,750	\$ 952,880	\$ 32,130	96.6%	\$ 270,454	11.9%
12/31/96	1,003,076	1,029,574	26,498	97.4%	273,351	9.7%
12/31/97	1,113,914	1,140,019	26,105	97.7%	266,640	9.8%
12/31/98	1,203,670	1,179,753	(23,917)	102.0%	282,251	-8.5%
12/31/99	1,325,928	1,324,662	(1,266)	100.1%	297,738	-0.4%
12/31/00	1,434,873	1,388,984	(45,889)	103.3%	283,283	-16.2%
12/31/01	1,508,291	1,611,960	103,669	93.6%	333,791	31.1%

Information in the above schedule for Plan Years ended December 31, 1999 and before are based on information prepared by Watson Wyatt Worldwide. All dollar amounts are in thousands.

## B. Schedule of Employer Contributions

<b>Fiscal Year Ended June 30</b>	<b>Annual Required Contribution (ARC)</b>	<b>Percentage Contributed</b>
2001	\$ 41,067,487	100%
2000	37,575,583	100%
1999	40,159,103	100%
1998	35,420,517	100%
1997	27,902,854	100%

The table below summarized certain information used in the calculation of the schedules in subsections A and B:

<b>Valuation date</b>	December 31, 2001
<b>Actuarial cost method</b>	Projected Unit Credit
<b>Amortization method</b>	Level percent closed
<b>Remaining amortization period</b>	20 years
<b>Asset valuation method</b>	5-year smoothed market
<b>Actuarial assumptions</b>	
<b>Investment rate of return*</b>	8.0%
<b>Projected salary increases*</b>	5.0 – 10.0%
<b>* Includes inflation at</b>	4.0%
<b>Cost of living adjustments</b>	2.0%

Information in the above schedule for the Fiscal Years ended June 30, 2000 and before are based on information appearing in the June 30, 2000 Comprehensive Annual Financial Report prepared by KCERA.

## C. Development of Net Pension Obligation

	<b>Year Ended June 30, 2000</b>	<b>Year Ended June 30, 2001</b>
<b>1. Beginning of year NPO</b>	\$ 0	\$ 0
<b>2. Employer Contributions</b>	(37,575,583)	(41,067,487)
<b>3. Pension Cost</b>	<u>37,575,583</u>	<u>41,067,487</u>
<b>4. End of year NPO</b>	0	0

The NPO for the beginning of the fiscal year ended June 30, 2000 and the Pension Cost for that year were based on information prepared by Watson Wyatt Worldwide.

## D. Schedule of Employer Cost

<b>Fiscal Year Ended June 30</b>	<b>Annual Pension Cost (APC)</b>	<b>Percentage of APC Contributed</b>	<b>Net Pension Obligation</b>
2001	\$ 41,067,487	100%	\$ 0
2000	37,575,583	100%	0
1999	40,159,103	100%	0
1998	35,420,517	100%	0
1997	27,902,854	100%	0

Information in the above schedule for the Fiscal Years ended June 30, 2000 and before are based on information prepared by Watson Wyatt Worldwide.

The Annual Pension Costs for the years beginning July 1, 2000 and 2001 are developed as follows:

	<b>Year Beginning July 1, 1999</b>	<b>Year Beginning July 1, 2000</b>
<b>1. Annual Required Contribution</b>	\$ 37,575,583	\$ 41,067,487
<b>2. Interest on NPO</b>	0	0
<b>3. Amortization of NPO</b>	0	0
<b>4. Pension Cost</b>	37,575,583	41,067,487

# Section 4 Technical Information

## A. Asset Information

### Net Plan Assets at Market Value as of December 31, 2001

The following information related to the allocation of plan assets comes from the December 31, 2001 report prepared by Wilshire Associates. Amounts may not add exactly due to rounding.

	Actual		Target	
	\$000's	%	\$000's	%
Cash and Cash Equivalents	\$ 14,116	1%	\$ 0	0%
Fixed Income	556,384	37%	528,962	35%
Domestic Equity	540,363	36%	528,962	35%
International Equity	269,098	18%	302,264	20%
Real Estate	94,380	6%	75,566	5%
Alternative Investments	35,853	2%	75,566	5%
Other Assets	1,125	0%	0	0%
<b>Net Assets</b>	<b>\$1,511,319</b>	<b>100%</b>	<b>\$1,511,319</b>	<b>100%</b>

### Asset Allocation



## Development of Actuarial Value of Assets

Development of Unexpected Gain (Loss) for the Six-Month Periods Ended in 2001

<b>For the Six-Month Period Ended</b>	<b>June 30, 2001</b>	<b>December 31, 2001</b>
1. Market Value of Assets - Beginning of Period	\$ 1,618,685,190	\$ 1,542,081,043
2. Contributions	7,705,824	26,618,452
3. Benefit Payments	(37,266,469)	(39,228,015)
4. Assumed Interest on items (1), (2) and (3)	<u>64,156,195</u>	<u>61,431,050</u>
5. Expected Value of Assets at End of Year	1,653,280,739	1,590,902,531
6. Actual Market Value of Assets at End of Year	<u>1,542,081,043</u>	<u>1,511,318,766</u>
7. Gain (Loss) for Plan Year = (6) - (5)	(111,199,696)	(79,583,764)

*Amounts may not add due to rounding*

Development of Market Stabilization Reserve

<b>Six-Month Period Ended</b>	<b>Unexpected Gain (Loss)</b>	<b>Percent Not Yet Phased In</b>	<b>Gain (Loss) Excluded</b>
12/31/01	\$ (79,583,764)	90%	\$ (71,625,388)
6/30/01	(111,199,696)	80%	(88,959,757)
12/31/00	N/A	70%	N/A
6/30/00	N/A	60%	N/A
12/31/99	N/A	50%	N/A
6/30/99	N/A	40%	N/A
12/31/98	N/A	30%	N/A
6/30/98	N/A	20%	N/A
12/31/97	N/A	10%	N/A
<i>Total</i>			\$ (160,585,145)

Development of Actuarial Value of Assets

1. Market Value of Assets as December 31	\$ 1,511,318,766
2. Market Stabilization Reserve	<u>(160,585,145)</u>
3. Actuarial Value: (1) – (2)	\$ 1,671,903,911

**Allocation of Actuarial Value of Assets for Valuation Purposes**

	<b><i>After Realignment</i></b>	<b><i>Before Realignment</i></b>	<b>December 31, 2000</b>
	<b>December 31, 2001</b>	<b>December 31, 2001</b>	
<b><i>Basic</i></b>			
General Members	679,757,132	651,337,219	618,353,259
District Members	30,697,389	34,260,657	32,685,897
Safety Members	<u>473,685,489</u>	<u>440,659,812</u>	<u>420,654,552</u>
Subtotal	1,184,140,010	1,126,257,688	1,071,693,708
<b><i>Cost-of-Living</i></b>			
General Members	180,765,521	209,185,433	199,150,512
District Members	7,268,353	3,705,084	3,083,456
Safety Members	<u>136,117,600</u>	<u>169,143,278</u>	<u>160,945,042</u>
Subtotal	324,151,474	382,033,795	363,179,010
<b><i>Total</i></b>			
<b><i>Valuation Reserves</i></b>	1,508,291,483	1,508,291,483	1,434,872,718
SRBR	163,612,428	163,612,428	157,936,450
Contingency Reserve	0	0	25,876,022
<b><i>Total Actuarial Value of Assets</i></b>	1,671,903,911	1,671,903,911	1,618,685,190

Amounts may not add exactly due to rounding.

## Reconciliation of Assets for the Year Ended December 31, 2001

	<b>Market Value</b>	<b>Actuarial Value</b>
<b>Beginning of Year</b>	<b>\$1,618,685,190</b>	<b>\$1,434,872,718</b>
Contributions – Employers	23,993,925	23,993,925
Contributions – Members	10,330,351	10,330,351
Gross Investment Income	(58,920,791)	110,788,385
Investment Expenses	(4,186,088)	N/A
Benefits paid to participants	(76,494,484)	(69,604,559)
Administrative Expenses	(2,089,337)	(2,089,337)
<b>End of Year</b>	<b>\$1,511,318,766</b>	<b>\$1,508,291,483</b>
Estimated Return (net of expenses)	-4.08%	7.67%

Amounts may not add exactly due to rounding.

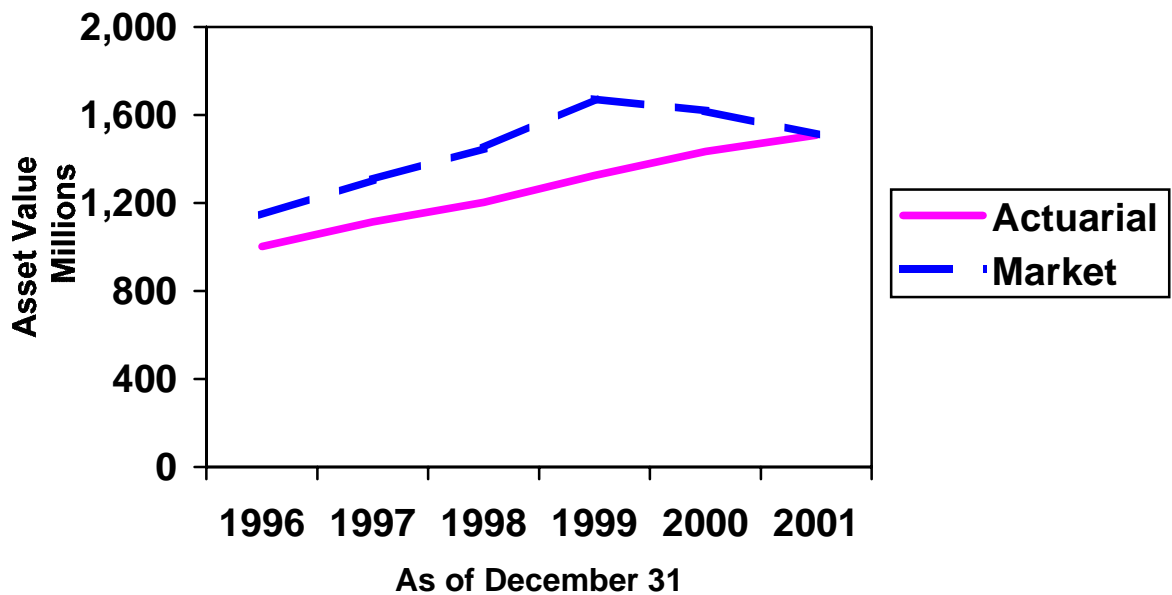


## Historical Asset Values

Asset Values as of December 31

Year	Market Value	Actuarial Value
2001	\$1,511,318,766	\$ 1,508,291,483
2000	\$1,618,685,190	\$ 1,434,872,718
1999	\$1,673,422,215	\$ 1,325,928,243
1998	\$1,449,358,816	\$ 1,203,670,449
1997	\$1,306,925,405	\$ 1,113,914,418
1996	\$1,144,777,444	\$ 1,003,075,890

Comparison of Asset Values



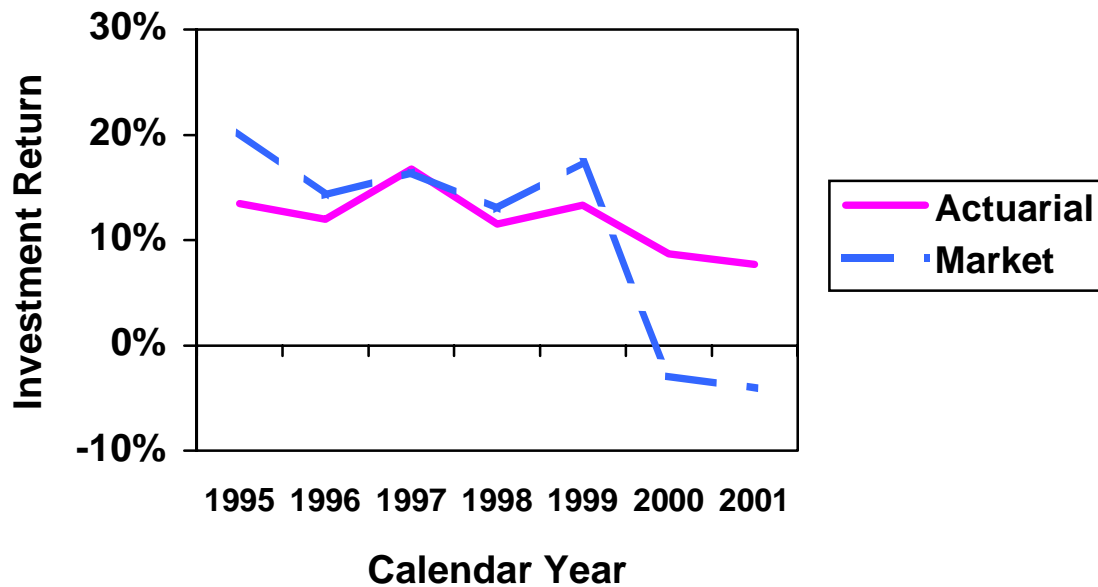
The Market Value of Assets includes all plan assets including those allocated to the Supplemental Retiree Benefit Reserve and the Contingency Reserve. The Actuarial Value of Assets includes only those assets that are taken into account in determining employer contribution rates. These exclude the Supplemental Retiree Benefit Reserve and the Contingency Reserve.

## Historical Rates of Investment Return

Estimated Investment Return for the Year Ended December 31

Year	Market Value	Actuarial Value
2001	-4.08%	7.67%
2000	-2.92%	8.69%
1999	17.41%	13.29%
1998	12.93%	11.54%
1997	16.46%	16.75%
1996	14.26%	11.95%
1995	20.24%	13.46%

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 years 2000 and 2001 have been calculated net of investment fees.

## Statement of Reserves and Fund Balances

	<i>After Realignment</i>	<i>Before Realignment</i>	
	December 31, 2001	December 31, 2001	December 31, 2000
<b>Member Deposit Reserves</b>			
General Members	110,078,634	110,078,634	102,200,898
District Members	9,167,010	9,167,010	8,675,882
Safety Members	<u>60,658,734</u>	<u>60,658,734</u>	<u>61,208,041</u>
Subtotal	179,904,379	179,904,379	172,084,820
<b>Employers Advance Reserves</b>			
General Members	244,265,164	215,845,252	212,254,864
District Members	10,472,356	14,035,625	13,648,340
Safety Members	<u>210,086,484</u>	<u>177,060,806</u>	<u>193,845,779</u>
Subtotal	464,824,004	406,941,683	419,748,983
<b>Cost-of-Living Reserves</b>			
General Members	180,765,521	209,185,433	198,556,929
District Members	7,268,353	3,705,084	3,074,266
Safety Members	<u>136,117,600</u>	<u>169,143,278</u>	<u>160,465,334</u>
Subtotal	324,151,474	382,033,795	362,096,529
<b>Retired Member Reserves</b>			
General Members*	325,413,333	325,413,333	302,054,451
District Members*	11,058,022	11,058,022	10,264,253
Safety Members	<u>202,940,271</u>	<u>202,940,271</u>	<u>164,346,942</u>
Subtotal	539,411,627	539,411,627	476,665,646
<b>Supplemental Retiree Benefit Reserves</b>			
	163,612,428	163,612,428	157,936,450
<b>Contingency Reserve</b>			
	0	0	25,876,022
<b>Total Reserves</b>	1,671,903,911	1,671,903,911	1,614,408,450
<b>Market Stabilization Reserve</b>			
	(160,585,145)	(160,585,145)	4,276,740
<b>Total Fund Balance</b>	1,511,318,766	1,511,318,766	1,618,685,190

\* 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.

## B. Liability Information

### Present Value of Projected Benefits

	Basic	COLA	Total
<b>1. Retirees and Beneficiaries</b>			
A. General			
i. County			
a. Regular Benefits	304,230,108	110,167,788	414,397,896
b. Golden Handshake	<u>270,492</u>	<u>64,212</u>	<u>334,704</u>
c. All Benefits	304,500,600	110,232,000	414,732,600
ii. Districts	<u>12,989,760</u>	<u>3,915,948</u>	<u>16,905,708</u>
iii. Total	317,490,360	114,147,948	431,638,308
B. Safety	<u>212,807,820</u>	<u>84,385,296</u>	<u>297,193,116</u>
C. All Retirees and Beneficiaries	530,298,180	198,533,244	728,831,424
<b>2. Deferred Vested Members</b>			
A. General			
i. County	30,694,971	5,570,227	36,265,198
ii. Districts*	<u>0</u>	<u>0</u>	<u>0</u>
iii. Total	30,694,971	5,570,227	36,265,198
B. Safety	<u>5,206,272</u>	<u>1,073,086</u>	<u>6,279,358</u>
C. All Deferred Vested	35,901,243	6,643,313	42,544,556
<b>3. Active Members</b>			
A. General			
i. County	605,069,198	116,882,714	721,951,912
ii. Districts	<u>42,119,064</u>	<u>8,297,324</u>	<u>50,416,388</u>
iii. Total	647,188,262	125,180,038	772,368,300
B. Safety	<u>444,071,401</u>	<u>94,492,877</u>	<u>538,564,278</u>
C. All Active Members	1,091,259,663	219,672,915	1,310,932,578
<b>4. All Members</b>			
A. General			
i. County			
a. Regular Benefits	939,994,277	232,620,729	1,172,615,006
b. Golden Handshake	<u>270,492</u>	<u>64,212</u>	<u>334,704</u>
c. All Benefits	940,264,769	232,684,941	1,172,949,710
ii. Districts	<u>55,108,824</u>	<u>12,213,272</u>	<u>67,322,096</u>
iii. Total	995,373,593	244,898,213	1,240,271,806
B. Safety	<u>662,085,493</u>	<u>179,951,259</u>	<u>842,036,752</u>
C. All Members	1,657,459,086	424,849,472	2,082,308,558

\* Liabilities for Deferred Vested Members who were previously employed at the Districts are included with Deferred Vested Liabilities for former County employees. These amounts will be separated in future valuations.

## Actuarial Accrued Liability

	Basic	COLA	Total
<b>1. Retirees and Beneficiaries</b>			
A. General			
i. County			
a. Regular Benefits	304,230,108	110,167,788	414,397,896
b. Golden Handshake	<u>270,492</u>	<u>64,212</u>	<u>334,704</u>
c. All Benefits	304,500,600	110,232,000	414,732,600
ii. Districts	<u>12,989,760</u>	<u>3,915,948</u>	<u>16,905,708</u>
iii. Total	317,490,360	114,147,948	431,638,308
B. Safety	<u>212,807,820</u>	<u>84,385,296</u>	<u>297,193,116</u>
C. All Retirees and Beneficiaries	530,298,180	198,533,244	728,831,424
<b>2. Deferred Vested Members</b>			
A. General			
i. County	30,694,971	5,570,227	36,265,198
ii. Districts	<u>0</u>	<u>0</u>	<u>0</u>
iii. Total	30,694,971	5,570,227	36,265,198
B. Safety	<u>5,206,272</u>	<u>1,073,086</u>	<u>6,279,358</u>
C. All Deferred Vested	35,901,243	6,643,313	42,544,556
<b>3. Active Members</b>			
A. General			
i. County	374,096,551	72,817,434	446,913,985
ii. Districts	<u>23,396,187</u>	<u>4,699,309</u>	<u>28,095,496</u>
iii. Total	397,492,738	77,516,743	475,009,481
B. Safety	<u>301,691,306</u>	<u>63,883,435</u>	<u>365,574,741</u>
C. All Active Members	699,184,044	141,400,178	840,584,222
<b>4. All Members</b>			
A. General			
i. County			
a. Regular Benefits	709,021,630	188,555,449	897,577,079
b. Golden Handshake	<u>270,492</u>	<u>64,212</u>	<u>334,704</u>
c. All Benefits	709,292,122	188,619,661	897,911,783
ii. Districts	<u>36,385,947</u>	<u>8,615,257</u>	<u>45,001,204</u>
iii. Total	745,678,069	197,234,918	942,912,987
B. Safety	<u>519,705,398</u>	<u>149,341,817</u>	<u>669,047,215</u>
C. All Members	1,265,383,467	346,576,735	1,611,960,202

## Normal Cost

In Dollars	<b>Basic</b>	<b>COLA</b>	<b>Total</b>
<b>1. General</b>			
A. County	22,809,651	5,507,391	28,317,042
B. District			
i. Electing MOU	799,735	179,084	978,819
ii. Not Electing MOU	<u>830,559</u>	<u>231,876</u>	<u>1,062,435</u>
iii. Total	<u>1,630,294</u>	<u>410,960</u>	<u>2,041,254</u>
C. All General Members	24,439,945	5,918,351	30,358,296
<b>2. Safety</b>			
	15,204,879	3,562,168	18,767,047
<b>3. All Members</b>			
A. County	38,014,530	9,069,559	47,084,089
B. District			
i. Electing MOU	799,735	179,084	978,819
ii. Not Electing MOU	<u>830,559</u>	<u>231,876</u>	<u>1,062,435</u>
iii. Total	<u>1,630,294</u>	<u>410,960</u>	<u>2,041,254</u>
C. All Members	39,644,824	9,480,519	49,125,343
As a Percent of Pay	<b>Basic</b>	<b>COLA</b>	<b>Total</b>
<b>1. General</b>			
A. County	9.74%	2.35%	12.10%
B. District			
i. Electing MOU	12.09%	2.71%	14.80%
ii. Not Electing MOU	8.33%	2.33%	10.65%
iii. Total	9.83%	2.48%	12.31%
C. All General Members	9.75%	2.36%	12.11%
<b>2. Safety</b>			
	18.29%	4.29%	22.58%
<b>3. All Members</b>			
A. County	11.98%	2.86%	14.84%
B. District			
i. Electing MOU	12.09%	2.71%	14.80%
ii. Not Electing MOU	8.33%	2.33%	10.65%
iii. Total	9.83%	2.48%	12.31%
C. All Members	11.88%	2.84%	14.72%

## C. Funded Percentage

### Basic Benefits

	<b>General – County</b>	<b>General – Districts</b>	<b>Safety</b>
1. Actuarial Accrued Liability			
a. Regular Benefits	709,021,630	36,385,947	519,705,398
b. Golden Handshakes	270,492	-	-
c. Total	709,292,122	36,385,947	519,705,398
2. Actuarial Value of Assets	679,757,132	30,697,389	473,685,489
3. Unfunded Actuarial Accrued Liability			
a. Regular Benefits	29,264,498	5,688,558	46,019,909
b. Golden Handshakes	270,492	-	-
c. Total	29,534,990	5,688,558	46,019,909
4. Amortization of Unfunded Actuarial Accrued Liability			
a. Regular Benefits	2,085,537	405,396	3,279,612
b. Golden Handshakes	95,422	-	-
c. Total	2,180,959	405,396	3,279,612
5. Funded Percentage	95.8%	84.4%	91.1%

## COL Benefits

	<b>General – County</b>	<b>General – Districts</b>	<b>Safety</b>
1. Actuarial Accrued Liability			
a. Regular Benefits	188,555,449	8,615,257	149,341,817
b. Golden Handshakes	64,212	-	-
c. Total	188,619,661	8,615,257	149,341,817
2. Actuarial Value of Assets	180,765,521	7,268,353	136,117,600
3. Unfunded Actuarial Accrued Liability			
a. Regular Benefits	7,789,928	1,346,904	13,224,217
b. Golden Handshakes	64,212	-	-
c. Total	7,854,140	1,346,904	13,224,217
4. Amortization of Unfunded Actuarial Accrued Liability			
a. Regular Benefits	555,150	95,987	942,425
b. Golden Handshakes	22,652	-	-
c. Total	577,802	95,987	942,425
5. Funded Percentage	95.8%	84.4%	91.1%



## Total Regular Benefits

	<b>General – County</b>	<b>General – Districts</b>	<b>Safety</b>
1. Actuarial Accrued Liability			
a. Regular Benefits	897,577,079	45,001,204	669,047,215
b. Golden Handshakes	334,704	-	-
c. Total	897,911,783	45,001,204	669,047,215
2. Actuarial Value of Assets	860,522,652	37,965,741	609,803,090
3. Unfunded Actuarial Accrued Liability			
a. Regular Benefits	37,054,427	7,035,463	59,244,125
b. Golden Handshakes	334,704	-	-
c. Total	37,389,131	7,035,463	59,244,125
4. Amortization of Unfunded Actuarial Accrued Liability			
a. Regular Benefits	2,640,687	501,383	4,222,037
b. Golden Handshakes	118,075	-	-
c. Total	2,758,762	501,383	4,222,037
5. Funded Percentage	95.8%	84.4%	91.1%

**Changes in Funded Percentage****As of Prior Valuation** **103.3%****Changes in Funded Percentage due to:**

<b>Normal Operation of Plan</b>	-0.1%
<b>Investment (Loss) Gain</b>	-0.6%
<b>Salary Loss</b>	-1.4%
<b>Termination Loss</b>	-0.6%
<b>Disability Loss</b>	-1.2%
<b>Retirement Loss</b>	-0.4%
<b>Other Demographic Experience</b>	-0.6%
<b>New Entrants</b>	-0.5%
<b>Benefit Improvement</b>	<u>-4.3%</u>
<b>Total Changes</b>	-9.7%

**As of Current Valuation** **93.6%**

## Supplemental Retiree Benefit Reserve

### **Approved Liabilities**

Retirees and Beneficiaries 48,237,048

Active Members 9,789,428

All Members 58,026,476

**Available Reserves** 163,612,428

**Funded Percentage** 282.0%

As part of a court settlement, the County has increased the maximum cost-of-living increase that can be provided from Regular Plan reserves from the current level of 2% per year, up to 2.5% per year. This benefit increase will be partly funded using \$64.7 million set aside for this purpose within the Supplemental Retiree Benefit Reserve by the Retirement Board. Since this benefit improvement took effect after the valuation date, the funding of the benefit is not included in this analysis. If the funding for the increased COLA were taken into account in this valuation, the funded percentage would decrease to 133.3%.

## D. Employer Contribution Rates

### Basic Benefits

	<b>General – County</b>	<b>General – Districts Electing MOU</b>	<b>General – District Not Electing MOU</b>	<b>Safety</b>
1. Normal Cost				
a. Dollars	22,809,651	799,735	830,559	15,204,879
b. Percent of Pay	9.74%	12.09%	8.33%	18.29%
2. Amortization of Unfunded Actuarial Accrued Liability				
a. Dollars	2,180,959	161,680	243,716	3,279,612
b. Percent of Pay	0.93%	2.44%	2.44%	3.95%
3. Employer Contribution				
a. Dollars	24,990,610	961,415	1,074,275	18,484,491
b. Percent of Pay	10.68%	14.53%	10.77%	22.24%

Overall Average Rate = 13.63%

## COL Benefits

	<b>General – County</b>	<b>General – Districts Electing MOU</b>	<b>General – District Not Electing MOU</b>	<b>Safety</b>
1. Normal Cost				
a. Dollars	5,507,391	179,084	231,876	3,562,168
b. Percent of Pay	2.35%	2.71%	2.33%	4.29%
2. Amortization of Unfunded Actuarial Accrued Liability				
a. Dollars	577,802	38,282	57,705	942,425
b. Percent of Pay	0.25%	0.58%	0.58%	1.13%
3. Employer Contribution				
a. Dollars	6,085,193	217,366	289,581	4,504,593
b. Percent of Pay	2.60%	3.29%	2.90%	5.42%

Overall Average Rate = 3.32%

## Total Contribution Rates

	<b>General – County</b>	<b>General – Districts Electing MOU</b>	<b>General – District Not Electing MOU</b>	<b>Safety</b>
1. Normal Cost				
a. Dollars	28,317,042	978,819	1,062,435	18,767,047
b. Percent of Pay	12.10%	14.80%	10.65%	22.58%
2. Amortization of Unfunded Actuarial Accrued Liability				
a. Dollars	2,758,762	199,962	301,421	4,222,037
b. Percent of Pay	1.18%	3.02%	3.02%	5.08%
3. Employer Contribution				
a. Dollars	31,075,804	1,178,781	1,363,856	22,989,084
b. Percent of Pay	13.28%	17.82%	13.68%	27.66%

Overall Average Rate = 16.96%

## Changes in Average Contribution Rate

**As of Prior Valuation** **12.89%**

**Changes in Average Contribution Rate due to:**

<b>Investment (Loss) Gain</b>	0.20%
<b>Salary Loss</b>	0.92%
<b>Termination Loss</b>	0.19%
<b>Disability Loss</b>	0.40%
<b>Retirement Loss</b>	0.12%
<b>Other Demographic Experience</b>	0.22%
<b>New Entrants</b>	-0.53%
<b>Benefit Improvement</b>	<u>2.55%</u>
<b>Total Changes</b>	4.07%

**As of Current Valuation** **16.96%**

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

<b>Membership:</b>	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.
<b>Final Average Salary (FAS):</b>	Highest one-year average

### Service Retirement

<b>Code Section:</b>	31676.14										
<b>Eligibility:</b>	10 years of service and age 50, or 30 years of service regardless of age, or age 70 regardless of service.										
<b>Benefit:</b>	1.667% of FAS per year of service times RAF										
<b>Retirement Age Factor (RAF):</b>	Adjustment factor for benefit commencing at age other than 52. Sample factors:										
	<table> <thead> <tr> <th>Age</th> <th>Factor</th> </tr> </thead> <tbody> <tr> <td>50</td> <td>.8850</td> </tr> <tr> <td>55</td> <td>1.1686</td> </tr> <tr> <td>60</td> <td>1.4638</td> </tr> <tr> <td>65</td> <td>1.5668</td> </tr> </tbody> </table>	Age	Factor	50	.8850	55	1.1686	60	1.4638	65	1.5668
Age	Factor										
50	.8850										
55	1.1686										
60	1.4638										
65	1.5668										
<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.										



## 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 in 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).
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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

## 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%			

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

<b>Contribution</b>		<b>Contribution</b>	
<b>Age</b>	<b>Rate</b>	<b>Age</b>	<b>Rate</b>
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%		

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

**Membership:** Employment (at least 50% of full-time) with County. 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:** 31664.1 effective January 1, 2001. This is a change from the prior actuarial valuation, when it was 31664.

**Eligibility:** 10 years of service and age 50, or 20 years of service regardless of age.

**Benefit:** 3.000% of FAS per year of service times RAF

**Retirement Age Factor (RAF):** Adjustment factor for benefit commencing at age other than 50. Sample factors:

Age	Factor
45	.7805
50	1.0000
55	1.0000

**Integration with Social Security:** Benefits based on first \$350 of monthly FAS are reduced by 1/3.

**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.

### 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 in 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).
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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

## 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>	<p>For County employees hired on or after Payroll Period 97-14:</p> <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> <p>For County employees hired before</p>

**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.

## 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		Age	Rate on	
	Rate on First \$350 of Monthly Compensation	Rate on Compensation in Excess of \$350 per Month		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%

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%

# 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

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

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<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.

**Benefit Eligibility:**

For decrement purposes, all active members are considered potentially eligible for all benefits without regard to service requirements. The demographic decrements take the eligibility requirements into account.

**Spouse Ages**

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 20 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.

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

## 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**

<b>Age</b>	<b>General Members</b>	<b>Safety Members</b>
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%	

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



## 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

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

<b>Age</b>	<b>General Members</b>	<b>Safety Members</b>
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

## 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	Vested	Ordinary	Service	Death	Ordinary	Service	Service
	Withdrawal				While			
	(Refund)	Termination	Death	Death	Eligible	Disability	Disability	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

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



## 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	74	-
41	227	35	4	5	5	31	79	-
42	215	35	4	5	6	33	85	-
43	204	35	4	5	6	35	93	-
44	192	35	4	5	7	35	100	-
45	180	35	5	6	7	37	105	100
46	169	35	5	6	8	37	110	50
47	157	35	5	6	8	40	115	50
48	146	35	6	6	9	43	119	100
49	134	35	6	6	11	45	124	250
50	122	35	7	6	13	48	128	800
51	116	35	8	7	16	50	133	600
52	110	35	9	7	19	55	137	700
53	105	35	10	8	22	58	141	800
54	100	35	11	8	25	60	146	900
55	-	-	12	8	29	65	150	3,500
56	-	-	13	9	34	68	154	1,750
57	-	-	14	10	39	70	158	3,000
58	-	-	15	10	44	73	161	3,250
59	-	-	16	11	49	78	165	3,750
60	-	-	-	-	-	-	-	10,000



## J. Member Information

### Active Participants

#### General Members

<b>County</b>	<b>December 31, 2001</b>	<b>December 31, 2000</b>
Number	6,043	5,617
Average Age	44.4	44.5
Average Service	9.4	9.7
Percent Male	30.2%	30.6%
Average Annual Pay	\$38,736	\$34,716
Total Covered Payroll	\$234,082,912	\$195,000,107

#### **Districts Electing MOU**

	<b>December 31, 2001</b>	<b>December 31, 2000</b>
Number	136	99
Average Age	45.8	46.6
Average Service	10.4	11.1
Percent Male	74.3%	81.8%
Average Annual Pay	\$48,644	\$41,943
Total Covered Payroll	\$6,615,579	\$4,152,340

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

	<b>December 31, 2001</b>	<b>December 31, 2000</b>
Number	218	187
Average Age	41.7	42.5
Average Service	6.0	6.4
Percent Male	67.4%	65.8%
Average Annual Pay	\$45,744	\$43,195
Total Covered Payroll	\$9,972,275	\$8,077,389

<b>Total General</b>	<b>December 31, 2001</b>	<b>December 31, 2000</b>
Number	6,397	5,903
Average Age	44.3	44.5
Average Service	9.3	9.6
Percent Male	32.4%	32.6%
Average Annual Pay	\$39,186	\$35,106
Total Covered Payroll	\$250,670,766	\$207,229,836

### Safety Members

	<b>December 31, 2001</b>	<b>December 31, 2000</b>
Number	1,658	1,581
Average Age	40.8	41.3
Average Service	12.5	13.1
Percent Male	82.2%	83.1%
Average Annual Pay	\$50,133	\$48,104
Total Covered Payroll	\$83,120,619	\$76,052,708

### Total Active Members

	<b>December 31, 2001</b>	<b>December 31, 2000</b>
Number	8,055	7,484
Average Age	43.6	43.8
Average Service	9.9	10.3
Percent Male	42.6%	43.3%
Average Annual Pay	\$41,439	\$37,852
Total Covered Payroll	\$333,791,385	\$283,282,544

## Terminated Vested Participants

### General Members

	<b><i>December 31, 2001</i></b>	<b><i>December 31, 2000</i></b>
Number	738	746
Average Age	46.2	45.7
Percent Male	42.3%	41.8%

### Safety Members

	<b><i>December 31, 2001</i></b>	<b><i>December 31, 2000</i></b>
Number	85	79
Average Age	43.2	43.7
Percent Male	75.3%	79.0%

### All Members

	<b><i>December 31, 2001</i></b>	<b><i>December 31, 2000</i></b>
Number	823	825
Average Age	45.9	45.5
Percent Male	45.7%	45.4%

## Retired Participants

### General Members

#### ***Service Retirements and Beneficiaries***      ***December 31, 2001***      ***December 31, 2000***

Number	2,910	2,868
Average Age	71.2	71.2
Percent Male	35.7%	43.3%
Average Monthly Benefit	\$1,065	\$1,013

#### ***Disabled***      ***December 31, 2001***      ***December 31, 2000***

Number	525	511
Average Age	60.8	60.9
Percent Male	36.2%	36.8%
Average Monthly Benefit	\$1,049	\$1,003

#### ***Total General***      ***December 31, 2001***      ***December 31, 2000***

Number	3,435	3,379
Average Age	69.6	69.6
Percent Male	35.7%	43.3%
Average Monthly Benefit	\$1,062	\$1,012

## Safety Members

### ***Service Retirements and Beneficiaries***      ***December 31, 2001***      ***December 31, 2000***

Number	585	544
Average Age	65.9	66.3
Percent Male	73.7%	72.4%
Average Monthly Benefit	\$2,411	\$2,130

### ***Disabled***      ***December 31, 2001***      ***December 31, 2000***

Number	352	391
Average Age	57.8	58.4
Percent Male	73.0%	74.7%
Average Monthly Benefit	\$2,095	\$1,648

### ***Total Safety***      ***December 31, 2001***      ***December 31, 2000***

Number	937	935
Average Age	62.9	65.1
Percent Male	73.4%	73.3%
Average Monthly Benefit	\$2,292	\$1,928

## Total Members

***Service Retirements and Beneficiaries***      ***December 31, 2001***      ***December 31, 2000***

Number	3,495	3,412
Average Age	70.3	69.8
Percent Male	42.0%	41.7%
Average Monthly Benefit	\$1,290	\$1,191

***Disabled***      ***December 31, 2001***      ***December 31, 2000***

Number	877	902
Average Age	59.6	70.5
Percent Male	51.0%	53.2%
Average Monthly Benefit	\$1,469	\$1,283

***Total Retirees***      ***December 31, 2001***      ***December 31, 2000***

Number	4,372	4,314
Average Age	68.2	70.5
Percent Male	43.8%	44.1%
Average Monthly Benefit	\$1,326	\$1,210

## Reconciliation of Participants

### General Members

	<u>Actives</u>	<u>Terminated Vested</u>	<u>Service Retirees and Beneficiaries</u>	<u>Disability Retirees and Beneficiaries</u>
<b>As of December 31, 2000</b>	<b>5,903</b>	<b>746</b>	<b>2,868</b>	<b>511</b>
New Hires/Rehires	909	(16)		
Net Transfers to Safety	(14)	1		
Terminated Non-vested / Refund	(223)	(1)		
Vested Terminations	(61)	61		
Suspended	(9)	(20)		
Service Retirements	(81)	(31)	112	
Disability Retirements	(19)		(1)	20
Active Deaths	(9)		9	
Deaths Or Ceased Payments			(95)	(13)
Beneficiaries Of Retirees Who Died			17	5
Cleanup of Duplicate Records				(4)
Other	1	(2)		6
<b>As of December 31, 2001</b>	<b>6,397</b>	<b>738</b>	<b>2,910</b>	<b>525</b>

## Safety Members

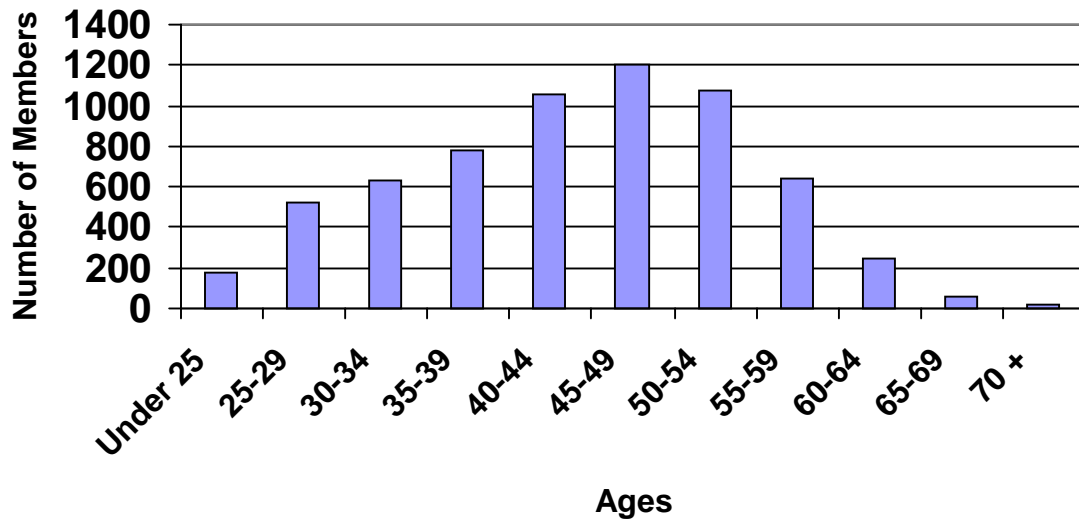
	<u>Actives</u>	<u>Terminated Vested</u>	<u>Service Retirees and Beneficiaries</u>	<u>Disability Retirees and Beneficiaries</u>
<b>As of December 31, 2000</b>	<b>1,581</b>	<b>79</b>	<b>544</b>	<b>391</b>
New Hires/Rehires	152			
Net Transfers From General	14	(1)		
Terminated Non-vested / Refund	(6)			
Vested Terminations	(10)	10		
Service Retirements	(40)	(3)	43	
Disability Retirements	(17)	(1)		18
Active Deaths	(1)		1	
Deaths Or Ceased Payments			(14)	(7)
Beneficiaries Of Retirees Who Died			5	5
Cleanup of Duplicate Records			(5)	(60)
Other	(15)	1	11	5
<b>As of December 31, 2001</b>	<b>1,658</b>	<b>85</b>	<b>585</b>	<b>352</b>



### Active General Members by Age and Service as of December 31, 2001

<u>Service</u> >>	<u>Under 1</u>	1-4	5-9	10-14	15-19	20-24	25-29	30 +	Total
<u>Age</u> <u>Under</u>									
25	118	54	2	-	-	-	-	-	174
25-29	174	310	36	-	-	-	-	-	520
30-34	157	296	129	51	1	-	-	-	634
35-39	128	231	175	173	62	8	-	-	777
40-44	103	262	206	234	157	91	1	-	1,054
45-49	86	254	212	259	170	171	49	6	1,207
50-54	66	218	172	205	147	128	98	37	1,071
55-59	37	104	111	143	82	73	38	50	638
60-64	7	36	50	61	34	23	16	20	247
65-69	3	7	12	16	4	10	5	2	59
70 +	1	1	1	2	6	2	1	1	16
<b>Total</b>	880	1,773	1,106	1,144	663	506	208	117	6,397

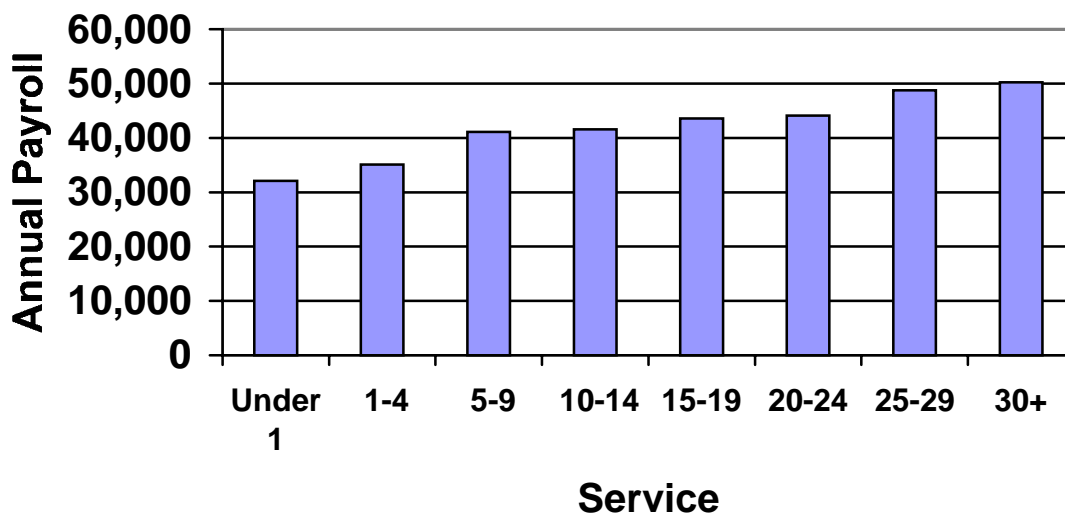
### Active General Members by Age



### Average Annual Compensation for General Members by Age and Service as of December 31, 2001

Service >>	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30 +	Total
<b>Age Under</b>									
<b>25</b>	27,189	26,304	25,240	-	-	-	-	-	26,892
<b>25-29</b>	30,672	33,312	31,730	-	-	-	-	-	32,319
<b>30-34</b>	32,705	34,435	40,998	35,873	48,650	-	-	-	35,480
<b>35-39</b>	34,917	36,073	38,034	40,356	35,718	38,839	-	-	37,278
<b>40-44</b>	31,473	35,915	41,756	42,124	45,074	39,760	25,271	-	39,687
<b>45-49</b>	34,706	35,211	42,919	41,907	46,124	44,152	46,681	49,240	41,305
<b>50-54</b>	33,244	36,787	42,033	43,276	43,115	47,561	50,319	41,043	42,195
<b>55-59</b>	34,794	36,094	44,625	39,966	44,635	47,962	49,930	53,110	42,984
<b>60-64</b>	41,196	37,007	36,907	43,124	41,353	37,354	40,592	59,565	41,306
<b>65-69</b>	31,292	42,213	45,237	45,519	28,976	34,107	56,761	64,965	42,902
<b>70 +</b>	15,121	59,688	26,465	34,661	32,853	27,738	66,512	44,030	42,360
<b>Total</b>	32,108	35,074	41,081	41,553	43,587	44,118	48,755	50,247	39,183

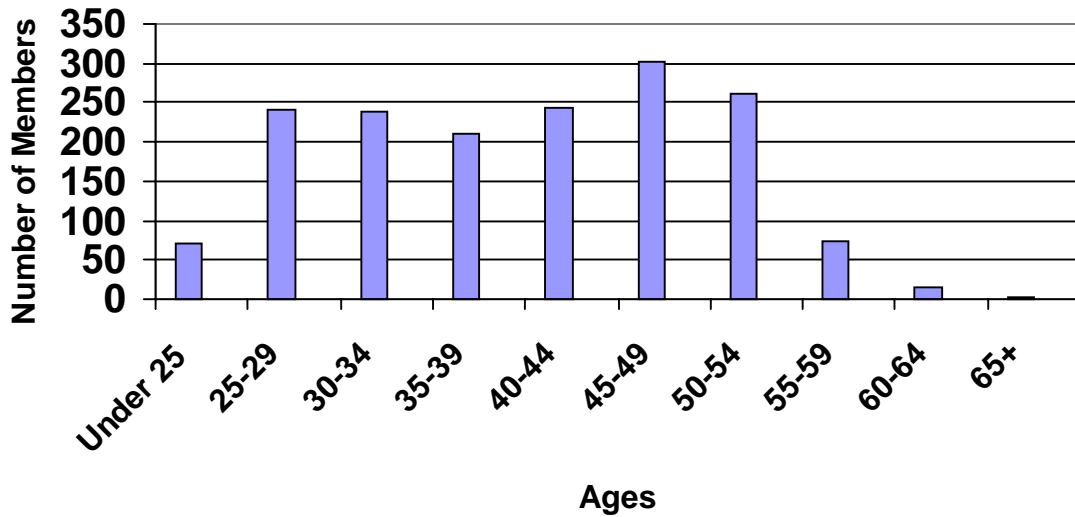
### General Member Pay by Service



### Active Safety Members by Age and Service as of December 31, 2001

<u>Service</u> >>	<u>Under</u> 1	1-4	5-9	10-14	15-19	20-24	25-29	30 +	Total
<u>Age</u> <u>Under</u>									
25	30	41	-	-	-	-	-	-	71
25-29	58	147	37	-	-	-	-	-	242
30-34	28	124	65	21	-	-	-	-	238
35-39	9	48	38	70	42	3	-	-	210
40-44	6	28	19	62	104	24	-	-	243
45-49	-	9	12	30	72	133	45	-	301
50-54	1	8	16	33	34	53	91	26	262
55-59	-	3	10	12	8	10	18	13	74
60-64	1	2	3	3	-	1	-	4	14
65-69	-	1	1	-	-	-	-	-	2
70 +	-	-	-	-	-	1	-	-	1
<b>Total</b>	133	411	201	231	260	225	154	43	1,658

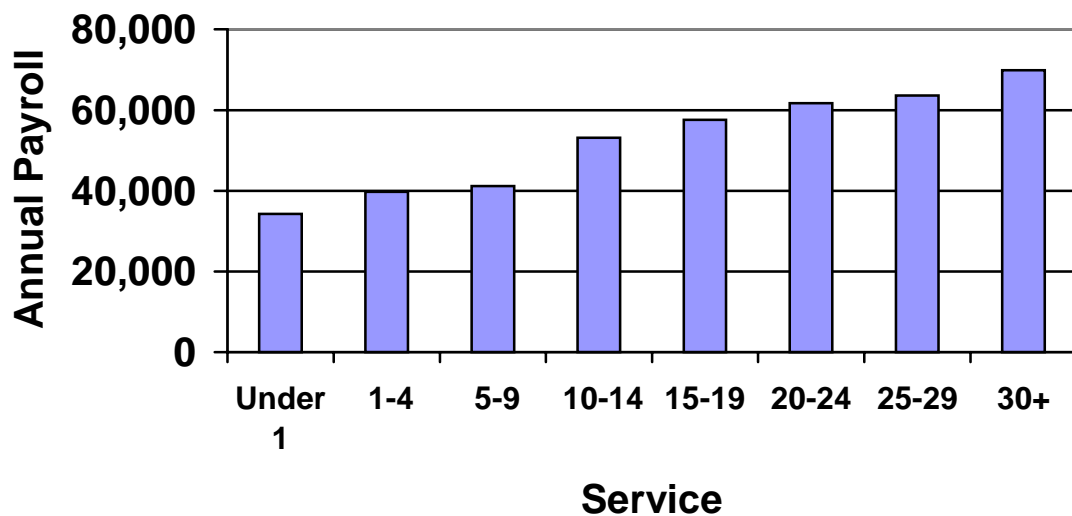
### Active Safety Members by Age



### Average Annual Compensation for Safety Members by Age and Service as of December 31, 2001

Service >>	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30 +	Total
<b>Age Under 25</b>	32,594	36,449	-	-	-	-	-	-	34,820
<b>25-29</b>	33,996	39,163	41,166	-	-	-	-	-	38,231
<b>30-34</b>	36,872	40,294	41,456	54,032	-	-	-	-	41,421
<b>35-39</b>	34,933	42,108	41,870	53,514	58,626	66,892	-	-	49,217
<b>40-44</b>	34,317	40,443	41,365	53,203	57,270	63,150	-	-	53,064
<b>45-49</b>	-	41,631	38,480	53,986	57,104	62,648	64,496	-	59,143
<b>50-54</b>	34,606	40,102	41,020	54,753	59,468	59,152	64,451	69,639	59,737
<b>55-59</b>	-	38,190	40,888	44,447	51,390	59,772	57,209	69,228	53,992
<b>60-64</b>	28,347	53,232	39,403	46,770	-	49,647	-	73,033	52,507
<b>65-69</b>	-	34,033	42,891	-	-	-	-	-	38,462
<b>70 +</b>	-	-	-	-	-	47,545	-	-	47,545
<b>Total</b>	34,325	39,786	41,208	53,157	57,549	61,682	63,618	69,831	50,133

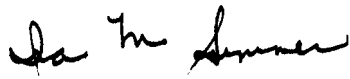
### Safety Member Pay by Service



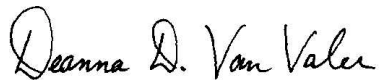
## K. Actuarial Certification

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.



Deanna Van Valer, A.S.A, E.A.  
Public Pension Professionals, Inc.

April 2002