

Fresno County Employees' Retirement Association

Actuarial Valuation as of June 30, 2003



Final

March 15, 2004

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Section

Highlights

This report presents the results of the June 30, 2003 actuarial valuation of the Fresno County Employees' Retirement Association (FCERA). Results from the prior valuation are shown for comparison. All dollar amounts are in millions.

June 30, 2003

June 30, 2002

Recommended Contribution Rates - Regular Benefit				
General	15.18%	12.72%		
Safety	22.76%	18.00%		
Total Plan	16.41%	13.55%		
Recommended Contribution Rates - Settlement Benefit				
General	6.88%	5.64%		
Safety	6.13%	4.63%		
Total Plan 6.76% 5.48%				

The contributions for Settlement Benefits for the 2003-2004 Fiscal Year were paid from Undistributed Earnings. There were no Undistributed Earnings as of June 30, 2003 to pay for unfunded Settlement liabilities.

Funded Status	i i	
Actuarial Accrued Liability	\$1,953.5	\$1,932.3
Actuarial Value of Assets	\$1,534.0	\$1,674.9
UAAL	\$419.5	\$257.4
Funded Percentage	78.5%	86.7%
Key Assumptions		
Interest Rate	8.16%	8.16%
Average Salary Increase	6.4% General 5.5% Safety	5.1%
Inflation	4.0%	4.0%

2 Board Summary

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

A. Benefit Terminology

For the purposes of this analysis, we will be distinguishing between several types of benefits provided to FCERA members under the plan provisions adopted by the County (and other Participating Employers) and the agreement between the County, FCERA and Plan Members to settle lawsuits related to the Ventura Decision (Ventura Settlement). In order to limit the repetition of benefit descriptions and sources of payments, we will refer to these benefits by the following names:

- Regular Benefits The benefits provided under the plan provisions in effect prior to the Ventura Settlement. These benefits are guaranteed by the County (and other Participating Employers) and include both Basic Benefits and COLA Benefits.
 - Basic Benefits All formula benefits provided under the Regular portion of FCERA. 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 FCERA. They include cost-of-living increases paid on service retirement benefits, disability benefits and survivor benefits.
- Settlement Benefits These are the additional benefits provided to Plan Members under the Ventura Settlement. These benefits are also guaranteed by the County (and other Participating Employers), but have been separated from Regular Benefits because they have a different source of funding under the Settlement Agreement. Settlement Benefits are broken down into three categories:
 - Supplemental Benefits (Section 6) These are the additional retirement benefits provided under Section 6 of the Ventura Settlement to Plan Members who were not yet retired as of January 1, 2001. These Supplemental Benefits, when combined with the Regular Benefits, provide retirement income of 2.5% of pay for each year of service at age 55 for General Members (age 50 for Safety Members).
 - \$15 Retiree Benefits (Section 8) These are the additional retirement benefits provided under Section 8 of the Ventura Settlement to Plan Members who were retired as of January 1, 2001. In general, they are equal to \$15 for each year of service.
 - Retiree Health Benefits (Section 9) These are benefits of \$3 per year of service provided under Section 9 of the Ventura Settlement to

all retired Plan Members to help pay for health benefits. These benefits are provided to Plan Members who retired before January 1, 2001 and those who retire after that date.

- Non-Valuation Benefits These are the additional benefits provided to Plan Members from Undistributed Earnings. These benefits are not guaranteed by the County (or other Participating Employers) and may be stopped at any time. It is our understanding that the Board of Retirement intends to continue to provide these benefits as long as Undistributed Earnings are available. Non-Valuation Benefits include Purchasing Power Benefits and Retiree Health Benefits.
 - O Purchasing Power Benefits These benefits, sometimes referred to as a Supplemental COLA, are generally designed to help long-term retirees retain a portion of the purchasing power of their initial retirement benefit that is lost to inflation. This loss of purchasing power occurs when inflation is greater than the cost of living adjustment provided under the Regular and Settlement Benefits. The Retirement Board currently provides a purchasing power benefit to retirees and beneficiaries whose COLA Bank is greater than 25%.
 - Retiree Health Benefits These are benefits provided to all retired Plan Members to help pay for health benefits. These benefits are in addition to those provided under the Ventura Settlement.

B. 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 June 30, 2003, the Retirement Plan's target asset allocation was:

Cash and Cash Equivalents	2%
Core Bonds	28%
Global Bonds	3%
Domestic Stocks	38%
International Stocks	18%
Private Markets	11%

For the past couple of years, the investment market has been difficult. According to lbbotson Associates, the return on investment for the major asset classes for the 12-month periods ended June 30, 2002 and June 30, 2003 were:

	June 30, 2002	June 30, 2003
Large Company Stocks	-17.99%	0.25%
Small Company Stocks	2.84%	3.14%
Long-term Corporate Bonds	9.89%	19.93%
Long-term Government Bonds	8.83%	20.16%
Intermediate-term Government Bonds	9.75%	11.92%
Treasury Bills	2.29%	1.38%

This translated into investment losses for pension funds across the United States. This fund was no exception. During the Plan Year ended June 30, 2003, Plan investments earned a return on a market value basis of approximately 1.7%. This return was less than the 8.16% return assumed. This resulted in an actuarial loss to the Retirement Plan due to investment losses of approximately \$94.2 million on a market-value basis.

FCERA uses an asset smoothing method to determine contribution rates and the Plan's funded position. This method spreads market gains greater than the assumed rate (or less than the assumed rate) over a five year period. Using the asset smoothing method, FCERA assets achieved a return for the fiscal year of approximately 1.0% due to the spreading of previous losses into the current year. This resulted in an actuarial loss of approximately \$121.1 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 decreased by 1.7% from 7,734 to 7,599, while the average pay increased by 6.4% from \$3,523 per month to \$3,750 per month. This resulted in an increase in total covered payroll of approximately 4.6%.

The number of retired members and beneficiaries receiving pension checks increased from 3,713 to 4,025, while the average monthly benefit check went from \$1,856 to \$1,949. This combination increased monthly payments from FCERA by approximately 13.8%.

Assumptions and Methodology

In the past year, we reviewed the past experience of FCERA and recommended refinements to the assumptions used in the annual valuation. The changes adopted by the Board were as follows:

- Economic Assumptions
 - Salary Increase: Revised the rates from separate rates for Safety and General Members based on age to separate rates for Safety and General Members based on the employee's service with FCERA.
- Demographic Assumptions
 - Withdrawal: Adjusted the rates of withdrawal for both General and Safety Members to reflect increased terminations at later ages. Overall, the new withdrawal rates are slightly lower for Safety Members and slightly higher for General Members.



- Deferred Vested: Increased the deferred vested rates for General and Safety Members to reflect plan experience.
- Disability: Adjusted the incidence of disabilities at various ages to reflect plan experience and the distribution between service and non-service connected disability rates. For Safety Members, we assume no future non-service connected disabilities. For General Members, we assume that 60% of future disabilities will be service-connected.
- Retirement: A slight change in the retirement rates to better match future expectations.
- Pre-retirement mortality: A decrease in the rate of service connected deaths to 0.02% per year for Safety Members and to 0% for General Members who are male. The rate of service-connected deaths for General Members who are female will remain at 0%.
- Post-retirement mortality: For valuation purposes, change to a newer mortality table (RP-2000) reflecting the impact of the type of work performed by an individual during that person's career on post-retirement life expectancy.

The FCERA Board also made a change in the amortization period, resetting the amortization period to 30 years for the current valuation.

Benefits

No benefit changes were adopted in the past year.

C. Funded Position

The primary responsibility of Plan Trustees is to ensure that there is enough money to pay for Plan benefits. We check our progress in this area by comparing the assets that have been set aside to pay for plan benefits with plan liabilities.

In this report, we will look separately at the funded position of Regular Benefits, Settlement Benefits and Non-Valuation Benefits.

Funded Position - Regular Benefits

The primary target liability for FCERA 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.

Current Funded Position

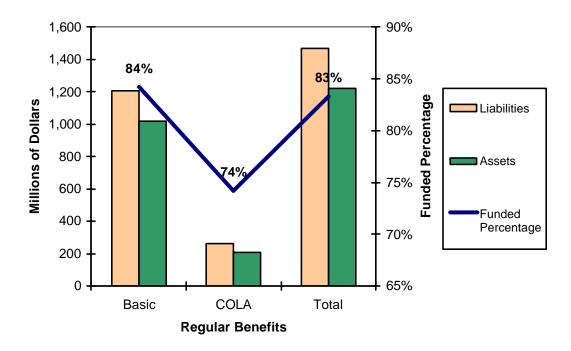
The following table shows the Plan's funded percentage for Regular Benefits is 83.3%. It is calculated by dividing the Actuarial Value of Assets by the Actuarial Accrued Liability.

	Basic	COL*	All Regular
Dollar amounts in Millions	Benefits	Benefits	Benefits
Actuarial Accrued Liability	\$ 1,207.6	\$ 260.2	\$ 1,467.7
Actuarial Value of Assets	<u>\$ 1,016.8</u>	<u>\$ 206.0</u>	<u>\$ 1,222.9</u>
Unfunded Actuarial Accrued Liability	\$ 190.7	\$ 54.2	\$ 244.9
Funded Percentage	84.2%	79.2%	83.3%

^{* 50%} of the UAAL for COL Benefits is covered by Employer contributions and the other 50% is covered by Member COL Contributions.



Current Funded Position

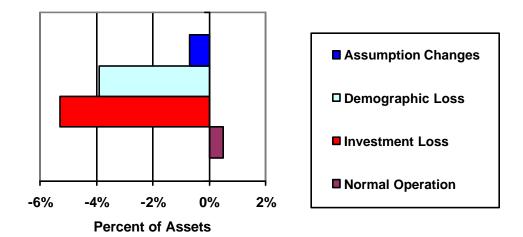


Change in Funded Position

The funded percentage for Regular Benefits decreased from 92.2% as of June 30, 2002 to 83.3% as of June 30, 2003, primarily due to the following events.

- Normal Operation of the plan increased was expected to increase the funded percentage by 0.5%.
- Asset losses decreased the funded percentage by 5.3%.
- Demographic losses decreased the funded percentage by an additional 3.9%.
- Assumption changes resulting from the experience analysis decreased the funded percentage by 0.7%.

Impact of Major Events on Funded Percentage



Funded Position - Settlement Benefits

When the Ventura Settlement was put into place, it was hoped that the entire cost of the additional benefits provided under that agreement would be paid from Undistributed Earnings. Undistributed Earnings are the amount that remains after earnings have been used to credit interest to the Plan's reserves. They are generally thought of as earnings in excess of those assumed to be earned under the actuarial valuation.

By their very nature, Undistributed Earnings are produced on an inconsistent basis and cannot be counted on to appear in any single time period. Because of this, the funding for Settlement Benefits is set up differently than funding for Regular Benefits. Undistributed Earnings become the primary source of funding for these benefits. For this reason, the long-term funding target for Settlement Benefits is the Present Value of Benefits.

The **Present Value of Benefits (PVB)** represents the amount of money, at the valuation date, which would be sufficient to pay for all Settlement Benefits for all current Plan Members if all plan assumptions are met in future years. In other words,

- If Plan Assets are equal to the Present Value of Benefits, and
- If current plan benefits remain in place, and
- If there are no new Plan Members, and
- If plan experience in all future years matches the assumptions, then

There will be enough money to pay for all promised benefits for all Plan Members and their beneficiaries for the rest of their lives without another dollar being contributed to the Retirement System by Plan Members, the County, or other Participating Employers.

Primary Funding Position

As the following table shows, Settlement Benefits were 50.4% funded on this basis. This was calculated by dividing the Actuarial Value of Assets by the Present Value of Benefits.

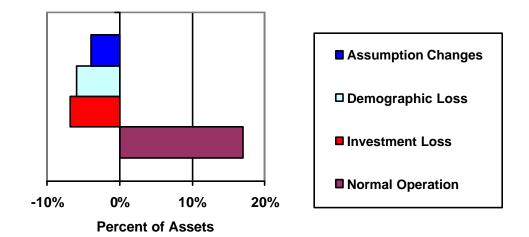
Dollar amounts in Millions	Supplemental (Section 6)	\$15 Retiree (Section 8)	Health (Section 9)	All Settlement Benefits
Present Value of Benefits	\$ 454.1	\$ 109.8	\$ 53.5	\$ 617.4
Actuarial Value of Assets	<u>\$ 177.5</u>	<u>\$ 101.0</u>	<u>\$ 32.6</u>	<u>\$ 311.1</u>
Unfunded Projected Liability	\$ 276.6	\$ 8.8	\$ 20.9	\$ 306.3
Funded Percentage	39.0%	92.0%	60.9%	50.4%

Changes from the Prior Valuation

Overall, there was only a slight increase in the funded position from 50.2% as of June 30, 2002 to 50.4% as of June 30, 2003. This was due to offsetting factors.

- Normal Operation of the Plan, including \$70 million allocated from Undistributed Earnings, increased the funded percentage by 17.0%
- Investment losses during the year decreased the funded percentage by 6.8%
- Liability losses decreased the funded percentage an additional 5.9%
- Assumption changes adopted by FCERA decreased the funded percentage by 4.0%

Impact of Major Events on Funded Percentage



Secondary Funding Position

If the reserves set aside to pay for Settlement Benefits are not sufficient to cover all liabilities and there are no assets available in Undistributed Earnings, Plan Members, the County and other Participating Employers will be required to make contributions. Because this is more of a short-term concern, we use a different measure of funded position to determine when a contribution may be required. This second measure of the funded position of Settlement Benefits uses the Actuarial Accrued Liability as a target, just like we did for Regular Benefits.

As the following table shows, Settlement Benefits were 64.1% funded on this short-term basis. This was calculated by dividing the Actuarial Value of Assets by the Actuarial Accrued Liability.

	Supplemental	\$15 Retiree	Health	All Settlement
Dollar amounts in Millions	(Section 6)	(Section 8)	(Section 9)	Benefits
Actuarial Accrued Liability	\$ 329.6	\$ 109.8	\$ 46.3	\$ 485.7
Actuarial Value of Assets	<u>\$ 177.5</u>	<u>\$ 101.0</u>	<u>\$ 32.6</u>	<u>\$ 311.1</u>
Unfunded Actuarial Accrued Liability	\$ 152.1	\$ 8.8	\$ 13.7	\$ 174.6

Funded	
Percentage	

53.9%

92.0%

70.4%

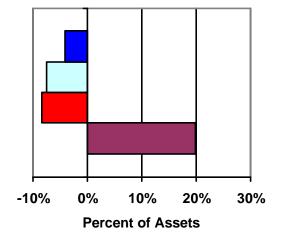
64.1%

Changes from the Prior Valuation

Overall, there was only a slight decrease in the funded position from 64.5% as of June 30, 2002 to 64.1% as of June 30, 2003. This was due to offsetting factors.

- Normal Operation of the Plan, including \$70 million allocated from Undistributed Earnings, increased the funded percentage by 19.8%
- Investment losses during the year decreased the funded percentage by 8.5%
- Liability losses decreased the funded percentage an additional 7.5%
- Assumption changes adopted by FCERA decreased the funded percentage by 4.2%

Impact of Major Events on Funded Percentage

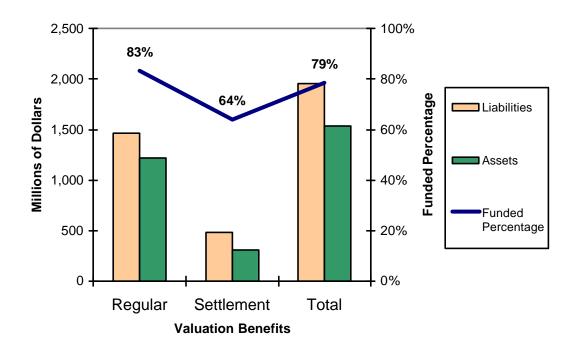




Funded Position - All Valuation Benefits

When we combine the Regular Benefits and the Settlement Benefits, we get a measure of the funded position of all benefits that are guaranteed by the County and other Participating Employers. The funded percentage for FCERA is 78.5%.

Dollar amounts in Millions	All Regular Benefits	All Settlement Benefits	All Valuation Benefits
Actuarial Accrued Liability	\$ 1,467.7	\$ 485.7	\$ 1,953.5
Actuarial Value of Assets	<u>\$ 1,222.9</u>	<u>\$ 311.1</u>	<u>\$ 1,534.0</u>
Unfunded Actuarial Accrued Liability	\$ 244.9	\$ 174.6	\$ 419.5
Funded Percentage	83.3%	64.1%	78.5%



Funded Position - Non-Valuation Benefits

Under the County Employees Retirement Law of 1937 (37 Act), the Retirement Board is allowed to use Undistributed Earnings to provide some benefits in addition to those guaranteed by the County. These benefits are provided on an ad-hoc basis. They do not vest with the Plan Members and the Retirement Board can pay them only as long as funding is available.

Since these benefits are paid from Undistributed Earnings, any benefits that the Retirement Board intends to continue into the future need to be funded up to the Present Value of Benefits. For that reason, we use the Present Value of Benefits as the long-term funding target for these benefits. The funded position of these benefits is shown in the table below.

	Purchasing	Retiree	Total
	Power	Health	Non-Valuation
Dollar amounts in Millions	Benefits	Benefits	Benefits
Present Value of Benefits	\$ 35.4	\$ 88.1	\$ 123.5
Actuarial Value of Assets	\$ 4.0	<u>\$ 62.4</u>	<u>\$ 66.5</u>
Unfunded Projected Liability	\$ 31.4	\$ 25.7	\$ 57.0
Funded Percentage	11.3%	70.8%	53.8%

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

D. Employer Contribution Rates

Each year, recommended contribution rates are determined separately for members and employers. Employer contributions are determined as the sum of two elements: the Normal Cost and an Amortization of the Unfunded Actuarial Accrued Liability (UAAL).

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 2.5%-at-50 plan for Safety members.
- Assumption Changes Periodically, the plan actuaries and trustees adjust their expectation for the future. This year, many of the demographic assumptions have been changed.
- 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.

For this valuation, the entire UAAL is amortized as a level percentage of payroll over a thirty-year period. In future valuations, changes in UAAL due to Plan Amendments will be amortized as a level percentage of payroll over a thirty-year period. All other changes will be amortized as a level percentage of payroll over a fifteen-year period.

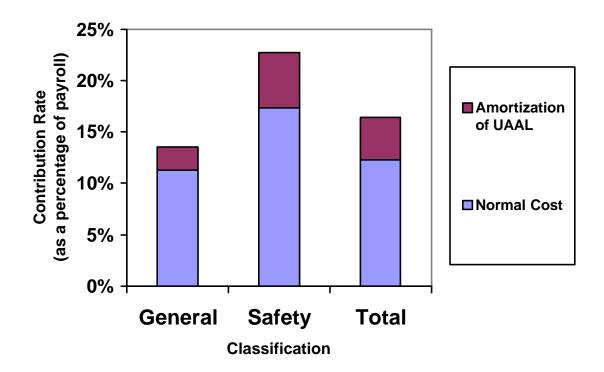
Contribution Rates - Regular Benefits

As we mentioned earlier, Regular Benefits are funded separately from Settlement Benefits. Regular Benefits are those benefits that were in effect prior to the Ventura Settlement. They are funded on a more traditional basis.

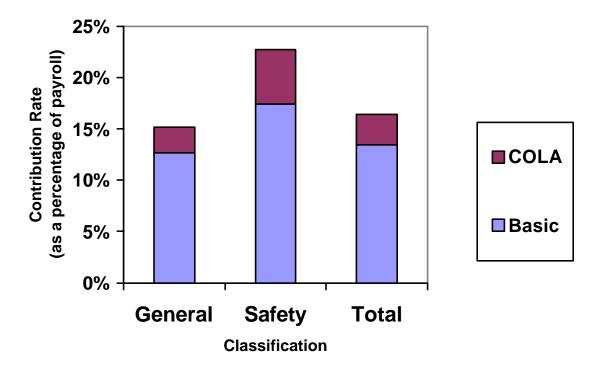
Current Contribution Rates

Regular Contributions for the coming year will be 16.41% of pay, or approximately \$58 million. These costs are split between General and Safety as follows:

Dollar amounts in Millions	General	Safety	Total
Normal Cost	11.29%	17.31%	12.27%
Amortization of UAAL	3.89%	<u>5.45%</u>	<u>4.14%</u>
Total Contribution Rate	15.18%	22.76%	16.41%
Dollar Amount of Contribution (in Millions)	\$ 45.2	\$ 13.2	\$ 58.4



These contribution rates include required contributions for both Basic Benefits and COLA Benefits, which are split as shown in the graph below.

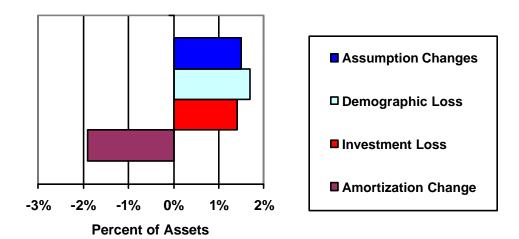


Changes from the Prior Valuation

Overall, there was only a small increase in the contribution rate from 13.55% for the 2003-2004 Fiscal Year to 16.41% for the 2004-2005 Fiscal Year. This was due to the following events.

- Asset losses, including the actual contributions and benefit payments to FCERA, increased contribution rates by approximately 1.4% of pay.
- Liability losses increased the contribution rates by approximately 1.7% of pay.
- An extension of the amortization period decreased contribution rates by approximately 1.9% of pay.
- Assumption changes adopted by FCERA increased contribution rates by an additional 1.5% of pay.

Impact of Major Events on Funded Percentage



Contribution Rates - Settlement Benefits

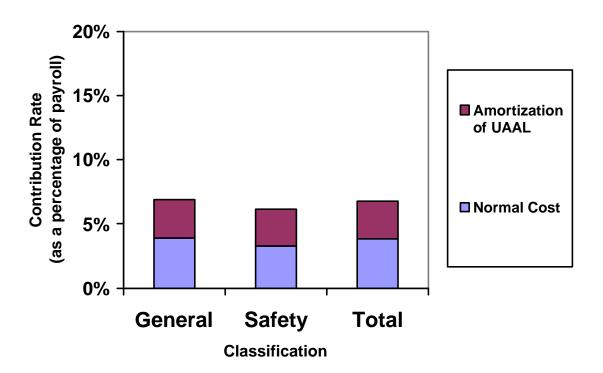
When the Ventura Settlement was put into place, it was hoped that the entire cost of the additional benefits provided under that agreement would be paid from Undistributed Earnings. This would include payment of any contributions required on an ongoing basis.

These contributions are a combination of a Normal Cost component and an amortization of any Unfunded Actuarial Accrued Liability for Settlement Benefits.

Current Contribution Rates

Settlement Contributions for the coming year are 6.76% of pay, or approximately \$24 million. These costs are split between General and Safety as follows:

Dollar amounts in Millions	General	Safety	Total
Normal Cost	3.91%	3.31%	3.81%
Amortization of UAAL	<u>2.97%</u>	<u>2.83%</u>	2.95%
Total Contribution Rate	6.88%	6.13%	6.76%
Contribution (in Millions)	\$ 20.5	\$ 3.6	\$ 24.0



Since there are no assets available from Undistributed Earnings as of June 30, 2003, these contributions will be required from the County for fiscal year 2004-2005. This is discussed in more detail later in this report.

E. Member Contribution Rates

Each year, recommended contribution rates are determined separately for members and employers. Member contributions are made up of three components: Basic Contributions, Cost of Living (COL) Contributions and Settlement Contributions.

- Basic Contributions are amounts, defined in the County Employees Retirement Law of 1937 (1937 Act), that are generally designed to pay for approximately one-quarter of the Regular Benefit that the member is projected to receive if he or she retires at the normal retirement age. Basic 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 1937 Act. Basic Contribution rates do not vary from year-to-year based on demographic or investment experience.
- COL Contributions are defined in Article 16.5 of the 1937 Act and are designed
 to pay for 50% of the Cost of Living (COLA) Benefit. They are determined on the
 basis of the value of COLA Benefits for current Plan Members and the amount of
 assets set aside in the Plan to pay for these benefits. These contributions are
 determined as a portion of the Basic Contributions and are affected by changes in
 assumptions as well as demographic and investment experience.
- Settlement Contributions are supplemental contributions required to help pay for the additional benefits agreed to under the Ventura Settlement Agreement. The language in the Ventura Settlement Agreement does not provide detailed guidance on how these contributions are to be calculated. For this valuation, we have looked at the proposed legislation designed by the parties to the Settlement to implement Section 7 of the Ventura Settlement (Assembly Bill 2063). Although the bill was vetoed by the Governor, it proposes an approach to calculating Member Contributions for this purpose in a manner similar to the method used for Basic Contributions. In this valuation, the Settlement Contributions for Members are those amount which, when added to the Basic Contributions, would be sufficient to pay for a projected retirement benefit equal to 1/160th of the Member's projected final compensation for each year of service paid on a monthly basis beginning at age 55 for General Members or age 50 for Safety Members.

General Member Contributions

Current Year Contributions

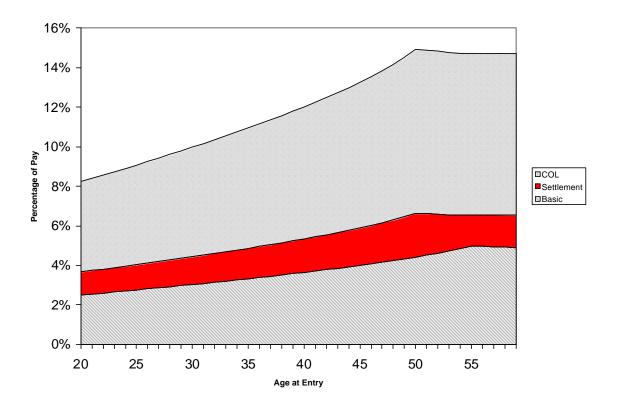
Since the prior valuation, there have been changes to the Basic, COL and Settlement Contribution Rates for General Members.

<u>Basic Contributions</u>. The Basic Contribution Rates for General Members were calculated in accordance with Section 31621.3 of the 1937 Act. The rates under this section are designed to be sufficient to pay for a projected benefit of 1/200th of the Member's projected final compensation for each year of service paid on a monthly basis beginning at age 60. The rates have changed slightly since the prior valuation due to changes in the recommended salary increase assumption and post-retirement mortality assumption. The Basic Contribution Rates for General Members are shown in Section F of the Technical Information portion of this report.

<u>COL Contributions.</u> The COL Contribution for General Members increased from 84% of Basic and Settlement Contribution Rates in the June 30, 2002 actuarial valuation to 125% of Basic and Settlement Contribution Rates in this valuation. This increase is due to a combination of an increase in COL liabilities resulting from assumption changes and a decrease in COL Reserves resulting from investment losses during the past year. The COL Contribution Rates for General Members are shown in Section F of the Technical Information portion of this report.

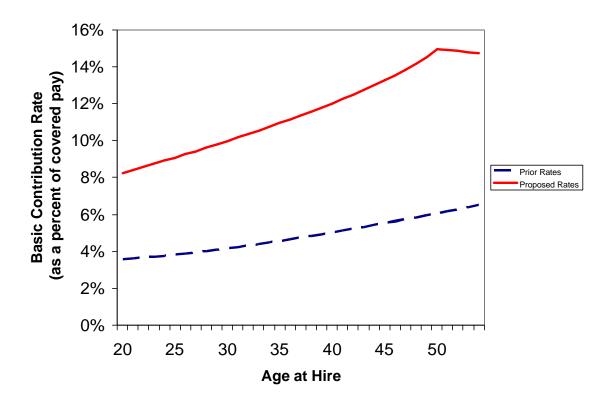
<u>Settlement Contributions</u>. Plan Members are asked to make additional contributions under Section 6 of the Ventura Settlement Agreement to help pay for the additional benefits provided under the Agreement when Undistributed Earnings are not available to pay for those benefits. Plan Members will be asked to make Settlement Contributions in the coming year because there are no Undistributed Earnings available to make those payments. The Settlement Contribution Rates for General Members are shown in Section F of the Technical Information portion of this report.

The contributions required from General Members for the coming year will be a combination of the Basic Contribution Rates, the Settlement Contribution Rates and the COL Contribution Rates. They will vary based on the Member's age at hire, and are shown in the graph below.



Comparison with Prior Contributions

The total contribution rates required of General Members will be approximately 140% higher than those required in the past year, as is shown in the following graph. This is due to a combination of the increased life expectancy assumption, the greater COL contribution and the requirement of the Settlement Contributions, which were paid last year from Undistributed Earnings.



Safety Members

Current Year Contributions

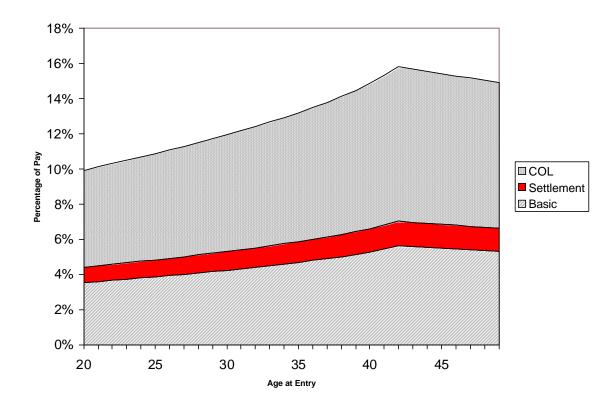
Since the prior valuation, there have been changes to the Basic, COL and Settlement Contribution Rates for Safety Members.

<u>Basic Contributions</u>. The Basic Contribution Rates for Safety Members were calculated in accordance with Section 31639.5 of the 1937 Act. The rates under this section are designed to be sufficient to pay for a projected benefit of 1/200th of the Member's projected final compensation for each year of service paid on a monthly basis beginning at age 50. The rates have changed slightly since the prior valuation due to changes in the recommended salary increase assumption and post-retirement mortality assumption. The Basic Contribution Rates for Safety Members are shown in Section H of the Technical Information portion of this report.

<u>COL Contributions.</u> The COL Contribution for Safety Members increased from 84% of Basic and Settlement Contribution Rates in the June 30, 2002 actuarial valuation to 125% of Basic and Settlement Contribution Rates in this valuation. This increase is due to a combination of an increase in COL liabilities resulting from assumption changes and a decrease in COL Reserves resulting from investment losses during the past year. The COL Contribution Rates for Safety Members are shown in Section H of the Technical Information portion of this report.

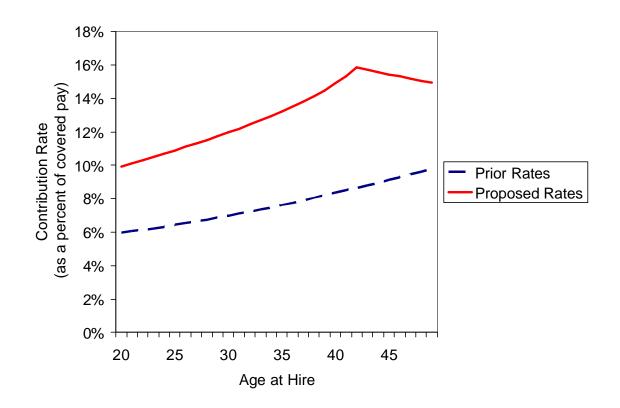
<u>Settlement Contributions</u>. Plan Members are asked to make additional contributions under Section 6 of the Ventura Settlement Agreement to help pay for the additional benefits provided under the Agreement when Undistributed Earnings are not available to pay for those benefits. Plan Members will be asked to make Settlement Contributions in the coming year because there are no Undistributed Earnings available to make those payments. The Settlement Contribution Rates for Safety Members are shown in Section H of the Technical Information portion of this report.

The contributions required from Safety Members for the coming year will be a combination of the Basic Contribution Rates, Settlement Contribution Rates and the COL Contribution Rates. They will vary based on the Member's age at hire, and are shown in the graph below.



Comparison with Prior Contributions

These contributions are approximately 70% greater than those that were required in the past year, as is shown in the following graph. This is due to a combination of the increased life expectancy assumption, the greater COL contribution and the requirement of the Settlement Contributions, which were paid last year from Undistributed Earnings.



3 Technical Information

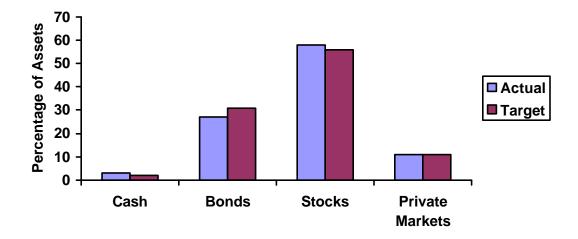
A. Asset Information

Net Plan Assets at Market Value as of June 30, 2003

	Dollars (in 000's)	Actual %	Target %
Cash and Cash Equivalents	47,953	3%	2%
Core Bonds	379,012	24%	28%
Global Bonds	44,844	3%	3%
Domestic Stocks	633,876	41%	38%
International Stocks	269,953	17%	18%
Private Markets	<u>175,002</u>	<u>11%</u>	<u>11%</u>
Net Assets	1,550,640	100%	100%

^{*} Percentages may not add up to 100% due to rounding.

Asset Allocation



Development of Actuarial Value of Assets

Development of Unexpected Gains and Losses

Six Month Period Ended 12/31/1998	Market Value Beginning of Period 1,625,610,659.54	Contributions 6,883,162.75	Benefit Payments 39,788,763.30	Market Value End of Period 1,241,039,939.10	Assumed Rate of Return 8.25%	Expected Return 65,062,439.82	Actual Return (384,570,720.44)	Unexpected Gain (Loss) (449,633,160.26)
6/30/1999	1,241,039,939.10	6,897,255.94	8,976,935.23	1,695,026,910.30	8.25%	50,136,430.92	453,986,971.20	403,850,540.28
12/31/1999	1,695,026,910.30	4,751,913.62	27,429,654.88	1,840,543,304.68	8.25%	68,075,888.96	145,516,394.38	77,440,505.42
6/30/2000	1,840,543,304.68	4,445,807.80	27,068,179.80	1,782,030,412.97	8.25%	73,960,614.83	(58,512,891.71)	(132,473,506.54)
12/31/2000	1,782,030,412.97	5,035,289.30	27,771,010.85	1,779,761,263.16	8.42%	73,038,501.75	(2,269,149.81)	(75,307,651.56)
6/30/2001	1,779,761,263.16	4,937,695.67	37,255,638.32	1,690,810,873.08	8.42%	72,747,271.31	(88,950,390.08)	(161,697,661.39)
12/31/2001	1,690,810,873.08	8,507,566.17	39,853,836.30	1,619,512,835.08	8.42%	69,098,174.84	(71,298,038.00)	(140,396,212.84)
6/30/2002	1,619,512,835.08	13,706,567.93	42,800,063.60	1,565,541,761.01	8.42%	66,203,646.89	(53,971,074.07)	(120,174,720.96)
12/31/2002	1,565,541,761.01	22,759,411.04	44,501,232.89	1,443,914,316.36	8.16%	62,186,834.00	(99,885,622.80)	(162,072,456.80)
6/30/2003	1,443,914,316.36	30,798,277.44	49,290,498.40	1,550,639,977.14	8.16%	57,386,728.24	125,217,881.74	67,831,153.50

Development of Market Stabilization Reserve

Six-Month Period Ended	Unexpected Gain (Loss)	Percent Recognized	Gain (Loss) Excluded
6/30/1999	405,930,220	90%	40,593,022
12/31/1999	100,118,247	80%	20,023,649
6/30/2000	(109,851,135)	70%	(32,955,340)
12/31/2000	(52,571,930)	60%	(21,028,772)
6/30/2001	(129,379,719)	50%	(64,689,859)
12/31/2001	(109,049,943)	40%	(65,429,966)
6/30/2002	(91,081,225)	30%	(63,756,858)
12/31/2002	(162,072,457)	20%	(129,657,965)
6/30/2003	67,831,154	10%	61,048,038
Total			(255,854,051)
Development of Actu	uarial Value of Asset	ïS	
1. Market Value of A	Assets as June 30		\$ 1,550,639,977
2. Market Stabilization Reserve			(255,854,051)
3. Preliminary Actuarial Value: (1) – (2)			1,806,494,028
4. Corridor Around	Market Value		
(a) Minimum = 80	0% of Market		1,240,511,982
(b) Maximum = 1	20% of Market		1,860,767,973
5. Gross Actuarial V	alue of Assets		1,806,494,028

Allocation of Actuarial Value of Assets for Valuation Purposes

Actuarial Value of Reserves	Fair Value	A atmosfed Malma
Reserve	Fair Value	Actuarial Value
Members' Accumulated Contributions		
General - Basic	135,178,220	131,258,156
General - COL	81,536,495	79,171,999
Safety - Basic	25,226,586	24,495,034
Safety - COL	14,322,942	13,907,587
General - Settlement	9,347,393	9,076,325
Safety - Settlement	1,186,229	1,151,829
Current Service Reserve		
General - Regular	253,718,939	246,361,286
Safety - Regular	50,040,283	48,589,153
General - Settlement	(13,766,070)	(13,366,865)
Safety - Settlement	(5,336,008)	(5,181,268)
Annuity Pension Reserve		
General - Regular	72,079,476	69,989,226
Safety - Regular	17,142,240	16,645,129
General - Settlement	689	669
Safety - Settlement	135	131
Current Service Pension Reserve		
General	366,009,006	355,395,026
Safety	123,710,685	120,123,170
Supplemental Annuity Reserve		
General	151,020,140	146,640,673
Safety	40,312,698	39,143,660
Survivors' Death Benefit Reserve	4,162,986	4,042,263
Cost of Living Adjustment Reserve	328,436,522	318,912,115
Supplemental Cost of Living Reserve	4,166,323	4,045,503
Supplemental Benefit Reserve	104,054,369	101,036,873
Contingency Reserve	(86,555,164)	0
Retiree Health Insurance Reserve	97,895,240	95,056,354
Market Stabilization Account	(223,250,375)	0
Undistributed Earnings	<u>0</u>	<u>0</u>
Total	1,550,639,977	1,806,494,028



Actuarial Adjustment Factor

1. Included Reserves

a) Total Reserves	1,550,639,977
b) Market Stabilization Account	(255,854,051)
c) Contingency Reserve (if less than zero)	(53,951,488)
d) Included Reserves = $(a) - (b) - (c)$	1,860,445,516
2. Actuarial Value of Assets	1,806,494,028
3. Adjustment Factor = (2) / (1d)	.9710007698

Allocation of Reserves for Valuation

Regular Valuation Reserves

	General	Safety	Total
<u>Basic</u>			
Member Accumulated Contributions	131,258,156	24,495,034	155,753,189
Current Service Reserve	355,395,026	120,123,170	475,518,196
Annuity Pension Reserve	69,989,226	16,645,129	86,634,355
Current Service Pension Reserve	246,361,286	48,589,153	294,950,438
Survivor's Death Benefit Reserve*	3,204,751	<u>837,512</u>	4,042,263
Total Basic	806,208,445	210,689,998	1,016,898,443
COLA			
Member Accumulated Contributions	79,171,999	13,907,587	93,079,586
Cost of Living Reserve**	<u>271,261,516</u>	<u>47,650,599</u>	<u>318,912,115</u>
Total COL	350,433,515	61,558,186	411,991,701

^{*} The Survivors' Death Benefit Reserve has been allocated between General and Safety on the same proportion as the other Basic Reserves.

^{**} The Cost of Living Reserve was allocated between General and Safety in the same proportion as the Cost of Living contributions in the Member Accumulated Contribution Reserves.

Settlement Reserves			
	General	Safety	Total
Supplemental Benefit (Section 6)			
Supplemental Annuity Reserve	146,640,673	39,143,660	185,784,333
Member Accumulated Contributions	9,076,325	1,151,829	10,228,154
Annuity Pension Reserves	669	131	800
Current Service Reserves	<u>(13,366,865)</u>	<u>(5,181,268)</u>	(18,548,133)
Total	142,350,802	35,114,352	177,465,154
\$15 Dollar Retiree (Section 8)			
Supplemental Benefit Reserve			101,036,873
Total			101,036,873
			101,000,010
Retiree Health (Section 9)			
Retiree Health Reserve			95,056,354
Proportion Attributable to			
Settlement***			0.34
Included Reserve			32,622,642
Non-Valuation Reserves			
Undistributed Earnings			0
Ondiotributed Edithings			U
Other Non-Valuation Reserves			
i) Supplemental COLA			4,045,503
ii) Contingency Reserve			0
iii) Retiree Health Reserve***			62,433,712
iv) Total Other Non-Valuation Rese	rves		66,479,215

^{***} The Retiree Health Reserve was allocated between Settlement Reserves and Non-Valuation Reserves based on the portion of the Reserve that was attributable to Settlement Benefits at the time of the initial transfer.

Summary of Reserves

Valuation Reserves

Regular Reserves	1,428,890,144
Settlement Reserves	<u>311,124,669</u>
Total Valuation Reserves	1,740,014,813

Non-Valuation Reserves

Undistributed Earnings	0
Other Non-Valuation Reserves	<u>66,479,215</u>
Total Non-Valuation Reserves	66,479,215



B. Liability Information

Present Value of Projected Benefits

Present Value of Projected Benefits – Basic

	Regular Benefits – Prior Assumptions	Regular Benefits – Proposed Assumptions	Regular and Settlement Benefits – Prior Assumptions	Regular and Settlement Benefits – Proposed Assumptions
1. Retirees and				
Beneficiaries				
A. General	433,187,698	436,223,857	576,956,304	580,878,279
B. Safety	<u>119,191,626</u>	<u>118,586,542</u>	<u>147,853,160</u>	<u>147,273,231</u>
C. Total	552,379,324	554,810,399	724,809,464	728,151,510
2. Deferred Vested				
Members				
A. General	63,591,610	63,997,126	85,340,096	85,847,374
B. Safety	<u>4,109,416</u>	<u>4,117,389</u>	<u>10,431,341</u>	10,408,744
C. Total	67,701,026	68,114,515	95,771,437	96,256,118
3. Active Members				
A. General	743,063,423	743,066,013	947,553,153	975,444,259
B. Safety	<u>186,026,339</u>	<u>210,334,537</u>	<u>223,186,750</u>	<u>251,621,449</u>
C. Total	929,089,762	953,400,550	1,170,739,903	1,227,065,708
4. All Members				
A. General	1,239,842,731	1,243,286,996	1,609,849,553	1,642,169,912
B. Safety	309,327,381	333,038,468	<u>381,471,251</u>	409,303,424
C. Total	1,549,170,112	1,576,325,464	1,991,320,804	2,051,473,336

Present Value of Projected Benefits – Basic and Cost of Living

	Regular Benefits – Prior Assumptions	Regular Benefits – Proposed Assumptions	Regular and Settlement Benefits – Prior Assumptions	Regular and Settlement Benefits – Proposed Assumptions
1. Retirees and				
Beneficiaries				
A. General	681,041,496	686,574,587	868,399,524	875,384,688
B. Safety	<u>181,654,013</u>	<u>181,392,742</u>	219,135,629	<u>218,981,687</u>
C. Total	862,695,509	867,967,329	1,087,535,153	1,094,366,375
2. Deferred Vested Members				
A. General	82,431,126	83,084,959	108,889,492	109,707,165
B. Safety	<u>5,288,789</u>	5,329,123	13,865,884	13,891,508
C. Total	87,719,915	88,414,082	122,755,376	123,598,673
3. Active Members				
A. General	962,903,957	972,922,516	1,225,769,949	1,274,288,667
B. Safety	248,359,027	282,469,420	297,057,570	336,875,497
C. Total	1,211,262,984	1,255,391,936	1,522,827,519	1,611,164,164
4. All Members				
A. General	1,726,376,579	1,742,582,062	2,203,058,965	2,259,380,520
B. Safety	435,301,829	469,191,285	530,059,083	569,748,692
C. Total	2,161,678,408	2,211,773,347	2,733,118,048	2,829,129,212

Present Value of Projected Benefits – Supplemental Settlement Benefits (Section 6)

	Prior Assumptions	Proposed Assumptions
1. Retirees and		
Beneficiaries A. General	60 709 040	70 256 726
	69,708,049	70,356,736
B. Safety	<u>19,591,947</u>	<u>19,550,914</u>
C. Total	89,299,996	89,907,650
2. Deferred Vested		
Members		
A. General	20,607,782	20,771,240
B. Safety	8,179,311	8,167,018
C. Total	28,787,093	28,938,258
3. Active Members		
A. General	246,660,730	283,858,649
B. Safety	45,949,470	51,397,771
C. Total	292,610,200	335,256,420
4. All Members		
A. General	336,976,561	374,986,625
B. Safety	73,720,728	79,115,703
C. Total	410,697,289	454,102,328

Present Value of Projected Benefits – \$15 Retiree Settlement Benefits (Section 8)

	Prior Assumptions	Proposed Assumptions
1. Retirees and Beneficiaries		
A. General B. Safety C. Total	94,740,023 <u>14,205,171</u> 108,945,194	95,481,561 <u>14,283,714</u> 109,765,275
2. Deferred Vested Members		
A. General B. Safety C. Total	0 0 0	0 0 0
3. Active Members		
A. General B. Safety C. Total	0 0 0	0 0 0
4. All Members		
A. General B. Safety C. Total	94,740,023 <u>14,205,171</u> 108,945,194	95,481,561 <u>14,283,714</u> 109,765,275

Present Value of Projected Benefits – Retiree Health Benefits from Settlement (Section 9)

	Prior Assumptions	Proposed Assumptions
1. Retirees and		
Beneficiaries		
A. General	22,909,956	22,971,804
B. Safety	<u>3,684,498</u>	<u>3,754,317</u>
C. Total	26,594,454	26,726,121
2. Deferred Vested		
Members		
A. General	5,850,584	5,850,966
B. Safety	<u>397,784</u>	395,367
C. Total	6,248,368	6,246,333
3. Active Members		
A. General	16,205,262	17,507,502
B. Safety	2,749,073	3,008,306
C. Total	18,954,335	20,515,808
4. All Members		
A. General	44,965,802	46,330,272
B. Safety	6,831,355	7,157,990
C. Total	51,797,157	53,488,262

Present Value of Projected Benefits – Non-Valuation Benefits

	Purchasing	Dada a Haalda
	Power	Retiree Health
	Benefits	Benefits
1. Retirees and Beneficiaries		
A. General	22,000,454	43,545,661
B. Safety	6,574,099	<u>6,915,801</u>
C. Total	28,574,553	50,461,462
2. Deferred Vested Members		
A. General	207,511	3,830,554
B. Safety	86,638	223,820
C. Total	294,149	4,054,374
3. Active Members		
A. General	4,363,890	28,594,411
B. Safety	<u>2,130,411</u>	<u>4,950,768</u>
C. Total	6,494,301	33,545,179
4. All Members		
A. General	26,571,855	75,970,626
B. Safety	<u>8,791,148</u>	12,090,389
C. Total	35,363,003	88,061,015

Actuarial Accrued Liability

Actuarial Accrued Liability – Basic

	Regular Benefits – Prior Assumptions	Regular Benefits – Proposed Assumptions	Regular and Settlement Benefits – Prior Assumptions	Regular and Settlement Benefits – Proposed Assumptions
1. Retirees and				
Beneficiaries				
A. General	433,187,698	436,223,857	576,956,304	580,878,279
B. Safety	<u>119,191,626</u>	118,586,542	<u>147,853,160</u>	<u>147,273,231</u>
C. Total	552,379,324	554,810,399	724,809,464	728,151,510
2. Deferred Vested Members				
A. General	63,591,610	63,997,126	85,340,096	85,847,374
B. Safety	<u>4,109,416</u>	<u>4,117,389</u>	10,431,341	10,408,744
C. Total	67,701,026	68,114,515	95,771,437	96,256,118
3. Active Members				
A. General	463,631,452	465,516,384	590,515,379	612,860,645
B. Safety	117,138,972	119,123,238	<u>141,814,035</u>	144,049,993
C. Total	580,770,424	584,639,622	732,329,414	756,910,638
4. All Members				
A. General	960,410,760	965,737,367	1,252,811,779	1,279,586,298
B. Safety	240,440,014	241,827,169	300,098,536	<u>301,731,968</u>
C. Total	1,200,850,774	1,207,564,536	1,552,910,315	1,581,318,266

Actuarial Accrued Liability – Basic and Cost of Living

	Regular Benefits – Prior Assumptions	Regular Benefits – Proposed Assumptions	Regular and Settlement Benefits – Prior Assumptions	Regular and Settlement Benefits – Proposed Assumptions
1. Retirees and				
Beneficiaries				
A. General	681,041,496	686,574,587	868,399,524	875,384,688
B. Safety	<u>181,654,013</u>	<u>181,392,742</u>	<u>219,135,629</u>	<u>218,981,687</u>
C. Total	862,695,509	867,967,329	1,087,535,153	1,094,366,375
2. Deferred Vested				
Members				
A. General	82,431,126	83,084,959	108,889,492	109,707,165
B. Safety	5,288,789	<u>5,329,123</u>	<u>13,865,884</u>	13,891,508
C. Total	87,719,915	88,414,082	122,755,376	123,598,673
3. Active Members				
A. General	604,793,435	612,168,757	768,133,981	803,476,705
B. Safety	156,530,359	159,383,007	188,888,692	192,232,736
C. Total	761,323,794	771,551,764	957,022,673	995,709,441
4. All Members				
A. General	1,368,266,057	1,381,828,303	1,745,422,997	1,788,568,558
B. Safety	343,473,161	346,104,872	421,890,205	425,105,931
C. Total	1,711,739,218	1,727,933,175	2,167,313,202	2,213,674,489

Actuarial Accrued Liability – Supplemental Settlement Benefits (Section 6)

1. Retirees and Beneficiaries A. General 69,708,049 70,356,736 B. Safety 19,591,947 19,550,914 C. Total 89,299,996 89,907,650 2. Deferred Vested Members A. General 20,607,782 20,771,240 B. Safety 8,179,311 8,167,018 C. Total 28,787,093 28,938,258 3. Active Members A. General 147,135,284 179,781,453 B. Safety 29,609,260 31,003,573 C. Total 176,744,544 210,785,026		Prior Assumptions	Proposed Assumptions
A. General 69,708,049 70,356,736 B. Safety 19,591,947 19,550,914 C. Total 89,299,996 89,907,650 2. Deferred Vested Members A. General 20,607,782 20,771,240 B. Safety 8,179,311 8,167,018 C. Total 28,787,093 28,938,258 3. Active Members A. General 147,135,284 179,781,453 B. Safety 29,609,260 31,003,573 C. Total 176,744,544 210,785,026			
B. Safety C. Total B. Safety Deferred Vested Members A. General B. Safety C. Total 20,607,782 B. Safety B. Safety B. Safety C. Total 20,607,782 B. Safety B. Safety B. Safety B. Safety C. Total 20,607,782 B. Safety B. Safe			
C. Total 89,299,996 89,907,650 2. Deferred Vested Members A. General 20,607,782 20,771,240 B. Safety 8,179,311 8,167,018 C. Total 28,787,093 28,938,258 3. Active Members A. General 147,135,284 179,781,453 B. Safety 29,609,260 31,003,573 C. Total 176,744,544 210,785,026			, ,
2. Deferred Vested Members A. General 20,607,782 20,771,240 B. Safety 8,179,311 8,167,018 C. Total 28,787,093 28,938,258 3. Active Members A. General 147,135,284 179,781,453 B. Safety 29,609,260 31,003,573 C. Total 176,744,544 210,785,026	B. Safety	<u>19,591,947</u>	<u>19,550,914</u>
Members 20,607,782 20,771,240 B. Safety 8,179,311 8,167,018 C. Total 28,787,093 28,938,258 3. Active Members 4. General 147,135,284 179,781,453 <th< td=""><td>C. Total</td><td>89,299,996</td><td>89,907,650</td></th<>	C. Total	89,299,996	89,907,650
A. General 20,607,782 20,771,240 B. Safety 8,179,311 8,167,018 C. Total 28,787,093 28,938,258 3. Active Members A. General 147,135,284 179,781,453 B. Safety 29,609,260 31,003,573 C. Total 176,744,544 210,785,026			
B. Safety C. Total 8,179,311 28,787,093 28,938,258 3. Active Members A. General B. Safety C. Total 147,135,284 179,781,453 B. Safety 29,609,260 210,785,026		20 607 702	20 771 240
C. Total 28,787,093 28,938,258 3. Active Members A. General 147,135,284 179,781,453 B. Safety 29,609,260 31,003,573 C. Total 176,744,544 210,785,026		• •	, ,
3. Active Members A. General 147,135,284 179,781,453 B. Safety 29,609,260 31,003,573 C. Total 176,744,544 210,785,026	•		
A. General 147,135,284 179,781,453 B. Safety 29,609,260 31,003,573 C. Total 176,744,544 210,785,026	C. Total	28,787,093	28,938,258
B. Safety <u>29,609,260</u> <u>31,003,573</u> C. Total 176,744,544 210,785,026	3. Active Members		
C. Total 176,744,544 210,785,026	A. General	147,135,284	179,781,453
C. Total 176,744,544 210,785,026	B. Safety	29,609,260	31,003,573
4 All Marshaus	C. Total	176,744,544	210,785,026
4. All Wempers	4. All Members		
A. General 237,451,115 270,909,429	A. General	237.451.115	270.909.429
B. Safety 57,380,518 58,721,505			
C. Total 294,831,633 329,630,934	•		

Actuarial Accrued Liability – \$15 Retiree Settlement Benefits (Section 8)

	Prior Assumptions	Proposed Assumptions
1. Retirees and Beneficiaries A. General B. Safety C. Total	94,740,023 <u>14,205,171</u> 108,945,194	95,481,561 <u>14,283,714</u> 109,765,275
2. Deferred Vested Members A. General B. Safety C. Total	0 0 0	0 0 0
3. Active Members A. General B. Safety C. Total	0 0 0	0 0 0
4. All Members A. General B. Safety C. Total	94,740,023 <u>14,205,171</u> 108,945,194	95,481,561 <u>14,283,714</u> 109,765,275

Actuarial Accrued Liability – Retiree Health Benefits from Settlement (Section 9)

	Prior	Proposed
	Assumptions	Assumptions
1. Retirees and Beneficiaries		
A. General	22,909,956	22,971,804
B. Safety	<u>3,684,498</u>	<u>3,754,317</u>
C. Total	26,594,454	26,726,121
2. Deferred Vested Members		
A. General	5,850,584	5,850,966
B. Safety	397,784	395,367
C. Total	6,248,368	6,246,333
3. Active Members		
A. General	10,627,318	11,526,495
B. Safety	<u>1,865,258</u>	<u>1,846,156</u>
C. Total	12,492,576	13,372,651
4. All Members		
A. General	39,387,858	40,349,265
B. Safety	<u>5,947,540</u>	5,995,840
C. Total	45,335,398	46,345,105

Normal Cost

Normal Cost – Basic

	Regular Benefits – Prior Assumptions	Regular Benefits – Proposed Assumptions	Regular and Settlement Benefits – Prior Assumptions	Regular and Settlement Benefits – Proposed Assumptions
Dollar Amounts				
A. General	23,961,249	25,963,327	30,075,410	33,633,823
B. Safety	<u>6,104,270</u>	7,620,390	7,083,327	<u>8,856,273</u>
C. Total	30,065,519	33,583,717	37,158,737	42,490,096
As a Percent of Payroll				
A. General	8.37%	9.07%	10.51%	11.75%
B. Safety	10.96%	13.68%	12.72%	15.90%
C. Total	8.79%	9.82%	10.87%	12.42%

Normal Cost – With Cost of Living

	Regular Benefits – Prior Assumptions	Regular Benefits – Proposed Assumptions	Regular and Settlement Benefits – Prior Assumptions	Regular and Settlement Benefits – Proposed Assumptions
Dollar Amounts				
A. General	33,070,806	36,217,951	41,726,723	46,983,564
B. Safety	<u>8,744,143</u>	<u>10,919,113</u>	<u>10,163,785</u>	12,689,628
C. Total	41,814,949	47,137,064	51,890,508	59,673,192
As a Percent of Payroll				
A. General	11.55%	12.65%	14.58%	16.41%
B. Safety	15.70%	19.60%	18.25%	22.78%
C. Total	12.23%	13.78%	15.17%	17.45%

Normal Cost – Settlement Benefits (Prior Assumption)

	Supplemental		
	Benefit	\$15 Retiree	Retiree Health
	(Section 6)	(Section 8)	(Section 9)
Dollar Amounts			
A. General	7,971,366	0	684,551
B. Safety	<u>1,310,293</u>	0	<u>109,349</u>
C. Total	9,281,659	0	793,900
As a Percent of Payroll			
A. General	2.89%	0.00%	0.25%
B. Safety	2.56%	0.00%	0.21%
C. Total	2.84%	0.00%	0.24%

Normal Cost – Settlement Benefits (Proposed Assumptions)

	Supplemental		
	Benefit	\$15 Retiree	Retiree Health
	(Section 6)	(Section 8)	(Section 9)
Dollar Amounts			
A. General	9,962,617	0	802,996
B. Safety	<u>1,637,944</u>	0	<u>132,571</u>
C. Total	11,600,561	0	935,567
As a Percent of Payroll			
A. General	3.62%	0.00%	0.29%
B. Safety	3.20%	0.00%	0.26%
C. Total	3.55%	0.00%	0.29%

C. Funded Percentage

Regular Benefits

	Basic Benefits	COL Benefits *	Total Benefits**
1. Actuarial Accrued LiabilityA. GeneralB. SafetyC. Total	965,737,367	416,090,936	1,173,782,835
	241,827,169	<u>104,277,703</u>	<u>293,966,021</u>
	1,207,564,536	520,368,639	1,467,748,856
2. Actuarial Value of Assets A. General B. Safety C. Total	806,208,445	350,433,515	981,425,203
	<u>210,689,998</u>	<u>61,558,186</u>	241,469,091
	1,016,898,443	411,991,701	1,222,894,294
3. Unfunded Actuarial Accrued Liability A. General B. Safety C. Total	159,528,922	65,657,421	192,357,633
	<u>31,137,171</u>	<u>42,719,517</u>	<u>52,496,930</u>
	190,666,093	108,376,938	244,854,562
4. Funded PercentagesA. GeneralB. SafetyC. Total	83.48%	84.22%	83.61%
	87.12%	59.03%	82.14%
	84.21%	79.17%	83.32%

^{* 50%} of the UAAL for COL Benefits is covered by Employer contributions and the other 50% is covered by Member COL Contributions.

^{**} Total Benefits are equal to Basic Benefits plus 50% of COL Benefits.

Settlement Benefits

	Settlement Benefits	Total All Benefits
1. Actuarial Accrued Liability		
A. General	406,740,255	1,580,523,090
B. Safety	<u>79,001,059</u>	<u>372,967,080</u>
C. Total	485,741,314	1,953,490,170
2. Actuarial Value of Assets	311,124,669	1,534,018,963
3. Unfunded Actuarial Accrued Liability	174,616,645	419,471,207
4. Funded Percentages	64.05%	78.53%

D. Employer Contribution Rates

Regular Benefits

Basic

1. Normal Cost	General 25,963,327	Safety 7,620,390	Total 33,583,717
 2. UAAL Amortization Payment a) Basic UAAL b) Amortization Factor – 30 Years c) Amortization Payment = (a) / (b) 	159,528,922 17.98371 8,870,746	31,137,171 17.98371 1,731,410	190,666,093 17.98371 10,602,156
3. Preliminary Contribution = (1) + (2c)	34,834,073	9,351,800	44,185,873
4. Interest for Payments during year	1,393,363	374,072	1,767,435
Adjustment for payment during next fiscal year	1,449,097	389,035	1,838,132
 6. Required Contribution = (3) + (4) + (5) a) Dollar Amount b) Percentage of Payroll 	37,676,533 12.65%	10,114,907 17.46%	47,791,440 13.44%

COL

	General	Safety	Total
1. Normal Cost			
a) Total Normal Cost	10,254,624	3,298,723	13,553,347
b) Portion paid by Employers	50%	50%	50%
c) Employer Normal Cost = (a) X (b)	5,127,312	1,649,362	6,776,674
2. UAAL Amortization Payment			
a) COLA UAAL	65,657,421	42,719,517	108,376,938
b) Amortization Factor	17.98371	17.98371	17.98371
c) Amortization Payment = (a) / (b)	3,650,939	2,375,456	6,026,395
d) Portion paid by Employerse) Employer UAAL Amortization	50%	50%	50%
Payment = (c) X (d)	1,825,470	1,187,728	3,013,198
3. Preliminary Contribution = (1) + (2e)	6,952,782	2,837,090	9,789,872
4. Interest for Payments during year	278,111	113,484	391,595
Adjustment for payment during next fiscal year	289,236	118,023	407,259
6. Required Contribution = (3) + (4) + (5)			
a) Dollar Amount	7,520,129	3,068,597	10,588,726
b) Percentage of Payroll	2.53%	5.30%	2.98%

Total Regular Benefits

	General	Safety	Total
1. Normal Cost	31,090,639	9,269,752	40,360,391
2. UAAL Amortization Payment	10,696,216	2,919,138	13,615,354
3. Preliminary Contribution = (1) + (2)	41,786,855	12,188,890	53,975,745
4. Interest for Payments during year	1,671,474	487,556	2,159,030
Adjustment for payment during next fiscal year	1,738,333	507,058	2,245,391
6. Required Contribution = (3) + (4) + (5)			
a) Dollar Amount	45,196,662	13,183,504	58,380,166
b) Percentage of Payroll	15.18%	22.76%	16.41%

Settlement Benefits

Supplemental Settlement Benefits (Section 6)

1. Normal Cost	General 9,962,617	Safety 1,637,944	Total 11,600,561
2. UAAL Amortization Payment a) UAAL i) Actuarial Accrued Liability ii) Actuarial Value of Assets iii) Unfunded Actuarial Accrued Liability b) Amortization Factor c) Amortization Payment = (a) / (b)	270,909,429 142,350,802 122,577,620 17.98371 7,148,615	58,721,505 35,114,352 22,445,003 17.98371 1,312,696	
3. Preliminary Contribution = (1) + (2c)	17,111,232	2,950,640	20,061,872
4. Interest for Payments during year	684,449	118,026	802,475
5. Adjustment for payment during next fiscal year	711,827	122,747	834,574
 6. Required Contribution = (3) + (4) + (5) a) Dollar Amount b) Percentage of Payroll 	18,507,508 6.22%	3,191,413 5.51%	21,698,921 6.10%

\$15 Retiree Settlement Benefits (Section 8)

	General	Safety	Total
1. UAAL Amortization Payment			
a) UAAL			
i) Actuarial Accrued Liability			109,765,275
ii) Actuarial Value of Assets			101,036,873
iii) Unfunded Actuarial Accrued Liability			8,728,402
b) Amortization Factor			17.98371
c) Amortization Payment			485,350
d) Covered Payroll	286,278,925	55,702,460	341,981,385
e) UAAL Amortization Percentage	0.14%		0.14%
f) Amortization Payment	400,790	77,983	478,774
2. Preliminary Contribution	400,790	77,983	478,774
•	,	,	,
3. Interest for Payments during year	16,032	3,119	19,151
4. Adjustment for newment during payt fiscal			
 Adjustment for payment during next fiscal year 	16,673	3,244	19,917
year	10,073	3,244	19,917
5. Required Contribution			
= (2) + (3) + (4)			
a) Dollar Amount	433,495	84,346	517,842
b) Percentage of Payroll	0.15%	0.15%	0.15%

Retiree Health Benefits from Settlement (Section 9)

1. Normal Cost	General 802,996	Safety 132,571	Total 935,567
UAAL Amortization Payment a) UAAL			
i) Actuarial Accrued Liability			46,345,105
ii) Actuarial Value of Assetsiii) Unfunded Actuarial Accrued Liability			32,622,642 13,722,463
b) Amortization Factor			17.98371
c) Amortization Payment = (a) / (b)			763,050
d) Covered Payroll	286,278,925	55,702,460	341,981,385
e) UAAL Amortization Percentage= (c) / (d)f) Amortization Payment	0.22%	0.22%	0.22%
= (d) X (e)	629,814	122,545	752,359
3. Preliminary Contribution			
= (1) + (2f)	1,432,810	255,116	1,687,926
4. Interest for Payments during year	57,312	10,205	67,517
Adjustment for payment during next fiscal year	59,605	10,613	70,218
6. Required Contribution = (3) + (4) + (5)			
a) Dollar Amount	1,549,727	275,934	1,825,661
b) Percentage of Payroll	0.52%	0.48%	0.51%

Total Settlement Benefits

	General	Safety	Total
1. Normal Cost	10,765,613	1,770,515	12,536,128
2. UAAL Amortization Payment	8,179,219	1,513,224	9,692,444
3. Preliminary Contribution = (1) + (2)	18,944,832	3,283,739	22,228,572
4. Interest for Payments during year	757,793	131,350	889,143
Adjustment for payment during next fiscal year	788,105	136,604	924,709
6. Required Employer Contributiona) Dollar Amountb) Percentage of Payroll	20,490,730 6.88%	3,551,693 6.13%	24,042,424 6.76%

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

Eligibility: 10 years of service and age 50, or

30 years of service regardless of age, or

age 70 regardless of service.

Benefit: 2.5% of FAS per year of service times

RAF

Retirement Age Factor (RAF): Adjustment factor for benefit

commencing at age other than 55.

Sample factors:

Age	Factor
50	0.7454
55	1.0000
60	1.3093

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.

Nonservice Connected Disability

Eligibility: 5 years of service.

Disabled Definition: Unable to perform their own job.

Benefit: 90% of accrued benefit, or

2.25% of FAS multiplied by service projected to age 60, but not more than 33.333% of FAS. Cannot be less than Service Retirement benefit (if eligible at

time of commencement).

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.

Service Connected Disability

Eligibility: First day of work

Disabled Definition: Disability is substantially caused by

employment and unable to perform his or

her own job.

Benefit: 50% of salary, but not less than Service

Retirement benefit (if eligible at time of

commencement).

Normal Form of Benefit: 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

Before eligible for Nonservice Connected Disability or Service

Retirement:

Refund of employee contributions with interest, plus 1 month's salary for each year of service (maximum 6 months'

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

Eligibility: First day of work

Other Requirement: Forfeits right to receive other benefit from

retirement system.

Benefit: Accumulated contributions with interest

Form of Benefit: Lump sum

Cost of Living Benefits

Timing: Annually, effective April 1 for all those

who retired on or before April 1. Based on change in Consumer Price Index (CPI) for the San Francisco Bay Area for

the preceding calendar year.

Maximum: 3% per year, with "banking" of COLAs.

When the COLA bank for a retiree or beneficiary exceeds 25%, it is the intention of the Retirement Board to provide additional benefits that would maintain a retiree's benefit at 75% of their

original purchasing power. These purchasing power benefits are not guaranteed by the County (or other participating employers) and are considered non-Valuation benefits. These benefits have historically been paid out of Undistributed Earnings.

Health Benefits

Eligibility: Receipt of a lifetime annuity upon service

retirement, disability retirement, deferred vested retirement, or service-connected

death.

Benefit: For members entering the plan prior to

1/1/1990, the monthly benefit is \$45 plus \$6.50 per year of service. For members entering the plan on or after 1/1/90, the benefit is \$8 per year of service. Benefits

are capped at \$240 per month.

Under the terms of the Ventura



Settlement, a benefit of \$3 per year of service is guaranteed by the County (and other participating employers). Any remaining benefit is not guaranteed, although it is the intention of the Board to use Undistributed Earnings to pay for these non-Valuation benefits.

Normal Form of Benefit: Life annuity to spouse after death of

member.

Member Contributions

Basic: Contribution is set by a table adopted by

the Retirement Board designed to be sufficient to provide an average annuity, at age 60, equal to 1/200 of the final

compensation of members.

Settlement: Additional contribution is set by a table

adopted by the Retirement Board designed to be sufficient (along with Basic Contributions for Regular Benefits) to provide an average annuity, at age 55, equal to 1/160 of the final compensation of members. This additional amount is paid from Undistributed Earnings when Undistributed Earnings are available.

COLA: Members pay for 50% of the cost of the

COLA. For the current year, that would increase Basic Contribution rates by

84%.

Percentage of Basic Contribution

Payable by Member:

Employees with more than 30 years of service who were hired prior to March 7, 1973, do not pay employee contributions.

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).

General Member Basic Contribution Rates

Members will be required to make contributions based on the following schedule.

	Rate on First \$350 of Monthly	Rate on Compensation in Excess of \$350 per		Rate on First \$350 of Monthly	Rate on Compensation in Excess of \$350 per
Age	Compensation	Month	Age	Compensation	Month
20	1.67%	2.50%	40	2.43%	3.65%
21	1.70%	2.55%	41	2.48%	3.72%
22	1.73%	2.60%	42	2.53%	3.79%
23	1.77%	2.65%	43	2.57%	3.86%
24	1.80%	2.70%	44	2.63%	3.94%
25	1.83%	2.75%	45	2.67%	4.01%
26	1.87%	2.81%	46	2.73%	4.09%
27	1.91%	2.86%	47	2.78%	4.17%
28	1.95%	2.92%	48	2.83%	4.25%
29	1.98%	2.97%	49	2.89%	4.33%
30	2.02%	3.03%	50	2.95%	4.42%
31	2.06%	3.09%	51	3.01%	4.52%
32	2.10%	3.15%	52	3.08%	4.62%
33	2.14%	3.21%	53	3.15%	4.72%
34	2.18%	3.27%	54	3.23%	4.85%
35	2.22%	3.33%	55	3.33%	4.99%
36	2.26%	3.39%	56	3.31%	4.97%
37	2.30%	3.45%	57	3.30%	4.95%
38	2.35%	3.52%	58	3.29%	4.93%
39	2.39%	3.59%	59	3.27%	4.91%



General Member Settlement Contribution Rates

Members will be required to make contributions based on the following schedule.

	Rate on First \$350 of Monthly	Rate on Compensation in Excess of \$350 per		Rate on First \$350 of Monthly	Rate on Compensation in Excess of \$350 per
Age	Compensation	Month	Age	Compensation	Month
20	0.78%	1.17%	40	1.12%	1.69%
21	0.79%	1.19%	41	1.15%	1.72%
22	0.81%	1.21%	42	1.17%	1.76%
23	0.82%	1.23%	43	1.20%	1.79%
24	0.84%	1.26%	44	1.22%	1.83%
25	0.85%	1.28%	45	1.25%	1.88%
26	0.87%	1.30%	46	1.28%	1.92%
27	0.88%	1.33%	47	1.32%	1.98%
28	0.90%	1.35%	48	1.36%	2.04%
29	0.92%	1.38%	49	1.41%	2.12%
30	0.93%	1.40%	50	1.48%	2.22%
31	0.95%	1.43%	51	1.40%	2.10%
32	0.97%	1.45%	52	1.32%	1.98%
33	0.99%	1.48%	53	1.23%	1.84%
34	1.01%	1.51%	54	1.13%	1.70%
35	1.02%	1.54%	55	1.04%	1.55%
36	1.04%	1.56%	56	1.05%	1.57%
37	1.06%	1.59%	57	1.06%	1.59%
38	1.08%	1.62%	58	1.07%	1.61%
39	1.10%	1.65%	59	1.09%	1.63%

General Member COL Contribution Rates

In past years, the additional contributions required to pay for cost of living benefits, for both members and employers, were often provided through Undistributed Earnings. Since there are no Undistributed Earnings available at this time to pay for the cost of living benefits, members will be required to make contributions based on the following schedule.

	Rate on First \$350 of Monthly	Rate on Compensation in Excess of \$350 per		Rate on First \$350 of Monthly	Rate on Compensation in Excess of \$350 per
Age	Compensation	Month	Age	Compensation	Month
20	3.05%	4.58%	40	4.45%	6.67%
21	3.11%	4.67%	41	4.53%	6.80%
22	3.17%	4.76%	42	4.62%	6.93%
23	3.23%	4.85%	43	4.71%	7.07%
24	3.30%	4.95%	44	4.81%	7.22%
25	3.36%	5.04%	45	4.91%	7.36%
26	3.43%	5.14%	46	5.01%	7.52%
27	3.49%	5.23%	47	5.13%	7.69%
28	3.56%	5.34%	48	5.25%	7.87%
29	3.62%	5.43%	49	5.37%	8.06%
30	3.69%	5.54%	50	5.53%	8.30%
31	3.77%	5.65%	51	5.52%	8.28%
32	3.83%	5.75%	52	5.50%	8.25%
33	3.91%	5.86%	53	5.47%	8.21%
34	3.98%	5.97%	54	5.45%	8.18%
35	4.05%	6.08%	55	5.45%	8.18%
36	4.13%	6.19%	56	5.45%	8.18%
37	4.20%	6.30%	57	5.45%	8.18%
38	4.29%	6.43%	58	5.45%	8.18%
39	4.37%	6.56%	59	5.45%	8.17%

General Member Contribution Rates (Basic plus Settlement plus COL)

The following schedule shows the total contribution rates required of General Members for the coming year.

	Rate on First \$350 of Monthly	Rate on Compensation in Excess of \$350 per		Rate on First \$350 of Monthly	Rate on Compensation in Excess of \$350 per
Age	Compensation	Month	Age	Compensation	Month
20	5.50%	8.25%	40	8.00%	12.01%
21	5.61%	8.41%	41	8.16%	12.24%
22	5.71%	8.57%	42	8.32%	12.48%
23	5.82%	8.73%	43	8.48%	12.72%
24	5.94%	8.91%	44	8.66%	12.99%
25	6.05%	9.07%	45	8.83%	13.25%
26	6.17%	9.25%	46	9.02%	13.53%
27	6.28%	9.42%	47	9.23%	13.84%
28	6.41%	9.61%	48	9.44%	14.16%
29	6.52%	9.78%	49	9.67%	14.51%
30	6.65%	9.97%	50	9.96%	14.94%
31	6.78%	10.17%	51	9.94%	14.90%
32	6.90%	10.35%	52	9.90%	14.85%
33	7.03%	10.55%	53	9.85%	14.77%
34	7.17%	10.75%	54	9.82%	14.73%
35	7.30%	10.95%	55	9.82%	14.72%
36	7.43%	11.14%	56	9.81%	14.72%
37	7.56%	11.34%	57	9.81%	14.72%
38	7.72%	11.57%	58	9.81%	14.72%
39	7.87%	11.80%	59	9.81%	14.71%

G. Summary of Major Plan Provisions –Safety 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. Positions must be one in which the principal duties consist of either active law enforcement or active

fire suppression.

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

Service Retirement

Eligibility: 10 years of service and age 50, or

20 years of service regardless of age.

Benefit: 2.5% 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	0.7805		
50	1.0000		
55	1.3099		

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.

Nonservice Connected Disability

Eligibility: 5 years of service.

Disabled Definition: Unable to perform their own job.

Benefit: 90% of accrued benefit, or

> 2.25% of FAS multiplied by service projected to age 55, but not more than 33.333% of FAS. Cannot be less than Service Retirement benefit (if eligible at

time of commencement).

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.

Service Connected Disability

Eligibility: First day of work

Disabled Definition: Disability is substantially caused by

employment and unable to perform his or

her own job.

Benefit: 50% of salary, but not less than Service

Retirement benefit (if eligible at time of

commencement).

Normal Form of Benefit: 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

Before eligible for Nonservice Connected Disability or Service

Retirement:

Refund of employee contributions with interest, plus 1 month's salary for each year of service (maximum 6 months'

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

Eligibility: First day of work



Other Requirement: Forfeits right to receive other benefit from

retirement system.

Benefit: Accumulated contributions with interest

Form of Benefit: Lump sum

Cost of Living Benefits

Timing: Annually, effective April 1 for all those

who retired prior to April 1. Based on change in Consumer Price Index (CPI) for the San Francisco Bay Area for the

preceding calendar year.

Maximum: 3% per year, with "banking" of COLAs.

When the COLA bank for a retiree or beneficiary exceeds 25%, it is the intention of the Retirement Board to provide additional benefits that would maintain a retiree's benefit at 75% of their

original purchasing power. These purchasing power benefits are not guaranteed by the County (or other participating employers) and are considered non-Valuation benefits. These benefits have historically been paid out of Undistributed Earnings.

Health Benefits

Eligibility: Receipt of a lifetime annuity upon service

retirement, disability retirement, deferred vested retirement, or service-connected

death.

Benefit: For members entering the plan prior to

1/1/1990, the monthly benefit is \$45 plus \$6.50 per year of service. For members entering the plan on or after 1/1/90, the benefit is \$8 per year of service. Benefits

are capped at \$240 per month.

Under the terms of the Ventura Settlement, a benefit of \$3 per year of service is guaranteed by the County (and other participating employers). Any remaining benefit is not guaranteed, although it is the intention of the Board to use Undistributed Earnings to pay for

these non-Valuation benefits.

Normal Form of Benefit: Life annuity to spouse after death of

member.

Member Contributions

Basic: 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 1/200 of the final

compensation of members.

Settlement: Additional contribution is set by a table

> adopted by the Retirement Board designed to be sufficient (along with Basic Contributions for Regular Benefits) to provide an average annuity, at age 50, equal to 1/160 of the final compensation of members. This additional amount is paid from Undistributed Earnings when Undistributed Earnings are available.

COLA: Members pay for 50% of the cost of the

> COLA. For the current year, that would increase Basic Contribution rates by

84%.

Percentage of Full Contribution

Payable by Member:

Employees with more than 30 years of service who were hired prior to March 7, 1973, do not pay employee contributions.

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).

Safety Member Basic Contribution Rates

Members will be required to make contributions based on the following schedule.

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	2.35%	3.53%	35	3.13%	4.70%
21	2.40%	3.60%	36	3.20%	4.80%
22	2.45%	3.67%	37	3.27%	4.91%
23	2.49%	3.73%	38	3.35%	5.02%
24	2.53%	3.80%	39	3.43%	5.15%
25	2.58%	3.87%	40	3.53%	5.29%
26	2.63%	3.94%	41	3.63%	5.45%
27	2.68%	4.02%	42	3.75%	5.63%
28	2.73%	4.09%	43	3.72%	5.58%
29	2.78%	4.17%	44	3.69%	5.53%
30	2.83%	4.25%	45	3.66%	5.49%
31	2.89%	4.33%	46	3.63%	5.44%
32	2.95%	4.42%	47	3.60%	5.40%
33	3.01%	4.51%	48	3.57%	5.35%
34	3.07%	4.60%	49	3.54%	5.31%

Safety Member Settlement Contribution Rates

Members will be required to make contributions based on the following schedule.

	Rate on First \$350 of Monthly	Rate on Compensation in Excess of \$350 per		Rate on First \$350 of Monthly	Rate on Compensation in Excess of \$350 per
Age	Compensation	Month	Age	Compensation	Month
20	0.59%	0.88%	35	0.78%	1.17%
21	0.60%	0.90%	36	0.80%	1.20%
22	0.61%	0.92%	37	0.82%	1.23%
23	0.62%	0.93%	38	0.84%	1.26%
24	0.63%	0.95%	39	0.86%	1.29%
25	0.65%	0.97%	40	0.88%	1.32%
26	0.66%	0.99%	41	0.91%	1.36%
27	0.67%	1.00%	42	0.94%	1.41%
28	0.68%	1.02%	43	0.93%	1.40%
29	0.69%	1.04%	44	0.92%	1.38%
30	0.71%	1.06%	45	0.91%	1.37%
31	0.72%	1.08%	46	0.91%	1.36%
32	0.73%	1.10%	47	0.90%	1.35%
33	0.75%	1.13%	48	0.89%	1.34%
34	0.77%	1.15%	49	0.89%	1.33%

Safety Member COL Contribution Rates

In past years, the additional contributions required to pay for cost of living benefits, for both members and employers, were often provided through Undistributed Earnings. Since there are no Undistributed Earnings available at this time to pay for the cost of living benefits, members will be required to make contributions based on the following schedule.

A	Rate on First \$350 of Monthly	Rate on Compensation in Excess of \$350 per	Ama	Rate on First \$350 of Monthly	Rate on Compensation in Excess of \$350 per
Age	Compensation	Month	Age	Compensation	Month
20	3.68%	5.52%	35	4.89%	7.34%
21	3.75%	5.62%	36	5.00%	7.50%
22	3.82%	5.73%	37	5.11%	7.67%
23	3.89%	5.83%	38	5.23%	7.85%
24	3.96%	5.94%	39	5.37%	8.05%
25	4.03%	6.05%	40	5.51%	8.26%
26	4.11%	6.16%	41	5.67%	8.51%
27	4.19%	6.28%	42	5.86%	8.79%
28	4.27%	6.40%	43	5.81%	8.72%
29	4.35%	6.52%	44	5.77%	8.65%
30	4.43%	6.64%	45	5.72%	8.58%
31	4.51%	6.77%	46	5.67%	8.51%
32	4.61%	6.91%	47	5.62%	8.43%
33	4.69%	7.04%	48	5.57%	8.36%
34	4.79%	7.19%	49	5.53%	8.29%

Safety Member Contribution Rates (Basic plus Settlement plus COL)

The following schedule shows the total contribution rates required of Safety Members for the coming year.

		Rate on			Rate on
	Rate on First \$350 of Monthly	Compensation in Excess of \$350 per		Rate on First \$350 of Monthly	Compensation in Excess of \$350 per
Age	Compensation	Month	Age	Compensation	Month
20	6.63%	9.94%	35	8.81%	13.21%
21	6.75%	10.12%	36	9.00%	13.50%
22	6.87%	10.31%	37	9.20%	13.80%
23	7.00%	10.50%	38	9.42%	14.13%
24	7.13%	10.69%	39	9.65%	14.48%
25	7.26%	10.89%	40	9.91%	14.87%
26	7.39%	11.09%	41	10.21%	15.31%
27	7.53%	11.30%	42	10.55%	15.83%
28	7.67%	11.51%	43	10.47%	15.70%
29	7.82%	11.73%	44	10.38%	15.57%
30	7.97%	11.96%	45	10.29%	15.44%
31	8.13%	12.19%	46	10.21%	15.31%
32	8.29%	12.43%	47	10.12%	15.18%
33	8.45%	12.68%	48	10.04%	15.06%
34	8.63%	12.94%	49	9.95%	14.93%

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

Interest: 8.16% per year.

Salary Increase – Total Payroll: 4.0 % per year.

Salary Increase – Individual: Rates varying by service, as shown in

Schedule 1. This is a change from the previous valuation, where rates varied by

age, as shown in Schedule 2.

Inflation: 4.0% per year.

Employee Contribution Interest

Crediting Rate:

8.16% per year.

Demographic Assumptions

Post-retirement mortality:

• **Service Retirement - General:** RP-2000 Healthy Annuitant Mortality,

with adjustment for white collar workers.

Life expectancies are shown in

Schedules 3. This is a change from the prior valuation, which used 1994 Group Annuity Mortality, with ages set forward one year for female members. Life Expectancies are shown in Schedule 4.

• Service Retirement - Safety: RP-2000 Healthy Annuitant Mortality,

with adjustment for blue collar workers.

Life expectancies are shown in

Schedules 5. This is a change from the prior valuation, which used 1994 Group Annuity Mortality for males, with no age



adjustment. Life Expectancies are shown in Schedule 6.

Disability Retirement:

RP-2000 Disabled Annuitant Mortality.

Life expectancies are shown in

Schedules 7. This is a change from the

prior valuation, which used 1981

Disability Mortality. Life Expectancies are

shown in Schedule 8.

Spouse:

RP-2000 Healthy Annuitant Mortality, with adjustment for white collar workers. This is a change from the prior valuation,

which used 1994 Group Annuity

Mortality, with ages set forward one year

for female beneficiaries.

Withdrawal (termination with refund of member contributions):

Rates varying by age, as shown in Schedule 9 (for General males), 11 (for General females) and 13 (for Safety). Proportion of total terminations varying by service, as shown in Schedule 15. These are all changes from the prior valuation, as shown in Schedule 10 (for General males), 12 (for General females)

and 14 (for Safety).

Vested Termination (termination with retirement pension deferred to age 63 for General and age 55 for Safety members):

Rates varying by age, as shown in Schedule 9 (for General males), 11 (for General females) and 13 (for Safety). Proportion of total terminations varying by service, as shown in Schedule 15. These are all changes from the prior valuation, as shown in Schedule 10 (for General males), 12 (for General females) and 14 (for Safety). Half of all members are assumed to join a reciprocal agency immediately after termination.

Pre-retirement mortality:

Rates varying by age, as shown in Schedule 9 (for General males), 11 (for General females) and 13 (for Safety). These are all changes from the prior valuation, as shown in Schedule 10 (for General males), 12 (for General females) and 14 (for Safety). Separate rates for

ordinary death, service related death,

and death while eligible.

Service Disability: Rates varying by age, as shown in

Schedule 9 (for General males), 11 (for General females) and 13 (for Safety). These are all changes from the prior valuation, as shown in Schedule 10 (for General males), 12 (for General females)

and 14 (for Safety).

Ordinary Disability: Rates varying by age, as shown in

Schedule 9 (for General males), 11 (for General females) and 13 (for Safety). These are all changes from the prior valuation, as shown in Schedule 10 (for General males), 12 (for General females)

and 14 (for Safety).

Service Retirement: Rates varying by age, as shown in

Schedule 9 (for General males), 11 (for General females) and 13 (for Safety). These are all changes from the prior valuation, as shown in Schedule 10 (for General males), 12 (for General females)

and 14 (for Safety).

Form of Payment: Life annuity for single members. 60%

contingent annuity for married members (100% contingent annuity if receiving

service-related disability).

Percentage Married at Retirement: 90% 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 three years

younger than husbands.

Where spousal information was included for retirees, that information was used. If no beneficiary information was present, it was assumed that there was no eligible

beneficiary.

Actuarial Methods

Funding Method: Entry Age Normal Funding Method.

Amortization Period: The Unfunded Actuarial Accrued Liability

(UAAL) is amortized as a level

percentage of payroll in pieces based on how the UAAL developed. The initial UAAL in this valuation for Regular Benefits is amortized over a 30-year period. The UAAL for Settlement Benefits are also amortized over a 30year period. In future years, any UAAL

arising from a plan amendment,

legislative change or court decision will be amortized over 30 years from the following valuation. Any other UAAL will be amortized over a 15-year period from

the valuation in which it arises.

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.

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 was 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. Additional comments related to data preparation are included

in Section K.

Schedule 1

Assumed Rate of Salary Increase

Years of Service	General Members	Safety Members
0	9.00%	6.00%
1	9.00%	6.00%
2	9.00%	6.00%
3	9.00%	6.00%
4	9.00%	6.00%
5	4.75%	6.00%
6	4.75%	6.00%
7	4.75%	6.00%
8 or	4.75%	5.00%
more		

Schedule 2

Prior Year Assumed Rate of Salary Increase

Age	General Members	Safety Members
20	10.240%	8.160%
21	9.720%	6.600%
22	8.680%	6.080%
23	7.640%	6.080%
24	7.640%	6.080%
25	6.600%	5.560%
26	6.600%	5.560%
27	6.600%	5.560%
28	6.600%	5.248%
29	6.600%	5.248%
30	6.080%	5.248%
31	5.560%	5.248%
32	5.040%	5.248%
33	4.520%	5.040%
34	4.520%	5.040%
35	4.520%	4.624%
36	4.520%	4.624%
37	4.520%	4.624%
38	4.520%	4.624%
39	4.520%	4.624%
40	4.520%	4.520%
41	4.520%	4.520%
42	4.520%	4.520%
42	4.520%	4.520%
43 44	4.520%	4.520%
4 4 45	4.520%	4.520%
46	4.520%	4.520%
40 47	4.520%	4.520%
48	4.520%	4.520%
49	4.520%	4.520%
5 0	4.520%	4.520%
51	4.520%	4.520%
52	4.520%	4.520%
53	4.520%	4.520%
54	4.520%	4.520%
55	4.520%	4.624%
56	4.520%	4.520%
57	4.520%	4.520%
58	4.520%	4.520%
59	4.520%	4.520%
60	4.520%	4.02070
61	4.520%	
62	4.520%	
63	4.520%	
64	4.520%	
65	4.520%	
66	4.520%	
67	4.520%	
68	4.520%	
69	4.520%	
OB	4.020/0	

Schedule 3

Life Expectancies at Sample Ages Healthy General Members

Age	Male	Female	Age	Male	Female
20	58.04	63.01	70	14.48	16.98
21	57.09	62.03	71	13.76	16.23
22	56.15	61.05	72	13.04	15.26
23	55.21	60.06	73	12.35	14.54
24	54.26	59.08	74	11.67	13.84
25	53.32	58.10	75	11.02	13.16
26	52.38	57.12	76	10.38	12.49
27	51.43	56.13	77	9.77	11.84
28	50.49	55.15	78	9.18	11.21
29	49.54	54.17	79	8.61	10.59
30	48.60	53.19	80	8.06	10.00
31	47.66	52.21	81	7.54	9.43
32	46.72	51.23	82	7.04	8.87
33	45.80	50.26	83	6.56	8.34
34	44.88	49.29	84	6.11	7.84
35	43.96	48.32	85	5.69	7.35
36	43.06	47.35	86	5.29	6.90
37	42.16	46.39	87	4.92	6.47
38	41.26	45.42	88	4.58	6.08
39	40.37	44.46	89	4.26	5.72
40	39.49	43.51	90	3.97	5.38
41	38.61	42.55	91	3.72	5.08
42	37.73	41.60	92	3.49	4.81
43	36.85	40.65	93	3.28	4.57
44	35.99	39.70	94	3.09	4.36
45	35.13	38.76	95	2.93	4.17
46	34.27	37.83	96	2.78	4.01
47	33.43	36.89	97	2.65	3.86
48	32.59	35.96	98	2.53	3.72
49	31.75	35.04	99	2.43	3.59
50	30.93	34.12	100	2.33	3.47
51	30.11	33.20	101	2.25	3.33
52	29.29	32.28	102	2.19	3.19
53	28.46	31.37	103	2.14	3.05
54	27.62	30.46	104	2.11	2.91
55	26.77	29.55	105	2.09	2.78
56	25.91	28.65	106	2.08	2.65
57	25.05	27.76	107	2.08	2.54
58	24.19	26.88	108	2.08	2.44
59	23.32	26.00	109	2.08	2.35
60	22.46	25.13	110	2.07	2.28
61	21.61	24.27	111	2.07	2.21
62	20.76	23.42	112	2.05	2.16
63	19.93	22.57	113	2.04	2.11
64	19.11	21.74	114	2.01	2.06
65	18.30	20.91	115	1.96	2.00
66	17.51	20.10	116	1.87	1.91
67	16.74	19.30	117	1.74	1.77
68	15.97	18.51	118	1.52	1.54
69	15.22	17.74	119	1.15	1.16

General Members – RP-2000 Healthy Mortality, with adjustment for white collar

Schedule 4

Prior Year Life Expectancies at Sample Ages Healthy General Members

Age	Male	Female	Age	Male	Female
20	59.44	63.16	70	14.33	16.58
21	58.47	62.18	71	13.67	15.82
22	57.50	61.19	72	13.02	15.08
23	56.53	60.21	73	12.38	14.35
24	55.57	59.23	74	11.77	13.64
25	54.60	58.25	75	11.16	12.94
26	53.64	57.26	76	10.57	12.27
27	52.68	56.28	77	10.00	11.61
28	51.71	55.30	78	9.45	10.97
29	50.75	54.32	79	8.92	10.35
30	49.79	53.33	80	8.41	9.76
31	48.83	52.35	81	7.93	9.18
32	47.87	51.37	82	7.48	8.63
33	46.91	50.40	83	7.04	8.09
34	45.95	49.42	84	6.63	7.59
35	44.99	48.44	85	6.23	7.10
36	44.03	47.47	86	5.84	6.63
37	43.06	46.49	87	5.47	6.19
38	42.10	45.52	88	5.11	5.77
39	41.14	44.55	89	4.78	5.39
40	40.18	43.58	90	4.46	5.02
41	39.22	42.61	91	4.17	4.69
42	38.27	41.65	92	3.90	4.37
43	37.32	40.68	93	3.65	4.08
44	36.36	39.72	94	3.42	3.81
45	35.42	38.76	95	3.21	3.55
46	34.47	37.80	96	3.02	3.32
47	33.53	36.84	97	2.85	3.10
48	32.59	35.88	98	2.70	2.90
49	31.66	34.93	99	2.56	2.71
50	30.73	33.98	100	2.43	2.54
51	29.81	33.03	101	2.31	2.38
52	28.90	32.09	102	2.19	2.23
53	27.99	31.15	103	2.08	2.10
54	27.09	30.21	104	1.97	1.98
55	26.19	29.28	105	1.88	1.88
56	25.31	28.35	106	1.80	1.79
57	24.43	27.44	107	1.73	1.70
58	23.56	26.53	108	1.66	1.63
59	22.71	25.63	109	1.61	1.58
60	21.87	24.74	110	1.57	1.55
61	21.04	23.86	111	1.55	1.54
62	20.23	23.00	112	1.54	1.53
63	19.43	22.15	113	1.53	1.53
64	18.65	21.32	114	1.53	1.51
65	17.88	20.50	115	1.51	1.48
66	17.14	19.69	116	1.48	1.42
67	16.41	18.90	117	1.42	1.29
68	15.70	18.12	118	1.29	1.04
69	15.01	17.35			

General Members – 1994 Group Annuity Mortality, females set forward 1 year



Schedule 5

Life Expectancies at Sample Ages Healthy Safety Members

Age	Male	Female	Age	Male	Female
20	56.26	61.99	70	13.31	15.77
21	55.31	61.00	71	12.66	15.05
22	54.36	60.02	72	12.03	14.36
23	53.42	59.03	73	11.41	13.69
24	52.47	58.04	74	10.81	13.03
25	51.52	57.06	75	10.23	12.40
26	50.57	56.07	76	9.66	11.77
27	49.62	55.08	77	9.12	11.17
28	48.67	54.10	78	8.60	10.57
29	47.72	53.11	79	8.09	10.00
30	46.77	52.13	80	7.61	9.43
31	45.82	51.15	81	7.15	8.89
32	44.88	50.16	82	6.71	8.37
33	43.95	49.19	83	6.29	7.87
34	43.02	48.21	84	5.89	7.40
35	42.10	47.23	85	5.52	6.95
36	41.18	46.26	86	5.17	6.53
37	40.27	45.29	87	4.83	6.14
38	39.36	44.32	88	4.53	5.78
39	38.46	43.35	89	4.24	5.45
40	37.56	42.38	90	3.98	5.15
41	36.67	41.42	91	3.74	4.88
42	35.78	40.45	92	3.52	4.64
43	34.89	39.49	93	3.32	4.42
44	34.01	38.54	94	3.14	4.23
45	33.13	37.58	95	2.97	4.05
46	32.26	36.63	96	2.82	3.89
47	31.39	35.69	97	2.69	3.75
48	30.53	34.74	98	2.57	3.62
49	29.68	33.80	99	2.47	3.49
50	28.83	32.86	100	2.37	3.37
51	27.99	31.93	101	2.29	3.24
52	27.16	30.99	102	2.23	3.10
53	26.32	30.05	103	2.18	2.96
54	25.49	29.12	104	2.14	2.82
55	24.67	28.19	105	2.12	2.69
56	23.84	27.27	106	2.12	2.57
57	23.02	26.36	107	2.12	2.46
58	22.21	25.45	108	2.11	2.36
59	21.40	24.56	109	2.11	2.28
60	20.61	23.69	110	2.11	2.20
61	19.82	22.83	111	2.10	2.14
62	19.02	21.98	112	2.10	2.14
63	18.28	21.16	113	2.07	2.04
64	17.53	20.34	114	2.04	2.04
65	16.79	20.34 19.55	114	2.04 1.98	1.94
66	16.79	18.76	116	1.90	1.86
67 68	15.35	17.99 17.24	117	1.76	1.73
68 60	14.65		118	1.53	1.51
69	13.97	16.49	119	1.15	1.15

Safety Members – RP-2000 Healthy Mortality, with adjustment for blue collar

Schedule 6

Prior Year Life Expectancies at Sample Ages Healthy Safety Members

Age	Unisex	Age	Unisex
20	59.44	70	14.33
21	58.47	71	13.67
22	57.50	72	13.02
23	56.53	73	12.38
24	55.57	74	11.77
25	54.60	75	11.16
26	53.64	76	10.57
27	52.68	77	10.00
28	51.71	78	9.45
29	50.75	79	8.92
30	49.79	80	8.41
31	48.83	81	7.93
32	47.87	82	7.48
33	46.91	83	7.04
34	45.95	84	6.63
35	44.99	85	6.23
36	44.03	86	5.84
37	43.06	87	5.47
38	42.10	88	5.11
39	41.14	89	4.78
40	40.18	90	4.46
41	39.22	91	4.17
42	38.27	92	3.90
43	37.32	93	3.65
44	36.36	94	3.42
45	35.42	95	3.21
46	34.47	96	3.02
47	33.53	97	2.85
48	32.59	98	2.70
49	31.66	99	2.76
50	30.73	100	2.43
51	29.81	101	2.31
52	28.90	102	2.19
53	27.99	103	2.19
54	27.09	104	1.97
55	26.19	105	1.88
56	25.31	106	1.80
57	24.43	107	1.73
58	23.56	108	1.66
59	22.71	109	1.61
60	21.87	110	1.57
61	21.04	111	1.55
62	20.23	112	1.54
63	19.43	113	1.53
64	18.65	114	1.53
65	17.88	115	1.53
66	17.14	116	1.48
67	16.41	117	1.40
68	15.70	117	1.42
69	15.70	119	14.33
Uð	10.01	113	14.55

General Members – 1994 Group Annuity Mortality, males



Schedule 7

Life Expectancies at Sample Ages Disabled General and Safety Members

Age	Male	Female	Age	Male	Female
20	30.81	46.81	70	9.81	12.98
21	30.51	46.16	71	9.43	12.46
22	30.20	45.50	72	9.05	11.96
23	29.89	44.84	73	8.69	11.47
24	29.57	44.17	74	8.33	11.00
25	29.24	43.50	75	7.99	10.53
26	28.90	42.82	76	7.65	10.09
27	28.55	42.14	77	7.33	9.65
28	28.20	41.45	78	7.02	9.23
29	27.84	40.76	79	6.72	8.81
30	27.47	40.06	80	6.43	8.42
31	27.09	39.36	81	6.16	8.03
32	26.70	38.65	82	5.89	7.66
33	26.31	37.93	83	5.63	7.29
34	25.90	37.22	84	5.38	6.94
35	25.49	36.49	85	5.14	6.61
36	25.07	35.76	86	4.90	6.28
37	24.63	35.03	87	4.66	5.97
38	24.19	34.28	88	4.41	5.67
39	23.73	33.54	89	4.16	5.39
40	23.27	32.78	90	3.90	5.12
41	22.79	32.03	91	3.65	4.87
42	22.31	31.26	92	3.43	4.63
43	21.81	30.49	93	3.23	4.40
44	21.30	29.72	94	3.04	4.20
45	20.78	28.94	95	2.88	4.02
46	20.25	28.15	96	2.73	3.85
47	19.73	27.38	97	2.60	3.71
48	19.23	26.62	98	2.49	3.58
49	18.73	25.88	99	2.38	3.46
50	18.25	25.15	100	2.29	3.33
51	17.78	24.44	101	2.21	3.20
52	17.32	23.74	102	2.15	3.07
53	16.86	23.06	103	2.10	2.93
54	16.42	22.39	104	2.06	2.79
55	15.98	21.73	105	2.05	2.66
56	15.55	21.09	106	2.04	2.54
57	15.12	20.46	107	2.04	2.43
58	14.69	19.83	108	2.04	2.34
59	14.27	19.22	109	2.04	2.25
60	13.86	18.62	110	2.03	2.18
61	13.44	18.02	111	2.03	2.11
62	13.03	17.43	112	2.02	2.06
63	12.61	16.85	113	2.00	2.02
64	12.20	16.27	114	1.97	1.98
65	11.80	15.70	115	1.93	1.93
66	11.39	15.14	116	1.85	1.85
67	10.99	14.58	117	1.72	1.72
68	10.59	14.04	118	1.50	1.50
69	10.20	13.50	119	1.14	1.14
03	10.20	10.00	113	1.14	1.14

Disabled Members – RP-2000 Disabled Mortality

Schedule 8

Prior Year Life Expectancies at Sample Ages Disabled Members

Age	General Members	Safety Members	Age	General Members	Safety Members
20	38.77	49.33	70	11.74	11.74
21	38.02	48.43	71	11.25	11.25
22	37.30	47.52	72	10.76	10.76
23	36.60	46.62	73	10.26	10.26
24	35.91	45.72	74	9.77	9.77
25	35.23	44.83	75	9.28	9.28
26	34.57	43.93	76	8.80	8.80
27	33.91	43.05	77	8.32	8.32
28	33.27	42.16	78	7.87	7.87
29	32.64	41.28	79	7.45	7.45
30	32.02	40.40	80	7.05	7.05
31	31.41	39.53	81	6.67	6.67
32	30.81	38.66	82	6.32	6.32
33	30.21	37.79	83	5.98	5.98
34	29.62	36.92	84	5.67	5.67
35	29.04	36.06	85	5.38	5.38
36	28.47	35.20	86	5.10	5.10
37	27.91	34.35	87	4.84	4.84
38	27.35	33.50	88	4.59	4.59
39	26.80	32.65	89	4.35	4.35
40	26.26	31.81	90	4.13	4.13
41	25.72	30.97	91	3.91	3.91
42	25.18	30.13	92	3.71	3.71
43	24.65	29.30	93	3.50	3.50
44	24.13	28.48	94	3.30	3.30
45	23.62	27.66	95	3.11	3.11
46	23.11	26.84	96	2.93	2.93
47	22.60	26.03	97	2.75	2.75
48	22.10	25.22	98	2.58	2.58
49	21.61	24.42	99	2.41	2.41
50	21.12	23.63	100	2.25	2.25
51	20.63	22.84	101	2.08	2.08
52	20.15	22.07	102	1.92	1.92
53	19.67	21.30	103	1.76	1.76
54	19.20	20.55	104	1.59	1.59
55	18.72	19.81	105	1.42	1.42
56	18.26	19.10	106	1.25	1.25
57	17.79	18.44	107	1.09	1.09
58	17.33	17.82	108	0.92	0.92
59	16.87	17.24	109	0.76	0.76
60	16.41	16.69	110	0.54	0.54
61	15.95	16.15	111	0.54	0.54
62	15.49	15.63	112	0.54	0.54
63	15.03	15.12	113	0.54	0.54
64	14.57	14.62	114	0.54	0.54
65	14.11	14.13	115	0.54	0.54
66	13.64	13.65	116	0.54	0.54
67	13.18	13.18	117	0.54	0.54
68	12.70	12.70	118	0.54	0.54
69	12.22	12.22	-	-	
55	1	1			

General Members – 1981 Disability Mortality

Safety Members – 1981 Disability Mortality for Safety



Schedule 9

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

General Members - Male

	Total	Ordinary	Ordinary	Service	Service	Service
Age	Termination	Death	Disability	Retirement	Death	Disability
20	750	10	1	-	-	-
21	720	10	1	-	-	-
22	710	10	1	-	-	-
23	700	10	1	-	-	-
24	690	11	1	-	-	-
25	680	11	1	-	-	1
26	670	11	1	-	-	1
27	660	11	1	-	-	1
28	650	11	1	-	-	1
29	640	12	1	-	-	1
30	630	12	1	-	-	1
31	620	14	1	-	-	1
32	610	16	1	-	-	1
33	600	18	1	-	-	1
34	590	20	1	-	-	1
35	580	22	2	-	-	1
36	570	24	2	-	-	1
37	560	25	3	-	-	1
38	550	27	3	-	-	1
39	540	29	3	-	-	1
40	530	30	3	-	-	2
41	520	32	3	-	-	2
42	510	34	4	-	-	2
43	500	36	5	-	-	2
44	490	39	5	-	-	3
45	480	42	6	-	-	3
46	470	45	7	-	-	4
47	460	49	8	-	-	4
48	450	52	9	-	-	5
49	440	56	10	-	-	5
50	430	60	11	500	-	6
51	420	60	13	300	-	6
52	410	59	15	300	-	7
53	400	57	16	300	-	8
54	390	56	18	450	-	9
55	380	54	19	600	-	10
56	370	54	21	1000	-	11
57	360	55	23	1500	-	11
58	350	57	24	2000	-	12
59	340	61	25	2500	-	13
60	330	66	26	3000	-	13
61	320	73	27	3000	-	13
62	310	82	27	5000	-	14
63	300	92	28	3000	-	14
64	290	104	29	3000	-	14
65	-	116	-	4000	-	-
66	-	130	-	4000	_	-
67	-	144	-	4000	_	-
68	-	158	-	6000	-	-
69	-	174	-	8000	_	-
70	-	_	-	10,000	-	-

Schedule 10

Prior Year 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)	Ordinary Death	Ordinary Disability	Service Retirement	Death While Eligible	Service Death	Service Disability	Vested Termination
20	1,550	2	-	-	-	1	1	6
21	1,500	2	-	-	-	1	1	6
22	1,450	2	-	-	-	1	1	12
23	1,380	2	-	-	-	1	1	18
24	1,310	2	-	-	-	1	1	23
25	1,240	3	1	-	1	1	1	29
26	1,170	3	1	-	1	1	1	35
27	1,100	3	1	-	1	1	1	47
28	1,030	3	1	-	1	1	1	59
29	960	3	1	-	1	1	1	70
30	900	4	1	_	1	1	1	82
31	830	4	1	_	1	1	1	94
32	760	4	1	_	1	1	1	105
33	700	4	1	_	3	1	1	117
34	630	4	1	_	3	1	1	140
35	570	5	1	_	3	1	2	176
36	520	5	1	-	3	1	2	205
				-				
37	480	5	2	-	3	1	2	222
38	450	5	2	-	3	1	2	252
39	420	6	2	-	3	1	2	263
40	390	6	3	-	4	1	2	269
41	360	6	3	-	4	1	2	269
42	330	7	4	-	4	1	2	269
43	300	7	4	-	5	1	3	257
44	270	8	5	-	5	1	3	246
45	230	8	6	-	7	1	3	234
46	190	9	7	-	7	1	4	222
47	150	10	8	-	8	1	4	211
48	120	11	9	-	8	1	5	187
49	100	12	10	-	9	1	5	164
50	100	13	11	350	10	1	6	140
51	100	14	12	270	12	1	7	117
52	100	15	14	200	13	2	8	94
53	100	16	15	200	14	2	9	82
54	100	17	17	400	16	2	10	76
55	100	18	18	550	17	2	11	76
56	100	19	20	630	18	2	12	76
57	100	20	21	760	20	2	13	76
58	100	21	22	900	21	2	14	76
59	100	22	23	1,300	22	3	15	76
60	100	24	23		23	3	16	70 70
				1,500				
61	100	26	24	1,800	25	3	16	59
62	100	28	24	4,000	26	3	17	47
63	100	30	25	2,400	29	3	17	35
64	100	32	25	2,500	31	4	18	23
65	-	34	-	3,500	35	4	-	-
66	-	36	-	3,500	39	4	-	-
67	-	38	-	3,500	44	4	-	-
68	-	40	-	4,500	51	4	-	-
69	-	42	-	6,000	59	4	-	-
70	-	-	-	10,000	-	-	-	-

Schedule 11

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

General Members - Female

Age	Total Termination	Ordinary Death	Ordinary Disability	Service Retirement	Service Death	Service Disability
20	840	3	1	-	-	Disability
21	804	3	1	_	-	-
22	792	3	1	_	_	_
23	780	3	1	-	-	-
23 24	768	3	1	-	-	-
24 25	756	3	1	-	-	1
25 26	756 744	3	1	-	-	1
26 27		3	1	-	-	1
	732 720	3		-		
28	720 708	4	1 1	-	-	1 1
29	708 696	4		-	-	
30		4	1	-	-	1
31	684	4 5	1 1	-	-	1 1
32	672	6		-	-	
33	660		1	-	-	1
34	648	6 7	1	-	-	1
35	636		2	-	-	1
36	624	8	2	-	-	1
37	612	8	2	-	-	1
38	600	9	3	-	-	1
39	588	9	3	-	-	2
40	576	10	3	-	-	2
41	564	11	4	-	-	2
42	552	12	4	-	-	2
43	540	14	5	-	-	2
44	528	15	5	-	-	2
45	516	16	5	-	-	3
46	504	18	6	-	-	3
47	492	19	7	-	-	3
48	480	21	8	-	-	4
49	468	23	9	-	-	4
50	456	24	9	400	-	5
51	444	25	10	400	-	5
52	432	27	11	400	-	6
53	420	29	12	400	-	6
54	408	32	13	400	-	7
55	396	35	14	1000	-	7
56	384	39	15	1000	-	8
57	372	43	16	1000	-	8
58	360	47	17	1500	-	9
59	348	51	19	1750	-	9
60	336	56	21	2000	-	10
61	324	61	23	2000	-	11
62	312	67	25	4000	-	12
63	300	74	27	2000	-	13
64	288	82	29	2000	-	15
65	-	91	-	4500	-	-
66	-	101	-	3000	-	-
67	-	112	-	3000	-	-
68	-	124	-	3000	-	-
69	-	137	-	3000	-	-
70	-	-	-	10,000	-	-

Schedule 12

Prior Year Probability of Separation from Active Service (Number separating at each age per 10,000 working at that age) General Members - Female

Age 20	Ordinary Withdrawal (Refund) 1,650	Ordinary Death	Ordinary Disability	Service Retirement	Death While Eligible	Service Death	Service Disability	Vested Termination
21	1,650	1	_	_	_	_	1	27
22	1,600	1	_	_	_	_	1	27
23	1,550	1	_	_	_	_	1	27
24	1,550	1	_	_	_	_	1	45
25	1,500	2	1	_	1	_	1	45
26	1,300	2	1	_	1	_	1	45
27	1,150	2	1	_	1	_	1	45
28	1,050	2	1	_	1	_	1	45
29	1,020	3	1	_	1	_	1	45
30	950	3	1	_	1	_	1	45
31	840	3	1	_	1	_	1	45
32	700	3	1	_	1	_	1	45 45
33	600	4	1	_	1	_	1	45 45
34	490	4	1	-	1	-	1	90
35	490 460	4	2	-	1	-	1	162
36	420	5	2	-	1	-	1	198
37	390	5	2	-	1	-	1	198
38	390 370	5	3	-	1	-	1	180
		5	3	-	1		2	
39	350			-		-		171
40	320	6	3	-	1	-	2	167
41	300	6	4	-	1	-	2	162
42	290	6	4	-	1	-	2	158
43	270	7	5	-	1	-	2	158
44	250	7	5	-	1	-	2	153
45	250	7	6	-	2	-	2	153
46	240	8	7	-	2	-	2	149
47	240	8	8	-	2	-	2	144
48	230	9	9	-	2	-	3	140
49	230	9	10	-	2	-	3	131
50	220	10	11	400	2	-	3	117
51	220	10	12	300	2	-	3	99
52	210	11	13	300	3	-	4	81
53	210	11	14	300	3	-	4	63
54	200	12	15	300	3	-	5	45
55	190	12	16	800	3	-	5	45
56	180	13	17	300	4	-	6	72
57	170	14	18	800	4	-	6	63
58	150	15	19	1,000	4	-	7	54
59	140	16	21	1,200	5	-	7	45
60	130	18	23	1,400	5	-	8	45
61	130	19	25	1,000	5	-	9	45
62	130	20	27	3,000	5	-	10	45
63	130	21	29	1,250	5	-	11	45
64	130	22	31	1,250	5	-	13	45
65	-	24	-	4,500	6	-	-	-
66	-	25	-	2,000	6	-	-	-
67	-	26	-	3,000	6	-	-	-
68	-	27	-	3,000	7	-	-	-
69	-	28	-	3,000	7	-	-	-
70	-	-	-	10,000	-	-	-	-



Schedule 13

Probability of Separation from Active Service (Number separating at each age per 10,000 working at that age) Safety Members

Age	Total Termination	Ordinary Death	Ordinary Disability	Service Retirement	Service Death	Service Disability
20	701	10	-	-	10	6
21	641	10	-	-	10	6
22	608	10	-	-	10	6
23	575	10	-	-	10	7
24	543	11	_	-	10	7
25	513	11	_	-	10	10
26	500	11	-	-	10	11
27	500	11	-	-	10	13
28	520	11	-	-	10	14
29	553	12	-	-	10	15
30	593	12	-	-	10	16
31	627	14	-	-	10	18
32	567	16	-	-	10	20
33	507	18	-	-	10	22
34	447	20	-	-	10	26
35	393	22	-	-	10	29
36	340	24	-	-	10	31
37	307	25	-	-	10	35
38	273	27	-	-	10	39
39	240	29	-	-	10	44
40	207	30	-	-	10	49
41	180	32	-	-	10	53
42	153	34	-	-	10	58
43	120	36	-	-	10	64
44	93	39	-	-	10	70
45	80	42	-	300	10	77
46	67	45	-	300	10	85
47	53	49	-	300	10	93
48	45	52	-	300	10	103
49	37	56	-	300	10	113
50	33	60	-	600	10	1076
51	27	60	-	700	10	132
52	27	59	-	800	10	143
53	20	57 56	-	1500	10	154
54	-		-	2500	10	165
55 56	-	54 54	-	5000	10	175
56 57	-	54 55	-	2500	10	186
57	-		-	2500	10	197
58 50	-	57 61	-	4000	10	207
59	-	-		4000 10,000	10	218 -
60	-	-	-	10,000	-	-

Schedule 14

Prior Year Probability of Separation from Active Service (Number separating at each age per 10,000 working at that age) Safety Members

	Ordinary				Death			
	Withdrawal	Ordinary	Ordinary	Service	While	Service	Service	Vested
Age	(Refund)	Death	Disability	Retirement	Eligible	Death	Disability	Termination
20	1,050	2	-	-	-	2	6	1
21	950	2	_	-	-	2	6	11
22	900	2	_	-	-	2	6	12
23	850	2	_	-	-	2	7	13
24	800	2	_	-	-	2	7	14
25	750	2	2	-	1	2	8	20
26	720	2	2	-	1	2	9	30
27	700	2	3	-	2	2	10	50
28	680	2	3	-	2	2	11	100
29	660	2	3	-	2	2	12	170
30	640	3	3	-	2	3	13	250
31	600	3	4	-	2	3	14	340
32	550	3	4	-	2	3	16	300
33	490	3	4	-	2	3	18	270
34	430	3	5	-	2	3	21	240
35	370	4	6	-	2	4	23	220
36	310	4	6	-	2	4	25	200
37	280	4	7	-	2	4	28	180
38	250	4	8	-	2	4	31	160
39	220	4	9	-	2	4	35	140
40	190	5	10	-	2	5	39	120
41	170	5	10	-	2	5	43	100
42	150	5	11	-	2	5	47	80
43	120	5	12	-	2	5	52	60
44	100	5	12	-	2	5	58	40
45	90	6	13	200	3	6	64	30
46	80	6	14	200	3	6	71	20
47	70	7	14	200	4	7	79	10
48	60	7	15	200	5	7	88	8
49	50	8	16	250	5	8	97	5
50	50	8	16	300	6	8	1,060	-
51	40	8	17	300	7	8	115	-
52	40	8	18	500	8	9	125	-
53	30	9	19	700	8	10	135	-
54	-	9	20	900	9	10	145	-
55	-	10	20	1,500	10	11	155	-
56	-	10	21	1,000	11	11	165	-
57	-	11	22	1,000	11	12	175	-
58	-	11	22	2,500	12	13	185	-
59	-	11	23	3,500	13	14	195	-
60	-	-	-	10,000	-	-	-	-

Schedule 15

Proportion of Terminations Receiving Refunds and Deferred Vested Benefits

Years of Service	Refunds	Deferred Vested
0	100%	0%
1	100%	0%
2	100%	0%
3	100%	0%
4	100%	0%
5	25%	75%
6	25%	75%
7	25%	75%
8	25%	75%
9	25%	75%
10	16.7%	83.3%
11	16.7%	83.3%
12	16.7%	83.3%
13	16.7%	83.3%
14	16.7%	83.3%
15	10%	90%
16	10%	90%
17	10%	90%
18	10%	90%
19	10%	90%
20 or	0%	100%
more		

J. Member Information

Active Participants

General Members	June 30, 2003	June 30, 2002
Number*	6,660	6,811
Average Age	43.3	43.0
Average Service	8.6	8.4
Percent Male	35.4%	35.7%
Average Annual Pay	\$42,985	\$40,471
Total Covered Payroll*	\$286,278,925	\$275,645,757
Safety Members		
Number*	939	923
Average Age	39.0	39.7
Average Service	9.5	10.2
Percent Male	82.9%	82.5%
Average Annual Pay	\$59,321	\$55,611
Total Covered Payroll*	\$55,702,460	\$51,329,403
Total Active Members		
Number*	7,599	7,734
Average Age	42.7	42.6
Average Service	8.7	8.6
Percent Male	41.2%	41.3%
Average Annual Pay	\$45,003	\$42,278
Total Covered Payroll*	\$341,981,385	\$326,975,160

^{*}The count for active members excludes those who are currently older than the last assumed retirement age. The covered payroll shown also excludes pay for these members.

General Members	June 30, 2003	June 30, 2002
Number	1,255	1,189
Average Age	48.1	47.6
Percent Male	40.9%	41.7%
Safety Members		
Number	96	78
Average Age	44.2	43.7
Percent Male	79.2%	84.6%
All Members		
Number	1,351	1,267
Average Age	47.7	47.4
Percent Male	44.8%	44.3%

Retired Participants

General Members

Service Retirements	June 30, 2003	June 30, 2002
and Beneficiaries		
Number	3,403	3,137
Average Age	69.3	69.4
Percent Male	39.0%	37.6%
Average Monthly Benefit	\$1,814	\$1,702
Disabled		
Number	146	150
Average Age	66.7	66.6
Percent Male	41.8%	41.3%
Average Monthly Benefit	\$1,394	\$1,308
Total General		
Number	3,549	3,287
Average Age	69.2	69.3
Percent Male	39.1%	37.8%
Average Monthly Benefit	\$1,796	\$1,684

Benefits include settlement benefits, except for Health benefits. Also included are purchasing power benefits.

Safety Members

Service Retirements and Beneficiaries	June 30, 2003	June 30, 2002
Number	391	344
Average Age	63.6	63.9
Percent Male	78.5%	77.6%
Average Monthly Benefit	\$3,252	\$3,420
Disabled		
Number	85	82
Average Age	53.1	53.3
Percent Male	75.3%	74.4%
Average Monthly Benefit	\$2,329	\$2,178
Total Safety		
Number	476	426
Average Age	61.7	61.9
Percent Male	77.9%	77.0%
Average Monthly Benefit	\$3,088	\$3,181

Benefits include settlement benefits, except for Health benefits. Also included are purchasing power benefits.

Total Members

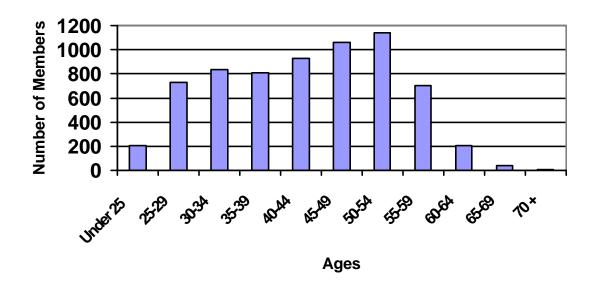
Service Retirements and Beneficiaries	June 30, 2003	June 30, 2002
Number	3,794	3,481
Average Age	68.7	68.8
Percent Male	43.1%	42.2%
Average Monthly Benefit	\$1,962	\$1,872
Disabled		
Number	231	232
Average Age	61.7	65.0
Percent Male	54.1%	45.1%
Average Monthly Benefit	\$1,738	\$1,615
Total Retirees		
Number	4,025	3,713
Average Age	68.3	68.4
Percent Male	43.7%	42.3%
Average Monthly Benefit	\$1,949	\$1,856

Benefits include settlement benefits, except for Health benefits. Also included are purchasing power benefits.

Active General Members by Age and Service as of June 30, 2003

Service >>	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30 +	Total
	-								
<u>Age</u> Under									
25	62	141	2	0	0	0	0	0	205
25-29	94	576	62	0	0	0	0	0	732
30-34	59	483	239	54	0	0	0	0	835
35-39	59	351	214	160	24	1	0	0	809
40-44	42	310	227	215	99	35	1	0	929
45-49	47	305	195	203	132	130	50	1	1,063
50-54	45	276	177	218	151	117	118	34	1,136
55-59	12	166	111	146	97	58	80	34	704
60-64	4	51	41	50	26	18	11	3	204
65-69	3	9	8	10	7	2	2	1	42
70 +	0	2	0	4	1	0	0	0	7
Total	427	2,670	1,276	1,060	537	361	262	73	6,666

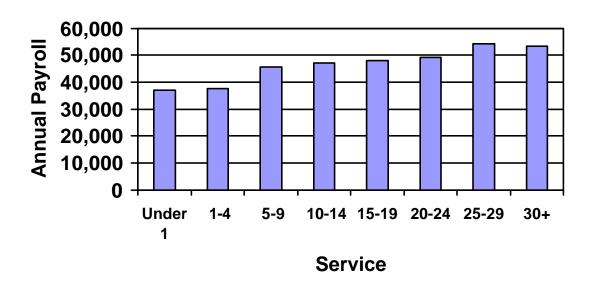
Active General Members by Age



Average Annual Full-Time Compensation for General Members by Age and Service as of June 30, 2003

Age Under 25 27,163 27,973 33,995 0 0 0 0 0 27,787 25-29 32,702 34,152 39,902 0 0 0 0 0 34,453 30-34 34,559 37,719 44,384 40,768 0 0 0 0 39,601 35-39 41,352 37,919 46,979 45,003 38,767 39,104 0 0 0 41,994 40-44 41,160 39,188 45,468 48,250 50,478 47,160 49,712 0 44,424 45-49 37,338 40,120 45,092 47,473 49,070 49,362 47,957 38,402 44,922 50-54 47,944 41,835 45,667 46,682 47,475 51,411 57,341 56,470 47,389 55-59 36,143 41,875 49,092 50,837 47,709 50,347 55,434 49,972 48,208 60-64 77,194 42,337 48,217 46,845 47,676 39,584<	Service >>	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30 +	Total
Under 25 27,163 27,973 33,995 0 0 0 0 0 27,787 25-29 32,702 34,152 39,902 0 0 0 0 0 34,453 30-34 34,559 37,719 44,384 40,768 0 0 0 0 39,601 35-39 41,352 37,919 46,979 45,003 38,767 39,104 0 0 41,994 40-44 41,160 39,188 45,468 48,250 50,478 47,160 49,712 0 44,424 45-49 37,338 40,120 45,092 47,473 49,070 49,362 47,957 38,402 44,922 50-54 47,944 41,835 45,667 46,682 47,475 51,411 57,341 56,470 47,389 55-59 36,143 41,875 49,092 50,837 47,709 50,347 55,434 49,972 48,208 60-64 7		-								. • • • • •
25 27,163 27,973 33,995 0 0 0 0 0 27,787 25-29 32,702 34,152 39,902 0 0 0 0 0 34,453 30-34 34,559 37,719 44,384 40,768 0 0 0 0 39,601 35-39 41,352 37,919 46,979 45,003 38,767 39,104 0 0 41,994 40-44 41,160 39,188 45,468 48,250 50,478 47,160 49,712 0 44,424 45-49 37,338 40,120 45,092 47,473 49,070 49,362 47,957 38,402 44,922 50-54 47,944 41,835 45,667 46,682 47,475 51,411 57,341 56,470 47,389 55-59 36,143 41,875 49,092 50,837 47,709 50,347 55,434 49,972 48,208 60-64 77,194 42,337 48,217 46,845 47,676 39,584 44,747 56,017 46										
25-29 32,702 34,152 39,902 0 0 0 0 0 0 34,453 30-34 34,559 37,719 44,384 40,768 0 0 0 0 0 39,601 35-39 41,352 37,919 46,979 45,003 38,767 39,104 0 0 41,994 40-44 41,160 39,188 45,468 48,250 50,478 47,160 49,712 0 44,424 45-49 37,338 40,120 45,092 47,473 49,070 49,362 47,957 38,402 44,922 50-54 47,944 41,835 45,667 46,682 47,475 51,411 57,341 56,470 47,389 55-59 36,143 41,875 49,092 50,837 47,709 50,347 55,434 49,972 48,208 60-64 77,194 42,337 48,217 46,845 47,676 39,584 44,747 56,017 46,076 65-69 74,550 57,778 32,664 55,578 50,592 28,955 25,142 61,828 49,641 70 + 0 34,856 0 38,826 38,610 0 0 0 37,661	Under									
30-34 34,559 37,719 44,384 40,768 0 0 0 0 39,601 35-39 41,352 37,919 46,979 45,003 38,767 39,104 0 0 41,994 40-44 41,160 39,188 45,468 48,250 50,478 47,160 49,712 0 44,424 45-49 37,338 40,120 45,092 47,473 49,070 49,362 47,957 38,402 44,922 50-54 47,944 41,835 45,667 46,682 47,475 51,411 57,341 56,470 47,389 55-59 36,143 41,875 49,092 50,837 47,709 50,347 55,434 49,972 48,208 60-64 77,194 42,337 48,217 46,845 47,676 39,584 44,747 56,017 46,076 65-69 74,550 57,778 32,664 55,578 50,592 28,955 25,142 61,828 49,641 70 + 0 34,856 0 38,826 38,610 0 0	25	27,163	27,973	33,995	0	0	0	0	0	27,787
35-39 41,352 37,919 46,979 45,003 38,767 39,104 0 0 41,994 40-44 41,160 39,188 45,468 48,250 50,478 47,160 49,712 0 44,424 45-49 37,338 40,120 45,092 47,473 49,070 49,362 47,957 38,402 44,922 50-54 47,944 41,835 45,667 46,682 47,475 51,411 57,341 56,470 47,389 55-59 36,143 41,875 49,092 50,837 47,709 50,347 55,434 49,972 48,208 60-64 77,194 42,337 48,217 46,845 47,676 39,584 44,747 56,017 46,076 65-69 74,550 57,778 32,664 55,578 50,592 28,955 25,142 61,828 49,641 70 + 0 34,856 0 38,826 38,610 0 0 0 37,661	25-29	32,702	34,152	39,902	0	0	0	0	0	34,453
40-44 41,160 39,188 45,468 48,250 50,478 47,160 49,712 0 44,424 45-49 37,338 40,120 45,092 47,473 49,070 49,362 47,957 38,402 44,922 50-54 47,944 41,835 45,667 46,682 47,475 51,411 57,341 56,470 47,389 55-59 36,143 41,875 49,092 50,837 47,709 50,347 55,434 49,972 48,208 60-64 77,194 42,337 48,217 46,845 47,676 39,584 44,747 56,017 46,076 65-69 74,550 57,778 32,664 55,578 50,592 28,955 25,142 61,828 49,641 70 + 0 34,856 0 38,826 38,610 0 0 0 37,661	30-34	34,559	37,719	44,384	40,768	0	0	0	0	39,601
45-49 37,338 40,120 45,092 47,473 49,070 49,362 47,957 38,402 44,922 50-54 47,944 41,835 45,667 46,682 47,475 51,411 57,341 56,470 47,389 55-59 36,143 41,875 49,092 50,837 47,709 50,347 55,434 49,972 48,208 60-64 77,194 42,337 48,217 46,845 47,676 39,584 44,747 56,017 46,076 65-69 74,550 57,778 32,664 55,578 50,592 28,955 25,142 61,828 49,641 70 + 0 34,856 0 38,826 38,610 0 0 0 37,661	35-39	41,352	37,919	46,979	45,003	38,767	39,104	0	0	41,994
50-54 47,944 41,835 45,667 46,682 47,475 51,411 57,341 56,470 47,389 55-59 36,143 41,875 49,092 50,837 47,709 50,347 55,434 49,972 48,208 60-64 77,194 42,337 48,217 46,845 47,676 39,584 44,747 56,017 46,076 65-69 74,550 57,778 32,664 55,578 50,592 28,955 25,142 61,828 49,641 70 + 0 34,856 0 38,826 38,610 0 0 0 37,661	40-44	41,160	39,188	45,468	48,250	50,478	47,160	49,712	0	44,424
55-59 36,143 41,875 49,092 50,837 47,709 50,347 55,434 49,972 48,208 60-64 77,194 42,337 48,217 46,845 47,676 39,584 44,747 56,017 46,076 65-69 74,550 57,778 32,664 55,578 50,592 28,955 25,142 61,828 49,641 70 + 0 34,856 0 38,826 38,610 0 0 0 37,661	45-49	37,338	40,120	45,092	47,473	49,070	49,362	47,957	38,402	44,922
60-64 77,194 42,337 48,217 46,845 47,676 39,584 44,747 56,017 46,076 65-69 74,550 57,778 32,664 55,578 50,592 28,955 25,142 61,828 49,641 70 + 0 34,856 0 38,826 38,610 0 0 0 37,661	50-54	47,944	41,835	45,667	46,682	47,475	51,411	57,341	56,470	47,389
65-69 74,550 57,778 32,664 55,578 50,592 28,955 25,142 61,828 49,641 70 + 0 34,856 0 38,826 38,610 0 0 0 37,661	55-59	36,143	41,875	49,092	50,837	47,709	50,347	55,434	49,972	48,208
70 + 0 34,856 0 38,826 38,610 0 0 0 37,661	60-64	77,194	42,337	48,217	46,845	47,676	39,584	44,747	56,017	46,076
	65-69	74,550	57,778	32,664	55,578	50,592	28,955	25,142	61,828	49,641
Total 37,106 37,744 45,524 47,231 48,108 49,342 54,164 53,251 42,979	70 +	0	34,856	0	38,826	38,610	0	0	0	37,661
Total 37,106 37,744 45,524 47,231 48,108 49,342 54,164 53,251 42,979										
Total 37,106 37,744 45,524 47,231 48,108 49,342 54,164 53,251 42,979										
	Total	37,106	37,744	45,524	47,231	48,108	49,342	54,164	53,251	42,979

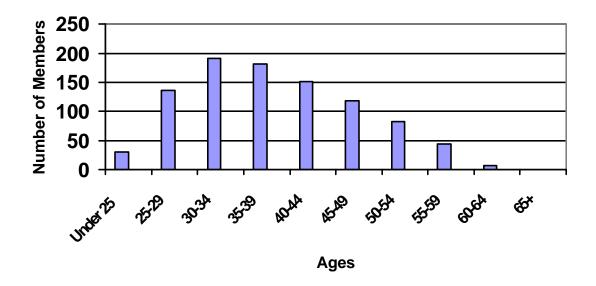
General Member Pay by Service



Active Safety Members by Age and Service as of June 30, 2003

Service	Under								
>>	1	1-4	5-9	10-14	15-19	20-24	25-29	30 +	Total
<u>Age</u> Under									
25	24	7	0	0	0	0	0	0	31
25-29	28	94	14	0	0	0	0	0	136
30-34	26	73	81	11	0	0	0	0	191
35-39	6	34	66	70	5	0	0	0	181
40-44	4	20	29	57	29	12	0	0	151
45-49	2	4	12	31	18	38	14	0	119
50-54	2	5	8	28	5	15	17	3	83
55-59	0	5	18	9	3	3	5	1	44
60-64	0	1	3	1	2	0	0	0	7
65 +	0	0	0	0	0	0	0	0	0
Total	92	243	231	207	62	68	36	4	943

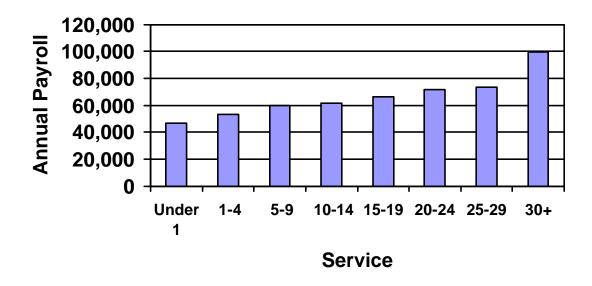
Active Safety Members by Age



Average Annual Full-Time Compensation for Safety Members by Age and Service as of June 30, 2003

Service	Under								
>>	1	1-4	5-9	10-14	15-19	20-24	25-29	30 +	Total
<u>Age</u> Under									
25	46,874	49,836	0	0	0	0	0	0	47,543
25-29	47,262	53,340	58,856	0	0	0	0	0	52,657
30-34	49,395	53,514	60,564	56,204	0	0	0	0	56,098
35-39	37,889	53,202	59,344	65,159	66,641	0	0	0	59,930
40-44	50,796	54,792	59,641	59,157	68,259	73,737	0	0	61,357
45-49	35,548	47,038	57,316	62,950	67,200	72,495	80,088	0	67,093
50-54	45,922	48,070	59,578	61,021	63,700	67,146	69,846	86,509	63,735
55-59	0	64,856	60,305	57,286	55,983	70,949	69,006	139,910	63,434
60-64	0	46,748	61,273	47,291	55,164	0	0	0	55,455
65 +	0	0	0	0	0	0	0	0	0
Total	47,022	53,389	59,782	61,711	66,437	71,466	73,712	99,859	59,295

Safety Member Pay by Service



K. Data Adjustments

The member data for the June 30, 2003 actuarial valuation was supplied by the FCERA Retirement Office. It was reviewed for reasonableness and consistency, but no audit was performed. Public Pension Professionals has relied upon the research efforts and knowledge of the Retirement Office staff in providing answers to many of our questions concerning the data.

The data provided is from the same database used to calculate benefit amounts for retiring members. The computer program used to extract actuarial valuation data from this database was new last year, and will need additional fine-tuning in the years to come. In addition, since the settlement benefits are so new, the current database is not yet fully structured to keep data in the manner in which it will be kept in the future. Due to these and other imperfections in the data, Public Pension Professionals has made several modifications or adjustments to the data for the valuation. We are not aware of any errors or omissions in the data, as modified, that would have a significant effect on the results of our calculations.

Some of the most significant modifications, adjustments, and assumptions that were made include.

- Part-time employees. Retirement benefits are calculated on the basis of full-time equivalent pay. For part-time employees, the salary that is received for the valuation was the salary actually paid. In this valuation, we also received information on the portion of the period worked by the employee. Using this information, pay amounts were adjusted to full-time equivalent for all employees.
- Annual Leave conversions to service. This valuation takes into account the fact that members who entered the plan prior to December 13, 1998 may convert annual leave (in excess of the maximum cashable hours) to service under the retirement plan. Based upon an assumed accrual pattern of 30 hours per year of service for the Annual Leave Plan II (max 400 hours), and 60 hours per year of service for the New Annual Leave Plan (max 1100 hours), accrued leave in excess of each plan's cap was converted to service upon service retirement for members in either of these plans. Actual annual leave balances are not provided in the actuarial data. Membership in a particular leave plan is also not provided. The member's Entry Date was used to determine which leave accrual pattern should apply. All active members, both County and District, are assumed to participate in the leave plans.
- Interest on Employee Contribution Balances. The June 30, 2003 data provided by FCERA included contribution balances that contained employee contributions made through June 30, 2003, but interest crediting was only done through June 30, 2002. Interest at the proper rate was applied to the end of year balance given in the data.

Public Pension Professionals gratefully acknowledges the Retirement Office staff for their hard work and knowledge in providing information on all the data issues that were raised. The FCERA Retirement Office staff is aware of most, if not all, of the data imperfections, and has improved upon the data used in the prior valuation as June 30, 2002.

L. Actuarial Certification

This 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.

Is me Summer

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

Deanna D. Van Valer

March 2004