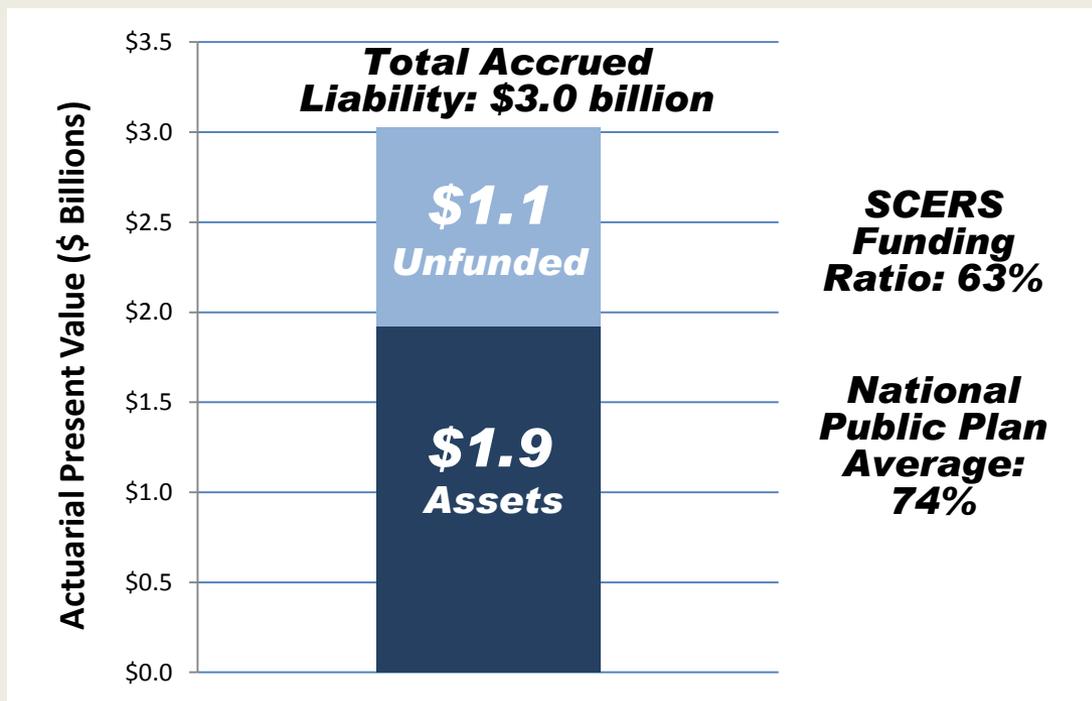


## **Basic Pension Math**

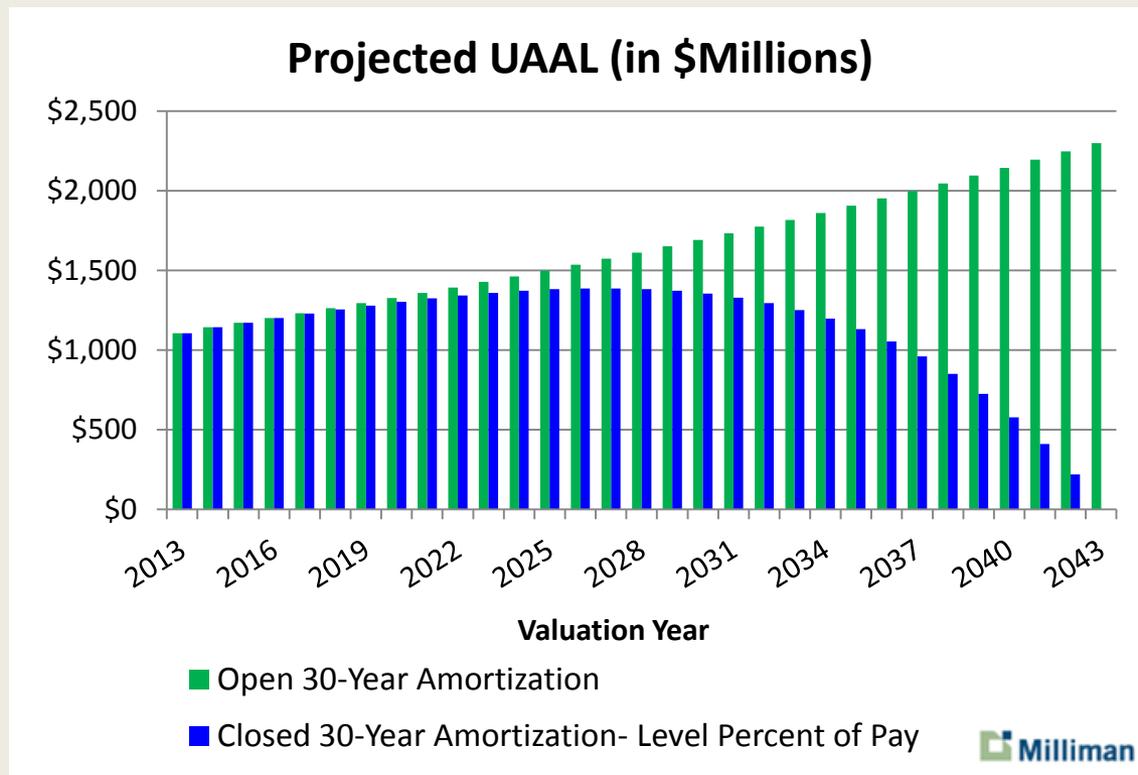
SCERS has a little less than 2/3rds of the money it needs to pay all the benefits that have been earned. This assumes that the investment portfolio returns 7.75% annually. The shortfall is largely due to investment losses in 2008, which affected plans nationally.



- The City will pay about 9% of payroll into SCERS in 2014 and the next 30 years to pay off (amortize) the unfunded liability.
- In addition, the City and Employees pay in a total of about 15% of payroll to pre-fund retirement benefits for current employees as the benefits are earned.

## **Closed vs. Open Amortization**

Differences in Unfunded Actuarial Accrued Liability (UAAL)



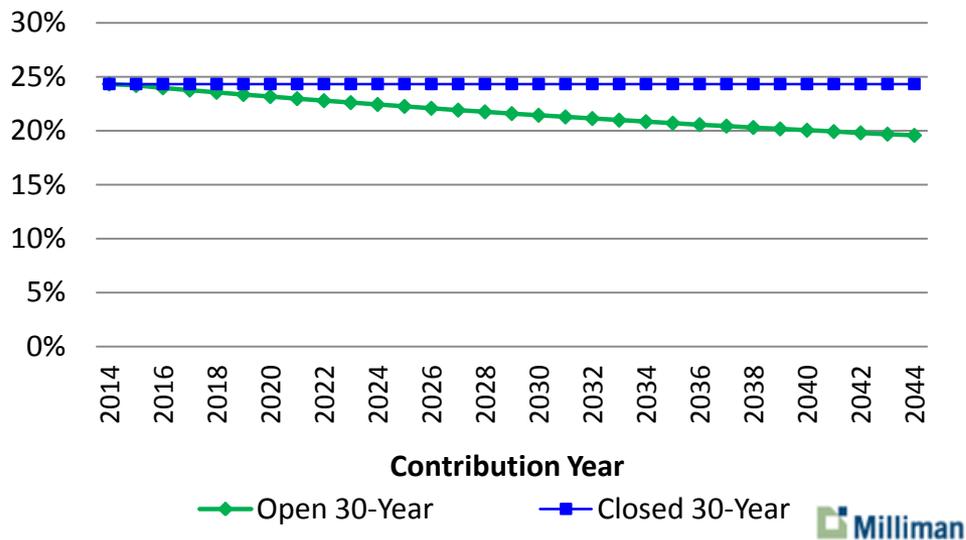
Both amortizations are significantly back-loaded. They depend on:

7.75% asset growth, and  
5% payroll growth  
3.5% price inflation  
+ 0.5% real wage growth  
+ 1% membership growth

This is analogous to a mortgage with ever-increasing payments to match your projected income.

- Both paths allow the unfunded liabilities to increase initially (negative amortization).
- With a closed amortization, the unfunded liabilities eventually turn toward zero.
- With an open / rolling amortization, the unfunded liabilities rise indefinitely.

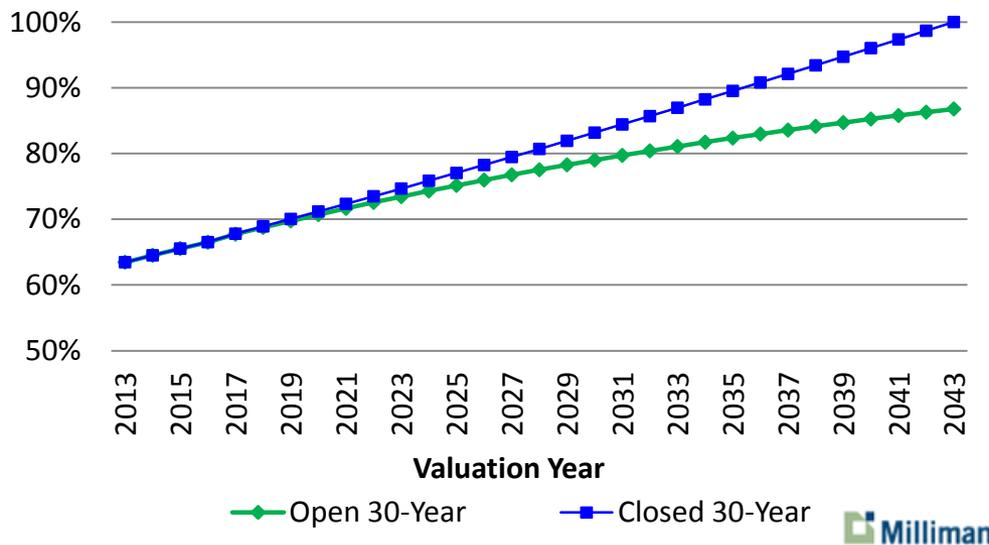
## Actuarial Required Contribution Rate



- The closed amortization would require consistent contributions around 24% of payroll (all other assumptions being met).

- The open amortization cuts you a small contribution rate break each year when you “refinance the mortgage.”

## Funding Ratio



- The funding ratio improves with both methods, since the assets are projected to rise a bit faster than the liabilities.

- However, the open amortization does not aim for 100% funding in any given time period. This leaves SCERS at greater risk in any future market downturn.