

ACTUARIAL REPORT
EMPLOYEES' RETIREMENT ASSOCIATION
OF THE
COUNTY OF FRESNO

Prepared for the Board of Retirement
as of April 8, 1982

EMPLOYEES' RETIREMENT ASSOCIATION

OF THE
COUNTY OF FRESNO

April 8, 1982

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INTRODUCTION

SECTION I

EMPLOYEES' RETIREMENT ASSOCIATION
OF THE
COUNTY OF FRESNO

Introduction

We were requested to perform an actuarial valuation and investigation of the Retirement System as of April 8, 1982, using the latest statistical information available as to the active, inactive and retired membership. Several special studies were also requested, results of which are included in Sections V through VII of this report.

The results presented herein are based upon the unaudited data as supplied to Coates, Herfurth & England, Inc. by the Retirement Office and the benefits for General and Safety members under Sections 31676.12 and 31664, respectively, of the County Employees Retirement Law of 1937.

The valuation results for the whole County have been calculated under varying sets of salary scale and interest assumptions in order to point out the effects of inflation upon the contribution requirements of the System. We believe that results under varying assumptions will allow one to judge the impact of inflation on the costs of the Plan.

The ratio of the assets of the System to its obligation for benefits earned to the date of the valuation is being provided on the basis currently used by the System, as well as the basis of FASB Statement #35. We believe that the use of either ratio is a good measure of the funding progress of the Plan.

We believe that the additional information included in this report will be of help to all parties in our mutual effort to assure the actuarial soundness and funding adequacy of the Retirement System.

HIGHLIGHTS OF RESULTS AND RECOMMENDATIONS

SECTION II

SECTION II

EMPLOYEES' RETIREMENT ASSOCIATION
OF THE
COUNTY OF FRESNO

Highlights of Results and Recommendations

Our July 1, 1980 and April 8, 1982 actuarial valuations of your System were based on the following data:

	<u>July 1, 1980</u>	<u>April 8, 1982</u>	<u>Percentage Increase (decrease) during the year</u>
<u>Active Members</u>			
Number	5,237	5,529	6%
Total annual payroll	\$ 91,912,000	\$107,047,000	16%
Average monthly salary	\$ 1,463	\$ 1,613	10%
<u>Retired Members</u>			
Number	1,412	1,596	13%
Total annual pension roll (basic)	\$ 5,798,000	\$ 7,506,000	29%
Average monthly allowance (basic)	\$ 342	\$ 392	15%
Total annual pension roll (C.O.L.)	\$ 6,625,000	\$ 8,530,000	29%
Average monthly allowance (C.O.L.)	\$ 391	\$ 445	8%
<u>Inactive Vested Members</u>			
Number	319	320	.3%
<u>Assets</u>			
Total assets at Book Value	\$128,268,000	\$172,684,000	35%

Based upon the results of our latest valuation of the System, we recommend that the following either be adopted or be noted for future reference, as the case may be:

- (1) Adoption of 8% interest rate for valuation purposes, along with a total salary scale of 6-1/2% per year (Section IV (i));
- (2) Adoption of County contribution rates resulting from Study #2 (Section IV (ii));
- (3) Adoption of employee contribution rates resulting from Study #2 (Section IV (ii) and VIII (vi));
- (4) Note the calculation of the ratios measuring the funding progress of the System (Section IV (iii));
- (5) Note our belief, based upon Item (4) above, that the System is currently being soundly funded;

With respect to the above items, each is discussed in more detail in the main body of the report and the discussions regarding these points may be found by referring to the Section of the report, as noted in parenthesis.

Fresno County is in a sound funding position. This statement is made based upon the funding progress ratios as calculated in this valuation and upon the anticipated adoption of the recommendations of this report.

EXPERIENCE ANALYSIS

SECTION III

EMPLOYEES' RETIREMENT ASSOCIATIONOF THECOUNTY OF FRESNOExperience Analysis Summary of Results(i) PROBABILITIES OF SEPARATION FROM SERVICE PRIOR TO RETIREMENT

An experience analysis was made, based upon each member's sex and attained age as of the valuation date, to determine the probability of members leaving the System because of non-vested withdrawal, death, disability retirement, service retirement and vested withdrawal.

The probabilities of each of these were developed to reflect the actual experience that took place during the 1-3/4-year investigation period, July 1, 1980 through April 8, 1982. We compared the probabilities of separation used in the previous valuation with those developed for the current study and made all necessary adjustments.

The assumptions made in regard to these rates are discussed in the following paragraphs.

(a) Withdrawal

As a result of the active investigation of the System, it was found that the actual number of non-vested withdrawals from the System was slightly higher than previously expected for General members and slightly lower for Safety members. The rates of withdrawal were increased by about 1% for General members and decreased by 5% for Safety members to reflect this experience. Furthermore, the experience showed that somewhat higher withdrawal rates should be used for County Hospital employees as compared to the rest of the General members.

An increase in withdrawal rates results in cost savings to the System.

(b) Service Retirement

The investigation of the System's actual experience indicated a continuing trend toward earlier retirement for the General and Safety members, with General male members showing the greatest increase. We have reflected these results in the revised recommended rates of service retirement. The net effect of these changes is to cause some increase in the cost of the System.

(c) Disability Retirement

As a result of the investigation, General female rates were decreased by 40% to reflect lower than expected incidence of ordinary (non-service connected) disability, while the duty disability rates were increased slightly. For males ordinary disability rates were decreased by 10% and duty disability rates were decreased by 20%.

For Safety members, both the ordinary and duty disability rates decreased by about 35% while the ordinary disability rates did not need adjusting.

An increase in disability rates usually results in higher costs to the System and a decrease in rates results in lower costs.

(d) Death Before Retirement

As a result of the experience analysis of the System, about a 10% decrease was required in the General male member ordinary death and a 50% decrease in the death while eligible rates. The female ordinary death rates were increased by 25%. All other death rates remained unchanged.

The Safety member death while eligible rates were decreased slightly. The duty and ordinary death rates remained unchanged.

(e) Deferred Retirement

The experience analysis showed that the probabilities of vested withdrawal or reciprocities for the General members should be reduced by 30% for the males and by 15% for the females.

For Safety members, rates of deferred retirement were reduced by about 20%.

(f) Summary of Probabilities of Separation

The rates of separation from active service have been discussed in the foregoing paragraphs. However, it is difficult to obtain the meaning of the various changes in the probabilities of separation by examining each one of them separately. This is because each of the probabilities depends on the others. For example, if there is more turnover, there will be fewer retirements. Because of this interdependency, it is helpful to develop another table which takes this into account. Tables 1 and 2 at the end of this Section show for both General (Hospital and non-Hospital) and Safety members the expected number of present active members who will eventually separate for each of the various causes of termination. Table 1 is based on the old set of assumptions, Table 2 on the new set. By using these tables, it is much easier to visualize the meaning of the changes in the probabilities of separation from the System. The rates used to develop Table 2 are summarized in Section VIII (v) of this report.

(ii) POST RETIREMENT MORTALITY

(a) Mortality after Service Retirement

At the time of the last actuarial study of the Retirement System, the 1971 Group Annuity Mortality Table with no age setback for males and a one-year setback for females was used as the basis for mortality after service retirement.

During the investigation period, 34 retired male members and beneficiaries died compared to 35 expected. For retired female members the number expected to die based on the current table was 20% higher than the actual experience. During the previous investigation, the number expected was 5% lower than actual. This "reverse" in trend from one investigation period to the next is not unusual and is due to the size of your group when viewed by itself, as well as the relatively short time period covered by the investigations. Based on these results, and on the experience of your group and other Counties we serve, we recommend continuing the use of the current mortality tables. The life expectancies based on these tables are shown in Section VIII (ix).

(b) Mortality after Disability Retirement

At the time of the last actuarial study, the 1973 Disability Mortality Table was used to measure mortality after disability for both males and females. This table is being currently replaced by a new, 1981 Disability Mortality Table which was developed based on the disability mortality experience of many governmental retirement systems. Based on this new table, the life expectancy of members who have retired for disability is longer than previously expected, as shown for the representative ages below:

<u>Age</u>	<u>Years of Life Expectancy</u>		
	<u>1973 Table</u>	<u>1981 Table</u>	
	<u>General and Safety</u>	<u>General</u>	<u>Safety</u>
40	23.3	26.2	31.8
50	18.5	21.1	23.6
60	14.3	16.4	16.6

The expected number of deaths was 14 under the 1973 Disability Table compared to 10 under the 1981 Table. The actual number of deaths was 11. The disability experience for your system corresponds closer to the new table. We recommend changing to the 1981 Disability Mortality Table at this time. The life expectancies based on this table are shown in Section VIII (x).

(iii) MORTALITY BASIS FOR EMPLOYEE CONTRIBUTION RATES

In accordance with the 1937 County Retirement Act, using a sex independent mortality basis, we calculated basic contribution rates under benefit Section 31676.12 for General members. The single mortality table used is the 1971 Group Annuity Mortality male table set back four years. This table represents the average mortality for the General member group as a whole and is, in our opinion, a fair and adequate sex independent mortality table.

The Safety member contribution rates are based on Section 31664 of the County Law and the 1971 Group Annuity Mortality male table with no further adjustment, since this table is already on a sex independent basis.

(iv) SALARY SCALES

The term Salary Scales refers to a schedule of percentage increases in salary by attained age, which is used in projecting salaries at future points in time. These projected salaries are in turn used for estimating the amounts of pension payable at retirement and for estimating the projected liability on account of other occurrences (for example, disability, death, withdrawal).

For the valuations we have made, we have used various salary scales, making sure that each of these scales was consistent with the corresponding interest assumption also used. The different combinations of salary scales and interest assumptions used in these studies are described and discussed in Section IV (i).

TABLE 1

COUNTY OF FRESNO

EMPLOYEES' RETIREMENT ASSOCIATION

Expected Number to Eventually Separate for Indicated Cause
(Based on Old Actuarial Assumptions)

NON-HOSPITAL GENERAL MALE MEMBERS

Attained Age	Number of Actives	With-drawal	Ordinary Death	Ordinary Disability	Service	Death While Eligible	Duty Death	Duty Disability	Terminated Vested
20-24	60	49	0	1	4	0	0	0	6
25-29	199	135	2	3	26	2	0	1	30
30-34	356	188	5	7	76	5	0	4	71
35-39	364	136	7	11	115	7	1	5	82
40-44	197	45	4	7	88	5	1	4	43
45-49	180	26	4	8	105	5	0	4	28
50-54	152	13	4	6	108	4	0	3	14
55-59	107	4	2	3	89	3	0	1	5
60-64	53	0	1	1	49	1	0	0	1
65 & Over	2	0	0	0	2	0	0	0	0
Total	1,670	596 (35.7%)	29 (1.7%)	47 (2.8%)	662 (39.7%)	32 (1.9%)	2 (.1%)	22 (1.3%)	280 (16.8%)

NON-HOSPITAL GENERAL FEMALE MEMBERS

20-24	218	204	0	1	6	0	0	0	7
25-29	381	321	2	3	29	0	0	0	26
30-34	418	284	4	7	72	1	0	0	50
35-39	281	140	3	8	86	1	0	1	42
40-44	181	63	3	7	80	1	0	1	26
45-49	155	33	2	6	94	1	0	1	18
50-54	157	17	2	6	119	1	0	1	11
55-59	123	4	1	4	109	0	0	0	5
60-64	73	0	1	2	69	0	0	0	1
65 & Over	4	0	0	0	4	0	0	0	0
Total	1,991	1,066 (53.5%)	18 (.9%)	44 (2.2%)	668 (33.6%)	5 (.3%)	0 (0%)	4 (.2%)	186 (9.3%)

SAFETY MEMBERS

20-24	25	15	0	0	7	0	0	2	1
25-29	100	46	1	0	35	1	1	10	6
30-34	125	40	2	0	58	1	2	15	7
35-39	119	25	2	0	68	1	1	16	6
40-44	43	4	1	0	30	0	1	6	1
45-49	30	0	1	0	24	1	0	3	1
50-54	22	0	0	0	20	0	0	2	0
55 & Over	4	0	0	0	4	0	0	0	0
Total	468	130 (27.8%)	7 (1.5%)	0 (0%)	246 (52.5%)	4 (.9%)	5 (1.1%)	54 (11.5%)	22 (4.7%)

TABLE 1
Continued

COUNTY OF FRESNO

EMPLOYEES' RETIREMENT ASSOCIATION

Expected Number to Eventually Separate for Indicated Cause
(Based on Old Actuarial Assumptions)

HOSPITAL MALE MEMBERS

Attained Age	Number of Actives	With-drawal	Ordinary Death	Ordinary Disability	Service	Death While Eligible	Duty Death	Duty Disability	Terminated Vested
20-24	24	20	0	0	2	0	0	0	2
25-29	64	45	0	1	8	1	0	0	9
30-34	107	58	1	2	22	2	0	1	21
35-39	51	19	1	1	16	1	1	1	11
40-44	25	6	1	1	11	1	0	0	5
45-49	28	4	1	1	15	1	0	1	5
50-54	28	2	1	1	20	0	0	1	3
55-59	15	1	0	1	12	0	0	0	1
60-64	7	0	0	0	7	0	0	0	0
65 & Over	2	0	0	0	2	0	0	0	0
Total	351	155 (44.2%)	5 (1.4%)	8 (2.3%)	115 (32.8%)	6 (1.7%)	1 (.3%)	4 (1.1%)	57 (16.2%)

HOSPITAL FEMALE MEMBERS

20-24	121	113	0	1	3	0	0	0	4
25-29	209	176	1	2	16	0	0	0	14
30-34	195	133	2	3	34	0	0	0	23
35-39	120	60	2	3	37	0	0	0	18
40-44	109	38	1	4	48	1	0	1	16
45-49	99	21	1	4	60	1	0	1	11
50-54	86	9	1	3	66	1	0	0	6
55-59	76	2	1	3	67	0	0	0	3
60-64	31	0	0	1	29	0	0	0	1
65 & Over	3	0	0	0	3	0	0	0	0
Total	1,049	552 (52.6%)	9 (.9%)	24 (2.3%)	363 (34.6%)	3 (.3%)	0 (0%)	2 (.2%)	96 (9.1%)

TABLE 2

COUNTY OF FRESNO

EMPLOYEES' RETIREMENT ASSOCIATION

Expected Number to Eventually Separate for Indicated Cause
(Based on New Actuarial Assumptions)

NON-HOSPITAL GENERAL MALE MEMBERS

Attained Age	Number of Actives	With-drawal	Ordinary Death	Ordinary Disability	Service	Death While Eligible	Duty Death	Duty Disability	Terminated Vested
20-24	60	48	0	1	6	0	0	0	5
25-29	199	130	2	3	37	1	0	1	25
30-34	356	180	5	7	101	3	1	3	56
35-39	364	135	6	10	141	4	1	4	63
40-44	197	44	3	7	104	3	1	3	32
45-49	180	22	3	7	122	2	0	3	21
50-54	152	10	3	5	119	2	0	2	11
55-59	107	3	2	3	93	1	0	1	4
60-64	53	0	1	1	50	0	0	0	1
65 & Over	2	0	0	0	2	0	0	0	0
Total	1,670	572 (34.2%)	25 (1.5%)	44 (2.6%)	775 (46.4%)	16 (1.0%)	3 (.2%)	17 (1.0%)	218 (13.1%)

NON-HOSPITAL GENERAL FEMALE MEMBERS

20-24	218	199	1	1	9	0	0	0	8
25-29	381	312	2	2	37	0	0	1	27
30-34	418	218	4	4	84	1	0	1	43
35-39	281	146	3	5	92	1	0	1	33
40-44	181	67	2	4	86	1	0	1	20
45-49	155	35	2	4	101	1	0	1	11
50-54	157	21	2	3	123	1	0	0	7
55-59	123	7	1	2	110	0	0	0	3
60-64	73	1	1	0	70	0	0	0	1
65 & Over	4	0	0	0	4	0	0	0	0
Total	1,991	1,069 (53.7%)	18 (.9%)	25 (1.3%)	716 (36.0%)	5 (.2%)	0 (0%)	5 (.2%)	153 (7.7%)

SAFETY MEMBERS

20-24	25	15	0	0	8	0	0	1	1
25-29	100	44	2	0	40	1	1	7	5
30-34	125	36	2	0	67	1	2	10	7
35-39	119	22	2	0	77	1	1	11	5
40-44	43	4	1	0	32	1	1	3	1
45-49	30	1	0	0	26	0	0	3	0
50-54	22	0	0	0	20	0	0	2	0
55 & Over	4	0	0	0	4	0	0	0	0
Total	468	122 (26.1%)	7 (1.5%)	0 (0%)	274 (58.5%)	4 (.9%)	5 (1.1%)	37 (7.9%)	19 (4.0%)

TABLE 2
Continued

COUNTY OF FRESNO

EMPLOYEES' RETIREMENT ASSOCIATION

Expected Number to Eventually Separate for Indicated Cause
(Based on New Actuarial Assumptions)HOSPITAL MALE MEMBERS

<u>Attained Age</u>	<u>Number of Actives</u>	<u>With-drawal</u>	<u>Ordinary Death</u>	<u>Ordinary Disability</u>	<u>Service</u>	<u>Death While Eligible</u>	<u>Duty Death</u>	<u>Duty Disability</u>	<u>Terminated Vested</u>
20-24	24	23	0	0	0	0	0	0	1
25-29	64	56	0	0	4	0	0	0	4
30-34	107	76	1	1	16	1	0	1	11
35-39	51	28	1	1	13	1	1	0	6
40-44	25	8	1	1	11	0	0	0	4
45-49	28	6	1	1	17	0	0	0	3
50-54	28	3	0	1	21	0	0	1	2
55-59	15	0	0	1	13	0	0	0	1
60-64	7	0	0	0	7	0	0	0	0
65 & Over	2	0	0	0	2	0	0	0	0
Total	351	200 (57.0%)	4 (1.1%)	6 (1.7%)	104 (29.6%)	2 (.6%)	1 (.3%)	2 (.6%)	32 (9.1%)

HOSPITAL FEMALE MEMBERS

20-24	121	117	0	0	2	0	0	0	2
25-29	209	189	1	0	9	0	0	0	10
30-34	195	152	1	2	24	0	0	0	16
35-39	120	76	1	2	29	0	0	0	12
40-44	109	50	2	2	43	1	0	0	11
45-49	99	28	2	2	58	1	0	1	7
50-54	86	14	1	2	63	1	0	1	4
55-59	76	6	1	2	65	0	0	0	2
60-64	31	1	0	0	29	0	0	0	1
65 & Over	3	0	0	0	3	0	0	0	0
Total	1,049	633 (60.3%)	9 (.9%)	12 (1.1%)	325 (31.0%)	3 (.3%)	0 (0%)	2 (.2%)	65 (6.2%)

VALUATION RESULTS

SECTION IV

EMPLOYEES' RETIREMENT ASSOCIATION
OF THE
COUNTY OF FRESNO

Analysis of Interest Rate and Salary
Scale Assumptions

Procedure Used to Select Assumptions for Study

To assist in the selection of appropriate interest and salary scale combinations used in these studies, we had available the Retirement Fund's investment earnings as well as current salary information of the active members.

The investment yields of the Fund during the past three years were as follows:

<u>Year Ended</u>	<u>Yield</u>
June 30, 1980	7.8%
June 30, 1981	8.4%
June 30, 1982	9.8%

The 3-year average is approximately 8.7%. Based on this figure, the current investment policy, and including a certain amount of conservatism, 8% was chosen as the long term interest rate assumption.

The same factor that has caused interest earnings to rise in the past (inflation) has also caused both the members' salaries and the Consumer Price Index to rise. In order to correlate the recommended long term investment return with the corresponding appropriate rate of inflation, we again have used the statistical procedures set forth in a published University of Chicago study. This study (Stocks, Bonds, Bills and Inflation: Simulations of the Future (1976-2000): Roger E. Ibbotson and Rex A. Sinquefeld) analyzes the long term rates of investment return in relation to various levels of inflation, using results actually achieved during the period 1926-1974.

Based on the above study as it applies to your County, a long term salary inflation rate of 5-1/2% was chosen as one appropriate to use with the long term interest assumption of 8%.

Because in the recent years the salary increases have been higher than the assumed long term inflation rate and because the possibility that this trend will continue seems likely for the next five years, we used an inflation rate starting somewhat higher than the long term assumption and graded it down to the appropriate long term level over the next five years.

In addition to the inflation assumption, merit and longevity increases ranging from 5% to 1/2% per year (depending on the member's classification, age and service) are included in our salary projections. The effect of the merit and longevity increase is to add an increase of about 1% per year to the salary projections.

Purpose of Multiple Studies

In connection with this survey, we have again performed more than one valuation of the System by varying the interest rates and the corresponding inflation components of the salary scales used. The purpose of this was to analyze the effect of these changes on the County and member contribution rates.

Specific Multiple Studies Selected

To illustrate more clearly the effects of inflation on the costs of the System, we have chosen to make the following studies, with the salary scale and investment assumptions as set forth:

- Study #1 - A valuation using 7% interest and 5-1/4% salary scale assumptions. Of the projected salary increase, 1% is for merit and longevity; 4-1/4% is for inflation. In the valuation, the salary increases start at 6-1/2% and reduce to 5-1/4% over the next five years. This set of economic assumptions is currently in effect.
- Study #2 - A valuation using 8% interest and 6-1/2% salary scale assumptions. Of the projected salary increase, 1% is for merit and longevity; 5-1/2% is for inflation. In the valuation, the salary increases start at 7-1/2% and reduce to 6-1/2% over the next five years.
- Study #3 - A valuation using 8-1/2% interest and 7% salary scale assumptions. Of the projected salary increase, 1% is for merit and longevity; 6% is for inflation. In the valuation, the salary increases start at 7-1/2% and reduce to 7% over the next five years.

We show in Section VIII(viii) a detailed listing of each of the above salary scales.

COUNTY OF FRESNOContribution Rates

A comparison of composite County and employee total (basic and cost-of-living) rates follows. This comparison shows rates currently contributed as well as rates resulting from our new study.

	Contribution Rates and Annual Amounts*			
	County		Employee	
	<u>% of Payroll</u>	<u>Annual Amount</u>	<u>% of Payroll</u>	<u>Annual Amount</u>
Current rates @ 7% interest and 5-1/4% salary scale	16.45%	\$17,619,000	6.68%	\$7,151,000
Recalculated rates @ 7% interest and 5-1/4% salary scale (Study #1)	15.52**	16,615,000	6.32**	6,765,000
Study #2 rates @ 8% interest and 6-1/2% salary scale	13.60**	14,559,000	5.98**	6,401,000
Study #3 rates @ 8-1/2% interest and 7% salary scale	12.52**	13,402,000	5.54**	5,930,000

*Contribution rates are based upon benefit Section 31676.12 for General members and Section 31664 for Safety members and the County pays half of the member basic rates.

**The rates reflect the effect of the transfer from the Contingency Reserve to the Cost-of-Living Reserve of \$3,000,000 each, for the County and for the members as a group.

In comparing the current rates with those recalculated by this study, each based on the 7% assumption, we note about a 5% decrease in both the County rates and the member rates. This decrease reflects primarily the \$6,000,000 transfer to the Cost-of-Living Reserve, expected lower future incidence of duty disability for Safety members and a 6% increase in the size of the active membership. The results of Studies #2 and #3 show further decreases in rates.

A more detailed comparison of the basic and cost-of-living contribution rates calculated in Studies #1, #2 and #3, as well as previously developed rates, are shown in Tables A and B following this Section. Table A shows a comparison of the member contribution rates; Table B shows a similar comparison of the County contribution rates.

Member contributions are payable over the employee's future working lifetime. The County rates reflect the Entry Age Normal Funding method. Under this method, part of the liability is being paid over the future working lifetimes of the members. The remaining supplemental past service liability is being amortized over 28 years from the valuation date.

Recommendations

We recommend that the Retirement Board adopt the Employee and County contribution rates resulting from Study #2. Study #2 assumes a long term interest rate of 8%, along with a 6-1/2% per year salary scale reflecting merit, longevity and long term inflation.

If the Retirement Board were to make another transfer of \$1,000,000 each, for the County and for the members, from the "Excess Earnings" account to the Cost-of-Living Reserve account, this would result in a reduction in the recommended Cost-of-Living contribution rates by .04% of total payroll for the County and .10% of the member's payroll, as a group. For employees it would mean that the Cost-of-Living rates calculated in Study #2 could be reduced from 71.31% to 68.62% of basic half-rates.

Because of their value to the Board, we recommend that multiple valuations be made at the time of each actuarial study. This will introduce different combinations of inflation and interest earnings so comparisons can be made with the current results. We feel in this way the funding of the Retirement Program can continue on a sound basis.

In this Section, we have pointed out for comparison purposes some of the corresponding costs if alternative economic assumptions are used. In addition, we have included (in Section IV (iii)) the funding test (funding progress ratio). We look forward to meeting with the Board and discussing the various topics covered.

TABLE A
1/2 Basic Rates

COUNTY OF FRESNO

COMPARISON OF EMPLOYEE CONTRIBUTION RATES
(Using percentage of monthly salary in excess of \$350)

Current Rates (Before Study)

<u>7% interest and 5-1/4% salary scale assumptions</u>							
<u>General Members</u>				<u>Safety Members</u>			
<u>Entry Age</u>	<u>Basic</u>	<u>C.O.L.</u>	<u>Total</u>	<u>Entry Age</u>	<u>Basic</u>	<u>C.O.L.</u>	<u>Total</u>
25	3.60%	3.13%	6.73%	21	4.27%	3.72%	7.99%
35	3.94	3.43	7.37	25	4.41	3.84	8.25
45	4.41	3.84	8.25	30	4.61	4.01	8.62

Rates Updated by 4/8/82 Valuation

<u>Study #1 - 7% interest and 5-1/4% salary scale assumptions</u>							
<u>General Members</u>				<u>Safety Members</u>			
<u>Entry Age</u>	<u>Basic</u>	<u>C.O.L.</u>	<u>Total</u>	<u>Entry Age</u>	<u>Basic</u>	<u>C.O.L.</u>	<u>Total</u>
25	3.60%	2.78%	6.38%	21	4.27%	3.30%	7.57%
35	3.94	3.04	6.98	25	4.41	3.41	7.82
45	4.41	3.41	7.82	30	4.61	3.56	8.17

<u>Study #2 - 8% interest and 6-1/2% salary scale assumptions</u>							
<u>General Members</u>				<u>Safety Members</u>			
<u>Entry Age</u>	<u>Basic</u>	<u>C.O.L.</u>	<u>Total</u>	<u>Entry Age</u>	<u>Basic</u>	<u>C.O.L.</u>	<u>Total</u>
25	3.45%	2.46%	5.91%	21	4.06%	2.90%	6.96%
35	3.75	2.67	6.42	25	4.15	2.96	7.11
45	4.14	2.95	7.09	30	4.31	3.07	7.38

<u>Study #3 - 8-1/2% interest and 7% salary scale assumptions</u>							
<u>General Members</u>				<u>Safety Members</u>			
<u>Entry Age</u>	<u>Basic</u>	<u>C.O.L.</u>	<u>Total</u>	<u>Entry Age</u>	<u>Basic</u>	<u>C.O.L.</u>	<u>Total</u>
25	3.32%	2.29%	5.61%	21	3.89%	2.69%	6.58%
35	3.61	2.49	6.10	25	3.98	2.75	6.73
45	3.98	2.75	6.73	30	4.13	2.85	6.98

Note: These rates reflect the fact that the County pays half of the members' basic rates.

COUNTY OF FRESNO

COMPARISON OF EMPLOYER CONTRIBUTION RATES

Current Rates

7% interest and 5-1/4% salary scale assumptions

	General		Safety	
	% of Payroll	Annual Amount*	% of Payroll	Annual Amount*
Basic	11.08%	\$10,528,000	20.14%	\$2,423,000
COL	4.36	4,143,000	4.36	525,000
Total	15.44%	\$14,671,000	24.50%	\$2,948,000

Average Rate for the total group = 16.45%

Rates Updated by 4/8/82 Valuation

Study #1 - 7% interest and 5-1/4% salary scale assumptions

	General		Safety	
	% of Payroll	Annual Amount*	% of Payroll	Annual Amount*
Basic	11.21%	\$10,651,000	16.11%	\$1,939,000
COL	3.76	3,573,000	3.76	452,000
Total	14.97%	\$14,224,000	19.87%	\$2,391,000

Average Rate for the total group = 15.52%

Study #2 - 8% interest and 6-1/2% salary scale assumptions

	General		Safety	
	% of Payroll	Annual Amount*	% of Payroll	Annual Amount*
Basic	9.75%	\$ 9,264,000	13.58%	\$1,634,000
COL	3.42	3,249,000	3.42	412,000
Total	13.17%	\$12,513,000	17.00%	\$2,046,000

Average Rate for the total group = 13.60%

Study #3 - 8-1/2% interest and 7% salary scale assumptions

	General		Safety	
	% of Payroll	Annual Amount*	% of Payroll	Annual Amount*
Basic	9.07%	\$ 8,618,000	12.27%	\$1,476,000
COL	3.09	2,936,000	3.09	372,000
Total	12.16%	\$11,554,000	15.36%	\$1,848,000

Average Rate for the total group = 12.52%

* Contributions are based on annual salaries on valuation date of \$95,014,000 for General and \$12,033,000 for Safety members.

COUNTY OF FRESNOFunding Progress of the SystemFunding Ratio - "Plan Termination" Assumption

A comparison of the measurement of the funding progress of the System in successive valuations is an important criteria for determining the soundness of a pension system. There are various methods of measuring the progress of the System's funding, but we believe the most useful measure is the ratio of the System's assets to its obligation for benefits earned to date. Unless amendments are made to the System, in any soundly funded System the assets should be increasing at a greater rate than the liabilities for benefits earned to date. This will have the effect of increasing the funding progress ratio in future years.

At the time of the last valuation we computed the ratio of the assets of the System to the obligation for benefits earned to date based on a plan termination assumption. We believe that this measure will help the Board to monitor the progress of the funding status of the System. To this end, we include below the funding ratio based on the recommended 8% interest rate assumption.

(1)	Present value of benefits earned to date assuming immediate 100% vesting	\$193,546,000
(2)	Assets as of valuation date @ book value	\$172,684,000
(3)	Ratio of assets to present value benefits (2) ÷ (1)	89.2%

The present value figure includes all liabilities of the System for basic and cost-of-living benefits granted to members and beneficiaries already on the pension roll. All basic and cost-of-living liabilities of active and vested inactive members are included for every year of service already earned at the valuation date. Liabilities are based on the salaries of the members as of April 8, 1982. In calculating the funding progress of the System, we have used all of the assets, including all undistributed earnings.

At the time of the last study, the funding ratio was 70.6%, based on an interest rate of 7% per annum. The funding ratio calculated in this study and based on an 8% interest rate assumption is 89.2%, which is higher than the corresponding ratio at the time of the last study. (The recalculated ratio based on the 7% interest assumption is 79.0% as of April 8, 1982, or 8.4% higher than the previously calculated ratio.)

The funding ratio of 89.2% as developed in this study is quite high compared to the funding ratios of many public retirement plans.

FASB #35 - "Plan Continuation" Assumption

In addition to the Funding Progress Ratio, we have also developed a funding ratio based on the actuarial liabilities as defined by the Financial Accounting Standards Board Statement #35 (FASB 35). The FASB 35 liabilities assume an ongoing plan, i.e., they include future withdrawals and disability retirements, whereas the Funding Progress Ratio liabilities exclude these. All of the other assumptions used are the same under both ratios. It should be noted that Public Plans are now exempt from FASB 35 reporting requirements.

The FASB 35 liability and funding ratio as of April 8, 1982, based on the 8% interest rate assumption, are as follows:

(1)	FASB 35 present value of benefits	\$196,640,000
(2)	Assets as of valuation date @ book value	\$172,684,000
(3)	Ratio of assets to present value of benefits (2) ÷ (1)	87.8%

The liability shown above is based on an interest assumption reflecting the cost value basis of the assets. For that reason, the comparison is made with assets at cost value rather than market value.

COUNTY OF FRESNO

Actuarial Balance Sheet

The purpose of an Actuarial Balance Sheet is to enable the Board, by reference to the periodic statements of this nature, to determine whether or not the contributions are adequate to provide the benefits without impairment to the Fund. The following is a descriptive listing of the items which make up the Actuarial Balance Sheet for basic and cost-of-living benefits under the System.

Item

1. The total assets in the Retirement Fund @ Cost Value as of April 8, 1982, taken from the Accounting Balance Sheet.
2. The present value of the contributions it is anticipated will be made by present members after April 8, 1982, until their separation from the System as active members.
3. The present value of future contributions that will be required of the County in order to fully provide the benefits anticipated on account of present active and retired members.
5. The present value of the basic and cost-of-living allowances which are currently being paid to retired members and beneficiaries on account of service, disability retirements and survivor benefits.
6. The present value of retirement allowances for anticipated future service and disability retirements, including continuance to spouses, to active and inactive members.
7. The present value of death benefits payable on account of the death of currently active members.
8. The present value of termination benefits payable on account of the withdrawal (refund) of currently active or inactive members.
9. The reserves held for future adverse experience, but sometimes used for other Retirement System purposes.

EMPLOYEES' RETIREMENT ASSOCIATION

OF THE COUNTY OF FRESNO

ACTUARIAL BALANCE SHEET*

As of April 8, 1982

ASSETS

	<u>Basic</u>	<u>C.O.L.</u>	<u>Total</u>
1. Total assets now held @ Cost Value	\$142,293,072	\$ 30,391,184	\$172,684,256
2. Present value of future contributions by members	37,190,455	26,520,513	63,710,968
3. Present value of future contributions by County	<u>151,339,948</u>	<u>60,137,645</u>	<u>211,477,593</u>
4. Total actuarial assets	\$330,823,475	\$117,049,342	\$447,872,817

LIABILITIES

	<u>Basic</u>	<u>C.O.L.</u>	<u>Total</u>
5. Present value of retirement allowances payable to present retired members	\$ 67,401,213	\$ 31,151,028	\$ 98,552,241
6. Present value of retirement allowances to be granted:			
a) For service retirement	224,236,446	70,860,559	295,097,005
b) For disability retirement	13,853,439	5,151,755	19,005,194
7. Present value of death benefits to be granted:			
a) 6 months' salary death benefit and return of contributions	1,367,420	444,892	1,812,312
b) Death while eligible to retire	1,596,357	585,850	2,182,207
c) Duty death	991,374	421,271	1,412,645
8. Present value of members' contributions to be returned upon withdrawal before retirement	15,095,558	8,433,987	23,529,545
9. Contingency reserve	4,507,972	0	4,507,972
10. Miscellaneous liabilities	<u>1,773,696</u>	<u>0</u>	<u>1,773,696</u>
11. Total actuarial liabilities	\$330,823,475	\$117,049,342	\$447,872,817

*Based on 8% interest and 6-1/2% salary scale assumptions.

SPECIAL GROUP COST STUDIES

SECTION V

EMPLOYEES' RETIREMENT ASSOCIATION
OF THE
COUNTY OF FRESNO

Hospital and Fire District Terminate from County Retirement Plan

As part of our actuarial study, we were asked to calculate the effect on County costs if one or both of the following takes place:

1. The termination of the employees of the Valley Medical Center (Hospital) from the County Retirement Plan with alternatives of retirement, deferred retirement, or refund of employee contributions.
2. The termination of the employees of the North Central Fire Protection District (Fire District) from the County Retirement Plan with either reciprocity within PERS and ultimate retirement from that System or possible immediate retirement from the Fresno County System for those now eligible to retire.

Hospital Termination

Based on the actuarial assumptions recommended in Study #2 (8% interest and total salary increases of 6-1/2% per year), we have calculated the liabilities of the Hospital under the Plan if termination occurs on the valuation date (April 8, 1982).

In these cost calculations we have assumed the present active employees will do the following:

1. All those employees with less than five years of service will obtain a refund of their contributions plus interest.
2. Seventy-five percent of those employees with more than five but less than ten years of service and those with more than ten years of service but who are not yet age fifty will go on deferred retirement and begin receiving their retirement allowances from the County at age fifty (or immediately, if they have already attained age fifty). Benefits will be based on present salaries.
3. Twenty-five percent of those employees with more than five but less than ten years of service and those with more than ten years of service who are not yet age fifty will ultimately become covered under reciprocity in another public retirement system and begin receiving their retirement allowances from the County at age 62 (or immediately, if they have already attained age 62). Benefits will be based on projected salaries to age 62.
4. All employees who are presently eligible to retire for service will retire immediately.

In addition to the above liability of the Hospital because of its active members, there are also liabilities for its present inactive employees and for former Hospital employees or their beneficiaries already on the pension roll.

To help offset its liabilities because of these active, inactive and retired members, the following assets are available to be used by the Hospital:

1. The active and inactive members' contributions plus interest
2. The Hospital's portion of the Employer Advance Reserve, the Retired Reserves, and the Cost of Living Reserve
3. Its portion of the Undistributed Earnings (Contingency Reserve)
4. The \$1,461,537 which it has contributed in advance toward its C.O.L. contributions (but has not yet used)

In connection with this portion of the study and the study covered in the next part of this Section, we have allocated, on an estimated basis, the various assets and reserves of the different employer groups now covered under the County Retirement Plan. These estimates were based on financial information made available to us by the County Retirement Office, as well as on various calculations made by us in connection with this information.

In Table C at the end of this Section, we summarize for each Employer Unit analyzed the number of members, the active members' salaries, the members' contributions plus interest, the retired members' annual allowances, and the estimated assets available to each employer.

Based on the assumptions described, we compare below the Hospital's assets and liabilities under the County Retirement Plan if the Hospital Termination takes place on the valuation date:

Comparison of Assets and Liabilities
Assuming Hospital Termination on April 8, 1982

Assets*

1.	Assets at Cost Value (excluding Undistributed Earnings)	\$27,708,177
2.	Employer portion of Undistributed Earnings	750,636
3.	Unused C.O.L. contributions paid in advance	1,461,537
4.	Total Assets	<u>\$29,920,350</u>

Liabilities

5.	Present value of retirement allowances to members already retired	\$15,603,988
6.	Present value of members' contributions to be refunded	1,339,215
7.	Present value of deferred and reciprocal benefits	16,230,215
8.	Present value of benefits for active members now eligible to retire	11,804,825
9.	Total Liabilities	<u>\$44,978,243</u>

*Employer assets are on an estimated basis

In comparing Item 4 with Item 9, it may be seen that the Hospital's liabilities under the County Retirement Plan exceed its assets available if termination of coverage takes place on April 8, 1982. The "shortage" (or difference between the two) is expressed below as a single sum and as various possible annual contribution levels, assuming different amortization periods over which the Hospital may fund its remaining obligations, all based on a rate of interest of 8% per annum:

Lump sum payment	\$15,057,893
------------------	--------------

Annual payment required if amortized at 8% interest over:

5 years	\$ 3,639,744
10 years	2,165,762
15 years	1,697,818
20 years	1,480,161

The above table is based on estimated assets using Cost Value and a long-term interest assumption of 8% per annum. If upon termination, it becomes necessary to recalculate the liabilities under the Plan using an interest assumption higher than 8%, the Employer assets used in that calculation would probably have to be reduced to reflect a Market Value basis.

North Central Fire Protection District Termination

Based on the actuarial assumptions recommended in Study #2 (8% interest and total salary increases of 6-1/2% per year), we have also calculated the liabilities of the Fire District under the Plan if termination occurs on the valuation date (April 8, 1982).

In these cost calculations we have assumed the present active employees will do the following:

1. All Fire personnel will go under reciprocity with PERS and ultimately retire at age 55. Those already age 55 would retire immediately.
2. All General personnel will go under reciprocity with PERS and ultimately retire at age 62. Those already age 62 would retire immediately.

In addition to the above liability of the Fire District because of its active members, there are also liabilities for its present inactive employees and for former Fire District employees or their beneficiaries already on the pension roll.

To help offset its liabilities because of these active, inactive, and retired members, the following assets are available to be used by the Fire District:

1. The active and inactive members' contributions plus interest
2. The Fire District's portion of the Employer Advance Reserve, the Retired Reserves and the Cost of Living Reserve
3. Its portion of the Undistributed Earnings (Contingency Reserve)

As was mentioned earlier, we have allocated, on an estimated basis, the various assets and reserves of the different employer groups now covered under the County Retirement Plan. These are shown in Table C at the end of this Section.

Based on the assumptions described above, we compare below the Fire District's assets and liabilities under the County Retirement Plan if the Fire District termination takes place on the valuation date:

Comparison of Assets and Liabilities
Assuming Fire District Termination on April 8, 1982

Assets*

1.	Assets at Cost Value (excluding Undistributed Earnings)	\$4,138,962
2.	Employer portion of Undistributed Earnings	112,127
3.	Total Assets	<u>\$4,251,089</u>

Liabilities

4.	Present value of retirement allowances to members already retired	\$1,349,268
5.	Present value of benefits for active members	4,246,210
6.	Total Liabilities	<u>\$5,595,478</u>

*Employer assets are on an estimated basis.

In comparing Item 3 with Item 6, it may be seen that the Fire District's liabilities under the County Retirement Plan exceed its available assets if termination of coverage takes place on April 8, 1982. The "shortage" (or difference between the two) is expressed below as a single sum and as various possible annual contribution levels, assuming different amortization periods over which the Fire District may fund its remaining obligations, all based on a rate of interest of 8% per annum:

Lump sum payment	\$1,344,389
------------------	-------------

Annual payment required if amortized at 8% interest over:

5 years	\$ 324,961
10 years	193,362
15 years	151,583
20 years	132,151

The above table is based on estimated assets using Cost Value and a long-term interest assumption of 8% per annum. If upon termination, it becomes necessary to recalculate the liabilities under the Plan using an interest assumption higher than 8%, the Employer assets used in that calculation would probably have to be reduced to reflect a Market Value basis.

COUNTY OF FRESNOAll Employee Groups Continue But Have Own Contribution Rates

The cost calculations in this Section assume that all employee groups will remain covered under the County Retirement Plan, but will have their own contribution rates. If this is done, each group will stand on its own feet as to its pension obligation under the Fresno County Retirement Plan. The groups in this special study for separate Employer contribution rates are the following:

1. Valley Medical Center (Hospital)
2. County Schools
3. Clovis Memorial Cemetery District
4. Mosquito Abatement District
5. North Central Fire Protection District (Fire District)
6. "County" (all County Plan employees except those covered in Groups 1 to 5 above)

The actuarial assumptions used in calculating the costs were those recommended in Study #2 (8% interest and total salary increases for 6-1/2% per year). Because the turnover rates and rates of service retirement of the Hospital employees are significantly different from the rest of the County General members, special Hospital and Non-Hospital employee withdrawal and service retirement rates were analyzed separately and adopted for use in the study. This is already being done between General member and Safety member categories.

The liabilities for each Employer Unit were calculated based on the above assumptions and the employee classification (General member or Safety member).

As mentioned earlier, we allocated, on an estimated basis, the various assets and reserves of these six employer units covered under the County Retirement Plan. These estimated asset and reserve allocations were based on financial information made available to us by the County Retirement Office as well as certain calculations made by us in connection with this information.

In Table C at the end of this Section, we summarize for each Employer group the number of members, the active members' annual salaries, the members' contributions plus interest, the retired members' annual allowances and the estimated Employer assets.

Using our calculated liabilities and the estimated assets by Employer group, we summarize below the required Employer contribution rates (as percentages of total salaries and annual dollar amounts) if each group stands on its own feet and has its own contribution rate. There will be no change in the member contribution rates.

Summary of Required Contributions by Employer Group*

Employer Unit	Number of Active Members	Annual Salaries	Employer Contribution Rate			Total Annual Employer Contribution
			Basic	C.O.L.	Total	
1. Hospital	1,400	\$23,787,234	7.48%	2.35%	9.83%	\$ 2,338,285
2. County Schools	8	125,940	-	-	-	107,171**
3. Clovis Memorial	3	51,108	16.65	4.53	21.18	10,825
4. Mosquito Abatement	11	221,088	25.42	8.66	34.08	75,347
5. North Central Fire	60	1,480,500	10.24	4.61	14.85	219,854
6. Balance of County	4,047	81,381,345	10.95	3.73	14.68	11,946,781

*Based on actuarial assumptions used in Study #2 (8% interest and 6-1/2% total salary increases).

**Level dollar amount over 10 years.

It should be noted that we have shown no rate of contribution for the County Schools. Instead, we have shown a level dollar contribution to be made over 10 years. This is because there are no new employees entering the County Schools. All new employees are covered under the PERS Retirement Plan rather than the County Plan.

The calculated rates take into account the \$6,000,000 recently transferred out of the Contingency Reserve into the Cost of Living Reserve on behalf of both the Employer and the employees (50-50 basis) but do not reflect the remaining Contingency Reserve amount. The unused portion of the advance C.O.L. contribution made by the Hospital has not been taken into account in calculating its rates. The same funding methods and amortization periods have been used in these calculations as are now being used for the County Retirement Plan as a whole.

EMPLOYEES' RETIREMENT ASSOCIATION

OF THE

COUNTY OF FRESNO

Employer Group Statistical Summary as of April 8, 1982

Employer Unit	Number of Members		Active Members Annual Salaries	Active and Inactive Member Contributions + Interest		Retired Members' Annual Allowances		Estimated Employer Assets****
	Active	Inactive		Basic	COL	Basic	COL	
1. "County"	4,047	287	\$ 81,381,345	\$25,396,610	\$6,795,810	\$6,092,741	\$ 799,006	\$134,161,404
2. Hospital	1,400	32	23,787,234	5,017,120	1,540,013	1,219,927	197,560	27,708,177
3. County Schools	8*	8	125,940	69,626	14,000	32,081	3,270	172,228
4. Clovis Memorial	3		51,108	30,981	6,267	--	--	130,693
5. Mosquito Abatement	11	15	221,088	57,321	20,035	69,774	11,259	91,124
6. North Central Fire	60**	1	1,480,500	683,096	191,914	91,417	12,804	4,138,962
Total County Plan	5,529	320	\$107,047,215	\$31,254,754	\$8,568,039	\$7,505,940	\$1,023,899	\$166,402,588

* All new County Schools' employees are covered under PERS rather than under the County Retirement Plan.

** 6 General members and 54 Safety

*** 2 General members and 10 Safety

**** Includes members' contributions plus interest but excludes Accounting Liabilities of \$1,773,696 and Undistributed Earnings of \$4,507,972.

POSSIBLE MODIFICATION OF BENEFITS

FOR NEW MEMBERS

SECTION VI

EMPLOYEES' RETIREMENT ASSOCIATION
OF THE
COUNTY OF FRESNO

Section 31676.1 and Other Changes

As requested, we have updated our study of the effects on costs, both member and County, if various modifications are made in the benefit and contribution structure of the Retirement System as applied to new employees.

The attached exhibits were developed in order to illustrate the cost reductions if the following changes in the basic and cost-of-living benefits of the System were adopted for new employees:

1. Change in the final average compensation basis from the highest year to the highest three-years;
2. Elimination of the current 3% maximum annual cost-of-living benefit;
3. Change in the benefit formula from Section 31676.12 to Section 31676.1.
4. Members contribute at full rather than half basic rates.

New Safety members would only be affected by changes 1, 2 and 4 shown above.

If it is desired to change benefits for new employees and develop a two-tier Retirement System in Fresno County, the combinations shown in the exhibits are now available in the present 1937 County Act and could be adopted without amendments required by the Legislature.

Exhibits I and II show the estimated effects on the required member and County contribution rates for new employees reflecting each of the possible benefit changes.

In Exhibits III and IV, specific combinations of benefit changes are illustrated showing the estimated annual savings to the County during the transition of present members to new members.

In Exhibits V and VI, we show comparisons of the "present" with the "new" basic service retirement benefits at various retirement ages and for various salary levels at the time of retirement.

We look forward to discussing these modification possibilities and their resulting effects on cost savings to the System when we meet with the Board.

COUNTY OF FRESNO

Estimated Effect on Required Contribution Rates*
If Retirement Plan Modifications Are Adopted for New Members

GENERAL MEMBERS

<u>Proposed Systems</u>	<u>County Contribution Rate</u>		<u>Member Contribution Rate</u>	
	<u>Reduction in Rate as % of Salary</u>		<u>Reduction in Rate as % of Salary</u>	
	<u>C.O.L. Maximum</u>		<u>C.O.L. Maximum</u>	
<u>Member Pays 1/2 Basic Rate**</u>	<u>3%</u>	<u>0%</u>	<u>3%</u>	<u>0%</u>
A. 31676.12; FAS=1 year	-%	1.18%	-%	2.45%
B. 31676.12; FAS=3 years	.44	1.55	.37	2.68
C. 31676.1; FAS=1 year	1.06	2.06	.98	3.02
D. 31676.1; FAS=3 years	1.43	2.37	1.29	3.20

Under the current system, the contribution rates for General members are as follows:

	<u>County Contribution Rate</u>	<u>Member Contribution Rate</u>
Basic	9.75%	3.43%
C.O.L.	<u>3.42</u>	<u>2.45</u>
Total	13.17%	5.88%

*These rate reductions apply to salaries of all new members only.

**If the member pays a full rather than a half basic rate, then there will be additional savings to the County equal to approximately 64% of the members' additional contributions. For example, under the current plan these savings would equal to 3.43% times .64, or 2.20% of total General payroll.

COUNTY OF FRESNO

Estimated Effect on Required Contribution Rates*
If Retirement Plan Modifications Are Adopted for New Members

SAFETY MEMBERS

<u>Proposed Systems</u>	<u>County Contribution Rate</u>		<u>Member Contribution Rate</u>	
	<u>Reduction in Rate as % of Salary</u>		<u>Reduction in Rate as % of Salary</u>	
	<u>C.O.L. Maximum</u>		<u>C.O.L. Maximum</u>	
<u>Member Pays 1/2 Basic Rate**</u>	<u>3%</u>	<u>0%</u>	<u>3%</u>	<u>0%</u>
A. 31664; FAS=1 year	-%	2.07%	-%	2.80%
B. 31664; FAS=3 years	.66	2.60	.42	3.04

Under the current system, the contribution rates for Safety members are as follows:

	<u>County Contribution Rate</u>	<u>Member Contribution Rate</u>
Basic	13.58%	3.93%
C.O.L.	<u>3.42</u>	<u>2.80</u>
Total	17.00%	6.73%

*These rate reductions apply to salaries of all new members only.

**If the member pays full rather than a half basic rate, then there will be additional savings to the County equal to approximately 78% of the members' additional contributions. For example, under the current plan these savings would equal to 3.93% times .78, or 3.07% of total Safety payroll.

COUNTY OF FRESNO

Estimated Effect on County Rates During Transition of Current Members to New Members

GENERAL MEMBERS

Year	Estimated Annual Salaries			County Rate			Estimated Total Savings During the Year
	Current	New	Both	Current	County Rate		Estimated Total Savings During the Year
					New	Both	
0	\$ 95,014,000	\$ 0	\$ 95,014,000	13.17%	12.73%	13.17%	\$ 0
1	92,495,000	8,695,000	101,190,000	13.17	12.73	13.13	40,000
2	89,976,000	17,589,000	107,565,000	13.17	12.73	13.10	75,000
3	87,456,000	26,671,000	114,127,000	13.17	12.73	13.07	114,000
4	84,937,000	35,923,000	120,860,000	13.17	12.73	13.04	157,000
5	82,418,000	45,331,000	127,749,000	13.17	12.73	13.01	204,000
6	80,664,000	54,111,000	134,775,000	13.17	12.73	12.99	243,000
7	78,911,000	63,277,000	142,188,000	13.17	12.73	12.97	284,000
8	77,158,000	72,850,000	150,008,000	13.17	12.73	12.96	315,000
9	75,405,000	82,854,000	158,259,000	13.17	12.73	12.94	364,000
10	73,651,000	93,312,000	166,963,000	13.17	12.73	12.92	417,000
15	65,645,000	152,569,000	218,214,000	13.17	12.73	12.86	676,000
20	56,249,000	228,948,000	285,197,000	13.17	12.73	12.82	998,000
25	43,489,000	329,252,000	372,741,000	13.17	12.73	12.78	1,454,000

Plan B - 31676.12; FAS = 3 years; 3% C.O.L.;			Plan D - 31676.1; FAS = 3 years; 0% C.O.L.;				
Member Pays 1/2 Basic Rate			Member Pays 1/2 Basic Rate				
Year	County Rate			County Rate			Estimated Total Savings During the Year
	Current	New	Both	Current	New	Both	
0	13.17%	12.73%	13.17%	13.17%	10.80%	13.17%	\$ 0
1	13.17	12.73	13.13	13.17	10.80%	12.97	202,000
2	13.17	12.73	13.10	13.17	10.80	12.78	420,000
3	13.17	12.73	13.07	13.17	10.80	12.62	628,000
4	13.17	12.73	13.04	13.17	10.80	12.47	846,000
5	13.17	12.73	13.01	13.17	10.80	12.33	1,073,000
6	13.17	12.73	12.99	13.17	10.80	12.22	1,280,000
7	13.17	12.73	12.97	13.17	10.80	12.12	1,493,000
8	13.17	12.73	12.96	13.17	10.80	12.02	1,725,000
9	13.17	12.73	12.94	13.17	10.80	11.93	1,962,000
10	13.17	12.73	12.92	13.17	10.80	11.85	2,204,000
15	13.17	12.73	12.86	13.17	10.80	11.51	3,622,000
20	13.17	12.73	12.82	13.17	10.80	11.27	5,419,000
25	13.17	12.73	12.78	13.17	10.80	11.08	7,790,000

Assumptions used

1. 8% interest; 6-1/2% salary scale.
2. Total payroll inflationary increases are graded from 6-1/2% to the long term 5-1/2% level over the next 5 years.
3. Total number of active members remains the same.

COUNTY OF FRESNO

Estimated Effect on County Rates During Transition of Current Members to New Members

SAFETY MEMBERS

Year	Estimated Annual Salaries			Plan B - 31664; FAS = 3 years; 3% C.O.L.; Member Pays 1/2 Basic Rate			Plan D - 31664; FAS = 3 years; 0% C.O.L.; Member Pays 1/2 Basic Rate		
	Current	New	Both	County Rate		Estimated Total Savings During the Year	County Rate		Estimated Total Savings During the Year
				Current	New		Current	New	
0	\$ 12,033,000	\$ 0	\$ 12,033,000	17.00%	16.34%	17.00%	17.00%	14.40%	17.00%
1	12,160,000	655,000	12,815,000	17.00	16.34	16.97	17.00	14.40	16.87
2	12,287,000	1,336,000	13,623,000	17.00	16.34	16.94	17.00	14.40	16.75
3	12,413,000	2,041,000	14,454,000	17.00	16.34	16.91	17.00	14.40	16.63
4	12,540,000	2,766,000	15,306,000	17.00	16.34	16.88	17.00	14.40	16.53
5	12,667,000	3,512,000	16,179,000	17.00	16.34	16.86	17.00	14.40	16.44
6	12,802,000	4,267,000	17,069,000	17.00	16.34	16.84	17.00	14.40	16.35
7	12,938,000	5,069,000	18,007,000	17.00	16.34	16.81	17.00	14.40	16.27
8	13,073,000	5,925,000	18,998,000	17.00	16.34	16.79	17.00	14.40	16.19
9	13,209,000	6,834,000	20,043,000	17.00	16.34	16.77	17.00	14.40	16.11
10	13,344,000	7,801,000	21,145,000	17.00	16.34	16.76	17.00	14.40	16.04
15	13,269,000	14,367,000	27,636,000	17.00	16.34	16.66	17.00	14.40	15.65
20	11,034,000	25,085,000	36,119,000	17.00	16.34	16.54	17.00	14.40	15.19
25	6,642,000	40,564,000	47,206,000	17.00	16.34	16.43	17.00	14.40	14.77
									1,053,000

Assumptions used

1. 8% interest; 6-1/2% salary scale.
2. Total payroll inflationary increases are graded from 6-1/2% to the long term 5-1/2% level over the next 5 years.
3. Total number of active members remains the same.

COUNTY OF FRESNO

Comparison of Estimated Monthly Service Retirement Benefits
at Present and Reduced Levels for New Members

GENERAL MEMBERS*

<u>Benefit Provisions</u>	<u>Salary at Retirement</u>	<u>Retirement Age</u>		
		<u>55</u>	<u>62</u>	<u>65</u>
1. Present System (31676.12; FAS = 1 yr)	\$ 900	\$333	\$ 636	\$ 697
	1,000	375	717	786
	1,200	460	880	965
	1,500	588	1,123	1,231
	2,000	800	1,529	1,677
2. 31676.12; FAS = 3 yrs	\$ 900	\$312	\$ 596	\$ 654
	1,000	352	672	737
	1,200	431	825	905
	1,500	551	1,053	1,154
	2,000	750	1,434	1,573
3. 31676.1; FAS = 1 yr	\$ 900	\$280	\$ 508	\$ 648
	1,000	316	573	730
	1,200	388	702	896
	1,500	495	897	1,144
	2,000	674	1,221	1,558
4. 31676.1; FAS = 3 yrs	\$ 900	\$263	\$ 476	\$ 608
	1,000	296	537	685
	1,200	364	658	840
	1,500	464	841	1,073
	2,000	632	1,145	1,461

*Assumes:

- (1) Average entry age of 31.
- (2) Salary change at retirement age of 6-1/2% per year.

COUNTY OF FRESNO

Comparison of Estimated Monthly Service Retirement Benefits
at Present and Reduced Levels for New Members

SAFETY MEMBERS*

<u>Benefit Provisions</u>	<u>Salary at Retirement</u>	<u>Retirement Age</u>		
		<u>50</u>	<u>55</u>	<u>60</u>
1. Present System (31664; FAS = 1 yr)	\$ 900	\$376	\$ 595	\$ 698
	1,000	424	671	787
	1,200	520	823	965
	1,500	664	1,051	1,232
	2,000	904	1,431	1,678
2. 31664; FAS = 3 yrs	\$ 900	353	558	655
	1,000	398	629	738
	1,200	488	772	905
	1,500	623	986	1,155
	2,000	848	1,342	1,574

* Assumes:

- (1) Average entry age of 26.
- (2) Salary change at retirement age of 6-1/2% per year.

COUNTY OF FRESNONew Los Angeles County Type Plan

We were requested by the County to study the effect on Retirement Plan costs if a change is made to permit the election of the new Los Angeles County Type Retirement Plan for General members.

The Los Angeles County Type Plan affects only the General employees, but affects both present members and new members. Both groups would have the right to elect the new Plan provisions and in doing so would give up their present Plan provisions. Such an election would be irrevocable.

We show in Exhibit VII (at the end of this Section) a brief comparison of the major features of your Present County Plan with those of the Los Angeles County Type Plan. In general, the Los Angeles County Type Plan more closely resembles a private pension plan than a public pension plan in that: (1) there are no employee contributions; (2) retirement is aimed at age 65; (3) there is a Social Security offset; (4) there are no monthly disability benefits and no death while active benefits; and, (5) there are no C.O.L. benefits.

Exhibit VIII (at the end of this section) compares the Present County Plan benefit plus Social Security with the Los Angeles County Type Plan benefit plus Social Security at retirement ages 62 and 65 for various salary levels and lengths of service. From Exhibit VIII it can be seen that for long service employees, the Los Angeles County Plan will result in a substantial reduction in benefits from the Present Plan at both age 62 and age 65. It should be noted this exhibit deals with benefits only and does not show the savings of the employees' contributions which also take place.

Because of the very large reduction in benefits if the Los Angeles County Plan is elected, it is essential that present employees and new employees are fully informed before electing to make a change. Each should have figures available to show not only the difference in monthly benefits and the difference in member contributions, but also the present values of the monthly benefit payments under each Plan and the present values of the employees' contributions under each Plan.

Present employees who elect to change will get a reduction in their past benefits already earned and their future benefits that would have been earned. The appeal for the members to change will be the no future contributions feature (more take home pay) and a refund of their contributions already made.

Because of the significant reduction in benefits under the Los Angeles County Type Plan, if large numbers of employees elect the Los Angeles County Plan, there will be sizable cost savings to the County.

Exhibit IX (at the end of the section) shows the estimated savings of the County over the next 25 years if the County provides for the employee election of the Los Angeles County Type Plan and the same percentage of the members elect to make the change as elected in Los Angeles County. There, about 25% of the present General members elected to make the change and about 50% of the new employees also elect the Los Angeles County Type Plan.

In estimating the potential cost savings to the County, we have divided Fresno County's present General members into the following three groups: Group A - members less than age 35 or those over age 35 with less than 5 years of service; Group B - members between ages 35 and 50, with at least 5 years of service; and, Group C - members at least age 50, with at least 5 years of service. To arrive at Los Angeles County's 25% of present employees electing, we have assumed that 35% of Group A, 15% of Group B and 0% of Group C will elect to make the change.

We look forward to discussing with the Board and with other interested parties the results of this part of the study and the possibility of the use of the new Los Angeles County Type Plan to provide for future Retirement Plan cost savings to both the members and the County.

Brief Comparison of Present Fresno County Plan to New L.A. County Plan

General Information on L.A. Plan

1. Applies to General Members only.
2. Subject to employer-employee relations provisions (Memorandum of Understanding)
3. Optional non-contributory retirement plan.
4. Both present employees and future employees have a choice of electing the New L.A. Plan Benefit for all service, along with no employee contributions (past or future).

<u>Plan Provision</u>	<u>Present Fresno County Plan</u>	<u>New L.A. County Plan</u>
1. <u>Service Retirement</u>		
a. Final average salary	1 year	3 years
b. Earliest retirement age	50	55
c. % credit per year*		
(1) Age 60	2.34%	Normal Ret. Benefit x .61
(2) Age 62	2.62	Normal Ret. Benefit x .74
(3) Age 65 (Normal Retirement Age)	2.62	(2% for 1st 35 yrs + 1% for over 35)
d. Social Security Offset	See *	1/35 x Co. Years x P.I.A. at age 65 (not greater than 100% PIA)
e. Maximum normal retirement benefit	100% of salary	(Benefit + <u>P.I.A.</u>) > 70% or 80% F.A.S.
2. <u>Disability Retirement</u>		No disability benefit in L.A. Plan. Special County <u>L.T.D.</u> Benefit <u>outside</u> the Plan
a. Non-Service Connected		
(1) Benefit	Usually 1/3 F.A.S.	1/3 F.A.S. - S.S.
(2) Final average salary (F.A.S.)	1 year	3 years
(3) Requirements	5 years + regular County disability	5 years + S.S. disability
b. Service Connected		
(1) Benefit	50% F.A.S.	50% F.A.S. - S.S. - W.C.
(2) Final average salary (F.A.S.)	1 year	3 years
(3) Requirements	0 years and regular County disability	0 years and S.S. disability
3. <u>Death Benefits (While Active)</u>		No death benefit in L.A. Plan. Special County Death Benefit <u>outside</u> Plan.
a. Ordinary death before eligible	6 months' salary + return of contributions	\$10,000 lump sum
b. Ordinary death after eligible	60% of member's S.R. or Disability Retirement	\$10,000 lump sum
c. Line of duty death	50% F.A.S. to spouse	\$10,000 lump sum
4. <u>Death Benefits (After Retired)</u>		
a. Automatic continuance to spouse		
(1) Service retirement and non-service connected disability	60%	50%
(2) Service connected disability	100%	50%
5. <u>Vesting Requirement</u>	5 years	10 years
6. <u>C.O.L. Benefits</u>	3% maximum	none
7. <u>Employee Contributions</u>	Varies by entry age. Average rate is 5.88% salary	none

*Under Fresno County Plan, the benefit is reduced by 1/3 of the percentage times the first \$350 of monthly final average salary per year of service after January 1, 1956. Under L.A. County Plan, the period the member is disabled under the County Plan is included for service retirement credit.

FRESNO COUNTY 4/8/82

EXHIBIT VIII

PROJECTED SERVICE RETIREMENT BENEFITS
(as a Percentage of Final Salary)

GENERAL MEMBERS

Estimated Projected Service Retirement Benefit								
Present Age	Past Years of Service	Total Service at Retirement	Present Monthly Salary	Present County Plan*	Social Security	Total		Total Proposed Benefit
						Present Benefit	"L.A. Plan" Benefit*	
Retirement at Age 65								
27	0	38	\$1,100	98.0%	44.0%	142.0%	25.3%	69.3%
27	0	38	1,400	98.4	41.2	139.6	28.0	69.2
37	5	33	1,400	84.7	41.9	126.6	23.1	65.0
37	5	33	1,800	85.1	36.3	121.4	28.4	64.7
47	15	33	1,600	83.9	38.8	122.7	26.0	64.8
47	15	33	2,100	84.5	31.8	116.3	32.6	64.4
57	25	33	1,700	82.3	36.7	119.0	28.0	64.7
57	25	33	2,300	83.4	28.6	112.0	35.7	64.3
Retirement At Age 62								
27	0	35	\$1,100	90.1%	34.8%	124.9%	17.0%	51.8%
27	0	35	1,400	90.4	32.6	123.0	19.0	51.6
37	5	30	1,400	76.8	33.1	109.9	15.9	49.0
37	5	30	1,800	77.2	28.8	106.0	19.3	48.1
47	15	30	1,600	75.9	30.8	106.7	17.7	48.5
47	15	30	2,100	76.5	25.0	101.5	22.3	47.3
57	25	30	1,700	74.2	28.9	103.1	19.2	48.1
57	25	30	2,300	75.3	22.2	97.5	24.5	46.7

*Present County Plan has a 3% COL provision. The "L.A. Type" Plan has no COL.

COUNTY OF FRESNOEstimated Effect on County Rates Over Next 25 YearsIf Los Angeles County Type Plan Is AdoptedGENERAL MEMBERS

No. of Years from the Valuation Date	Estimated Annual Salaries			Estimated Effect on County Cost			
	Tier 1 (Present Plan)	Tier 2 (L.A. Type Plan)	Both	County Rate*			Estimated Total Savings During the Year**
				Tier 1	Tier 2	Both	
0	\$ 72,348,000	\$ 22,666,000	\$ 95,014,000	7.06%	1.67%	5.77%	\$ 2,793,000
1	74,632,000	26,558,000	101,190,000	7.06	1.67	5.65	3,096,000
2	77,014,000	30,551,000	107,565,000	7.06	1.67	5.53	3,421,000
3	79,489,000	34,638,000	114,127,000	7.06	1.67	5.42	3,755,000
4	82,051,000	38,809,000	120,860,000	7.06	1.67	5.33	4,085,000
5	84,691,000	43,058,000	127,749,000	7.06	1.67	5.24	4,433,000
6	87,504,000	47,271,000	134,775,000	7.06	1.67	5.17	4,771,000
7	90,510,000	51,678,000	142,188,000	7.06	1.67	5.10	5,133,000
8	93,720,000	56,288,000	150,008,000	7.06	1.67	5.04	5,505,000
9	97,145,000	61,114,000	158,259,000	7.06	1.67	4.98	5,903,000
10	100,798,000	66,165,000	166,963,000	7.06	1.67	4.92	6,328,000
15	123,427,000	94,787,000	218,214,000	7.06	1.67	4.72	8,707,000
20	154,629,000	130,568,000	285,197,000	7.06	1.67	4.59	11,750,000
25	195,670,000	177,071,000	372,741,000	7.06	1.67	4.50	15,692,000

Assumptions used

1. 8% interest; 6-1/2% salary scale.
2. Total number of active members remains the same; total inflationary payroll increases are graded from 6-1/2% to the long term level of 5-1/2% over the next 5 years.
3. 25% of present employees change to new "L.A. Type" Plan and 50% of all future employees elect the new Plan.

*Normal Cost contribution rate only.

**Savings equal to about 1.65% of total General payroll on account of an immediate transfer of current members to the "L.A. Type" Plan are also included.

SECTION VII

POSSIBLE SOCIAL SECURITY TERMINATION

Purpose and Form of the Study

As part of this assignment, we were requested by the County to make an actuarial study on the possible termination from Social Security coverage by Fresno County and its employees. The study has used the statistical and financial information available from the County as to the membership as of April 8, 1982.

The main purposes of this assignment were to analyse the pros and cons of withdrawing from Social Security and to provide the necessary cost and benefit basis for the Board of Supervisors to be able to make an informed decision on the question.

The following topics are covered in this section:

- a. What level of benefits are needed at retirement?
- b. What level do you already have?
- c. How may Social Security coverage be replaced?
- d. What will it cost?
- e. The basis for making the decision.
- f. The pros and cons of terminating Social Security coverage.

What Level of Benefits Is Needed at Retirement?

The usual purpose of a pension plan is to provide employees with an income after retirement, which when combined with other sources of retirement income, will give the employee an "adequate" level of financial support. "Adequate" is defined as the amount of income sufficient to provide a standard of living comparable to what a person was enjoying prior to retirement. In determining this required amount, it is first necessary to estimate those expense items which will either be reduced or eliminated after retirement. These items include income taxes, Social Security taxes, contributions to the County Pension Plan, other work related expenses, personal savings and investments. Because of these reductions and favored tax treatment after retirement, an individual's standard of living at retirement can be provided at a level lower than his pre-retirement income.

<u>Gross Pre-Retirement Income Before Taxes</u>	<u>Percentage of Income Necessary @ Retirement</u>	
	<u>Member Covered Under Social Security*</u>	<u>Member Not Covered Under Social Security</u>
\$15,000	59%	75%
25,000	51	67
35,000	46	62

*Percentages here are lower because Social security retirement benefits received are not taxable.

The income replacement ratios shown above expressed as percentages of pre-retirement gross income for a single person, both with and without Social Security coverage. The salary used in the examples ranges from \$15,000 to \$35,000 and reflects the general salary levels at retirement of the present Fresno County employees. We have assumed all employees will retire at age 62, the present average age at which the General members are retiring in Fresno County.

In connection with the level of benefits needed, it should be noted that it not only is important to start the retirement benefit at a level that supports the member's pre-retirement standard of living, but it is also important (if possible) to provide for some increases in benefits after retirement such that the person's standard of living may be able to be maintained.

In the table below, we show the percentages of income necessary to maintain the pre-retirement standard of living for a member retiring at age 62.

What Benefits Do You Already Have?

A first step in deciding whether or not to terminate Social Security coverage is for the members and the County to know what benefits are presently available to the County employees under the County Plan and under Social Security coverage.

County Plan

We have summarized in Section VIII(i) the major provisions of the Present County Plan. That section describes the service and disability retirement benefits, the death benefits, and the cost of living benefits for both the General and Safety members. The years of service and age requirements are given for each benefit.

Social Security (Major Provisions)

In general, Social Security benefits are paid to workers, their dependents or their survivors. The amount of monthly cash benefits paid by Social Security is based principally upon the following factors:

- a. The average earnings upon which Social Security taxes were paid, excluding earnings for certain years and adjusted for changes over the years in the average earnings of the nation's workers.
- b. The number and kind of family members.
- c. Consumer Price Index changes that occur after becoming eligible for benefits.

Retirement benefits are based on years of covered service and average covered salary. Full benefits are paid at age 65 but are reduced for earlier retirement. The minimum retirement age is 62, with the benefit at that time being 80% of the full benefit. Benefits are slightly increased for each year retirement is delayed beyond age 65. There are certain restrictions on the amounts of earnings after retirement until age 72.

The spouse over age 65 will, in general, receive 50% of the worker's retirement benefit. The spouse can draw benefits starting at age 62. The spouse cannot receive a "double benefit", but is entitled to the greater of the actual Social Security benefit earned by the spouse or the benefit being received as the spouse of the worker. A spouse can draw a benefit at any age if caring for the worker's child who is under age 16.

The definition of being disabled is very stringent and the worker, in general, must be covered under Social Security in 5 of the last 10 years. The worker's disability benefit is the same as the age 65 retirement benefit, if the average earnings on which the benefits are based are the same. The family benefits paid are similar to those described under retirement benefits.

On the death of the active worker, the spouse is entitled to a benefit at any age if there are dependent children of the worker under age 16. If there are no children under age 16, the spouse is entitled to a Social Security benefit starting at age 60. Generally 75% of the member's benefit is payable to the widow and to each eligible child, subject to the maximum family benefit. A lump sum of \$255 is also paid to an eligible beneficiary on the death of the active worker.

Family benefits (payable to a member of the worker's family) are certain percentages of the worker's amounts. The following shows the percentages before applying any early retirement reductions:

- a. Wife or husband - 50% of member's benefit while member is alive.
- b. Child - 50% of member's benefit while member is alive or 75% if member is dead.
- c. Widow or Widower - benefit equal to the member's benefit if widow(er) is over age 65 or 75% if still young and caring for member's child.

The maximum family benefit under retirement or survivor cases is about 175% of the worker's full benefit. In disability cases, the family maximum ranges from 100% of the member's full benefit at very low wage levels to 150% at higher wage levels.

On the death of the retired worker, the amount the widow(er) age 65 receives is changed to the full amount the worker was receiving. Lesser amounts are paid to the widow(er) at age 60 (71.5%) or at age 62 (82.9%).

Social Security benefits are automatically increased each year. This increase reflects the full change in cost-of-living as measured by the Consumer Price Index.

Both the employee and the County pay the same Social Security tax. The Social Security tax rate schedule is shown below, expressed as a percentage of covered salary:

<u>Year</u>	<u>Social Security</u>	<u>Hospital Insurance</u>	<u>Total</u>
1981	5.35%	1.30%	6.65%
1982 -84	5.40	1.30	6.70
1985	5.70	1.35	7.05
1986 -89	5.70	1.45	7.15
1990	6.20	1.45	7.65

The maximum covered salary for 1982 is \$32,400. The maximum taxable earnings base will increase automatically to keep up with increases in the average wages and salaries of American workers.

Medicare benefits are ordinarily payable only to persons age 65 or older, but younger disabled persons can also qualify. The benefits are of two kinds: Part A is a hospital insurance benefit and everyone covered by Social Security receives this benefit. These benefits cover in-patient hospital, skilled nursing home, and home health agency costs.

Part B is a supplemental medical insurance benefit. This covers doctors' costs and many out-patient costs. Those enrolling under the medical insurance plan (Part B) must pay a monthly premium to receive these benefits. To be entitled to Part B benefits, you need not be covered by Social Security.

A person not covered by Social Security (or receiving a dependent's benefit) can now purchase at age 65 Part A coverage for \$113 per month and Part B coverage for \$12.20 per month.

How May Social Security Coverage Be Replaced?

If Fresno County terminates Social Security coverage, the County's present employees will lose certain Social Security benefits. We list below for each type of benefit the possible beneficiaries of future Social Security benefits that would be affected:

1. Retirement or disability benefits -
the member, the spouse, a minor child
2. Survivor benefits (death of active member) -
the widow or widower, the mother of minor child, minor children, dependent parents
3. Hospital insurance (Medicare) -
the member, spouse or widow(er)

Some of the above benefits to dependents run concurrently, that is, they are also received by the dependent while the member is alive. There are certain limitations on maximum family benefits. All benefits have the cost of living feature, without restriction as to maximum.

Some employees will lose all of the above Social Security benefits (generally, if they have less than 10 years of Social Security coverage and continue working for the County. Some employees will lose only part of the benefits. Most Social Security benefits will be smaller than they otherwise would have been had the coverage continued. Most of the employees will lose the possibility of collecting Social Security disability benefits.

Replacement Decisions To Be Made

In general, the "replacement" benefits should be based on the current Social Security provisions. The amounts of benefits and the value of any "residual" Social Security benefits should be taken into account if the program is to be terminated. Those employees who have at least 10 years of service with the County are already "fully covered" under Social Security and will be entitled to receive some service retirement benefit or some survivor's benefit. What will be lost (or be needed to be replaced) is the difference between the Social Security benefit, if continued, and the residual Social Security benefit if terminated. For both equity and cost considerations, all residual Social Security benefits should be taken into account in designing the Replacement Program.

The actual Replacement Program may either be similar to Social Security in as many respects as possible or be a substantially different type of a benefit package.

Source of the Replacement Package

There are at least two sources of possibly replacing benefits lost by terminating Social Security coverage - the 1937 County Act and a Life Insurance Company.

We believe the following possibilities exist for further coverage under the 1937 County Act:

1. Service Retirement Benefits

- a. If the County terminates Social Security coverage, one change is definitely required under the 1937 County Act. The present Social Security coordination benefit formula at the \$350 monthly salary level must be eliminated for both General and Safety members' future service. It is also possible to adopt the full benefit formula for all service (past and future).
- b. The 1937 Act has only one Safety Member basic benefit formula so no change could be made here. However, for the General members, there are other higher basic benefit levels (Sections 31676.13 and 31676.14) which might be considered.
- c. The County now has a 3% maximum C.O.L. benefit. Under the County Act it is possible to increase this maximum to a higher level.

2. Disability Benefits

- a. Step 1c (under Service Retirement) could also be taken for both groups to increase the C.O.L. position of all County Plan disability benefits.

3. Death Benefits

- a. The Survivor Death Benefit Provision under Article 15.5 of the County Law is available to both groups and would help to replace lost Social Security death benefits on the death of active members.
- b. A higher than 3% C.O.L. benefit could be adopted to replace this part of the Social Security C.O.L. benefit.

To the extent that the full replacement of lost Social Security benefits may not be able to be achieved (or could not be afforded) through modification of the County's Present Retirement Plan, an insurance company would also be available as a means to complete the job. The following possibilities exist through an insurance company:

1. Service Retirement Benefits

A possibility permitted the County is to replace some of the lost Social Security benefits by setting up a Deferred Compensation Plan through an insurance company and include all the County's employees in it. If the Plan is properly set up, such employee salary reductions would not be taxable until the money was actually received by the employee. The "deferred" amounts would build up with interest and, depending on the vesting provisions, will ultimately belong to the employees. The employee would receive his or her account balance at the time of terminating County service. In the case of disability, service retirement or death, the account balance could be taken in the form of a monthly payment, rather than as a lump sum, and could provide some of the Social Security monthly benefit replacement needed. Also, if the Deferred Compensation benefit is large enough this method might be used to pay for the Medicare Program coverage at age 65, if the member was not "fully" covered by Social Security at that time.

2. Disability Benefits

A long-term disability program is also available through an insurance company. This would be an especially good method to replace Social Security disability benefits because the disability requirements to receive a benefit could be made as strict as those used by Social Security itself.

3. Death Benefits

Part of the death while active Social Security benefits could be obtained through the Survivors' Death Benefit Provision of Article 15.5. It is also possible to have additional life insurance coverage. The value of such life insurance coverage might be used to either replace the balance of the lost Social Security survivor death benefits or to "offset" some other Social Security benefits unable to be replaced directly.

What Will It Cost To Make the Change?

In order to be able to calculate the effect on County and member costs if any changes are to be made in the Present County Retirement Plan, it is necessary to develop an appropriate base for such costs.

Preliminary to this "Possible Social Security Termination Study", we have completed a cost update of the County's Present Retirement Plan. In that study, based on the experience of the active and retired County members, we have developed various actuarial assumptions appropriate to Fresno County. The assumptions developed are those set forth in Section VIII(ii) of this report and these have been used in this study.

We summarize below the County and member contribution rates necessary for the Present County Plan, reflecting this updated study. These rates provide the cost base from which the financial considerations of the possible termination of Social Security coverage should be studied.

Recommended Present Plan Rates*

<u>County</u>	<u>Members</u>			
	<u>General</u>		<u>Safety</u>	
	<u>Age</u>		<u>Age</u>	
13.60%	25	5.91%	21	6.96%
	35	6.42	25	7.11
	45	7.09	30	7.38

*County rates as a percentage of total salaries; Member rates as a percentage of monthly salary in excess of \$350.

Because the full replacement of all lost or reduced Social Security benefits can not be achieved through the 1937 County Act alone, part of the replaced benefits for service retirement, disability retirement and death would have to be obtained through a life insurance company. In this Section we show "representative" life insurance company cost figures for the various benefits available through this source.

In the Deferred Compensation area, the size of the resulting benefit depends largely on the ability of the insurance company to invest the contributions. The program is to be long term. Note should be taken that the annuity purchase rates a life insurance company quotes are the "current rates" that now hold and these are not guaranteed for all years to come. For each company there will be a large difference between its "current" annuity quotations and its "guaranteed" annuity purchase rates. In the representative cost figures shown, we have used rates mid-way between the current and the guaranteed. Insurance companies still use separate annuity purchase rates for men and women. If the County purchases annuities, it should insist that the purchase rates are on a unisex basis.

The insurance company would write the Deferred Compensation Program such that employee taxes would be deferred. The contributions by the County and by the members could be on either a compulsory or a non-compulsory basis. The County contributions could either be fully or partially vested.

In connection with any Long-Term Disability benefits purchased through a life insurance company, there will be a maximum (ranging between 65% and 75% of salary) put on the total disability benefits received from all sources (County Plan, Social Security, Workers' Compensation, etc.). These maximum restrictions substantially reduce the effective disability coverage that is being provided to the members by the insurance company.

We summarize below the costs to make various changes in the County's Retirement Program, both the 1937 County Act changes and the Insurance Company changes. If more than one change is made in the 1937 County Act benefits, the total costs may be greater than the sum of the individual costs. This is because some benefits are interrelated and one change influences the costs of another.

<u>Possible Changes in Present 1937 County Act Benefits</u>		<u>Cost</u> <u>(% of Salary)</u>
1.	General Members:	
a.	Change Section 31676.12 (Present Modified Formula) to <u>full</u> formula for all service	
	(1) County	.29%
	(2) Member	.46%
b.	Change Section 31676.12 to full formula for service to date and change future service to 31676.14 (a benefit slightly higher than 31676.12)	
	(1) County	.53%
	(2) Member	.33%
c.	Change present <u>actives</u> from 3% C.O.L. maximum to 4%	
	(1) County	.71%
	(2) Member	1.15%
d.	Add Survivor's Allowance under Article 15.5*	
	(1) County	.10%
	(2) Member	.10%

*This benefit only partially replaces Social Security benefits. More complete Social Security replacement can more easily be accomplished using Group Insurance.

2. Safety Members:

- a. Change Section 31664 (Present Modified Formula)
to full formula for all service

(1) County	.29%
(2) Member	.39%

- b. Change present actives from 3% maximum C.O.L. to 4%

(1) County	1.35%
(2) Member	1.33%

- c. Add Survivor's Allowance under Article 15.5*

(1) County	.14%
(2) Member	.14%

*This benefit only partially replaces Social Security benefits. More complete Social Security replacement can more easily be accomplished using Group Insurance.

<u>Possible Addition of Insurance Company Benefits</u>	<u>Cost</u> (% of Salary)
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1. Deferred Compensation*

a. General Members	11.25%
b. Safety Members	11.00%

*Could be voluntary on the part of the employee. Could have less than 100% vesting on the part of the County contributions.

2. Group Life Insurance*

a. General Members	.50%
b. Safety Members	.76%

**Lump sum benefit is a multiple of salary as shown below, depending on the age at death: 9.0 x salary at age 20, decreasing by .1 x salary per age to 8.0 x at age 30, then by .2 x to 5.0 x salary at age 45, then by .3 x to .5 x salary at age 60 and remaining at that level to age 69 for General members. For Safety members benefit stops at .8 x salary at age 59.

3. Long Term Disability Program:***

- | | | |
|----|-----------------|------|
| a. | General Members | .78% |
| b. | Safety Members | .84% |

***Description (see below)

- (1) Benefit is 60% of salary at disability per month, made up of:
 - (a) Contribution of 11.25% for General and 11.00% for Safety members to the Deferred Compensation Plan.
 - (b) Balance to be taken as a monthly allowance, but limited to a total of 75% of salary, at disability, when taking into account disability benefits received from all other sources.
- (2) Disability requirements are as strict as those of Social Security.
- (3) Coverage and benefits stop at age 57 for Safety members and age 62 for General members.

The Basis of Making a Decision

We show below our Proposed Replacement Program if Social Security coverage is to be terminated by the County. This Replacement Package follows closely the specific types of Social Security benefits which will be lost or reduced. You will note we have recommended that large amounts of contributions be put into a Deferred Compensation Program and that only minor portions of the total replacement package come from 1937 County Act changes. This is because in an inflationary environment a Deferred Compensation Program will provide more control on costs than would an increase in benefit formula based on final average salary. Although the need is there for a higher Cost-of-Living maximum than 3%, this is a very costly type of benefit. Again, the Deferred Compensation Program has been suggested because it is almost solely based on investment earnings and these should be higher in an inflationary environment than at other times.

A. Proposed 1937 County Act Changes

1. Full formula for all service under Section 31676.12 for General members and under Section 31664 for Safety members. Both would have a 3% C.O.L.

B. Proposed Insurance Company Benefits

1. Deferred Compensation (100% vested to employee):
 - a. General Members - 11.25% of salary contribution.
 - b. Safety Members - 11.00% of salary contribution.
2. Group Life Insurance:
 - a. General Members - coverage to age 70 (or termination of employment - except by Life Insurance Company qualified disability)
 - b. Safety Members - coverage to age 60 (or termination of employment - except by Life Insurance Company qualified disability).
 - c. Benefit is taken as a lump sum or as an optional selection. The lump sum is a multiple of salary depending on the age at death while an active member or while disabled under the Insurance Company Program and ranging from 9 times at age 20 to one-half at age 70. There is no benefit for Safety members age 60 or over.
 - d. Group Life Insurance premiums are waived to age 70 for General members and to age 60 for Safety members if the member becomes disabled under the Insurance Company Long-Term Disability Program.

3. Disability Replacement - Long-Term Disability Program:

- a. Benefit is 60% of salary at date of disability made up of the following two pieces:
 - (i) Contribution of 11.25% of salary for General members and 11.00% of salary for Safety members at disability is made to the Deferred Compensation Program.
 - (ii) Balance is paid as a monthly allowance. These amounts are limited in total to 75% of salary at disability (when taking into account disability benefits received from all other sources - for example, County Plan or Social Security).
- b. Disability requirements are as strict as those of Social Security.
- c. Disability coverage and disability benefits stop at age 57 for Safety members and age 62 for General members at which time the Deferred Compensation benefit begins.

C. Proposed Medicare Replacement

A source of funds will be built up to buy at age 65 replacement of Medicare coverage for those members not entitled to this coverage from another source.

Level of Benefits - Before and After

In order to compare the total benefit levels under the Proposed Replacement Program (if Social Security coverage is terminated) with those of the Present Benefit Program, we have prepared tables showing projected benefits for service retirement, disability retirement and death, using representative ages, sex, salaries and classification. The present monthly salary bases used reflect your own employee salary statistics.

The tables showing the projected benefit comparisons appear as Table 1 (Service Retirement), Table 2 (Disability Retirement) and Table 3 (Death Benefit).

The projected amounts for Tables 1 and 2 have been expressed as percentages of anticipated final salary. Inflationary salary increases of 5-1/2% per year have been used in the projections. Because your present County benefit has a 3% Cost of Living (C.O.L.) provision, all service and disability benefits have been converted to an "equivalent" 3% C.O.L. basis so that more appropriate comparisons could be made.

In each of the tables we have calculated the ratio of the total new benefit to the total present benefit so that benefit gains or losses could be established more easily. Ratios have been calculated assuming a C.O.L. level of 3% per year. We have also shown what would happen to the comparison ratios if the C.O.L. level that ultimately materializes under Social Security were to be 5% per year rather than 3%.

In Table 1 age 62 has been used as the General members' retirement age and age 57 for the Safety members. Because the minimum age of drawing Social Security benefits on retirement is age 62, the Safety members' age 62 Social Security benefits were reduced actuarially to corresponding age 57 levels.

In Table 2 it should be noted that because of the very strict Social Security disability requirements, it is entirely possible (and maybe even probable) that a member qualifying for a County Plan disability benefit will not be able to qualify for a Social Security disability benefit.

Table 3 shows the projected County Plan and Social Security benefits in the case of the death of the active member. The actual Social Security benefit is a varying amount of monthly benefit depending upon the status of the member's dependents on the date of the member's death. To be able to compare present benefits with possible replacement benefits, the varying monthly amounts have been converted into "equivalent" lump sum values, expressed as multiples of the annual salary at the time of death. The table shows attained age (present age) of the member, sex of member, past years of service, age at death, and present monthly salary. The information on family dependents used in the calculations is that of another county, which has provided us considerable detailed information for a study made for them. We believe the use of this family dependent data is appropriate for use in your County in these projections of Social Security death benefits.

In reviewing these tables, the following observations should be made:

1. Table 1 (Projected Service Retirement Benefits):

- a. This table reflects benefits for the member only. No concurrent benefit to member and spouse under Social Security has been taken into account. No continuance to a spouse on the death of the retired member has been taken into account.
- b. Examples of deferred compensation benefit amounts reflect mid-way between high interest earnings and low interest earnings and may be viewed as "dependable to count on" for comparison purposes.
- c. Based on the 3% C.O.L. level comparisons, most of the cases show increases in total benefits under the Replacement Package. Increases are generally less than 10%.
- d. Based on the 5% C.O.L. level comparisons, the "gains" or increases are less than the 3% basis. The General members and Safety members have some gains and some losses. The General male members and Safety members fare slightly better than the female members.

2. Table 2 (Projected Disability Benefits):

- a. Disability benefits, which will tend to be lost if Social Security coverage is terminated, cannot be completely replaced, even on a single life basis.
- b. On the 3% C.O.L. basis, benefits for all members tend to be reduced about 10% to 20% below present benefits. This is primarily because all Social Security disability coverage is lost five years after Social Security is terminated and because the insurance companies have certain maximums set for the total disability benefit from all sources.
- c. On the 5% C.O.L. basis of comparison, losses range between 20% and 30% and none of these take into account concurrent benefits to spouses or to minor children.

3. Table 3 (Projected Death Benefits):

- a. Under this replacement benefit all members gain, some substantially. This holds for both 3% and 5% C.O.L. levels.
- b. All single members gain here because the group insurance is for all members not just married members (as in Social Security).

The above descriptions took into account single lives (except in the case of death benefits). What happens in connection with concurrent benefits (member and spouse or children together) or in connection with the continuation of the benefit to the spouse on the death of the retired member?

1. General Male or Safety Service Retirement:

Here the spouse of the member loses the most (concurrent benefits or continuance) if the spouse is not employed.

2. Female Service Retirement:

Spouse probably will not lose here unless unemployed.

3. General Male or Safety Disability Retirement:

Spouse loses most if not employed. If employed, probably will not lose. If children, will lose on concurrent benefits.

4. Female Disability Retirement:

There will probably be no loss to the spouse but there will be a loss because of minor children.

PROJECTED SERVICE RETIREMENT BENEFITS
(as a Percentage of Final Salary)

Present Age	Past Years of Service	Total Years at Retirement*	Present Monthly Salary	Projected Benefit (S.S. Continues)			Projected Benefit (S.S. Terminated)			Ratio of New to Present	
				County Plan C.O.L.	Social Security**	Total***	County Plan 3% C.O.L.	Social Security**	L.I. Total***	If C.O.L. Materializes 3% C.O.L. 5% C.O.L.*****	
General Male Members											
27	0	35	\$1,400	90.4%	32.6%	123.0%	91.7%	0%	38.5%	1.06%	.98%
37	5	30	1,800	77.2	28.8	106.0	78.6	0	25.6	.98	.94
47	15	30	2,100	76.5	25.0	101.5	78.6	19.5	14.3	1.11	1.09
57	25	30	2,300	75.3	22.2	97.5	78.6	21.3	4.4	1.07	1.06
General Female Members											
27	0	35	\$1,100	90.1%	34.8%	124.9%	91.7%	0%	32.9%	1.00%	.94%
37	5	30	1,400	76.8	33.1	109.9	78.6	0	21.8	.91	.86
47	15	30	1,600	75.9	30.8	106.7	78.6	24.6	12.2	1.08	1.06
57	25	30	1,700	74.2	28.9	103.1	78.6	28.2	3.8	1.07	1.07
Safety Members*****											
22	0	35	\$1,600	90.6%	25.9%	116.5%	91.7%	0%	29.7%	1.04%	.99%
32	5	30	2,000	77.3	22.6	99.9	78.6	0	19.6	.98	.94
42	15	30	2,300	76.7	20.0	96.7	78.6	13.3	11.0	1.06	1.05
52	25	30	2,500	75.6	17.7	93.3	78.6	15.2	3.4	1.04	1.04

*Retirement age is 62 for General members and 57 for Safety members.

**If spouse, age 62, is not working or entitled to a Social Security benefit in his or her own right, the above Social Security amount should be multiplied by 1.47.

***These are the actual benefits projected to be paid but they are not on the same C.O.L. basis unless the C.O.L. which materializes under Social Security is 3% per year. (The Life Insurance Company Deferred Compensation benefits at retirement age have been converted into an "equivalent" 3% C.O.L. benefit.)

****If a 5% C.O.L. materializes under Social Security, these would be the ratios of the new and present benefits.

*****The Social Security Benefit at age 62 for the Safety Members has been reduced by an early retirement factor to give the appropriate equivalent percentage at age 57. When the member reaches age 62, he will draw the Social Security age 62 benefit.

PROJECTED DISABILITY RETIREMENT BENEFITS
(as a Percentage of Final Salary)

Projected Benefit (S.S. Continues)														Projected Benefit (S.S. Terminated)						Ratio of New to Present					
Present Age	Past Years of Service	Age at Disability	Present Monthly Salary	County Plan 3% C.O.L.			Social Security*	Total**	County Plan 3% C.O.L.			Social Security*	L.I.**			Total**	If C.O.L. Materializes			5% C.O.L.*****					
				C.O.L.	C.O.L.	C.O.L.			To	After	62		To	After	62		To	After	62		To	After	62		
General Male Members																									
25	0	40	\$1,400	33.3%	40.9%	74.2%		33.3%	0%	32.9%	32.7%	66.2%	66.0%	.89%	.89%	.78%	.78%								
35	7	50	1,800	39.6	36.1	75.7		39.6	0	32.9	22.6	72.5	62.2	.96	.82	.87	.75								
45	15	55	2,100	45.0	31.2	76.2		45.0	0	26.3	15.5	71.3	60.5	.94	.79	.87	.74								
General Female Members																									
25	0	40	\$1,100	33.3%	43.7%	77.0%		33.3%	0%	32.9%	32.7%	66.2%	66.0%	.86%	.86%	.75%	.75%								
35	7	50	1,400	39.6	41.8	81.4		39.6	0	32.9	22.6	72.5	62.2	.89	.76	.80	.69								
45	15	55	1,600	45.0	38.5	83.5		45.0	0	26.3	15.5	71.3	60.5	.85	.72	.79	.67								
Safety Members*****																									
25	0	40	\$1,600	50.0%	38.8%	88.8%		50.0%	0%	19.4%	26.4%	69.4%	76.4%	.78%	.86%	.70%	.78%								
35	7	50	2,000	50.0	33.6	83.6		50.0	0	19.4	19.2	69.4	69.2	.83	.83	.77	.76								
45	15	55	2,300	63.4	29.0	92.4		65.5	0	7.4	10.1	72.9	75.6	.79	.82	.74	.77								

*If the member has a child less than age 16, this Social Security percentage factor will be multiplied by 1.50. The maximum family benefit is the lesser of the disabled worker's average indexed monthly earnings or 150% of the member's P.I.A.

**These are the actual benefits projected to be paid but they are not on the same C.O.L. basis unless the C.O.L. which materializes under Social Security is 3% per year.

***These are representative Life Insurance Company L.T.D. benefits "to age 62" (or 57) and Deferred Compensation benefits after age 62 (or 57). For comparison purposes, these benefits have been converted to an "equivalent" 3% C.O.L. benefit.

****If a 5% C.O.L. materializes under Social Security, these would be the ratios of the new and present benefits.

*****This assumes the Safety Member disability is service connected.

PROJECTED DEATH BENEFITS

Present Age	Past Years of Service	Age At Death	Present Monthly Salary	Projected Benefit (S.S. Continues)			Projected Benefit (S.S. Terminated)				Ratio New to Present Lump Sum		
				County Plan 3% C.O.L.*	Social Security**	County Plan 3% C.O.L.*	Social Security	Lump Sum Benefit**					
								Ins.	Deferred Comp.	Total			
General Male Members													
25	0	40	\$1,400	20.0%	5.22x	20.0%	0	6.0x	1.8x	7.80x	1.49%	1.36%	
35	7	50	1,800	23.8	3.12x	23.8	1.42x	3.5x	1.8x	6.72x	2.15	1.97	
45	15	55	2,100	27.0	2.81x	27.0	1.60x	2.0x	1.1x	4.70x	1.67	1.54	
General Female Members													
25	0	40	\$1,100	20.0%	4.70x	20.0%	0	6.0x	1.8x	7.80x	1.66%	1.51%	
35	7	50	1,400	23.8	2.91x	23.8	1.36x	3.5x	1.8x	6.66x	2.29	2.08	
45	15	55	1,600	27.0	4.95x	27.0	1.44x	6.0x	1.1x	4.54x	1.84	1.64	
Safety Members													
25	0	40	\$1,600	50.0%	4.95x	50.0%	0	6.0x	1.8x	7.80x	1.58%	1.43%	
35	7	50	2,000	50.0	2.91x	50.0	1.30x	3.5x	1.8x	6.60x	2.27	2.08	
45	15	55	2,300	63.4	2.45x	65.5	1.46x	2.0x	1.1x	4.56x	1.86	1.71	

* Expressed as a percentage of final salary.

** The Social Security Benefit on the death of an active worker is a varying amount of monthly benefit depending on the number and ages of the dependents and is described below:

- Widow(er) + 1 child less than age 16 = 2 X .750 = 1.500 P.I.A.
- Widow(er) + 2 children less than age 16 = 1.750 P.I.A.
- Widow(er) without any children less than age 16 = .715 P.I.A. beginning at age 60, where P.I.A. = Primary Insurance Amount.

For comparison purposes, the varying monthly amounts of Social Security have been converted into lump sum values of multiples of the annual salary at the time of death. In this conversion the effect of a 3% C.O.L. feature has been taken into account.

*** If a 5% C.O.L. materializes under Social Security, these would be the ratios of the lump sums.

Level of Costs - Before and After

The proposed Social Security contribution rates (Present Law) are set forth below. The factor of "2" indicates these tax rates are paid by both the members and the County.

<u>Year</u>	<u>Total Tax Rate</u>
1982-84	6.70% x 2 = 13.40%
1985	7.05% x 2 = 14.10%
1986-89	7.15% x 2 = 14.30%
1990 and later	7.65% x 2 = 15.30%

Since the termination date (if it takes place) is before January 1, 1985, we have taken the approach that 13.40% of salary is available (if needed) for Social Security replacement benefits. The increases from 13.40% as shown above for years after 1984 indicate there will be savings from this source to both the County and the members. In addition, because of the use of deferred compensation with its deferred tax payments, there will be increased take home pay for the members of about 1½% of salary.

An estimate of the cost of the "Proposed Replacement Program" (if Social Security is terminated) is shown below.

<u>Change</u>	<u>Percentage of Salaries</u>	
	<u>General Members</u>	<u>Safety Members</u>
a. 1937 Act changes	.75%	.68%
b. Deferred Compensation*	11.25	11.00
c. Group Life Insurance	.50	.76
d. Long Term Disability	.78	.84
e. Replace Medicare**	<u>.12</u>	<u>.12</u>
Total	13.40%	13.40%

*100% vested to employees

**In the case of Medicare replacement, this coverage is to be purchased at age 65 for all present members who will not receive this benefit under Social Security, either by already having the 10 years of coverage or because their spouses have earned this benefit under Social Security. It should be noted that for future employees who work with the County through to retirement and are not entitled to this benefit from any other source, the required cost would be .37% of salaries of all members. Therefore, if all future employees are to receive the full Replacement Package, there will be a slight increase in the total cost shown above.

Pros and Cons of Terminating Social Security CoverageGeneral Observations

Before the "pros and cons" of Social Security termination are discussed, it would be most appropriate to look at the possible future amendments to the Social Security Program as it exists today. The kinds of changes in the Program being contemplated are reductions in benefits or delays in receiving them, as well as funding from the General Fund or juggling the Social Security funds now available.

1. To provide a better funding base for Social Security, mandatory coverage is being contemplated for those not now covered by Social Security.
2. It is suggested that full Social Security benefits should not be received at age 65 but at age 68. Present levels of benefits that would have been available at age 62 or age 65 would be substantially reduced if this change is made.
3. One of the main reasons for the poor funding position of Social Security is the present "unlimited" C.O.L. benefit after retirement. Different (and lower) bases are being contemplated for use to measure the changes in C.O.L. from year to year.
4. There appears the need for either a lower level of Social Security benefits or a higher level of Social Security contributions. Because of the extreme political consequences, it may be several years before a specific acceptable solution is found for the problem.

In connection with the possible Social Security termination, it should be noted that Social Security relates to Social Insurance. Here the primary concern is social adequacy, not who pays for what. The payment of Social Security benefits relates to the "need" of the person and not to the value of the taxes paid by him or her or for him or her. Because of this, some persons gain and some lose.

Advantages of Terminating

1. County costs can be reduced by eliminating the future increases in Social Security contributions. Substantial reductions in County costs can only be obtained though if future new employees receive only part of the proposed Replacement Benefits rather than all of it.
2. There will be more take home pay for the employees. This will result from both the elimination of the required future increases in Social Security contribution and the use of the Deferred Compensation Program, which will defer taxes on part of their salaries.
3. The solvency of the present Social Security System is at least questionable unless or until specific action can be taken by the Federal Government to correct it. Such necessary action is politically detrimental and will likely be a long time in coming. The source of funding the Social Security System is the active workers and their number (relative to the number of Social Security beneficiaries) is diminishing. This likely will cause even greater increases in Social Security contribution requirements up ahead.

4. Many changes are now being contemplated in the Social Security System, designed generally to either reduce benefits or to delay the eligibility age for receipt of full benefits. For a long time the proposed changes in Social Security will no doubt reflect both politics and the need to correct the problems. Social Security benefits may end up going down while the required Social Security contribution rates (taxes) are going up. Under the local Replacement Program, such a reduction in promised benefits could not legally be made in California.
5. There will be better control of both the benefit and cost levels of the total County Retirement Program.
6. Many County employees (at least 25% of them) already have enough years with the County to qualify for some Social Security benefits, so while they will lose something on Social Security termination they will at the same time gain more on the Social Security Replacement Package.
7. Under Social Security the low-paid employees are favored over the other employees.
 - The Replacement Program would provide benefits that are in direct proportion to each employee's salary.
8. Because of the Social Insurance concept, many of the young employees will not receive from Social Security as much as they and their employer have contributed into it.
9. Many of the married women will receive benefits from Social Security related to their husbands' benefits rather than related to their own Primary Insurance Amounts. This can lead them to believe that they and their employer have made Social Security contributions but there is no "apparent" benefit being received by them for their contributions paid.
10. The earliest retirement age for the County's members is age 50. Some of them could (if they wanted to) complete their years for qualifying for Social Security benefits after retirement and receive these in addition to their County benefits.
11. Currently, as in most public retirement systems also covered under Social Security, there are criticisms from the Public that the total retirement benefits (from the County and Social Security) are too large relative to pre-retirement take home pay. Terminating from Social Security would permit the County to at least be sure this criticism could not be directed to its new employees (unless they also are to receive the full Replacement Package).
12. Under Social Security there is a penalty depending upon the amount of earnings after retirement. The local program and the Proposed Replacement to Social Security do not have such restrictions.

Disadvantages of Terminating

1. Social Security coverage may soon become mandatory.
2. Once you have terminated Social Security Coverage, you are out for good, so the choice better be right (this disadvantage is at least "questionable" now because of the current topic of possible mandatory Social Security coverage arose). If the

County goes out and then must come back in, the whole Retirement Plan will have to be revamped to take any replacement changes into account. (The use of the proposed Deferred Compensation Program will make any possible revamping much easier.)

3. Part of the cost of Social Security Benefits (for example, the major part of the cost of Part B of Medicare) is already being paid out of General Fund taxes and more of this "external" financing may be up ahead. If this takes place, and the employees terminate Social Security coverage, they will still have to contribute toward any Social Security benefits being supported by the General Fund and receive nothing in return for these contributions.
4. There is no way all of the benefits lost or reduced in terminating Social Security can be replaced directly by another source (for example, concurrent benefits - benefits paid to both the member and the spouse or to the member and the child while both are alive). On an individual employee basis, some benefits will certainly be lost if Social Security is terminated, even with the greatest effort on the part of the Replacement Program. Providing "comparable" Replacement Benefits can take care of the group but that does not guarantee individual equity in the exchange.
5. It is extremely difficult (if not impossible, cost-wise) to replace the unlimited C.O.L. benefit currently in the Social Security Program.
6. Certain favorable features now in Social Security will be lost:
 - a. Members will lose the portability feature and possibly with it the effect of previous Social Security taxes they have already paid into the Social Security System. (The 100% vesting of the Deferred Compensation Program helps to replace this portability feature for future service.)
 - b. The low-paid now gain, relatively, under Social Security and if it is terminated this will eliminate the present advantages to this group.
 - c. Part-time employees, temporary employees and short term non-career employees also have certain advantages under Social Security that they will give up or partially lose under a Replacement Program.
 - d. Unless future Social Security benefits have already been guaranteed (sufficient quarters put in), family benefits will be lost or reduced.
7. The Replacement Benefits take account of the present Social Security Law but young employees, especially, could lose out on possible future benefit improvements in Social Security. (At the moment though, the proposed future changes for Social Security seem to be reductions, not increases.)
8. Any "residual" Social Security benefits (for those already qualified by number of quarters) will be lower than they otherwise would have been because of the "zero Social Security covered salary" years being introduced after termination.
9. Social Security benefits are tax exempt and any kind of a Replacement Program will lead to benefit payments likely to be taxable.

10. If new employees only receive part of the Replacement Program, two County employees will be working side by side, doing the same job but receiving different Retirement Plan benefits. On the other hand, if the new employees receive all of the Replacement Benefits, the possible savings to the County because of terminating Social Security will be substantially reduced.
11. The lack of Social Security coverage within the County could have some effect on the ability of the County to recruit new employees.
12. Bad public relations could result from the decision to terminate Social Security coverage because the County would be doing something private groups are not permitted to do.

Summary and Conclusions

We believe all the information shown in this Section of this report provides a sound basis for the County Board of Supervisors and the County employees to reach a well informed decision as to the answer to the question. We summarize below some of the principal results if Social Security coverage is terminated and a "closely fitting" Replacement Package is adopted.

Summary1. Who Gains and Who Loses?

Based on the 3% or the 5% Cost-of-Living levels, most employees will achieve minor gains financially under service retirement from termination of Social Security coverage. Young single women members will likely lose some if they intend to stay with the County until retirement and do not already have 10 years of Social Security coverage. The young male married members will have some losses resulting from concurrent benefits and continuance of the benefit to the spouse after the death of the retired member. Only minor losses will take place though if the member's wife has been working long enough to be covered by Social Security.

In disability benefits, all members will likely lose at least some benefits. This relates to level of benefits and to benefits to minor children.

No employees should lose on the death benefits and single employees will gain substantially.

2. Size of Possible County Gains (Financial)

The size of the possible gains to the County if Social Security coverage is terminated depends almost solely on the treatment of new employees. If new employees are to receive the full Replacement Package, this will severely limit the County's future savings.

3. Effect of Cost-of-Living Maximums

Comparisons have been made in this report using both 3% and 5% C.O.L. levels. The average Social Security annual cost of living increase over the past seven years (since this provision began) has been about 8.5% per year.

If it turns out that the Social Security law is not changed to use a different measuring base than the Consumer Price Index, the numerical comparisons shown in this report would tend to understate the effect of the reduction in benefits if Social Security is terminated.

It is our opinion that some changes will be made in the manner in which the C.O.L. benefit works so that more control on the cost of this provision can be achieved.

4. Form of Major Replacement Benefit

If Social Security coverage is to be terminated, the use of deferred compensation as the major replacement benefit has some extremely favorable advantages:

- a. Because it relates to future service only, it will provide more help to the younger employees who would tend to lose the most if Social Security benefits are not replaced.
- b. The benefit is based on a fixed percentage of salary contribution and, therefore, the cost is able to be controlled.
- c. The 100% vesting feature is helpful to the short term, part time, or temporary employees.
- d. There will be tax advantages ahead of time and no limit on earnings after retirement tend to offset the lost Social Security tax advantages after retirement.
- e. Because the program is highly investment earnings oriented, this will help offset some of the effect of high inflation levels that might take place in the future.

Conclusion

From a financial point of view, based on this study and the composition of the various employee groups within the County, if termination of Social Security coverage takes place the majority of present County employees will likely gain some financially.

About 46% of the members of all three groups (General males and females and Safety members) will gain slightly. These will be the members who will either have more than 10 years of County service or, counting other service, already have at least 10 years covered under Social Security.

About 42% of the members of all three groups will probably at least hold their own financially if Social Security coverage is terminated. These are the members who will likely eventually terminate from the County and go to work elsewhere and be subsequently covered by Social Security. In the meantime though they would take their Deferred Compensation buildup with them when they terminate.

About 12% of the members will probably lose some if Social Security coverage is terminated. These will be those members now without 10 years of Social Security coverage who will tend to stay with the County until retirement. Within this group of 12% about 3% are married women (who could end up gaining by terminating Social Security coverage if their spouses are covered). There are also some Safety members, (about 2%), who after retirement from the County could go elsewhere to work and put in sufficient time to also be eligible for a Social Security benefit.

Although our report does not answer the question of possible termination of Social Security coverage from a philosophical point of view, we hope that it does provide valuable information to the Board of Supervisors in reaching their decision on this part of the question.

APPENDIX
SECTION VIII

COUNTY OF FRESNO

MAJOR PLAN PROVISIONS OF THE PRESENT SYSTEM

Benefit Sections 31676.12 and 31664
of the 1937 County Act

Briefly summarized below are the major provisions of the County Employees Retirement Law of 1937, as amended through April 8, 1982, and as adopted by your County.

1. Membership

Each person entering County employment becomes a member on the first day of the calendar month after entrance.

2. Return of Contributions

If a member should resign or die before becoming eligible for retirement, his contributions plus interest will be refunded.

3. Death Benefit

Before Retirement

In addition to the return of contributions, a death benefit is payable to the member's beneficiary or estate equal to one month's salary for each completed year of service under the retirement system, based on the final year's average salary, but not to exceed six (6) months' salary.

If a member dies while eligible for service retirement or non-service connected disability, the spouse receives 60% of the allowance that the member would have received for retirement on the day of his death.

If a member dies in the performance of duty, the spouse receives 50% of the member's final average salary.

After Retirement

If the retirement was for service connected disability, 100% of the member's allowance as it was at death is continued to the surviving spouse for life.

If the retirement was for other than service connected disability, 60% of the member's allowance is continued to the spouse for life.

4. Disability Benefit

Members with 5 years of service, regardless of age, are eligible for non-service connected disability. The benefit is 1.8% of final average salary for each year of service. If this benefit does not equal 1/3 of final average salary, the benefit is increased by the same percentage of final average salary for the years which would have been credited to age 62 (age 55 for Safety members), but the total benefit in this case can not be more than 1/3 of final average salary.

If the disability is service connected, the member may retire regardless of length of service, and the benefit is 50% of final average salary.

5. Service Retirement Benefit

General Members

Members with 10 years of service, who have attained the age of 50, are eligible to retire. Members with 30 years of service, regardless of age, are eligible to retire. Retirement is compulsory on the first day of the month following that in which a member reaches the age of 70.

Safety Members

Members with 10 years of service, who have attained the age of 50, are eligible to retire. Members with 20 years of service, regardless of age, are eligible to retire. Retirement is compulsory on the first day of the month following that in which a member reaches the age of 60.

Benefit

The percentage of monthly final average salary per year of service, depending on age at retirement, is illustrated below for representative ages. For members integrated with Social Security, the benefit is reduced by 1/3 of the same percentage times the first \$350 of monthly final average salary per year of service after January 1, 1956.

<u>Age</u>	<u>Miscellaneous</u>	<u>Safety</u>
50	1.34%	2.00%
55	1.77	2.62
60	2.34	2.62
65	2.62	-

Final average salary is based on the highest year.

6. Member Contribution Rates

(a) Basic

Rates are based on the age nearest birthday at entry into the System. The rates are such as to provide an average annuity at age 60 of $1/200$ of final average salary for General members, and at age 50 of $1/200$ of final average for Safety members. For members integrated with Social Security, the contributions payable with respect to the first \$350 of monthly salary are reduced by $1/3$.

(b) Cost-of-Living

Rates are designed to pay for half of the future cost-of-living costs. The maximum increase in retirement allowances is 3% per year. Increases are based on the Cost-of-Living Index for the year ending December 31st.

Member contributions are refundable if the employee terminates from the System.

7. County Contribution Rates

The County rates are actuarially determined to provide for the balance of the basic and cost-of-living contributions needed.

COUNTY OF FRESNOSummary of Assumptions and Funding MethodA. Assumptions

- | | | |
|----|---|---|
| 1. | Valuation Interest Rate | 8% |
| 2. | Post-Retirement Mortality | |
| | (a) Service | |
| | Males | 1971 Group Annuity Mortality Table with no setback (Male) |
| | Females | 1971 Group Annuity Mortality Table with a 1 year setback (Female) |
| | (b) Disability | 1981 Disability Mortality Table |
| | (c) For Employee Contribution Rate Purposes | |
| | General | 1971 Group Annuity Mortality Table with a 4 year setback (Male) |
| | Safety | 1971 Group Annuity Mortality Table with no setback (Male) |
| 3. | Pre-Retirement Mortality | Based upon the Experience Analysis |
| 4. | Withdrawal Rates | Based upon the Experience Analysis |
| 5. | Disability Rates | Based upon the Experience Analysis |
| 6. | Service Retirement Rates | Based upon the Experience Analysis |
| 7. | Salary Scales | Reflecting merit and longevity of approximately 1% plus inflation of 5-1/2% per year for a total of 6-1/2%. The salary increases are graded from 7-1/2% in the first year to the 6-1/2% long term assumption over the next 5 years. |
| 8. | Assets | At Cost Value |

COUNTY OF FRESNO

Summary of Assumptions and Funding Method
(Continued)

B. Funding Method

The County's liability is currently being funded on the Entry Age Normal Method with a Supplemental Present Value. The amortization period for the Supplemental Present Value is 28 years from the April 8, 1982 valuation date.

COUNTY OF FRESNOTotal Annual Salary and Membership DistributionOf Active Non-Hospital General Membersas of April 8, 1982**M A L E**

Present Age	Years of Service							TOTAL
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Over	
19 & Below	3 33,519							3 33,519
20-24	57 785,474	1 11,416						58 796,890
25-29	166 2,778,447	38 704,342						204 3,482,789
30-34	157 3,322,133	168 4,280,150	34 759,837	1 21,765				360 8,383,885
35-39	107 2,434,114	137 3,440,496	101 2,493,392	13 376,125	1 22,467			359 8,766,594
40-44	42 1,039,688	53 1,385,557	54 1,369,441	34 884,657	10 320,210			193 4,999,553
45-49	30 702,575	38 964,749	28 678,651	40 1,014,885	37 1,050,426	10 274,549		183 4,685,835
50-54	19 336,388	21 552,503	37 920,445	25 624,360	25 659,278	19 589,823	6 166,920	152 3,849,717
55-59	11 234,726	10 238,270	22 553,318	20 486,833	13 354,750	14 342,315	15 402,258	105 2,612,470
60-64	8 145,603	14 396,146	12 277,402	9 286,541	3 60,928	3 80,924	2 56,221	51 1,303,765
65-69			2 58,743					2 58,743
70 & Over								
Total	600 11,812,667	480 11,973,629	290 7,111,229	142 3,695,166	89 2,468,059	46 1,287,611	23 625,399	1,670 38,973,760

Average Attained Age 39.25
 Average Service 9.00
 Average Entry Age 30.25

COUNTY OF FRESNOTotal Annual Salary and Membership DistributionOf Active Non-Hospital General Membersas of April 8, 1982**F E M A L E**

Present Age	Years of Service							TOTAL
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Over	
19 & Below	18 182,983							18 182,983
20-24	197 2,446,108	9 118,006						206 2,564,114
25-29	298 4,342,325	80 1,318,561	3 49,694					381 5,710,580
30-34	228 3,528,088	129 2,493,225	56 1,059,508	3 53,984				416 7,134,805
35-39	119 1,824,281	84 1,625,005	55 1,085,693	20 381,663				278 4,916,642
40-44	68 1,076,360	53 921,417	31 557,243	17 348,270	11 189,705	2 32,427		182 3,125,422
45-49	57 800,121	34 603,449	35 633,921	16 306,047	4 94,525	9 146,688		155 2,584,751
50-54	38 490,906	53 884,446	37 706,464	24 458,009	5 76,363	3 44,878	1 20,491	161 2,681,557
55-59	19 293,587	23 405,428	37 628,854	15 258,194	10 179,973	13 218,771	1 30,815	118 2,015,622
60-64	12 156,701	18 320,642	11 178,438	14 251,202	8 161,172	7 148,743	2 31,943	72 1,248,841
65-69		2 40,862		1 18,671	1 28,240			4 87,773
70 & Over								
Total	1,054 15,141,460	485 8,731,041	265 4,899,815	110 2,076,040	39 729,978	34 591,507	4 83,249	1,991 32,253,090
Average Attained Age					36.75			
Average Service					6.25			
Average Entry Age					30.50			

COUNTY OF FRESNOTotal Annual Salary and Membership DistributionOf Active Hospital Membersas of April 8, 1982**MALE**

Present Age	Years of Service							TOTAL
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Over	
19 & Below								
20-24	25 307,473							25 307,473
25-29	55 837,310	10 160,730						65 998,040
30-34	65 1,225,237	34 650,175	6 126,796					105 2,002,208
35-39	19 355,935	18 350,559	13 262,119	1 12,560				51 981,173
40-44	7 95,488	6 134,389	6 111,167	3 58,379	3 44,701	1 20,127		26 464,251
45-49	7 194,630	10 192,039	5 107,059	2 26,368	2 25,900	1 28,344		27 574,340
50-54	8 135,247	4 81,549	4 74,138	1 13,808	3 69,093	7 107,577	2 44,311	29 525,723
55-59	2 37,394	4 75,308	2 37,082	1 17,631	1 13,626	3 63,008	1 28,084	14 272,133
60-64	1 12,950	4 74,163	1 28,995				1 40,098	7 156,206
65-69			1 31,569					1 31,569
70 & Over			1 30,113					1 30,113
Total	189 3,201,664	90 1,718,912	39 809,038	8 128,746	9 153,320	12 219,056	4 112,493	351 6,343,229
Average Attained Age					33.25			
Average Service					6.50			
Average Entry Age					26.75			

COUNTY OF FRESNOTotal Annual Salary and Membership DistributionOf Active Hospital Membersas of April 8, 1982**F E M A L E**

Present Age	Years of Service							TOTAL
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Over	
19 & Below	7 70,461							7 70,461
20-24	113 1,563,948	3 38,304						116 1,602,252
25-29	184 3,019,866	30 548,399	1 13,964					215 3,582,229
30-34	132 2,226,429	42 805,004	15 240,797					189 3,272,230
35-39	78 1,368,637	24 436,815	13 243,657	5 92,731				120 2,141,840
40-44	64 1,056,124	23 410,762	10 191,961	8 162,603	5 77,466			110 1,898,916
45-49	30 487,031	31 493,115	19 373,677	12 263,316	4 80,170	2 45,741		98 1,743,050
50-54	29 410,192	18 278,581	15 255,854	10 175,787	4 72,030	7 125,545	1 14,770	84 1,332,759
55-59	19 280,222	18 307,238	21 319,091	8 135,350	4 86,073	6 120,659	1 39,890	77 1,288,523
60-64	8 121,412	7 123,468	5 67,688	6 90,468	3 44,726	1 23,976		30 471,738
65-69			2 27,928				1 12,144	3 40,072
70 & Over								
Total	664 10,604,322	196 3,441,686	101 1,734,617	49 920,255	20 360,465	16 315,921	3 66,804	1,049 17,444,070
Average Attained Age					37.25			
Average Service					5.50			
Average Entry Age					31.75			

COUNTY OF FRESNOTotal Annual Salary and Membership DistributionOf Active Safety Membersas of April 8, 1982**MALE & FEMALE**

Present Age	Years of Service							TOTAL
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Over	
20-24	26 502,434							26 502,434
25-29	77 1,673,475	23 585,352						100 2,258,827
30-34	44 977,297	58 1,467,946	25 693,431					127 3,138,674
35-39	13 311,599	38 988,175	48 1,346,816	17 536,701				116 3,183,291
40-44	1 24,340	10 270,726	12 333,236	18 528,229	2 64,802			43 1,221,333
45-49		1 32,401	5 136,858	18 527,310	6 187,125			30 883,694
50-54		1 32,895	1 26,368	10 303,668	6 196,408	3 90,260	1 45,897	22 695,496
55 & Over				2 53,360			2 96,032	4 149,392
Total	161 3,489,145	131 3,377,495	91 2,536,709	65 1,949,268	14 448,335	3 90,260	3 141,929	468 12,033,141
Average Attained Age					34.50			
Average Service					8.50			
Average Entry Age					26.00			

COUNTY OF FRESNOSummary of Monthly Allowances Being Paid General Members

<u>Service Retirements</u>	<u>Number</u>	<u>Monthly Allowance</u>		
		<u>Basic</u>	<u>Cost-of-Living</u>	<u>Total</u>
Unmodified	913	\$395,218	\$44,719	\$439,937
Option 1	239	49,541	11,545	61,086
Options 2 & 3	46	10,236	1,982	12,218
Total	<u>1,198</u>	<u>\$454,995</u>	<u>\$58,246</u>	<u>\$513,241</u>
 <u>Disability Retirements</u>				
Unmodified	117	\$ 37,563	\$ 6,253	\$ 43,816
Option 1	17	2,657	576	3,233
Options 2 & 3	2	140	37	177
Total	<u>136</u>	<u>\$ 40,360</u>	<u>\$ 6,866</u>	<u>\$ 47,226</u>
 <u>Beneficiaries</u>				
Total	<u>119</u>	<u>\$ 27,304</u>	<u>\$ 5,471</u>	<u>\$ 32,775</u>
 Grand Total	 <u>1,453</u>	 <u>\$522,659</u>	 <u>\$70,583</u>	 <u>\$593,242</u>

COUNTY OF FRESNOSummary of Monthly Allowances Being Paid Safety Members

<u>Service Retirements</u>	<u>Number</u>	<u>Monthly Allowance</u>		
		<u>Basic</u>	<u>Cost-of-Living</u>	<u>Total</u>
Unmodified	88	\$ 73,725	\$ 9,904	\$ 83,629
Option 1	4	2,566	310	2,876
Options 2 & 3	<u>3</u>	<u>567</u>	<u>170</u>	<u>737</u>
Total	<u>95</u>	<u>\$ 76,858</u>	<u>\$10,384</u>	<u>\$ 87,242</u>
 <u>Disability Retirements</u>				
Unmodified	25	\$ 16,502	\$ 2,606	\$ 19,108
Options 1	2	612	177	789
Options 2 & 3	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	<u>27</u>	<u>\$ 17,114</u>	<u>\$ 2,783</u>	<u>\$ 19,897</u>
 <u>Beneficiaries</u>				
Total	<u>21</u>	<u>\$ 8,864</u>	<u>\$ 1,577</u>	<u>\$ 10,441</u>
 Grand Total	 <u>143</u>	 <u>\$102,836</u>	 <u>\$14,744</u>	 <u>\$117,580</u>

COUNTY OF FRESNO

Non-Hospital General Male Members

Probabilities of Separation Prior to Retirement

Age	Withdrawal	Ordinary Death	Ordinary Disability	Service	Death While Eligible	Duty Death	Duty Disability	Vested Termination
20	.1545	.0002	.0000	.0000	.0000	.0001	.0001	.0010
21	.1455	.0002	.0000	.0000	.0000	.0001	.0001	.0012
22	.1370	.0002	.0000	.0000	.0000	.0001	.0001	.0014
23	.1280	.0002	.0000	.0000	.0000	.0001	.0001	.0016
24	.1190	.0002	.0000	.0000	.0000	.0001	.0001	.0018
25	.1110	.0003	.0001	.0000	.0001	.0001	.0001	.0022
26	.1050	.0003	.0001	.0000	.0001	.0001	.0001	.0030
27	.0990	.0003	.0001	.0000	.0001	.0001	.0001	.0037
28	.0910	.0003	.0001	.0000	.0001	.0001	.0001	.0043
29	.0830	.0003	.0001	.0000	.0001	.0001	.0001	.0050
30	.0760	.0004	.0001	.0000	.0001	.0001	.0001	.0055
31	.0690	.0004	.0001	.0000	.0001	.0001	.0001	.0060
32	.0620	.0004	.0001	.0000	.0001	.0001	.0001	.0065
33	.0575	.0004	.0002	.0000	.0002	.0001	.0001	.0070
34	.0555	.0004	.0002	.0000	.0002	.0001	.0001	.0075
35	.0535	.0005	.0003	.0000	.0002	.0001	.0002	.0080
36	.0520	.0005	.0003	.0000	.0002	.0001	.0002	.0092
37	.0510	.0005	.0003	.0000	.0002	.0001	.0002	.0105
38	.0495	.0005	.0004	.0000	.0002	.0001	.0002	.0117
39	.0475	.0006	.0004	.0000	.0002	.0001	.0002	.0130
40	.0450	.0006	.0005	.0000	.0003	.0001	.0003	.0145
41	.0405	.0006	.0006	.0000	.0003	.0001	.0003	.0155
42	.0355	.0007	.0008	.0000	.0003	.0001	.0003	.0160
43	.0305	.0007	.0010	.0000	.0004	.0001	.0003	.0157
44	.0265	.0008	.0012	.0000	.0004	.0001	.0003	.0155
45	.0215	.0008	.0014	.0000	.0005	.0001	.0004	.0150
46	.0185	.0009	.0016	.0000	.0005	.0001	.0005	.0145
47	.0165	.0010	.0018	.0000	.0006	.0001	.0006	.0140
48	.0155	.0011	.0020	.0000	.0006	.0001	.0007	.0135
49	.0145	.0012	.0022	.0000	.0007	.0001	.0008	.0130
50	.0135	.0013	.0025	.0300	.0008	.0001	.0009	.0125
51	.0130	.0014	.0028	.0320	.0009	.0001	.0010	.0120
52	.0125	.0015	.0031	.0330	.0010	.0002	.0011	.0112
53	.0120	.0016	.0035	.0345	.0011	.0002	.0012	.0105
54	.0110	.0017	.0039	.0360	.0012	.0002	.0013	.0098
55	.0100	.0018	.0043	.0400	.0013	.0002	.0014	.0092
56	.0090	.0019	.0045	.0450	.0014	.0002	.0016	.0085
57	.0080	.0020	.0047	.0500	.0015	.0002	.0017	.0080
58	.0070	.0021	.0049	.0650	.0016	.0002	.0019	.0076
59	.0060	.0022	.0051	.0800	.0017	.0003	.0020	.0073
60	.0045	.0024	.0053	.1250	.0018	.0003	.0021	.0070
61	.0035	.0026	.0054	.1600	.0019	.0003	.0021	.0067
62	.0025	.0028	.0055	.4000	.0020	.0003	.0022	.0064
63	.0015	.0030	.0056	.2000	.0022	.0003	.0023	.0060
64	.0005	.0032	.0057	.2250	.0024	.0004	.0024	.0055
65	.0000	.0034	.0000	.3500	.0027	.0004	.0000	.0050
66	.0000	.0036	.0000	.2650	.0030	.0004	.0000	.0000
67	.0000	.0038	.0000	.3000	.0034	.0004	.0000	.0000
68	.0000	.0040	.0000	.5000	.0039	.0004	.0000	.0000
69	.0000	.0042	.0000	.7500	.0045	.0004	.0000	.0000
70	.0000	.0000	.0000	1.0000	.0000	.0000	.0000	.0000

COUNTY OF FRESNO

Non-Hospital General Female Members

Probabilities of Separation Prior to Retirement

Age	Withdrawal	Ordinary Death	Ordinary Disability	Service	Death While Eligible	Duty Death	Duty Disability	Vested Termination
20	.2230	.0001	.0000	.0000	.0000	.0000	.0001	.0012
21	.2140	.0001	.0000	.0000	.0000	.0000	.0001	.0016
22	.2050	.0001	.0000	.0000	.0000	.0000	.0001	.0020
23	.1960	.0001	.0000	.0000	.0000	.0000	.0001	.0024
24	.1860	.0001	.0000	.0000	.0000	.0000	.0001	.0028
25	.1750	.0002	.0001	.0000	.0001	.0000	.0001	.0032
26	.1630	.0002	.0001	.0000	.0001	.0000	.0001	.0038
27	.1510	.0002	.0001	.0000	.0001	.0000	.0001	.0044
28	.1400	.0002	.0001	.0000	.0001	.0000	.0001	.0050
29	.1290	.0003	.0001	.0000	.0001	.0000	.0001	.0056
30	.1180	.0003	.0001	.0000	.0001	.0000	.0001	.0059
31	.1070	.0003	.0001	.0000	.0001	.0000	.0001	.0062
32	.0970	.0003	.0002	.0000	.0001	.0000	.0001	.0065
33	.0880	.0004	.0002	.0000	.0001	.0000	.0001	.0070
34	.0830	.0004	.0002	.0000	.0001	.0000	.0001	.0075
35	.0790	.0004	.0003	.0000	.0001	.0000	.0001	.0080
36	.0751	.0005	.0003	.0000	.0001	.0000	.0001	.0085
37	.0710	.0005	.0004	.0000	.0001	.0000	.0001	.0090
38	.0670	.0005	.0004	.0000	.0001	.0000	.0001	.0100
39	.0630	.0005	.0005	.0000	.0001	.0000	.0001	.0110
40	.0590	.0006	.0005	.0000	.0001	.0000	.0001	.0120
41	.0550	.0006	.0006	.0000	.0001	.0000	.0001	.0128
42	.0510	.0006	.0007	.0000	.0001	.0000	.0001	.0135
43	.0470	.0007	.0008	.0000	.0001	.0000	.0001	.0130
44	.0425	.0007	.0009	.0000	.0001	.0000	.0001	.0124
45	.0380	.0007	.0010	.0000	.0002	.0000	.0001	.0118
46	.0345	.0008	.0011	.0000	.0002	.0000	.0002	.0110
47	.0315	.0008	.0012	.0000	.0002	.0000	.0002	.0100
48	.0290	.0009	.0013	.0000	.0002	.0000	.0002	.0090
49	.0265	.0009	.0014	.0000	.0003	.0000	.0002	.0080
50	.0245	.0010	.0015	.0185	.0003	.0000	.0003	.0075
51	.0230	.0010	.0016	.0185	.0003	.0000	.0003	.0070
52	.0215	.0011	.0017	.0185	.0004	.0000	.0003	.0065
53	.0205	.0011	.0018	.0200	.0004	.0000	.0003	.0060
54	.0195	.0012	.0020	.0250	.0004	.0000	.0004	.0055
55	.0180	.0012	.0022	.0350	.0004	.0000	.0004	.0053
56	.0175	.0013	.0024	.0500	.0005	.0000	.0005	.0051
57	.0160	.0014	.0026	.0650	.0005	.0000	.0005	.0049
58	.0140	.0015	.0028	.0825	.0005	.0000	.0006	.0047
59	.0120	.0016	.0030	.1050	.0006	.0000	.0006	.0045
60	.0100	.0018	.0032	.1100	.0006	.0000	.0006	.0043
61	.0080	.0019	.0034	.1600	.0006	.0000	.0007	.0041
62	.0060	.0020	.0036	.3000	.0007	.0000	.0007	.0039
63	.0040	.0021	.0038	.1700	.0007	.0000	.0008	.0037
64	.0010	.0022	.0040	.2150	.0007	.0000	.0008	.0035
65	.0000	.0024	.0000	.5000	.0008	.0000	.0000	.0035
66	.0000	.0025	.0000	.2900	.0008	.0000	.0000	.0000
67	.0000	.0026	.0000	.3400	.0008	.0000	.0000	.0000
68	.0000	.0027	.0000	.6000	.0009	.0000	.0000	.0000
69	.0000	.0028	.0000	.8000	.0009	.0000	.0000	.0000
70	.0000	.0000	.0000	1.0000	.0000	.0000	.0000	.0000

COUNTY OF FRESNO

Hospital Male Members

Probabilities of Separation Prior to Retirement

Age	Withdrawal	Ordinary Death	Ordinary Disability	Service	Death While Eligible	Duty Death	Duty Disability	Vested Termination
20	.2780	.0002	.0000	.0000	.0000	.0001	.0001	.0010
21	.2620	.0002	.0000	.0000	.0000	.0001	.0001	.0012
22	.2470	.0002	.0000	.0000	.0000	.0001	.0001	.0014
23	.2330	.0002	.0000	.0000	.0000	.0001	.0001	.0016
24	.2200	.0002	.0000	.0000	.0000	.0001	.0001	.0018
25	.2070	.0003	.0001	.0000	.0001	.0001	.0001	.0022
26	.1940	.0003	.0001	.0000	.0001	.0001	.0001	.0030
27	.1820	.0003	.0001	.0000	.0001	.0001	.0001	.0037
28	.1700	.0003	.0001	.0000	.0001	.0001	.0001	.0043
29	.1580	.0003	.0001	.0000	.0001	.0001	.0001	.0050
30	.1460	.0004	.0001	.0000	.0001	.0001	.0001	.0055
31	.1340	.0004	.0001	.0000	.0001	.0001	.0001	.0060
32	.1230	.0004	.0001	.0000	.0001	.0001	.0001	.0065
33	.1130	.0004	.0002	.0000	.0002	.0001	.0001	.0070
34	.1040	.0004	.0002	.0000	.0002	.0001	.0001	.0075
35	.0970	.0005	.0003	.0000	.0002	.0001	.0002	.0080
36	.0930	.0005	.0003	.0000	.0002	.0001	.0002	.0092
37	.0900	.0005	.0003	.0000	.0002	.0001	.0002	.0105
38	.0860	.0005	.0004	.0000	.0002	.0001	.0002	.0117
39	.0820	.0006	.0004	.0000	.0002	.0001	.0002	.0130
40	.0760	.0006	.0005	.0000	.0003	.0001	.0003	.0145
41	.0700	.0006	.0006	.0000	.0003	.0001	.0003	.0155
42	.0630	.0007	.0008	.0000	.0003	.0001	.0003	.0160
43	.0510	.0007	.0010	.0000	.0004	.0001	.0003	.0157
44	.0430	.0008	.0012	.0000	.0004	.0001	.0003	.0155
45	.0360	.0008	.0014	.0000	.0005	.0001	.0004	.0150
46	.0330	.0009	.0016	.0000	.0005	.0001	.0005	.0145
47	.0300	.0010	.0018	.0000	.0006	.0001	.0006	.0140
48	.0275	.0011	.0020	.0000	.0006	.0001	.0007	.0135
49	.0255	.0012	.0022	.0000	.0007	.0001	.0008	.0130
50	.0240	.0013	.0025	.0300	.0008	.0001	.0009	.0125
51	.0220	.0014	.0028	.0320	.0009	.0001	.0010	.0120
52	.0200	.0015	.0031	.0330	.0010	.0002	.0011	.0112
53	.0180	.0016	.0035	.0345	.0011	.0002	.0012	.0105
54	.0160	.0017	.0039	.0360	.0012	.0002	.0013	.0098
55	.0140	.0018	.0043	.0400	.0013	.0002	.0014	.0092
56	.0120	.0019	.0045	.0450	.0014	.0002	.0016	.0085
57	.0100	.0020	.0047	.0500	.0015	.0002	.0017	.0080
58	.0085	.0021	.0049	.0650	.0016	.0002	.0019	.0076
59	.0065	.0022	.0051	.0800	.0017	.0003	.0020	.0073
60	.0050	.0024	.0053	.1250	.0018	.0003	.0021	.0070
61	.0040	.0026	.0054	.1600	.0019	.0003	.0021	.0067
62	.0030	.0028	.0055	.4000	.0020	.0003	.0022	.0064
63	.0025	.0030	.0056	.2000	.0022	.0003	.0023	.0060
64	.0020	.0032	.0057	.2250	.0024	.0004	.0024	.0055
65	.0000	.0034	.0000	.3500	.0027	.0004	.0000	.0050
66	.0000	.0036	.0000	.2650	.0030	.0004	.0000	.0000
67	.0000	.0038	.0000	.3000	.0034	.0004	.0000	.0000
68	.0000	.0040	.0000	.5000	.0039	.0004	.0000	.0000
69	.0000	.0042	.0000	.7500	.0045	.0004	.0000	.0000
70	.0000	.0000	.0000	1.0000	.0000	.0000	.0000	.0000

COUNTY OF FRESNO

Hospital Female Members

Probabilities of Separation Prior to Retirement

Age	Withdrawal	Ordinary Death	Ordinary Disability	Service	Death While Eligible	Duty Death	Duty Disability	Vested Termination
20	.3120	.0001	.0000	.0000	.0000	.0000	.0001	.0012
21	.2995	.0001	.0000	.0000	.0000	.0000	.0001	.0016
22	.2870	.0001	.0000	.0000	.0000	.0000	.0001	.0020
23	.2745	.0001	.0000	.0000	.0000	.0000	.0001	.0024
24	.2620	.0001	.0000	.0000	.0000	.0000	.0001	.0028
25	.2495	.0002	.0001	.0000	.0001	.0000	.0001	.0032
26	.2365	.0002	.0001	.0000	.0001	.0000	.0001	.0038
27	.2230	.0002	.0001	.0000	.0001	.0000	.0001	.0044
28	.2075	.0002	.0001	.0000	.0001	.0000	.0001	.0050
29	.1875	.0003	.0001	.0000	.0001	.0000	.0001	.0056
30	.1700	.0003	.0001	.0000	.0001	.0000	.0001	.0059
31	.1500	.0003	.0001	.0000	.0001	.0000	.0001	.0062
32	.1325	.0003	.0002	.0000	.0001	.0000	.0001	.0065
33	.1200	.0004	.0002	.0000	.0001	.0000	.0001	.0070
34	.1125	.0004	.0002	.0000	.0001	.0000	.0001	.0075
35	.1075	.0004	.0003	.0000	.0001	.0000	.0001	.0080
36	.1035	.0005	.0003	.0000	.0001	.0000	.0001	.0085
37	.0995	.0005	.0004	.0000	.0001	.0000	.0001	.0090
38	.0950	.0005	.0004	.0000	.0001	.0000	.0001	.0100
39	.0890	.0005	.0005	.0000	.0001	.0000	.0001	.0110
40	.0830	.0006	.0005	.0000	.0001	.0000	.0001	.0120
41	.0770	.0006	.0006	.0000	.0001	.0000	.0001	.0128
42	.0710	.0006	.0007	.0000	.0001	.0000	.0001	.0135
43	.0655	.0007	.0008	.0000	.0001	.0000	.0001	.0130
44	.0600	.0007	.0009	.0000	.0001	.0000	.0001	.0124
45	.0535	.0007	.0010	.0000	.0002	.0000	.0001	.0118
46	.0470	.0008	.0011	.0000	.0002	.0000	.0002	.0110
47	.0410	.0008	.0012	.0000	.0002	.0000	.0002	.0100
48	.0365	.0009	.0013	.0000	.0002	.0000	.0002	.0090
49	.0330	.0009	.0014	.0000	.0003	.0000	.0002	.0080
50	.0305	.0010	.0015	.0120	.0003	.0000	.0003	.0075
51	.0290	.0010	.0016	.0120	.0003	.0000	.0003	.0070
52	.0275	.0011	.0017	.0120	.0004	.0000	.0003	.0065
53	.0260	.0011	.0018	.0135	.0004	.0000	.0003	.0060
54	.0240	.0012	.0020	.0160	.0004	.0000	.0004	.0055
55	.0235	.0012	.0022	.0225	.0004	.0000	.0004	.0053
56	.0220	.0013	.0024	.0325	.0005	.0000	.0005	.0051
57	.0200	.0014	.0026	.0425	.0005	.0000	.0005	.0049
58	.0175	.0015	.0028	.0525	.0005	.0000	.0006	.0047
59	.0150	.0016	.0030	.0650	.0006	.0000	.0006	.0045
60	.0125	.0018	.0032	.0825	.0006	.0000	.0006	.0043
61	.0095	.0019	.0034	.1000	.0006	.0000	.0007	.0041
62	.0070	.0020	.0036	.1900	.0007	.0000	.0007	.0039
63	.0050	.0021	.0038	.1100	.0007	.0000	.0008	.0037
64	.0030	.0022	.0040	.1350	.0007	.0000	.0008	.0035
65	.0000	.0024	.0000	.5000	.0008	.0000	.0000	.0035
66	.0000	.0025	.0000	.2900	.0008	.0000	.0000	.0000
67	.0000	.0026	.0000	.3400	.0008	.0000	.0000	.0000
68	.0000	.0027	.0000	.6000	.0009	.0000	.0000	.0000
69	.0000	.0028	.0000	.8000	.0009	.0000	.0000	.0000
70	.0000	.0000	.0000	1.0000	.0000	.0000	.0000	.0000

COUNTY OF FRESNO

Safety Members

Probabilities of Separation Prior to Retirement

<u>Age</u>	<u>Withdrawal</u>	<u>Ordinary Death</u>	<u>Ordinary Disability</u>	<u>Service</u>	<u>Death While Eligible</u>	<u>Duty Death</u>	<u>Duty Disability</u>	<u>Vested Termination</u>
20	.0810	.0003	.0000	.0000	.0000	.0002	.0005	.0010
21	.0780	.0003	.0000	.0000	.0000	.0002	.0005	.0011
22	.0750	.0003	.0000	.0000	.0000	.0002	.0005	.0012
23	.0720	.0003	.0000	.0000	.0000	.0002	.0006	.0013
24	.0690	.0003	.0000	.0000	.0000	.0002	.0007	.0014
25	.0670	.0004	.0000	.0000	.0001	.0003	.0007	.0015
26	.0650	.0004	.0000	.0000	.0001	.0003	.0008	.0017
27	.0630	.0004	.0000	.0000	.0002	.0003	.0008	.0019
28	.0600	.0004	.0000	.0000	.0002	.0003	.0009	.0021
29	.0560	.0004	.0000	.0000	.0002	.0003	.0010	.0023
30	.0520	.0005	.0000	.0000	.0002	.0004	.0010	.0025
31	.0470	.0005	.0000	.0000	.0002	.0004	.0011	.0027
32	.0410	.0005	.0000	.0000	.0002	.0004	.0013	.0030
33	.0350	.0005	.0000	.0000	.0002	.0004	.0015	.0033
34	.0310	.0005	.0000	.0000	.0002	.0004	.0017	.0036
35	.0280	.0006	.0000	.0000	.0002	.0005	.0019	.0039
36	.0260	.0006	.0000	.0000	.0002	.0005	.0021	.0042
37	.0240	.0006	.0000	.0000	.0002	.0005	.0023	.0045
38	.0220	.0007	.0000	.0000	.0002	.0005	.0025	.0048
39	.0200	.0007	.0000	.0000	.0002	.0005	.0029	.0051
40	.0190	.0008	.0000	.0000	.0003	.0006	.0032	.0048
41	.0180	.0008	.0000	.0000	.0003	.0006	.0036	.0045
42	.0170	.0009	.0000	.0000	.0003	.0006	.0039	.0042
43	.0160	.0009	.0000	.0000	.0003	.0007	.0043	.0039
44	.0150	.0010	.0000	.0000	.0003	.0007	.0047	.0036
45	.0130	.0010	.0000	.0000	.0004	.0008	.0053	.0033
46	.0110	.0011	.0000	.0000	.0004	.0008	.0058	.0030
47	.0090	.0012	.0000	.0000	.0005	.0009	.0065	.0027
48	.0070	.0013	.0000	.0000	.0006	.0009	.0072	.0024
49	.0050	.0014	.0000	.0000	.0007	.0010	.0080	.0023
50	.0000	.0015	.0000	.1200	.0008	.0010	.0088	.0020
51	.0000	.0016	.0000	.1100	.0009	.0011	.0096	.0000
52	.0000	.0017	.0000	.1200	.0010	.0012	.0104	.0000
53	.0000	.0018	.0000	.1300	.0011	.0013	.0112	.0000
54	.0000	.0019	.0000	.1400	.0012	.0013	.0120	.0000
55	.0000	.0020	.0000	.1650	.0013	.0014	.0127	.0000
56	.0000	.0021	.0000	.2000	.0014	.0015	.0135	.0000
57	.0000	.0022	.0000	.2500	.0015	.0016	.0143	.0000
58	.0000	.0023	.0000	.3000	.0016	.0017	.0151	.0000
59	.0000	.0024	.0000	.5000	.0017	.0018	.0159	.0000
60	.0000	.0000	.0000	1.0000	.0000	.0000	.0000	.0000

COUNTY OF FRESNO

Member Contribution Rates*

General - Section 31676.12

Entry Age	Basic		C.O.L.**		Basic and C.O.L.	
	First \$350 of Monthly Compen- sation	Excess of Monthly Compen- sation over \$350	First \$350 of Monthly Compen- sation	Excess of Monthly Compen- sation over \$350	First \$350 of Monthly Compen- sation	Excess of Monthly Compen- sation over \$350
16	2.26%	3.39%	1.61%	2.42%	3.87%	5.81%
17	2.26	3.39	1.61	2.42	3.87	5.81
18	2.26	3.39	1.61	2.42	3.87	5.81
19	2.26	3.39	1.61	2.42	3.87	5.81
20	2.26	3.39	1.61	2.42	3.87	5.81
21	2.26	3.39	1.61	2.42	3.87	5.81
22	2.27	3.40	1.61	2.42	3.88	5.82
23	2.27	3.41	1.62	2.43	3.89	5.84
24	2.29	3.43	1.63	2.45	3.92	5.88
25	2.30	3.45	1.64	2.46	3.94	5.91
26	2.31	3.47	1.65	2.47	3.96	5.94
27	2.33	3.49	1.66	2.49	3.99	5.98
28	2.35	3.52	1.67	2.51	4.02	6.03
29	2.37	3.55	1.69	2.53	4.06	6.08
30	2.39	3.58	1.70	2.55	4.09	6.13
31	2.41	3.61	1.71	2.57	4.12	6.18
32	2.43	3.64	1.73	2.60	4.16	6.24
33	2.45	3.68	1.75	2.62	4.20	6.30
34	2.48	3.72	1.77	2.65	4.25	6.37
35	2.50	3.75	1.78	2.67	4.28	6.42
36	2.53	3.79	1.80	2.70	4.33	6.49
37	2.55	3.83	1.82	2.73	4.37	6.56
38	2.58	3.87	1.84	2.76	4.42	6.63
39	2.60	3.90	1.85	2.78	4.45	6.68
40	2.63	3.94	1.87	2.81	4.50	6.75
41	2.65	3.98	1.89	2.84	4.54	6.82
42	2.68	4.02	1.91	2.87	4.59	6.89
43	2.71	4.06	1.93	2.90	4.64	6.96
44	2.73	4.10	1.95	2.92	4.68	7.02
45	2.76	4.14	1.97	2.95	4.73	7.09
46	2.79	4.18	1.99	2.98	4.78	7.16
47	2.81	4.22	2.01	3.01	4.82	7.23
48	2.84	4.26	2.03	3.04	4.87	7.30
49	2.87	4.30	2.05	3.07	4.92	7.37
50	2.89	4.34	2.06	3.09	4.95	7.43
51	2.92	4.38	2.08	3.12	5.00	7.50
52	2.95	4.42	2.10	3.15	5.05	7.57
53	2.97	4.46	2.12	3.18	5.09	7.64
54	3.00	4.50	2.14	3.21	5.14	7.71
55	3.03	4.55	2.16	3.24	5.19	7.79
56	3.06	4.59	2.18	3.27	5.24	7.86
57	3.09	4.63	2.20	3.30	5.29	7.93
58	3.11	4.67	2.22	3.33	5.33	8.00
59 & Over	3.14	4.71	2.24	3.36	5.38	8.07

* As a percentage of salary (half contribution rates); based upon 8% interest and 6-1/2% salary scale assumptions.

**71.31% of basic half contribution rates.

COUNTY OF FRESNO

Member Contribution Rates*

Entry Age	Safety - Section 31664					
	Basic		C.O.L.**		Basic and C.O.L.	
	First \$350 of Monthly Compen- sation	Excess of Monthly Compen- sation over \$350	First \$350 of Monthly Compen- sation	Excess of Monthly Compen- sation over \$350	First \$350 of Monthly Compen- sation	Excess of Monthly Compen- sation over \$350
21	2.71%	4.06%	1.93%	2.90%	4.64%	6.96%
22	2.72	4.08	1.94	2.91	4.66	6.99
23	2.73	4.10	1.95	2.92	4.68	7.02
24	2.75	4.13	1.97	2.95	4.72	7.08
25	2.77	4.15	1.97	2.96	4.74	7.11
26	2.79	4.18	1.99	2.98	4.78	7.16
27	2.81	4.21	2.00	3.00	4.81	7.21
28	2.83	4.24	2.01	3.02	4.84	7.26
29	2.85	4.28	2.03	3.05	4.88	7.33
30	2.87	4.31	2.05	3.07	4.92	7.38
31	2.89	4.34	2.06	3.09	4.95	7.43
32	2.92	4.38	2.08	3.12	5.00	7.50
33	2.95	4.42	2.10	3.15	5.05	7.57
34	2.97	4.46	2.12	3.18	5.09	7.64
35	3.00	4.50	2.14	3.21	5.14	7.71

*As a percentage of salary (half contribution rates); based upon 8% interest and 6-1/2% salary scale assumptions.

**71.31 % of basic half contribution rates.

COUNTY OF FRESNO
ACCOUNTING BALANCE SHEET

As of April 8, 1982

ASSETS

1.	Cash	\$ 2,426,819
2.	Contributions receivable	927,241
3.	Securities owned (cost basis)	166,005,865
4.	Accrued Interest	3,303,839
5.	Other receivables	<u>20,492</u>
6.	Total Assets	<u>\$172,684,256</u>

LIABILITIES

7.	Members' deposit reserve		
	a. Normal contributions	\$31,254,753	
	b. Cost-of-living contributions	<u>8,568,039</u>	\$ 39,822,792
8.	Current service advance reserve		27,832,892
9.	Current service pension reserve		62,680,581
10.	Annuity reserve		12,592,915
11.	Survivors' death benefit reserve		1,650,263
12.	Cost-of-living reserve		15,823,145
13.	Investment contingency reserve		10,507,972*
14.	Miscellaneous liabilities		
	a. Valley Medical Center		
	Prepaid Contributions		1,461,537
	b. Other		<u>312,159</u>
15.	Total Liabilities		<u>\$172,684,256</u>

*Before the \$6,000,000 transfer for Cost-of-Living.

COUNTY OF FRESNO

Ratio of Current Compensation to Compensation

Anticipated at Age 70 for General Members and

Age 60 For Safety Members

Age	GENERAL MEMBERS			SAFETY MEMBERS		
	Study #1	Study #2	Study #3	Study #1	Study #2	Study #3
20	.070	.039	.031	.130	.081	.067
21	.078	.043	.034	.140	.088	.073
22	.085	.048	.038	.150	.095	.080
23	.093	.053	.042	.160	.103	.086
24	.100	.058	.047	.170	.111	.093
25	.108	.063	.051	.181	.119	.101
26	.116	.069	.056	.191	.127	.109
27	.124	.075	.061	.202	.136	.117
28	.133	.081	.066	.214	.146	.125
29	.142	.087	.072	.226	.156	.135
30	.150	.093	.077	.238	.167	.145
31	.160	.100	.083	.252	.178	.155
32	.169	.108	.090	.265	.190	.166
33	.178	.114	.096	.280	.203	.178
34	.186	.121	.102	.294	.216	.191
35	.195	.128	.109	.310	.230	.204
36	.204	.136	.116	.326	.245	.218
37	.214	.145	.124	.342	.260	.233
38	.224	.153	.132	.358	.276	.248
39	.235	.162	.140	.375	.292	.264
40	.246	.172	.149	.393	.309	.282
41	.258	.183	.159	.412	.328	.300
42	.271	.194	.170	.432	.348	.320
43	.283	.205	.181	.452	.369	.341
44	.297	.218	.193	.474	.392	.363
45	.311	.231	.205	.495	.414	.386
46	.326	.245	.219	.520	.440	.412
47	.342	.260	.233	.545	.467	.439
48	.358	.275	.248	.571	.495	.468
49	.374	.291	.264	.598	.525	.498
50	.393	.309	.282	.627	.556	.530
51	.412	.329	.300	.657	.590	.565
52	.431	.348	.319	.688	.626	.602
53	.451	.369	.340	.721	.663	.642
54	.473	.391	.363	.756	.703	.684
55	.497	.415	.387	.792	.746	.729
56	.520	.440	.412	.830	.791	.776
57	.545	.467	.439	.870	.840	.828
58	.570	.494	.467	.911	.889	.881
59	.598	.525	.498	.954	.943	.939
60	.627	.556	.530	1.000	1.000	1.000
61	.656	.589	.565			
62	.688	.626	.602			
63	.721	.663	.642			
64	.756	.703	.684			
65	.792	.746	.729			
66	.830	.791	.776			
67	.869	.839	.827			
68	.911	.889	.881			
69	.954	.943	.939			
70	1.000	1.000	1.000			

Study #1 = Merit and longevity + 4.25% inflation

Study #2 = Merit and longevity + 5.50% inflation

Study #3 = Merit and longevity + 6.00% inflation

COUNTY OF FRESNOYears of Life Expectancy after Service Retirement

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>
50	26.91	33.54	80	7.00	9.40
51	26.05	32.61	81	6.63	8.88
52	25.20	31.67	82	6.27	8.37
53	24.36	30.75	83	5.94	7.89
54	23.53	29.82	84	5.63	7.43
55	22.71	28.90	85	5.34	6.99
56	21.90	27.99	86	5.06	6.57
57	21.10	27.08	87	4.80	6.16
58	20.31	26.17	88	4.55	5.77
59	19.53	25.28	89	4.31	5.40
60	18.76	24.39	90	4.08	5.04
61	18.00	23.50	91	3.87	4.70
62	17.26	22.63	92	3.66	4.38
63	16.53	21.77	93	3.46	4.07
64	15.81	20.91	94	3.26	3.77
65	15.11	20.07	95	3.07	3.50
66	14.43	19.24	96	2.89	3.23
67	13.77	18.42	97	2.71	2.98
68	13.13	17.62	98	2.54	2.76
69	12.50	16.82	99	2.37	2.54
70	11.91	16.03	100	2.20	2.34
71	11.33	15.26	101	2.04	2.14
72	10.79	14.50	102	1.88	1.95
73	10.26	13.78	103	1.72	1.78
74	9.74	13.07	104	1.55	1.61
75	9.24	12.40	105	1.38	1.44
76	8.76	11.75	106	1.21	1.28
77	8.28	11.12	107	1.04	1.13
78	7.83	10.53	108	.88	.98
79	7.41	9.95	109	.71	.84
			110	.50	.69
			111	--	.50

1971 GA (x) (y - 1)

COUNTY OF FRESNOYears of Life Expectancy after Disability RetirementGeneral Members

<u>Age</u>	<u>Male & Female</u>	<u>Age</u>	<u>Male & Female</u>	<u>Age</u>	<u>Male & Female</u>
20	38.73	50	21.08	80	7.00
21	37.98	51	20.59	81	6.63
22	37.26	52	20.11	82	6.27
23	36.56	53	19.63	83	5.94
24	35.87	54	19.16	84	5.63
25	35.19	55	18.68	85	5.34
26	34.53	56	18.21	86	5.06
27	33.87	57	17.75	87	4.80
28	33.23	58	17.29	88	4.55
29	32.60	59	16.83	89	4.31
30	31.98	60	16.37	90	4.09
31	31.37	61	15.91	91	3.87
32	30.76	62	15.45	92	3.66
33	30.17	63	14.99	93	3.46
34	29.58	64	14.53	94	3.26
35	29.00	65	14.07	95	3.07
36	28.43	66	13.60	96	2.89
37	27.87	67	13.13	97	2.71
38	27.31	68	12.66	98	2.54
39	26.76	69	12.18	99	2.37
40	26.21	70	11.70	100	2.20
41	25.67	71	11.21	101	2.04
42	25.14	72	10.72	102	1.88
43	24.61	73	10.22	103	1.72
44	24.09	74	9.73	104	1.55
45	23.57	75	9.24	105	1.38
46	23.06	76	8.76	106	1.21
47	22.56	77	8.28	107	1.04
48	22.06	78	7.83	108	.88
49	21.57	79	7.41	109	.71
				110	.50

1981 Disability Table

COUNTY OF FRESNOYears of Life Expectancy after Disability RetirementSafety Members

<u>Age</u>	<u>Male & Female</u>	<u>Age</u>	<u>Male & Female</u>	<u>Age</u>	<u>Male & Female</u>
20	49.29	50	23.59	80	7.00
21	48.39	51	22.80	81	6.63
22	47.48	52	22.03	82	6.27
23	46.58	53	21.26	83	5.94
24	45.68	54	20.50	84	5.63
25	44.79	55	19.77	85	5.34
26	43.89	56	19.06	86	5.06
27	43.01	57	18.40	87	4.80
28	42.12	58	17.78	88	4.55
29	41.24	59	17.20	89	4.31
30	40.36	60	16.64	90	4.09
31	39.48	61	16.11	91	3.87
32	38.61	62	15.59	92	3.66
33	37.74	63	15.08	93	3.46
34	36.88	64	14.58	94	3.26
35	36.02	65	14.09	95	3.07
36	35.16	66	13.61	96	2.89
37	34.31	67	13.13	97	2.71
38	33.45	68	12.66	98	2.54
39	32.61	69	12.18	99	2.37
40	31.77	70	11.70	100	2.20
41	30.93	71	11.21	101	2.04
42	30.09	72	10.72	102	1.88
43	29.26	73	10.22	103	1.72
44	28.43	74	9.73	104	1.55
45	27.61	75	9.24	105	1.38
46	26.80	76	8.76	106	1.21
47	25.98	77	8.28	107	1.04
48	25.18	78	7.83	108	.88
49	24.38	79	7.41	109	.71
				110	.50

1981 Disability Table