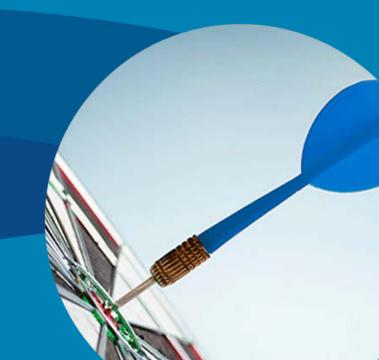


Benefit Accumulation Fund Interest Rate Credit Recommendation for 2018

Leslee Hardy Mark Randall Joe Newton March 28-29, 2019

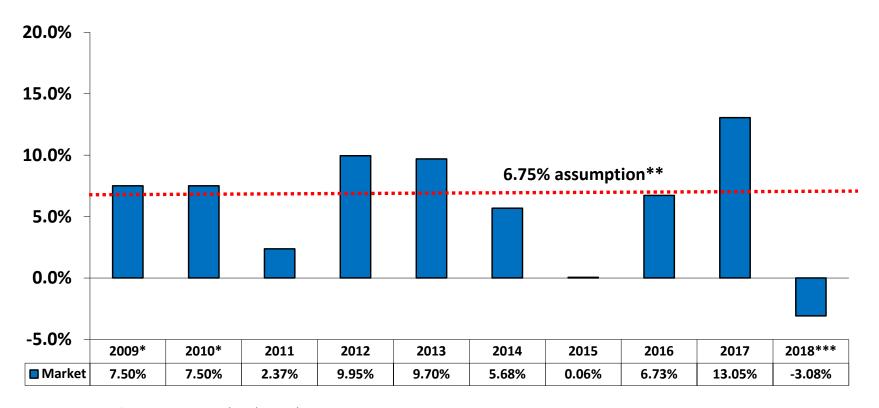


Overall Fund Return for 2018

- GRS recommends crediting the Benefit Accumulation Fund (BAF) interest equal to approximately -3.08%
- This will be credited based on the beginning of year market value BAF balance for each city
- This amount was determined after all administrative and investment expenses have been paid and the statutory requirements have been fulfilled
- This will hold the initial Interest Reserve Account at \$290M to allow for unanticipated changes in the market values as all investments are finalized



Historical BAF Interest Credits

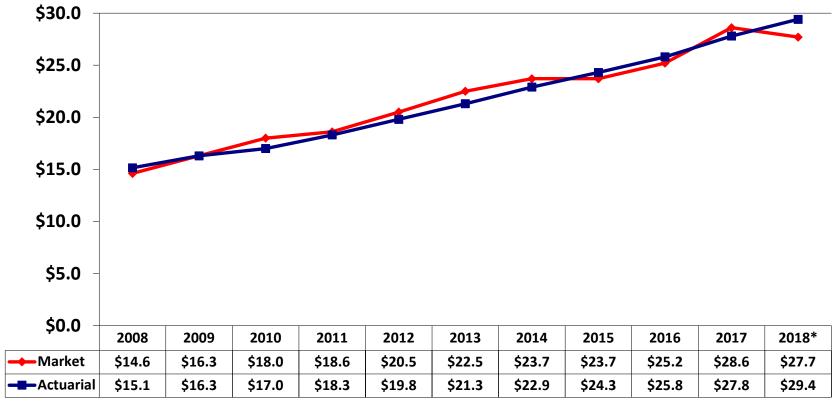


5.84% average compound credit over last 10 years

- * Credits to City MAF accounts (pre-restructuring)
- ** Assumption was 7% from 2011 2015, 7.50% for 2009-2010.
- *** Proposed



Market and Actuarial Values of Assets



^{*} Estimated

AVA is currently 106.1% of MVA, was 97.2% last year



Current Smoothing and Amortization Policy

- Annually, the difference between actual and expected credits at 6.75% is smoothed over a 10 year period to determine the amount of the excess/shortfall to recognize in a given valuation.
- The recognized excess/shortfall is then amortized over a new amortization base as an actuarial gain or loss.
 - 25 Years for losses
 - Equal to largest loss base for gains
- This process provides substantial dampening in year to year volatility and prevents overreacting to performance in any one year



"Smoothed" 2018 Rate of Return

- The shortfall allocation below 6.75% first offsets the \$836 million in deferred excess as of December 31, 2017
- Of the remaining shortfall, \$189 million will be recognized in the 2018 valuation and \$1.7 billion will be deferred for future valuations (roughly 6.2% of Fund)
- The recognition of the \$189 million will produce an increase in contribution rates of approximately 0.18% for 2020 from investment performance (will vary slightly by city)



GRS' 2018 BAF Interest Credit Recommendation

 GRS recommends crediting the BAF with an interest credit of approximately -3.08% which represents the investment income remaining after all administrative and investment expenses have been paid and the statutory requirements have been fulfilled, includes any estimated 4th quarter private investment fund valuation adjustments and maintains the \$290M Interest Reserve Account balance as of December 31, 2018

