

**A Historical Review and Analysis of the
Mendocino County Employees Retirement Association
Unfunded Actuarial Accrued Liability**

October, 2016

Executive Summary

The Mendocino County Employees Retirement Association (MCERA) had an unfunded actuarial accrued liability (UAAL), or unfunded liability, of \$182 M as of June 30, 2015. The Board of Retirement requested staff conduct this analysis of the unfunded liability during the strategic planning retreat in 2015.

The objective of the work is to address the following questions:

1. What factors or events contributed to the development of the UAAL?
2. What was the significance of those factors or events?
3. What are recommended policy changes based on the answers to these questions?

The results of the research are less than satisfying as we are unable to answer question 2 in any meaningful way because of concerns with the information from the actuary for MCERA prior to FY-2011. In addressing question one, the research identified the following factors that may have contributed to the UAAL over time:

- Benefit Changes in the early 2000s,
- Pension Obligation Bonds,
- Excess Earnings used to provide Retiree Health Care Benefits,
- Investment Returns,
- Actuarial Funding Policy prior to FY-2009, and
- Assumption Changes.

While the first two questions are focused on history, the third question is looking to today and the future for ways to improve. During the course of this work, a well-respected individual in the public pension space posed the question, 'Doing an analysis of what caused the current UAAL is nice, but what are you going to do with the information?'

This question was thought provoking and contributed to the focus on the third question. There are ten recommendations for the MCERA Board of Retirement:

1. MCERA should continue to conduct annual actuarial valuations.
2. MCERA should continue to conduct triennial experience studies.
3. MCERA should continue to regularly review its actuarial funding policy.
4. MCERA should maintain transparency of financial and actuarial information.
5. MCERA should maintain its current excess earnings policy.
6. MCERA should continue to focus on the long run.
7. MCERA should continue to focus on improving governance.
8. MCERA should maintain the current level of independence from the Plan Sponsors.
9. MCERA should adopt a policy to conduct an actuarial audit every 5 years.
10. MCERA should conduct an actuarial audit after the 2017 Experience Study and the FY-2017 Annual Actuarial Valuation.

Introduction

The Mendocino County Employees Retirement Association (MCERA) has an unfunded actuarial accrued liability (UAAL). As of June 30, 2015 it was \$182 million. A defined benefit pension plan, such as MCERA, can develop a UAAL, commonly called an unfunded liability, due to a number of reasons. This work will identify some of the factors that contributed to the MCERA unfunded liability.

Specifically, the objective of this research is to address the following questions regarding the unfunded liability:

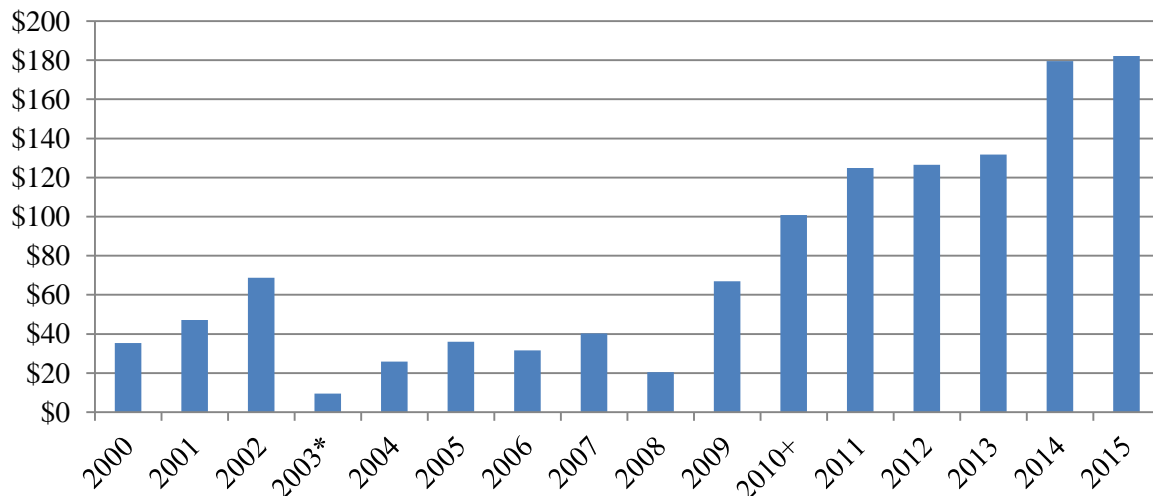
1. What factors or events contributed to the development of the UAAL?
2. What was the significance of those factors or events?
3. What are recommended policy changes based on the answers to these questions?

Pension systems are incredibly complex. As with any complex system, there are a myriad of inter-related factors that can contribute to the development of an unfunded liability. There is no single simple cause for the UAAL at MCERA. The graph below shows the reported UAAL for MCERA.

“For every complex problem there is an answer that is clear, simple, and wrong.”

- H. L. Mencken

MCERA Unfunded Liability (UAAL) (\$M)



* Mendocino County issued Pension Obligation Bonds in Fiscal Year 2003.

+ MCERA changed actuarial service firms in 2011. The UAAL figure reported here is that calculated by the new firm at the beginning of the 2011 valuation process.

MCERA maintains a website at www.co.mendocino.ca.us/retirement where it provides access to all available reports and information to the public. Annual actuarial valuation reports and independent auditor report from fiscal year 1996 (FY-1996) to current can be found in the Reports tab on the website. All of the information referenced in this study is contained in various reports available on the website.

History

MCERA was created in 1947 and has changed much over the nearly 70 years of its existence. This analysis focuses on the history of MCERA since the year 2000. This time period is analyzed because the factors that are most impactful to the UAAL occurred in this period.

Before reviewing those factors, we first must address a historical issue with serious implications for this study. One of the most important changes made by the MCERA Board was to terminate its relationship with its previous actuarial services provider at Buck Consultants because they systematically underestimated MCERA's costs and liabilities.

Actuarial History

From FY-1994 to FY-2010, Buck Consultants provided actuarial services to MCERA. Actuaries play a key role in monitoring and reporting the health of a defined benefit pension plan since the contributions are typically received over a period of decades and benefits are paid over decades thereafter.

Because of the time elements involved, actuaries estimate future benefits to be paid, discount those estimated future benefits to current dollars, determine past and future contribution costs required to provide these benefits, and then measure the current financial health of a pension plan by comparing the assets on hand with the costs already accrued. Underlying the estimates of future contributions and benefits are a number of assumptions in two broad categories: demographic and economic.

Demographic assumptions include factors such as mortality, retirement rates, withdrawal rates, disability rate and likelihood of being married. Economic assumptions include inflation rate, investment rate of return, salary growth and cost of living adjustment (COLA) rate.

Each of these assumptions is reviewed every three years by the actuary to ensure the observed results are tracked closely by the assumptions. Based on this review, the actuary makes recommendations to the Board of Retirement of assumption changes to more accurately align the assumptions with the experience of the Association.

Because so much of the cost of the Association is dependent on predicting the future, occasionally pension systems will conduct actuarial audits where a different actuarial firm will review the assumptions, calculations and methodology of the actuary for the plan. Such an audit was conducted for MCERA in 2011 to review the work of Buck Consultants. The audit was conducted by EFI Actuaries and is available on the MCERA websites in the Reports tab.

The audit performed by EFI yielded significant concerns. To quote from the audit report: "The actuarial assumptions used by Buck are seriously flawed." Further, "the assumptions Buck developed have systematically underestimated the liabilities and costs of the Plan."

The EFI audit made a number of recommended changes in methodology, each of which would have resulted in higher plan costs and a lower funded ratio. In fact, if all assumptions had been implemented in FY-2009 (the year reviewed for the audit), the plan costs would have been 24.45% of payroll instead of 13.25% and the funded ratio would have been 74.2% instead of the 83.4% reported.

The actuarial audit resulted in the MCERA Board losing confidence in the abilities of Buck and a search for a new actuary was initiated. Beginning in FY-2011, MCERA retained a new actuary, the Segal Company.

When Segal was retained by MCERA, they strived to reconcile with the results of Buck Consultants in their FY-2010 valuation in what amounted to another audit of the prior actuary. In that process, Segal identified other issues such as how member contribution rates had been calculated. They also recalibrated the unfunded liability at the end of FY-2010 as part of the annual actuarial valuation process.

The UAAL for FY-2010 reported by Buck was \$91.8 M. When estimated by Segal, the UAAL for FY-2010 was instead \$100.8 M, 9.8% larger than reported by Buck. These revelations further eroded any confidence in Buck’s results.

To further compound the issue, conducting the research for this project uncovered other questions about the results included in the annual valuation reports from Buck. One such issue deals with the investment returns of MCERA. The following table compares the annual rate of investment return on market value from 2005 to 2010 reported by Buck Consultant and Callan Associates, the investment consultant for MCERA.

Table 1. Comparison of Reported Investment Returns

Fiscal Year	Reported Investment Return	
	Buck	Callan
2005	9.7%	10.9%
2006	11.2%	12.1%
2007	16.8%	18.1%
2008	(7.9%)	(3.8%)
2009	(16.3%)	(16.5%)
2010	17.0%	14.5%

The differences here range from 0.2 percentage points to 4.1 percentage points. The difference in the reported figures further eroded confidence in the annual actuarial valuation reports from Buck.

Based on these findings, along with the results of the actuarial audit, we are forced to conclude that we can no longer rely on the validity of any information produced by Buck Consultants for MCERA. As a result of this conclusion, we will not use any such reports in this analysis.

Unfortunately, this decision impairs the current analysis, especially with regards to the second question outlined in the introduction - estimating the magnitude of the various contributing factors to the current unfunded liability. MCERA staff worked diligently to identify a means to avoid such an outcome. The only solution identified is to request Segal, or another actuary, to recreate the actuarial valuations from Buck.

Such an effort would likely entail costs in excess of \$250,000. Because of the excessive cost and the limited ability of such an analysis to produce any value added in terms of recommended improvements for the Board of Retirement, this solution is discarded.

Accordingly, for a quantitative review of changes to the UAAL we are limited to changes between FY-2010 and FY-2015. We can, however, still pursue the first research question above and outline the issues that likely impacted the unfunded liability prior to FY-2010. It is to this survey we turn next.

Issues Impacting the Unfunded Actuarial Accrued Liability

There are a myriad of issues that ultimately impact the UAAL for a pension fund. Some issues may be the result of policy choices by a governing board, while others may result from external factors over which a board has no influence, much less control. Examples of the former include actuarial funding policy and setting actuarial assumptions while examples of the latter include benefit changes or investment performance.

The following sections examine both categories of changes. Specifically, the focus here is upon the issues that have resulted in changes to the unfunded liability for MCERA.

Benefit Changes

Mendocino County changed the retirement benefits for County employees between 2001 and 2005, with the effective date depending on bargaining units. Additionally, changes in this time period also created the Safety Probation Plan whereas previously those members were part of the General Members Plan.

While MCERA worked with the County during the development and implementation of the benefit changes, it is important to note that MCERA does not set retirement benefits. That responsibility lies solely with the Plan Sponsor. MCERA administers the retirement benefits as specified by the Plan Sponsor.

The result of the various changes in benefits adopted by the Plan Sponsor in the early 2000s was an increase in the cost of pension benefits. In general the benefit multipliers were increased, resulting in higher retirement benefits, earlier retirements with the higher benefits, and therefore higher plan costs. As discussed above, we are unable to confidently quantify the impact of the benefit changes on plan costs or the unfunded liability for MCERA since the changes occurred prior to FY-2010.

Pension Obligation Bonds

Paired with the benefit changes, the County elected to issue Pension Obligation Bonds (POB) in December, 2002. Upon issue, the County placed proceeds of \$76.3 M into the MCERA trust. The claimed intent of the Plan Sponsor in bond sale was twofold: (1) eliminate the existing UAAL and (2) pre-pay the costs associated with the benefit changes adopted beginning in 2001.

To quote from the annual actuarial valuation report for FY-2002, "The County issued Pension Obligation Bonds in December 2002 to fund the UAAL resulting from the enhanced benefit and the plan's

experience.” While we cannot attest to whether the POB accomplished the objective because of the concerns with information from Buck, this statement clearly identifies the objective.

Excess Earnings – Retiree Health Care

Excess Earnings are defined in Government Code Section 31592.4 as:

- (b) For purposes of this section, “excess earnings” means earnings of the retirement fund at the end of any fiscal year that exceed the total interest credited to contributions and reserves plus 1 percent of the total assets of the retirement fund.

This language allows that in years where the investment returns exceed the assumed rate of return, the earnings in excess of the assumed return that exceed 1% of the total assets of the Trust may be declared as “excess earnings”. In Mendocino County, Excess Earnings were utilized to provide Health Insurance benefits for retired members of the Association.

We have information from MCERA audit reports on the amount of funds directed to pay for Health Benefits over the period from 1995-2010. Since the information is contained in Audit Reports, we maintain some degree of confidence in the information. The table below details the amounts expended for Health Benefits by year.

Table 2. Retiree Health Benefits Paid by MCERA

Fiscal Year	Health Benefits Paid (\$,000)
1995	\$921
1996	1,083
1997	1,157
1998	1,127
1999	1,360
2000	1,614
2001	1,338
2002	2,295
2003	2,257
2004	2,759
2005	2,680
2006	3,410
2007	3,382
2008	4,017
2009	4,860
2010	<u>3,889</u>
Total	\$38,150

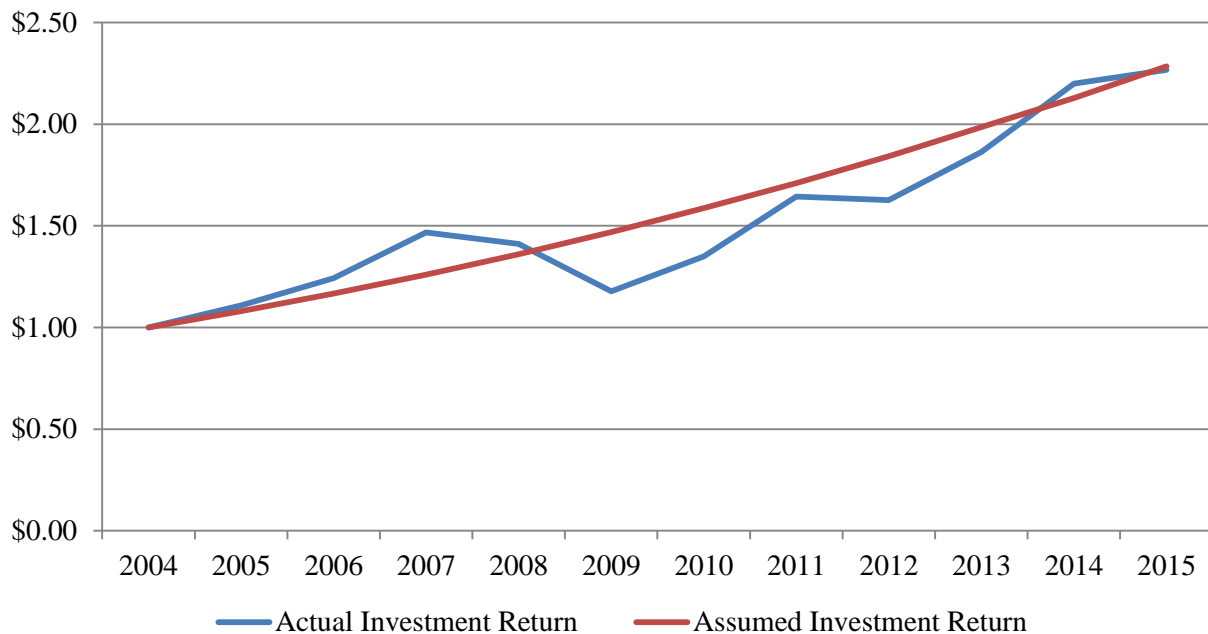
While the use of Excess Earnings is allowed within the 1937 Act, the result is that \$38 M in investment earnings were used to pay for other post-employment benefits (OPEB) rather than to pay down the UAAL.

The provision of retiree health benefits continues in a few other 1937 Act plans, often funded via “excess earnings”. Mendocino County elected to do away with the practice of declaring Excess Earnings and paying for OPEBs in 2010. Plan sponsors that continue the provision of OPEBs are now required to recognize the liability for those OPEBs for financial reporting purposes in a similar manner to the UAAL.

Investment Returns

Investment returns failing to meet assumptions is frequently offered as a cause of the unfunded liability at MCERA. The graph below compares the actual investment returns to the assumed investment returns from 2005 to 2015. MCERA changed the assumed investment return two times in this period. Beginning in FY-2011, the assumed rate of return was reduced from 8.0% to 7.75% and in FY-2014 the rate was reduced from 7.75% to 7.25%.

MCERA Growth of A Dollar



As the graph shows, from beginning to end, there is little difference between the actual investment return and the assumed return. There have been intervening years in which the difference has been more significant. Relying on any single year to compare experience to assumptions is not ideal as there is always variability in investment returns. Rather, it is more important to focus on the long term.

Importantly, this period includes the dramatic market events of 2008-09 and the corresponding recovery from 2010-2014. Interestingly, when considering the growth of a dollar over this period, the value at the end of the period for the actual return is \$2.37 while the value for the assumed rates of return is \$2.38.

This graph shows that, over the period represented, realized investment returns do not appear to materially contribute to the current UAAL. For periods prior to 2005, we are dependent upon

information from the actuary reports of the time, and do not consider those in this analysis as previously discussed.

Actuarial Funding Policy

It appears that until FY-2008, MCERA operated under a funding agreement in which the target funded ratio was 90%, increasing by 1% each year until a target funded ratio of 100% would be achieved after 10 years. The following is excerpted from the FY-2008 Actuarial Valuation report prepared by Buck Consultants.

“In accordance with the funding agreement between the County and the Association, the County is required to amortize the portion of the UAAL that is in excess of the target balance (9% of the total actuarial accrued liability). Since the UAAL of \$20.4 million does not exceed the target balance (9% x \$373 million = \$34 million), the County is not required to fund any portion of the UAAL under the terms of the funding agreement.”
(p. 18)

Beginning in FY-2009, it appears that MCERA adopted a new funding methodology as the following quote from the FY-2009 Actuarial Valuation indicates.

“The funding agreement between the County and the Association was discontinued as of June 30, 2009. The new funding methodology includes the provision that the County amortize the UAAL over a 30 year period.” (p.22)

Industry best practices require the actuarial funding policy of a pension trust target a 100% funded ratio. The reason for this is the concept of intergenerational equity (IGE). In balance with a competing funding policy goal to manage volatility of the employer’s contribution, IGE requires that every generation of taxpayers pay the cost of government services provided in that period, including deferred benefits, such as retirement for government employees.

The current year cost of the deferred retirement benefits earned by government employees in the current year is represented by the “Normal Cost” of the plan. If Plan Sponsors pay the normal cost each year, and plan experience matches the assumptions, then an unfunded liability of zero is the result. In such an ideal, each generation of taxpayers bear the full cost of the government services received.

If, however, Plan Sponsors pay less than the Normal Cost or experience differs from the plan assumptions, an unfunded liability can result, which requires a systematic payment plan to pay off such unfunded liability. When a UAAL exists, IGE principles show the importance of addressing the liability as quickly as possible. Of course, it is also important to balance that with providing stability for the plan and by minimizing volatility of contributions from the Plan Sponsor.

An actuarial funding policy that ignores an unfunded liability by not requiring contributions to amortize the UAAL such as MCERA had prior to FY-2009 is problematic. Such policies have been rejected by most actuaries.

Assumption Changes

MCERA conducts a study every 3 years comparing the actuarial assumptions to the plan experience. This study is routinely referred to as a triennial experience study, or just experience study. This study reviews all assumptions on which the actuary bases the annual valuation study. These assumptions fall in to two major categories: demographic and economic.

Demographic assumptions include factors such as the likelihood of association members retiring in any given year of service, likelihood of association members becoming disabled, likelihood of members dying in any given year of age and likelihood of association member withdrawing from membership among numerous others. Economic assumptions include factors such as the growth of members' salaries, rate of inflation, rate of increase for retiree benefits cost of living adjustments (COLA) and rate of return on investments among others.

Assumption changes can result in significant changes in the unfunded liability. One of the most significant changes in assumptions over the past decades has been the increasing life span of association members, mirroring the trend in the United States. As life spans increase for our members, the association expects to pay more benefits since the primary benefit is a monthly lifetime annuity.

The other significant assumption change has been the reduction of the assumed rate of return on investments. This assumption is critical for two closely related reasons. First, lower return on investment results in less expected growth in assets in the future. Second, the assumed rate of return on investment is used by the actuary to discount future flows to present value.

There is an inverse relationship between the discount rate and the value today of future dollars. That is, a lower discount rate results in larger present value for future outflows. Larger present value for future outflows translates into a larger unfunded liability for MCERA.

The table below outlines the changes in the UAAL, by year from 2011-2015. Of particular note is the over \$75 M increase in UAAL resulting from assumption changes, the most significant of which have been the lowering of the assumed investment rate of return.

Table 3. Unfunded Actuarial Accrued Liability Changes, 2011-2015 (\$M)

	2011	2012	2013	2014	2015
Prior Valuation UAAL		\$124.9	\$126.5	\$131.7	\$179.6
a) Measured by Prior Actuary	\$91.8				
b) Re-measured by Current Actuary	100.8				
Expected Increase/(Decrease)	7.7	6.9	3.1	3.2	0.7
Salary Increase Greater/(Less) than Expected	(11.4)	(13.8)	(5.2)	(3.8)	(1.8)
Asset Return Less/(Greater) than Expected	15.3	3.6	3.0	(6.5)	(5.7)
Actuarial Assumption Changes	24.0	2.9		50.2	
Contribution Delay					4.3
Method Change	(5.6)			8.0	
Other Experience	<u>(5.9)</u>	<u>1.9</u>	<u>4.2</u>	<u>(3.3)</u>	<u>5.0</u>
Ending UAAL	\$124.9	\$126.5	\$131.7	\$179.6	\$182.2

Recommendations

This analysis, along with review of industry best practices, reveals a number of areas where MCERA has implemented best practices as well as opportunities for the Board of Retirement to make further improvements. The following recommendations for maintaining or improving the governance of MCERA in regards to monitoring the unfunded liability are offered for consideration by the MCERA Board. The first eight recommendations are continuations of current practices or policies. The final two recommendations are new to MCERA and are forwarded to align MCERA with industry best practices.

MCERA should continue to conduct annual actuarial valuations.

MCERA is required to conduct an actuarial valuation report at least every three years by Government Code Sections 31453 and 7504. Industry best practice is for defined-benefit plans to conduct annual valuations. MCERA has conducted annual actuarial valuations as a matter of practice. This recommendation may seem obvious, but it is important enough to warrant mention.

MCERA should continue to conduct triennial actuarial experience studies.

Similarly to the preceding recommendation, MCERA has, by practice, conducted a triennial experience study. There is no statute requiring such study; however, it is industry best practice to do so every three to five years. This recommendation continues to align MCERA with industry best practices.

MCERA should regularly review its actuarial funding policy.

MCERA has created an environment where the Board strives to be a policy-focused governance Board. To that end, the Board has reviewed all of its policies and adopted a calendar for regular review of all policies on a go-forward basis. This is an important step for MCERA to maintain best practices across all policy domains, including the actuarial funding policy.

In 2016 the Board received and accepted a recommendation from staff, in consultation with the actuary, to review the actuarial funding policy every 5 years. This review schedule was adopted as part of the policy review calendar which can be found on the MCERA website.

MCERA should maintain transparency of financial and actuarial information.

MCERA is a public trust serving the needs of its members, the active employees and retirees of Mendocino County, the Mendocino County Superior Court and Russian River Cemetery District. At the same time, the Board has a fiduciary obligation to minimize the costs to the plan sponsors, and by extension the taxpayers of Mendocino County, required to adequately pay for the retirement benefits.

It is important for the public to have access to all of the information regarding the financial position of MCERA in order to facilitate open, honest communication with plan members, plan sponsors and tax payers regarding the financial standing of MCERA as well as plan costs.

MCERA should maintain the current Excess Earnings Policy.

In 2015, MCERA adopted a new Excess Earnings Policy stating that MCERA will not certify excess earnings for any purposes. The policy specifies that any excess earnings will be directed toward the UAAL, and at such time as there is no unfunded liability, excess earnings will be held as a reserve against future investment downturns. Further, in January 2016 the Board of Supervisors revoked the resolution adopting Government Code Section 31592.4 for Mendocino County. These actions require future Board of Supervisors and Board of Retirement to make policy changes in a very public manner to reinstitute the use of excess earnings to provide OPEBs.

MCERA should maintain its focus on the long run.

In the development of its Strategic Plan, the Board of MCERA reviewed an array of issues. A major issue the Board examined was the concern expressed by some that MCERA is at risk of bankruptcy. After careful review, the Board determined this is not a significant risk for MCERA in the short or intermediate term based on a review of the simplified cash flow of MCERA for FY-2015 in table 4 below. It is important to recognize that this simplified cash flow ignores investment returns.

While the MCERA Board is not concerned about bankruptcy of MCERA, it is concerned about the long term financial health of the County as well as the MCERA trust as evidenced by the vision statement in the organization strategic plan. The Board is determined to focus on the long-run and incorporated language indicating such into its Strategic Plan.

This is important as an unfunded liability is an issue that requires long-run thinking to address. With a UAAL of \$182 M, the problem cannot be solved in ten years, much less one year. An issue of this magnitude requires long term planning to address and the MCERA Board has committed to such an approach.

Table 4. MCERA Simplified Cash Flow Analysis, (\$M)

	2015
Additions:	
Employer Contributions	\$15,164
Employee Contributions	<u>4,652</u>
Subtotal	\$19,816
Deductions:	
Benefit Payments	\$30,049
Administrative Expenses	<u>1,059</u>
Subtotal	\$31,108
Net Cash Flow	(\$11,292)
Assets	\$444,217
Years of Net Cash Flow	39.3

MCERA should continue to focus on improving governance.

The Board of MCERA has a strategic plan which states the Board’s intention to operate as a policy focused governance Board. The MCERA Board recognizes that pension plan administration and governance is an extraordinarily complex myriad of issues. To adequately navigate in such an environment, the Board must access experts in various areas to help the Board make the best possible decisions.

A significant component of such a focus is delegation to staff and experts to research issues and bring recommendations to the Board. The Board then thoughtfully reviews those recommendations before adopting policy. The Board of MCERA should continue its efforts to improve the governance of MCERA.

MCERA should maintain the current level of independence from Plan Sponsors.

The California Constitution clearly specifies the duties of the Board of Retirement for a retirement association such as MCERA.

“The members of the retirement board shall ... discharge their duties with respect to the system solely in the interest of, and for the exclusive purposes of providing benefit to, participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses of administering the system. A retirement board’s duty to the system’s participants and their beneficiaries shall take precedence over any other duty.” California Constitution, Article XVI, Section 17(b)

The first duty of the Board of MCERA is to ensure the trust pays the benefits promised to the members of the Association. With such a clear duty to the members, it is logical that the MCERA Board should be

independent of the Plan Sponsors in order to make decisions that are in the best interests of the Association, regardless of how difficult or painful those decisions may be for the Plan Sponsors.

MCERA became a separate entity, independent of the County Treasurer's office, in 2007. Since that time MCERA has built the organization from the ground up. The organization now has a staff of five full-time employees. Since becoming a separate entity, MCERA has made a number of changes designed to improve governance, increase transparency, and ground decision making in the Board's fiduciary obligation of what is best for the MCERA trust and its beneficiaries.

There are a number of areas in which there exist the potential for conflict between the Association and Plan Sponsors. A certain level of separation and independence from plan sponsors increases the Board's ability to fulfill its fiduciary responsibilities and thus should be protected.

MCERA should conduct an actuarial audit at least every 5 years.

The following is excerpted from the Government Finance Officers Association (GFOA) best practice advisories on the GFOA website.

"Background:

Due diligence requires that pension plan fiduciaries and plan sponsors exercise prudence in selecting service providers such as actuaries, and monitor the quality of their work. An *actuarial audit* is a valuable tool for monitoring the quality of actuarial services performed on behalf of the pension plan.

An actuarial audit involves engaging the services of an outside actuary (*reviewing actuary*) to scrutinize the work of the plan's consulting actuary. Actuarial audits are helpful for several reasons:

1. They enhance the credibility of the actuarial valuation process by providing independent assurance that it was performed in accordance with actuarial standards of practice;
2. They increase public trust in how the pension plan is being governed;
3. They help plan fiduciaries to assess whether the pension plan is meeting its funding objectives;
4. They can lead to the remediation of errors that might otherwise go undiscovered; and
5. They can provide recommendations for improving the actuarial valuation process, including how information is presented in the actuarial valuation report and in other communications."

Further in the discussion, the GFOA makes the following recommendations:

"Recommendation:

The GFOA recommends that public pension plan fiduciaries:

1. Gain an understanding of the types of actuarial audits.
2. Provide for actuarial audits at least once every five years.

3. Determine the level of actuarial audit most appropriate when a red flag appears, such as:
 - a) Significant and unanticipated changes in asset or liability trends or funded ratio.
 - b) Computed contribution rates change without adequate explanation.
 - c) The actuarial methods and assumptions used are not consistent with those approved by the plan's board.
 - d) The actuarial methods and assumptions are not consistent with plan objectives.

Often when a new consulting actuary is engaged the new consulting actuary performs a full replication of the previous actuarial valuation to establish a baseline. This practice, when feasible, is highly encouraged.”

MCERA should adopt a policy to conduct an actuarial audit at least every five years in accordance with industry best practice.

MCERA should conduct an actuarial audit after the 2017 triennial experience study and the FY-2017 actuarial valuation.

After the actuarial audit in 2011, MCERA retained a new actuary who began their engagement with the 2011 triennial experience study and the FY-2011 actuarial valuation. As part of the transition, the new actuary conducted its own valuation of the FY-2010 actuarial valuation. Such a review is similar to an actuarial audit.

In accordance with the above recommendation, and in recognition of the review by the new actuary in 2011, MCERA should plan to conduct an actuarial audit after the next triennial experience study and the corresponding valuation.

Conclusion

That MCERA has a significant unfunded liability is a clear. The causes that led to the unfunded liability are clearly outlined above, although we are unable to quantify the amount each factor contributed to the UAAL. Even if we were able to measure the impact of the causes of the UAAL, it would not improve the outcomes of this analysis.

The current facts are:

1. MCERA has a \$182 M UAAL,
2. We cannot change events in the past, thus
3. We can only address issues going forward.

The Board of Retirement at MCERA is keenly focused on a vision of being a healthy part of a strong Mendocino County economy. We encourage interested parties to work with the Board toward finding solutions to the issues for the betterment of all in the County.