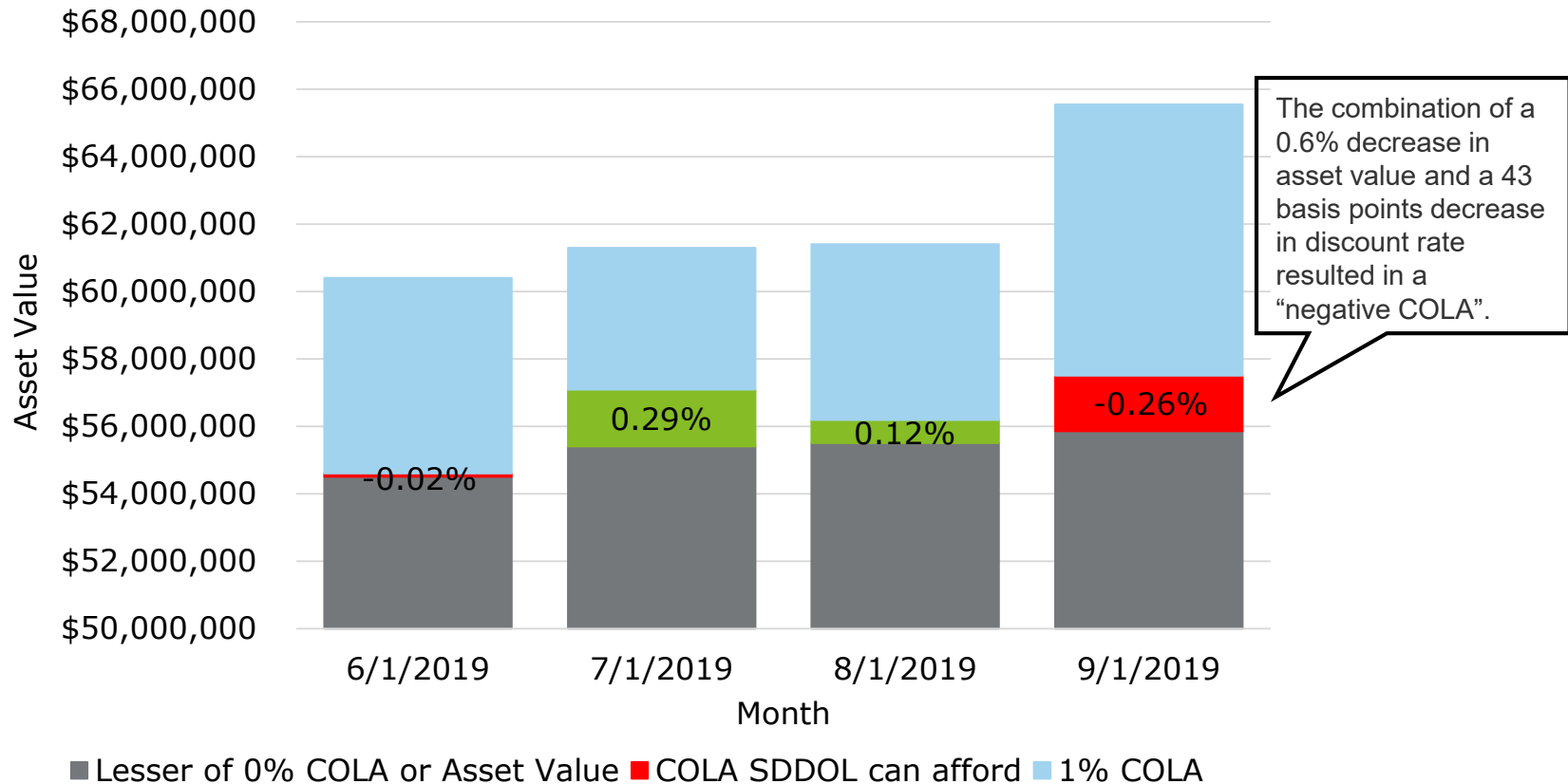


# Annuity Purchase Estimates\* June 2019 – Sept. 2019

***As of September 1, 2019, South Dakota Department of Labor plan cannot afford to purchase annuities***



\* Based on preliminary RFP response. Final purchasable COLA is estimated to be 20-30 basis points higher. Methods and assumptions used for this analysis are shown on the subsequent page.

# Methods and Assumptions

- The annuity purchase prices developed here were based upon preliminary annuity purchase prices for in-payment participants provided by two insurers in February 2019. The quotes are used as the basis for the analysis. The quotes assume a liability transfer date of May 1, 2019 and are based upon data provided as of October 31, 2018.
- Projections in future months for in-payment participants are calculated using the single interest rate that would produce a liability equal to the quote for the 3% Fixed COLA. The interest rate is adjusted monthly with movements in the Intermediate FTSE Pension Liability Index to estimate the purchase price available for varying measurement dates.
- Additionally, an annuity purchase price was estimated for participants not yet in payment using the FTSE Pension Liability Index – Short Duration with a 15% load to account for the additional premium an insurer would charge for the risk associated with deferred lives.
- All estimated quotes were developed assuming a mortality assumption of 97% of RP2014, projected generationally with Scale MP-2018, white collar rates for females and total dataset rates for males.