



Paul Angels, FSA, MAAA, FCA, EA
Senior Vice President & Actuary
T 415.263.8273
M 415.823.1195
pangelo@segalco.com
Andy Yeung, ASA, MAAA, FCA, EA
Vice President & Actuary
T 415.263.8283
ayeung@segalco.com

180 Howard Street
Suite 1100
San Francisco, CA 94105-6147
segalco.com

March 19, 2021

Ms. Doris Rentschler
Executive Director
Mendocino County Employees' Retirement Association
625-B Kings Court
Ukiah, CA 95482

**Re: Special Study on Re-amortization of the Unfunded Actuarial Accrued Liability (UAAL)
"Restart" Layer**

Dear Doris:

As requested by the Board of Retirement, we have provided in this letter the additional cost to the employer if the combined base (or "restart"¹) UAAL layer were to be amortized over a shorter period than the 19-year period that currently remains in the June 30, 2020 valuation. This information is being provided based on a few alternative scenarios outlined by MCERA.

BACKGROUND

Following the June 30, 2012 valuation, the Board reviewed various elements of MCERA's actuarial funding policy, including the policy to continue to amortize the total outstanding balance of the UAAL (for the General, Safety and Probation groups) as of June 30, 2012 (i.e., the aforementioned combined base or restart layer) of \$126,527,019 over a declining period and creating separate amortization layers for any new UAAL established after June 30, 2012. As of the most recent valuation as of June 30, 2020, the total outstanding balance of the restart layer was \$134,133,121, with 19 years remaining in the amortization schedule. This amount was larger than the original UAAL at the time of the June 30, 2012 valuation because of negative amortization.²

The Association's total UAAL has increased to \$244 million as of June 30, 2020, primarily as a result of assumption changes recommended by Segal and approved by the Board in the last few experience studies. The outstanding balance of the restart layer still represents over one-half of the total UAAL. In addition, MCERA's funding policy stipulates that any new UAAL layers associated with plan amendments, assumption and method changes, and experience gains/losses are to be amortized over 18 years, so at least in the current valuation the remaining 19 year period for the restart layer represents the longest remaining period.

¹ In the June 30, 2009 valuation, the amortization period for MCERA's UAAL was restarted at 30 years, which is the longest period allowed under the 1937 Act CERL.

² Negative amortization is a result of contributions paid being less than the interest accruing on the outstanding balance of the UAAL. This happens when the amortization payments are calculated as a level percent of salary and, under MCERA's current economic actuarial assumptions, the amortization period is about 20 years or longer.



SCENARIOS

MCERA has outlined three scenarios for re-amortizing the current outstanding balance of the UAAL restart layer, as follows:

1. Reduce the amortization period by 1 year (i.e., from the current 19 years remaining as of June 30, 2020 to 18 years) for the County, the Superior Court and the Cemetery District.
2. Reduce the amortization period to 15 years for all three employers.
3. Increase the UAAL amortization payment toward the restart layer by \$4 million, payable each year starting in 2027/2028 after the County's Pension Obligation Bond³ debt service is paid off in 2026/2027.⁴

Under Scenarios 1 (18-year amortization) and 2 (15-year amortization), we are providing herein the effect on the employer contribution rates and annual contribution amounts (both total and incremental) associated with the reduction in the amortization period. We are also providing an amortization schedule for the current restart layer (under the current 19-year remaining period), along with amortization schedules for the restart layer under both scenarios.

Under Scenario 3 (additional annual payments of \$4M, starting in 2027/2028), we have determined how much the additional payments would reduce the County's remaining amortization period for the UAAL restart layer. Since the hypothetical additional annual payments under this scenario are not assumed to begin until the 2027/2028 fiscal year, there would be no effect on the current employer contribution rates. Similar to Scenarios 1 and 2, we are also providing an amortization schedule for the restart layer under Scenario 3. For simplicity, this schedule reflects the annual additional payments being made in the first month of each fiscal year starting in 2027/2028. Also, in determining the impact on the future employer annual contribution amounts, we have not determined the separate impact for the County versus each of the two other employers because the County contributed over 95% of the total UAAL contributions as determined in the June 30, 2020 valuation.

Note that in our conversation with you on December 17, 2020, we discussed that under Scenario 3 above we would also provide the effect on the employer contribution rates and annual amounts associated with just a one-time additional payment of \$4 million in 2027/2028 (instead of annual \$4 million additional payments), but we would not provide an amortization schedule under this additional sub-scenario.

As discussed, our results are presented for all membership groups (i.e., General, Safety, and Probation) and for all employers (i.e., County, Superior Court and Cemetery District) combined, and all results are based on the June 30, 2020 valuation even though any scenario that may be adopted would not take effect until the June 30, 2021 valuation, at the earliest.

³ We understand that the County's Pension Obligation Bond was also applied to reduce the UAAL for the other employers.

⁴ Based on direction from MCERA, the \$4 million annual amortization payment would stay flat, rather than increase by 3.25% per year consistent with our 3.25% annual payroll increase assumption used in the level percent of salary UAAL amortization method adopted by MCERA.

RESULTS

Baseline

The baseline results for this study are the employer contribution rates and annual amounts determined in the June 30, 2020 valuation, which are based on a 19-year remaining amortization period for the restart UAAL layer. Those results are reproduced in the table below. In addition, we have included an amortization schedule for the current UAAL restart layer in Appendix A of this letter.

Baseline Results (19-year Amortization) as of June 30, 2020⁵

Membership and Tier	Total Rate	Estimated Annual Dollar Amount ⁶
• General Tier 1	39.12%	\$172,000
• General Tier 2/Tier 3	34.99%	9,784,000
• General Tier 4	31.48%	10,301,000
• Safety Tier 2	67.11%	4,391,000
• Safety Tier 3	57.13%	2,640,000
• Probation Tier 2	37.49%	621,000
• Probation Tier 3	32.46%	445,000
All Categories Combined	37.65%	\$28,354,000

Scenario 1 (18-year Amortization)

Under Scenario 1, the amortization period for the UAAL restart layer has been reduced by 1 year, from the current 19 years remaining as of June 30, 2020 to 18 years. The results of that reduction in the amortization period are as follows:

Scenario 1 Results (18-year Amortization) as of June 30, 2020

Membership and Tier	Scenario 1		Increase over Baseline	
	Total Rate	Estimated Annual Dollar Amount ⁶	Total Rate	Estimated Annual Dollar Amount ⁶
• General Tier 1	39.63%	\$174,000	0.51%	\$2,000
• General Tier 2/Tier 3	35.50%	9,927,000	0.51%	143,000
• General Tier 4	31.99%	10,468,000	0.51%	167,000
• Safety Tier 2	67.85%	4,439,000	0.74%	48,000
• Safety Tier 3	57.87%	2,674,000	0.74%	34,000
• Probation Tier 2	38.04%	630,000	0.55%	9,000
• Probation Tier 3	33.01%	452,000	0.55%	7,000
All Categories Combined	38.19%	\$28,764,000	0.54%	\$410,000

As shown above, decreasing the amortization period for the UAAL restart layer by 1 year increases the employer rate determined in the June 30, 2020 valuation by 0.54% of payroll and the estimated annual dollar amount based on the June 30, 2020 projected compensation by \$410,000.

⁵ There were no Safety Tier 1 or Probation Tier 1 active members reported for the June 30, 2020 valuation, so those tiers have been removed from this table.

⁶ Based on June 30, 2020 projected compensation.

We have included an amortization schedule for the UAAL restart layer under an 18-year amortization period in Appendix B.

Scenario 2 (15-year Amortization)

Under Scenario 2, the amortization period for the UAAL restart layer has been reduced by 4 years, from the current 19 years remaining as of June 30, 2020 to 15 years. The results of that reduction in the amortization period are as follows:

Scenario 2 Results (15-year Amortization) as of June 30, 2020				
Membership and Tier	Scenario 2		Increase over Baseline	
	Total Rate	Estimated Annual Dollar Amount⁷	Total Rate	Estimated Annual Dollar Amount⁷
• General Tier 1	41.62%	\$183,000	2.50%	\$11,000
• General Tier 2/Tier 3	37.49%	10,484,000	2.50%	700,000
• General Tier 4	33.98%	11,119,000	2.50%	818,000
• Safety Tier 2	70.65%	4,622,000	3.54%	231,000
• Safety Tier 3	60.67%	2,804,000	3.54%	164,000
• Probation Tier 2	40.15%	665,000	2.66%	44,000
• Probation Tier 3	35.12%	481,000	2.66%	36,000
All Categories Combined	40.31%	\$30,358,000	2.66%	\$2,004,000

As shown above, decreasing the amortization period for the UAAL restart layer by 4 years increases the employer rate determined in the June 30, 2020 valuation by 2.66% of payroll and the estimated annual dollar amount based on the June 30, 2020 projected compensation by \$2,004,000.

We have included an amortization schedule for the UAAL restart layer under a 15-year amortization period in Appendix C.

Scenario 3 (Additional Annual Payments of \$4M, starting in 2027/2028)

Under Scenario 3, we have estimated that the additional annual payments of \$4M, starting in 2027/2028, would help pay off the UAAL restart layer approximately 3 years earlier than under the current 19-year schedule, or in about 16 years (see Appendix D). Because those payments would start in eight years (in 2027/2028), this means they would be paid for nine years (i.e., 2027/2028 through 2035/2036) for a total of \$36 million.⁸

Furthermore, while each of these payments could be treated as a contribution gain and amortized over 18 years, we assume for the purpose of this Scenario that the employer would continue to make the same annual UAAL contributions under the Baseline plus \$4 million (from 2027/2028 through 2035/2036) so as to shorten the UAAL payment period for the restart layer. Otherwise, as discussed in more detail in the next subsection (*Additional Information under Scenario 3*), the first such payment would reduce the employer contribution rate by 0.33% of payroll, which is equivalent to an annual dollar amount of about \$321,000.

⁷ Based on June 30, 2020 projected compensation.

⁸ Alternatively, the ninth additional payment in year 2035/2036 could be skipped, resulting in total additional payments of \$32 million, and the UAAL restart layer would still be paid off within 16 years.

Additional Information under Scenario 3

As mentioned above, we were also requested to provide the effect on the employer contribution rates and annual amounts associated with just a one-time additional payment of \$4 million in 2027/2028 instead of annual \$4 million additional payments beginning at that time. For this part of Scenario 3, we are treating the additional payment the same as any other contribution gain. That is, we are assuming that the additional payment toward the UAAL will be amortized over an 18-year period, which is MCERA's policy for amortizing actuarial gains/losses. This is more consistent with the practice at other Systems we serve, which would generally not allow such a relatively small additional payment to be applied to a particular prior amortization layer.

At the time of the June 30, 2028 valuation, the projected payroll would be expected to have increased to \$97,277,576 under the current 3.25% payroll inflation rate assumption. Based on this information, and assuming there are no changes to the current 6.75% discount rate and 3.25% payroll inflation assumptions, a \$4M additional payment toward the UAAL in the first month of the 2027/2028 fiscal year would reduce the aggregate employer contribution rate by 0.33% of payroll, which is equivalent to an annual dollar amount of about \$321,000 based on the assumed projected payroll as of June 30, 2028.

Note that in determining the contribution rate impacts in this study, we have not taken into consideration the one year scheduled delay between the date of the valuation and the date of the contribution rate implementation. Furthermore, we have assumed that the actuarial assumptions adopted by the Board for the June 30, 2020 valuation would remain unchanged in all future valuations.


As noted, all results shown in this letter are based on the June 30, 2020 actuarial valuation. That valuation and these calculations were completed under the supervision of Andy Yeung, ASA, MAAA, FCA, Enrolled Actuary. We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

Please let us know if you need any additional information or have any questions. We look forward to discussing this letter with you.

Sincerely



Paul Angelo, FSA, MAAA, FCA, EA
Senior Vice President & Actuary



Andy Yeung, ASA, MAAA, FCA, EA
Vice President & Actuary

DNA/bbf

Appendices

cc: Robert Reveles

Mendocino County Employees' Retirement Association

Unfunded Actuarial Accrued Liability (UAAL) Amortization Schedule - "Restart" Layer Baseline - 19-year Amortization Based on the June 30, 2020 Valuation

Annual Interest Rate: 6.75%
Annual Payroll Inflation: 3.25%

Year	Beginning of Year Balance	Annual Payment	Interest Paid	Principal Paid	End of Year Balance
1	\$134,133,121 ⁽¹⁾	\$9,710,279	\$8,758,847	\$951,433	\$133,181,688
2	133,181,688	10,025,863	8,685,033	1,340,831	131,840,858
3	131,840,858	10,351,704	8,584,623	1,767,081	130,073,777
4	130,073,777	10,688,134	8,455,119	2,233,015	127,840,762
5	127,840,762	11,035,499	8,293,833	2,741,666	125,099,096
6	125,099,096	11,394,152	8,097,869	3,296,283	121,802,813
7	121,802,813	11,764,462	7,864,115	3,900,348	117,902,465
8	117,902,465	12,146,807	7,589,220	4,557,587	113,344,878
9	113,344,878	12,541,579	7,269,584	5,271,994	108,072,883
10	108,072,883	12,949,180	6,901,336	6,047,844	102,025,039
11	102,025,039	13,370,028	6,480,315	6,889,714	95,135,325
12	95,135,325	13,804,554	6,002,052	7,802,502	87,332,823
13	87,332,823	14,253,202	5,461,746	8,791,456	78,541,367
14	78,541,367	14,716,431	4,854,244	9,862,188	68,679,180
15	68,679,180	15,194,715	4,174,009	11,020,707	57,658,473
16	57,658,473	15,688,544	3,415,101	12,273,442	45,385,031
17	45,385,031	16,198,421	2,571,147	13,627,275	31,757,756
18	31,757,756	16,724,870	1,635,304	15,089,566	16,668,191
19	16,668,191	17,268,428	600,237	16,668,191	0
Total		\$249,826,855	\$115,693,734	\$134,133,121	

Note: Totals may be slightly off due to rounding.

⁽¹⁾ "Restart" Layer UAAL as of June 30, 2020.

Mendocino County Employees' Retirement Association

Unfunded Actuarial Accrued Liability (UAAL) Amortization Schedule - "Restart" Layer Scenario 1 - 18-year Amortization Based on the June 30, 2020 Valuation

Annual Interest Rate: 6.75%
Annual Payroll Inflation: 3.25%

<u>Year</u>	<u>Beginning of Year Balance</u>	<u>Annual Payment</u>	<u>Interest Paid</u>	<u>Principal Paid</u>	<u>End of Year Balance</u>
1	\$134,133,121 ⁽¹⁾	\$10,097,487	\$8,747,078	\$1,350,409	\$132,782,712
2	132,782,712	10,425,655	8,645,950	1,779,705	131,003,007
3	131,003,007	10,764,489	8,515,522	2,248,967	128,754,039
4	128,754,039	11,114,335	8,353,083	2,761,252	125,992,787
5	125,992,787	11,475,551	8,155,719	3,319,831	122,672,956
6	122,672,956	11,848,506	7,920,295	3,928,211	118,744,745
7	118,744,745	12,233,583	7,643,437	4,590,146	114,154,599
8	114,154,599	12,631,174	7,321,517	5,309,657	108,844,942
9	108,844,942	13,041,687	6,950,638	6,091,049	102,753,893
10	102,753,893	13,465,542	6,526,609	6,938,933	95,814,960
11	95,814,960	13,903,172	6,044,930	7,858,242	87,956,717
12	87,956,717	14,355,025	5,500,765	8,854,261	79,102,457
13	79,102,457	14,821,564	4,888,922	9,932,642	69,169,815
14	69,169,815	15,303,264	4,203,827	11,099,437	58,070,378
15	58,070,378	15,800,620	3,439,498	12,361,122	45,709,256
16	45,709,256	16,314,141	2,589,514	13,724,626	31,984,630
17	31,984,630	16,844,350	1,646,987	15,197,363	16,787,266
18	16,787,266	17,391,792	604,526	16,787,266	0
Total		\$241,831,937	\$107,698,816	\$134,133,121	

Note: Totals may be slightly off due to rounding.

⁽¹⁾ "Restart" Layer UAAL as of June 30, 2020.

Mendocino County Employees' Retirement Association

Unfunded Actuarial Accrued Liability (UAAL) Amortization Schedule - "Restart" Layer Scenario 2 - 15-year Amortization Based on the June 30, 2020 Valuation

Annual Interest Rate: 6.75%
Annual Payroll Inflation: 3.25%

<u>Year</u>	<u>Beginning of Year Balance</u>	<u>Annual Payment</u>	<u>Interest Paid</u>	<u>Principal Paid</u>	<u>End of Year Balance</u>
1	\$134,133,121 ⁽¹⁾	\$11,578,669	\$8,702,058	\$2,876,611	\$131,256,510
2	131,256,510	11,954,976	8,496,449	3,458,527	127,797,982
3	127,797,982	12,343,513	8,251,189	4,092,324	123,705,659
4	123,705,659	12,744,677	7,962,764	4,781,913	118,923,746
5	118,923,746	13,158,879	7,627,395	5,531,484	113,392,262
6	113,392,262	13,586,542	7,241,021	6,345,521	107,046,741
7	107,046,741	14,028,105	6,799,278	7,228,827	99,817,914
8	99,817,914	14,484,018	6,297,475	8,186,544	91,631,370
9	91,631,370	14,954,749	5,730,575	9,224,174	82,407,196
10	82,407,196	15,440,778	5,093,171	10,347,607	72,059,589
11	72,059,589	15,942,604	4,379,455	11,563,149	60,496,440
12	60,496,440	16,460,738	3,583,194	12,877,545	47,618,895
13	47,618,895	16,995,712	2,697,699	14,298,013	33,320,882
14	33,320,882	17,548,073	1,715,795	15,832,278	17,488,604
15	17,488,604	18,118,385	629,781	17,488,604	0
Total		\$219,340,418	\$85,207,297	\$134,133,121	

Note: Totals may be slightly off due to rounding.

⁽¹⁾ "Restart" Layer UAAL as of June 30, 2020.

Mendocino County Employees' Retirement Association

Unfunded Actuarial Accrued Liability (UAAL) Amortization Schedule - "Restart" Layer Scenario 3 - Additional Annual \$4 Million Payments Starting 2027/2028 Based on the June 30, 2020 Valuation

Annual Interest Rate: 6.75%
Annual Payroll Inflation: 3.25%

Year	Beginning of Year Balance	Annual Payment ⁽²⁾	Interest Paid	Principal Paid	End of Year Balance
1	\$134,133,121 ⁽¹⁾	\$9,710,279	\$8,758,847	\$951,433	\$133,181,688
2	133,181,688	10,025,863	8,685,033	1,340,831	131,840,858
3	131,840,858	10,351,704	8,584,623	1,767,081	130,073,777
4	130,073,777	10,688,134	8,455,119	2,233,015	127,840,762
5	127,840,762	11,035,499	8,293,833	2,741,666	125,099,096
6	125,099,096	11,394,152	8,097,869	3,296,283	121,802,813
7	121,802,813	11,764,462	7,864,115	3,900,348	117,902,465
8	117,902,465	16,146,807 ⁽³⁾	7,342,400	8,804,408	109,098,057
9	109,098,057	16,541,579	6,736,103	9,805,475	99,292,582
10	99,292,582	16,949,180	6,061,845	10,887,335	88,405,247
11	88,405,247	17,370,028	5,314,158	12,055,870	76,349,378
12	76,349,378	17,804,554	4,487,180	13,317,374	63,032,003
13	63,032,003	18,253,202	3,574,621	14,678,581	48,353,422
14	48,353,422	18,716,431	2,569,737	16,146,694	32,206,728
15	32,206,728	19,194,715	1,465,298	17,729,417	14,477,310
16	14,477,310	14,768,187	290,876	14,477,310	0
Total		\$230,714,779	\$96,581,658	\$134,133,121	

Note: Totals may be slightly off due to rounding.

⁽¹⁾ "Restart" Layer UAAL as of June 30, 2020.

⁽²⁾ The annual payments in years 8 through 16 are equal to the annual payments for those years from Appendix A plus \$4M (although the year 16 payment in this Appendix D are only for a partial year).

⁽³⁾ Additional annual payments of \$4M are assumed to begin in year 8 (i.e., 2027/2028) and are assumed to be made at the beginning of each fiscal year.