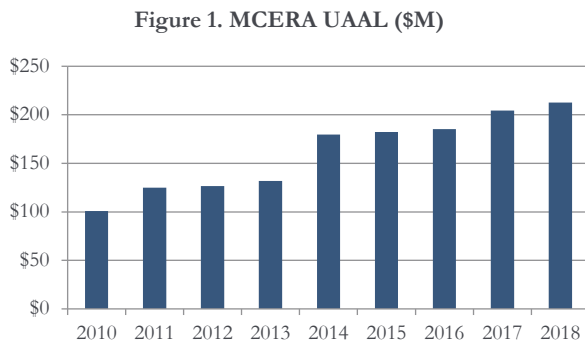
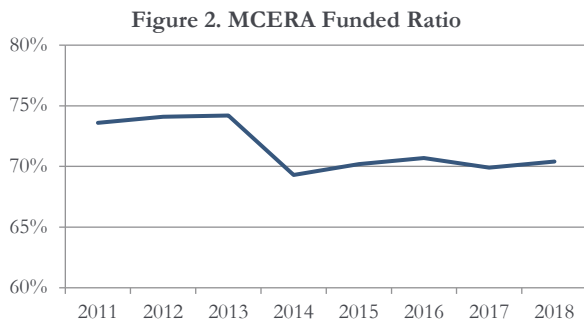


MCERA Unfunded Actuarial Accrued Liability (UAAL)

The difference between the **liabilities** of a pension system and the **assets** available to pay those liabilities is the unfunded actuarial accrued liability (UAAL). As of June 30, 2018 the **MCERA** UAAL was \$212.6 M. Figure 1 shows the history of the MCERA UAAL.

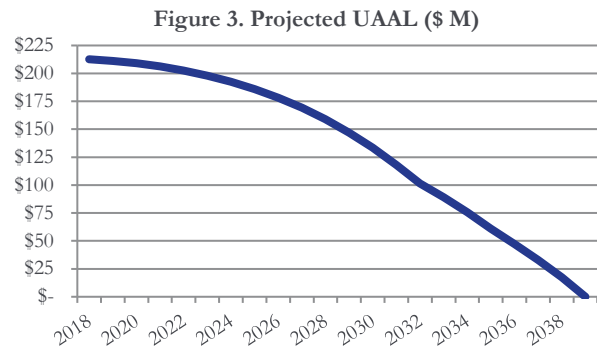


Another measure commonly used to compare the health of pension systems is the **funded ratio**, defined as the ratio of Assets to Liabilities. As of June 30, 2018, the MCERA funded ratio was 70.4%. Figure 2 shows the funded ratio history.



The UAAL and funding ratio tell us where a pension plan is at a certain date in very simple understandable terms. However, these measures tell us nothing about the direction in which a plan is headed. A plan with a high funded ratio could be in peril if headed in the wrong direction.

Knowing where you are is important, but it is just as important to know where you are going. Figure 3 shows MCERA's plan to address the UAAL, which is projected to reach \$0 in 2039.



How can MCERA expect the UAAL to decline in the future when it has been increasing over the past 8 years? The MCERA Board has made several changes that have, in part, caused the increase in the UAAL but also allow more confidence in its future decline.

Since 2010, MCERA has changed assumptions to be more conservative in our projection. Specifically, MCERA has lowered the **investment return assumption** and increased the assumed **member life expectancy**. These changes increased the UAAL by over \$100 M since 2010. However, with more conservative assumptions, there is a higher likelihood of meeting or exceeding the projections in the future.

In addition to these assumption changes, MCERA changed policy in 2009 to reduce the UAAL payoff period which eliminated **negative amortization**. By taking these steps nearly a decade ago, MCERA set the fund on a path where the UAAL will now begin to decline toward zero.