

# **COUNTY OF SAN MATEO Inter-Departmental Correspondence**

DATE:

July 12, 2004

**BOARD MEETING DATE:** 

July 27, 2004

TO:

Honorable Board of Supervisors

FROM:

John Maltbie, County Manager

Mary Welch, Director, Employee and Public Services

SUBJECT:

Review of Actuarial Study Conducted to Determine Feasibility of

Implementing Government Code Section 31658 which Relates to the Purchase

of Additional Retirement Credit by County Employees

#### Recommendation

It is recommended that your Board: (1) accept the actuarial study conducted by Mercer, Human Resource Consultants, an enrolled actuary, evaluating the issues surrounding the purchase of additional retirement credit by members (employees) under Section 31658 (AB55) of the California Government Code; (2) defer implementation of AB55 until additional information is available to determine its impact on the County.

#### Background

San Mateo County is a "37 Act" County. Under the County Employees Retirement Law (CERL) of 1937, retirement benefits are calculated, in part, based upon years of service credit.

On September 3, 2003, Assembly Bill 55 was approved by the Governor enacting Government Code section 31658 which authorized active members of retirement systems subject to CERL to purchase up to five years of additional retirement credit. This option is only available if the local county board of supervisors enacts an enabling resolution making Section 31658 applicable in that county. Employees choosing to exercise this option would be required to pay an amount, as calculated by an enrolled actuary, sufficient to not place any additional financial burden on the retirement system.

On October 28, 2003, the board approved funding for a study that was conducted and completed by Mercer on April 26, 2004.

#### Discussion

Pursuant to the requirements mandated by Government Code Section 7507 and Section 31516, the actuarial study setting forth future annual costs has been completed and is ready for public posting and review.

The study conducted by Mercer identified numerous assumptions that impact cost-neutral actuarial calculations of members' purchase price for additional retirement service credit. A copy of Mercer's study is attached as Exhibit A and is available for public review in the Clerk of the Board's office.

Having reviewed the Mercer analysis, we recommend that your Board defer implementation of AB55. The actuarial analysis states: "the number of assumptions makes it very difficult to guarantee that any service purchase will be 'cost neutral'". Limited participation, gender and marital status of participants, age at retirement, salary changes, changes in benefits or assumptions may result in additional County cost. Because several California jurisdictions have implemented AB55, the County will be able to obtain additional important information that may enable it to address these issues before considering adoption. Without further experience and analysis, we cannot presently assure that the implementation will meet the "revenue neutral" requirement of AB55.

A critical assumption regarding the number of individuals who will be able to purchase additional time concerns the use of outside financial resources. In 2001, federal law was changed to permit employees to purchase eligible retirement time using deferred compensation assets. The vast majority of SamCERA purchases during the past two years have included the use of these assets. There is doubt about whether these resources may be used to purchase AB55 time. One of the County's two deferred compensation administrators (Nationwide) analyzed the purchase of time under AB55 and indicated that "government 457 plans are risking the eligibility of their 457 plans if the IRS determines that such transfers are prohibited." Nationwide recommends that employers "defer a decision to permit the transfer of 457 assets to purchase air time until the IRS provides formal guidance regarding this issue." The County's other deferred compensation administrator (Hartford) and other industry experts caution similar postponement of decisions.

As a result of the uncertain fiscal impact on the County and the question regarding the resources purchasers may use, we recommend postponement of any decision. We will continue to monitor this issue and will keep you apprised of our ongoing research of this option.

#### Vision Alignment

This resolution will contribute to Shared Vision 2010, specifically Prosperity Vision #20, "Government decisions are based on careful consideration of future impact, rather than temporary relieve or immediate gain."

Fiscal Impact

None at this time.

RECOMMENDED

OUNTY MANAGER

**Human Resource Consulting** 

111 SW Fifth Avenue, Suite 2800 Portland, OR 97204-3693 503 273 5912 Fax 503 273 5999 marcia.chapman@mercer.com www.mercerHR.com

April 26, 2004

Mr. Robert Adler Assistant Controller County of San Mateo 555 County Center, Fourth Floor Redwood City, CA 94063

#### Via E-Mail and Regular Mail

Subject:

California Code Section 31658 Feasibility Study

Dear Mr. Adler:

As you requested, we evaluated the actuarial issues surrounding the purchase of service by members under Section 31658 (AB55) of the California Government Code.

Section 31658 indicates that the purchase price for such service must be "sufficient to not place any additional financial burden upon the retirement system." The purchase price is based on actuarial calculations, which include a number of assumptions regarding benefit levels, when benefits will be paid and for how long. The number of assumptions makes it very difficult to guarantee that any service purchase will be "cost-neutral". The actuary's challenge, therefore, is to make a good faith effort to develop assumptions which will produce a price which is fair to the purchasing member without creating much opportunity for members to purchase a benefit for significantly less than cost.

The complexity of the assumptions will change cost-neutrality of Section 31658 service purchase offering for the County in the following circumstances:

- Limited participation The purchase of service is quite expensive, so you might expect only a few members elect to purchase service. If only a small number of members choose to purchase additional service, then the Section 31658 offering will not be cost-neutral. Large numbers create opportunities for actuarial experience to even out over time. In other words, with more purchases, those purchases which are significantly different from the true cost of that particular individual's service are more likely to offset each other.
- Several factors which combine to create differences between the purchase price and the actual experience of the individual member include:
  - Actual age at retirement versus expected age at retirement.

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- Changes in actuarial assumptions after the purchase such as the discount rate used to develop the liabilities.
- Salary increases different than expected.
- Changes in the benefits provided, such as the benefit formula or cost-of-living provisions.
- The gender of the member purchasing service. For the development of the rates we have used unisex tables. However, the cost of purchased service is generally higher for female members who are expected to live longer than males of the same age. It would be more actuarially sound to develop rates which differ by gender. However, this practice is generally not used in pension calculations due to discrimination.
- The marital status of the member purchasing service. We included the cost of the survivor benefit in the calculation. Alternatively, the System could charge separate rates for married and unmarried members. However, since the cost is dependent on the marital status of the member at the time benefits are started rather than at the time of the purchase of service, this inclusion makes the calculation more conservative.

To show how the calculations might be different for an individual, the following examples provide the expected and actual results for a hypothetical individual. Column A shows the cost to the individual as we propose as the service cost. Column B shows the actual cost to the System if the individual retires earlier than expected. Column C shows the actual cost to the System if the individual retires later than expected. As you can see, the actions of the individual have a significant impact on the actual cost to the System, even if only one variable is changed. The individual is retiring under General Plan 2 purchasing five years of service:

	Column A	Column B	Column C
Age of Member at purchase date	48	48	48
Age of Member at Retirement	60	58	62
Current Salary	\$67,000	\$67,000	\$67,000
Actuarial Cost	\$82,000	\$85,000	\$80,000

In this example, if only one member purchases service at age 48 and chooses to retire at age 62 instead of age 60 as expected, there is a cost to the System. However, if two individuals purchase service and one retires at 62 and another at 58, the service purchases are very close to cost-neutrality.

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We prepared exhibits of tables to assist you in determining the magnitude of costs to individual members who choose to purchase service. There are seven exhibits in total, including:

- A separate table for each General Plan
- A separate table for each Safety and Probation Plan

These exhibits are intended to provide you with an estimated member cost for the lump sum purchase of service under AB55. The assumptions used to develop these rates are outlined in the appendix.

To give you an idea of the average employee cost, we calculated the employee cost based on the average age and salary as of June 30, 2003, under each plan. Assuming the employee purchases the service at the age shown, the employee cost is as follows:

	General Pian 1	General Plan 2	General Plan 3	General Plan 4
Average Age as of June 30, 2003	56	48	43	39
Average Salary as of June 30, 2003	\$72,840	\$66,876	\$56,964	\$58,632
Assumed Years of Service Purchased	5	5	5	5
Average Employee Cost to Purchase Service	\$107,000	\$82,000	\$28,000	\$57,000

	Safety & Probation – Plan 1	Safety & Probation – Plan 2	Safety & Probation – Plan 4
Average Age as of June 30, 2003	54	43	34
Average Salary as of June 30, 2003	\$102,000	\$90,216	\$77,580
Assumed Years of Service Purchased	5	5	5
Average Employee Cost to Purchase Service	\$196,000	\$142,000	\$96,000

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The tables are expressed as a percentage of current pay. Because the benefit level is dependent on pay, using a formula based on age at purchase and percentage of pay allows for ease of calculation.

#### **Actuarial Cost**

Under the 1937 Act, Counties are required to obtain an actuarial study before implementing changes in benefits. For the reasons cited above, it is extremely difficult to estimate the cost or savings to the Association of implementing Section 31658. However, we have developed rates which, if a sizable percentage of members choose to purchase service, should result in low cost to the Association. However, if only a few members choose to purchase service, there is likely to be some actuarial cost to the County. There is another risk which is that members will come to understand the factors which make the service purchase advantageous to one group or another. For example, if only female members purchase service, there would be an additional cost to the System. Likewise, actuarial mortality tables assume that some members who are in poor health will die soon after benefits are paid. If those individuals in poor health choose not to purchase service, the net cost of the purchase will be higher than the amount paid by the members.

After you have reviewed this letter, please call me at 503 273 5912 so that we can discuss any questions you have.

Sincerely,

[MLC]

Marcia L. Chapman, FSA, EA

MLC/mlr:gjw Enclosures

Copy: Scott Hood

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#### **Assumptions**

- Retire at their weighted average retirement age from active employment at
  - Age 60 for General Plan One, General Plan Two and General Plan Four,
  - Age 63 for General Plan Three, and
  - Age 52 for all tiers of Safety and Probation.
- Interest rate is assumed to be 8.00 percent per year.
- The mortality assumptions for pre-retirement and post retirement includes:
  - General Plan
    - An evenly distributed table of 1994 Group Annuity Mortality Table Male rates set back 1 year and 1994 Group Annuity Mortality Table Female rates set back 1 year
  - General Plan Beneficiaries
    - Same as General Plan Members
  - Safety & Probation Plan
    - 1994 Group Annuity Mortality Table set forward 1 year (Male)
  - Safety & Probation Plan Beneficiaries
    - 1994 Group Annuity Mortality Table set back 2 years (Female)
- Interest and mortality are applied to postretirement benefit payments, with an assumed COLA amount of
  - 3.00 percent for Plan One
  - 2.75 percent for Plan Two
  - 2.00 percent for Plan Four
- Prior to retirement only interest and mortality are applied.
- Salary is assumed to increase at a rate of 6.25 percent per year.
- A Member is assumed to be married and to elect the 60 Percent Joint & Survivor Annuity option.
- Beneficiaries are assumed to be three years younger than the Member.
- 100 percent of members are married at retirement

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# San Mateo County Employees' Retirement Association Percentage of Annual Compensation (at Purchase Age) Required to Purchase Additional Service

Purchase			Service Pu		<u>_</u> :
Age	1	2	3	4	5
25	17%	34%	51%	68%	85%
26	17%	35%	52%	69%	86%
27	18%	35%	53%	70%	88%
28	18%	36%	54%	71%	89%
29	18%	36%	55%	73%	91%
30	18%	37%	_55%	74%	92%
31	19%	38%	56%	75%	94%
32	19%	38%	57%	76%	96%
33	19%	39%	58%	78%	97%
34	20%	40%	59%	79%	99%
. 35	20%	40%	60%	80%	101%
36	20%	41%	61%	82%	102%
37	21%	42%	62%	83%	104%
38	21%	42%	64%	85%	106%
39	22%	43%	65%	86%	108%
40	22%	44%	66%	88%	110%
41	22%	45%	67%	89%	111%
42	23%	45%	68%	91%	113%
43	23%	46%	69%	. 92%	115%
44	23%	47%	70%	94%	117%
45	24%	48%	72%	96%	120%
46	24%	49%	73%	97%	122%
47	25%	50%	74%	99%	124%
48	25%	50%	76%	101%	126%
49	26%	51%	77%	103%	128%
50	26%	52%	78%	105%	131%
51	27%	53%	80%	106%	133%
52	27%	54%	81%	108%	136%
53	28%	55%	83%	111%	138%
54	28%	56%	84%	113%	141%
55	29%	57%	86%	115%	144%
56	29%	59%	88%	117%	146%
57	30%	60%	90%	119%	149%
58	30%	61%	91%	122%	152%
59	31%	62%	93%	124%	156%
60	32%	.64%	95%	127%	159%
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# San Mateo County Employees' Retirement Association Percentage of Annual Compensation (at Purchase Age) Required to Purchase Additional Service

Purchase		Years o	f Service P	urchased	
Age	1	2	3	4	5
25	17%	33%	50%	66%	83%
26	17%	34%	50%	67%	84%
27	17%	34%	51%	68%	85%
28	17%	35%	52%	70%	87%
29	18%	35%	53%	71%	88%
30	18%	36%	54%	72%	90%
31	18%	37%	55%	73%	91%
32	19%	37%	56%	74%.	93%
33	19%	38%	57%	76%	95%
34	19%	39%	58%	77%	96%
35	20%	39%	59%	78%	98%
36	20%	40%	60%	80%	100%
37	20%	41%	61%	81%	101%
38 .	21%	41%	62%	82%	103%
39	21%	42%	63%	84%	105%
40	21%	43%	64%	85%	107%
41	22%	43%	65%	87%	108%
42	22%	44%	66%	88%	110%
43	22%	45%	67%	90%	112%
44	23%	46%	69%	91%	114%
45	23%	47%	70%	93%	116%
46	24%	47%	71%	95%	118%
47	24%	48%	72%	96%	121%
48	25%	49%	74%	98%	123%
49	25%	50%	75%	100%	125%
50	25%	51%	76%	102%	127%
51	26%	52%	78%	104%	130%
52	26%	53%	79%	106%	132%
53	27%	54%	81%	108%	134%
54	27%	55%	82%	110%	137%
55	28%	56%	84%	112%	140%
56	28%	57%	85%	114%	142%
57	29%	58%	87%	116%	145%
58	30%	59%	89%	119%	148%
59	30%	61%	91%	121%	151%
60	31%	62%	93%	124%	155%

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## San Mateo County Employees' Retirement Association Percentage of Annual Compensation (at Purchase Age) Required to Purchase Additional Service

Purchase	Years of Service Purchased					
Age	1	2	3	4	.5	
25	7%	15%	22%	29%	36%	
26	7%	15%	22%	30%	37,%	
27	8%	15%	23%	30%	38%	
28	8%	15%	23%	31%	38%	
29	8%	16%	23%	31%	39%	
30	8%	16%	24%	32%	40%	
31	8%	16%	24%	32%	40%	
32	8%	16%	25%	33%	41%	
33	8%	17%	25%	33%	42%	
34	8%	17%	25%	34%	42%	
35	9%	17%	26%	35%	43%	
36	9%	18%	26%	35%	44%	
37	9%	18%	27%	36%	45%	
38	9%	18%	27%	36%	45%	
39	9%	19%	28%	37%	46%	
40	9%	19%	28%	38%	47%	
41	10%	19%	29%	38%	48%	
42	10%	19%	29%	39%	49%	
43	10%	20%	30%	40%	50%	
44	10%	20%	30%	40%	50%	
45	10%	21%	31%	41%	51%	
46	10%	21%	31%	42%	52%	
47	11%	21%	32%	43%	53%	
48	11%	22%	32%	43%	54%	
49	11%	22%	33%	44%	55%	
50	11%	22%	34%	45%	56%	
51	11%	23%	34%	46%	57%	
52	12%	23%	35%	47%	58%	
53	12%	24%	36%	47%	59%	
54	12%	24%	36%	48%	60%	
55	12%	25%	37%	49%	62%	
56	13%	25%	38%	50%	63%	
57	13%	26%	38%	51%	64%	
58	13%	26%	39%	52%	65%	
59	13%	27%	40%	53%	67%	
60	14%	27%	41%	55%	68%	
61	14%	28%	42%	56%	70%	
62	14%	29%	43%	57%	71%	

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# San Mateo County Employees' Retirement Association Percentage of Annual Compensation (at Purchase Age) Required to Purchase Additional Service

Purchase		Years o	f Service P	urchased	
Age	_ 1	, 2	3	4	5
25	15%	31%	46%	61%	76%
26	16%	31%	47%	62%	78%
27	16%	32%	47%	63%	79%
28	16%	32%	48%	64%	80%
29	16%	33%	49%	65%	82%
30	17%	33%	50%	66%	83%
31	17%	34%	51%	68%	85%
32	17%	34%	52%	69%	86%
33	17%	35%	52%	70%	87%
34	18%	36%	53%	71%	89%
35	18%	36%	54%	72%	90%
36	18%	37%	55%	74%	92%
37	19%	37%	56%	75%	94%
38	19%	38%	57%	76%	95%
39	19%	39%	58%	77%	97%
40	20%	39%	59%	79%	99%
41 '	20%	40%	60%	80%	100%
42	20%	41%	61%	82%	102%
43	21%	42%	62%	83%	104%
44	21%	42%	63%	84%	106%
45	21%	43%	64%	86%	107%
46 .	22%	44%	66%	88%	109%
47 .	22%	45%	67%	89%	111%
48	23%	45%	68%	91%	113%
49	23%	46%	69%	92%	115%
50	23%	47%	70%	94%	117%
51	24%	48%	72%	96%	120%
52	24%	49%	73%	98%	122%
53	25%	50%	75%	99%	124%
54	25%	51%	76%	101%	127%
55	26%	52%	77%	103%	129%
56	26%	53%	79%	105%	132%
57	27%	54%	81%	107%	134%
58	27%	55%	82%	110%	137%
59	28%	56%	84%	112%	140%
60	29%	57%	86%	114%	143%

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## San Mateo County Employees' Retirement Association Percentage of Annual Compensation (at Purchase Age) Required to Purchase Additional Service

Safety 1 and Probation 1

Purchase	·	Years	of Service Pu	urchased	
Age	1	2	3	4	5
25	24%	48%	71%	95%	119%
26	24%	48%	73%	97%	121%
27	25%	49%	74%	98%	123%
28	25%	50%	75%	100%	125%
29	25%	51%	76%	102%	127%
30	26%	52%	78%	104%	130%
31	26%	53%	79%	105%	132%
32	27%	54%	80%	107%	134%
33	27%	55%	82%	109%	136%
34	28%	56%	83%	111%	139%
35	28%	57%	85%	113%	141%
36	29%	57%	86%	115%	144%
37	29%	59%	88%	117%	146%
38	30%	60%	89%	119%	149%
39	30%	61%	91%	121%	151%
40	31%	62%	92%	123%	154%
41	31%	63%	94%	125%	157%
42	32%	64%	96%	128%	160%
43	32%	65%	97%	130%	162%
44	33%	66%	99%	132%	165%
45	34%	67%	101%	135%	168%
46	34%	69%	103%	137%	172%
47	35%	70%	105%	140%	175%
48	36%	71%	107%	142%	178%
49	36%	73%	109%	145%	181%
50	37%	74%	111%	148%	185%
51	38%	75%	113%	151%	189%
52	38%	77%	115%	154%	192%

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# San Mateo County Employees' Retirement Association Percentage of Annual Compensation (at Purchase Age) Required to Purchase Additional Service

Safety 2 and Probation 2

Purchase		Years	of Service P	urchased	· · · · · · · · · · · · · · · · · · ·
Age	1	2	3	4	5
25	23%	46%	69%	92%	115%
26	23%	47%	70%	94%	117%
27	24%	48%	72%	96%	119%
28	24%	49%	73%	97%	122%
29	25%	49%	74%	99%	124%
30	25%	50%	75%	101%	126%
31	26%	51%	77%	102%	128%
32	26%	52%	78%	104%	130%
33	26%	53%	79%	106%	132%
34	27%	54%	81%	108%	135%
35	27%	55%	82%	110%	137%
36	28%	56%	84%	112%	139%
37	28%	57%	85%	114%	142%
38	29%	58%	87%	116%	144%
39	29%	59%	88%	118%	147%
40	30%	60%	90%	120%	150%
41	30%	61%	91%	122%	152%
42	31%	62%	93%	124%	155%
43	32%	63%	95%	126%	158%
44	32%	64%	96%	128%	161%
45	33%	65%	98%	131%	163%
46	33%	67%	100%	133%	166%
47	34%	68%	102%	136%	170%
48	35%	69%	104%	138%	173%
49	35%	70%	106%	141%	176%
50	36%	72%	108%	144%	179%
51	37%	73%	110%	146%	183%
52	37%	75%	112%	149%	187%

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## San Mateo County Employees' Retirement Association Percentage of Annual Compensation (at Purchase Age) Required to Purchase Additional Service

Safety 4 and Probation 4

Purchase		Years	of Service P	urchased	
Age	1	2	3	4	5
25	21%	42%	63%	85%	106%
26	22%	43%	65%	86%	108%
27	22%	44%	66%	88%	110%
28	22%	45%	67%	89%	111%
29	23%	45%	68%	91%	113%
30	23%	46%	69%	92%	115%
31	23%	47%	70%	94%	117%
32	24%	48%	72%	95%	119%
33	24%	49%	73%	97%	121%
34	25%	49%	74%	99%	124%
. 35	25%	50%	75%	101%	126%
36	26%	51%	77%	102%	128%
37	26%	52%	78%	104%	130%
38	26%	53%	79%	106%	132%
39	27%	54%	81%	108%	135%
40	27%	55%	82%	110%	137%
41	28%	56%	84%	112%	139%
42	28%	57%	85%	114%	142%
43	29%	58%	87%	116%	145%
44	29%	59%	88%	118%	147%
45	30%	60%	90%	120%	150%
46	31%	61%	92%	122%	153%
47	31%	62%	93%	124%	155%
48	32%	63%	95%	127%	158%
49	32%	65%	97%	129%	161%
50	33%	66%	99%	132%	164%
51	34%	67%	101%	134%	168%
52	34%	68%	103%	137%	171%
				<del></del>	