# Legislative Commission on Pensions and Retirement Investment Return Assumption Considerations

January 26, 2022

Emily M. Knutson, FSA, EA, MAAA Mark W. Schulte, FSA, EA, MAAA



# What we're going to cover

1	Importance of investment return assumption	
2	Process for calculating assumption	
3	Recommending and selecting assumption	
4	Reasonability	
5	Other issues	
6	Questions	

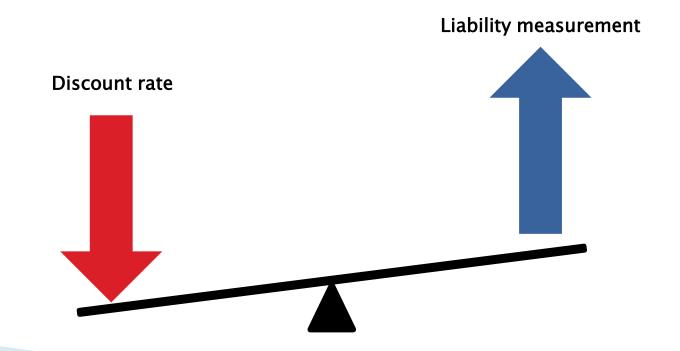
# Importance of investment return assumption

- Pension financing: how much money do we need today to pay a benefit promised in the future?
- If long-term investment returns fall below assumption then may have insufficient funds to pay promised benefits

Initial contribution	<u>Investment scenario</u>	Potential pension payments \$4,200
\$1,000	<b>7.5%</b> for 20 years <b>7.0%</b> for 20 years	\$3,900
	<b>0.0%</b> for 20 years	<b>\$1,000</b>

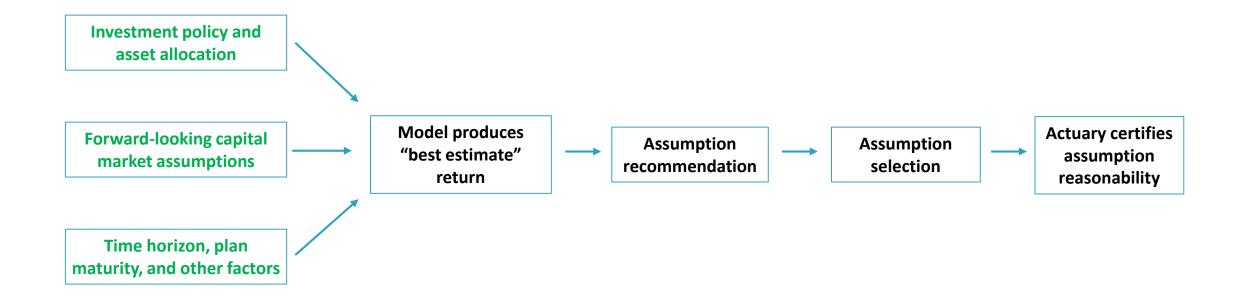
## Importance of investment return assumption

- Inverse relationship between investment return assumption (discount rate) and liability
- If reduce investment return assumption, then you're adjusting your expectation of how future pension benefits will be financed (contributions vs. investment earnings)



# Process for calculating assumption

Want a well-documented and rational process for determining and selecting investment return assumption



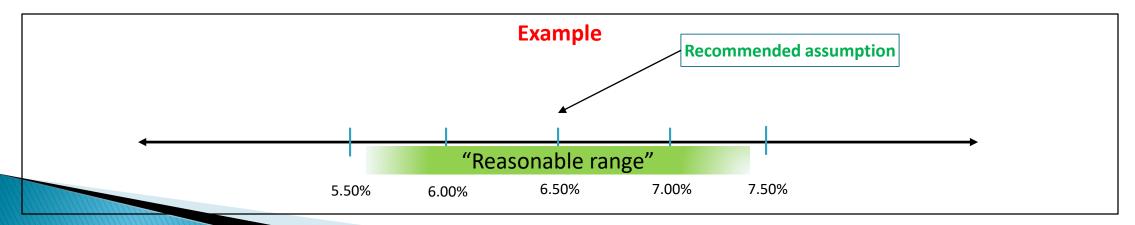
# Recommending and selecting assumption

#### Assumption recommendation

- Focus is on experts' "best-estimate"
- Median recommendation (i.e., long-run 50% likelihood of returns above or below)

#### Selecting the assumption

- Who is responsible, and for what purpose (funding or accounting)?
- Justify selection if it doesn't agree with experts' recommendation
- Selection must be within actuary's "range of reasonableness" to avoid report disclaimer



# Reasonability

- Actuary must attest whether assumption is reasonable (or not) at each valuation
- Opinions may differ, and that's ok!
  - Different model inputs, processes, and professional judgement
  - Our best estimate is 6.75% (20-year horizon); high end of our reasonable range is 7.5%

### Other Issues



The last two years' investment returns have been great, but need these above-average years to balance out times when returns lag the assumption



Want to maintain integrity of the actuarial valuations/assumptions and, to the extent possible, keep those decisions separate from other policy choices



Capital market assumptions are constantly evolving, and an assumption at the high end of "reasonable range" could quickly become unreasonable



# Questions



L/D/C/R: 4/emk/mws