Date: February 21, 2018
To: Board of Retirement
From: James Wilbanks, Retirement Administrator
Subject: 2018 Alternative Economic Scenario Actuarial Analysis

MCERA is considering whether to commission the Consulting Actuary to conduct an analysis of the actuarial impact of various economic scenarios to better understand the impact to MCERA of outcomes different from the current assumptions. It is important to note, the Board expects the results of this analysis to be purely educational.

The scenarios will focus on the economic assumptions used to conduct the annual actuarial valuation, and will ignore the demographic assumptions. Throughout this document we shall refer to years, and in every case that shall mean the plan year ending June 30 of the stated year.

Below are a number of alternative scenarios for the Board to consider requesting the Consulting Actuary analyze. This list is by no means exhaustive, but does capture an array of major economic scenarios.

The recommended scenarios are:

0. Baseline –economic outcomes are exactly equal to the assumed outcomes (for comparison purposes);
1. One year investment shock – investment rate of return in 2018 equal to 0%, followed by investment rate of return in 2019 and beyond equal to the assumption;
2. One year investment surprise - investment rate of return in 2018 equal to 14% (double the assumed rate), followed by investment rate of return in 2019 and beyond equal to the assumption;
3. L-Bottom Recession –investment rate of return in 2018 matches the assumption, investment rate of return of negative 20% (-20%) in 2019, followed by an investment rate of return in 2019 and beyond that matches the assumption; and
4. Global Stagnation - investment rate of return of 5% in years 2018 - 2025, followed by an investment rate of return in 2026 and beyond that matches the assumption.

Based on input from the consulting actuary, the analysis of the above scenarios would cost $10,000. Additionally, the Board could elect to also request the consulting actuary to model a lowering of the investment return and inflation assumptions. This scenario is different from those above since it requires analysis of the entire actuarial model with different assumptions rather than just examining differences from existing assumptions. Given this, the following scenario can also be analyzed at an additional cost of $5,000.

5. Lowering of assumptions – lower the assumed investment rate of return to 6.5% and the assumed rate of inflation to 2.75%.

I encourage the Board to discuss these scenarios and decide which to include in the analysis. Additionally, I recommend that any motion choosing the scenarios for analysis also include a budget amendment for a corresponding amount.