Old Hire Reports

- Each Department has individual liabilities, assets, and funding policy

- Purpose of Valuation:
  - Determine funded level of plan – how do assets compare to obligations?
  - Determine required contribution
The Actuarial Terms we will define

• Actuarial Accrued Liability (AAL)
• Actuarial Value of Assets (AVA)
• Unfunded Actuarial Accrued Liability (UAAL)
• Funded Ratio
• Required Contribution (RC)

*Examples assume no investments are available, earnings = $0.*
Closed Plan Dynamic

- Last Old Hire member was hired in 1978
- Only 3 members still regular active (non DROP)
- Vast majority of members are in payment phase
- Generally fund benefits over active career so, in theory, would like to have benefits fully funded at this point
Actuarial Accrued Liability (AAL)

- Because Plans are closed, the accrued liability simply represents the total present value of the annuities over the member’s life expectancies.
  - Assume plan has two retirees, age 70 and 75.
  - Assume life expectancy 80 (or 10 and 5 years remaining respectively).
  - Both receive benefits of $10,000 per year

- Total liability = 
  \[ 10 \times $10,000 + 5 \times $10,000 = $150,000 \]
Actuarial Accrued Liability (AAL)

- The Actuarial Accrued Liability also represents the *target value of assets* at the valuation date.
Actuarial Value of Assets (AVA)

• Investment returns are volatile
• Don’t want all that volatility to flow through to contribution requirements
• Smooth assets
  – Assumes investment returns of 7.5%
  – Smooth any deviation from that (above or below) over 5 years
• Smoothed value is the actuarial value of assets
Unfunded Accrued Liability

- Accrued liability is representative of desired amount in the bank, but...
- That doesn’t always mean that’s what’s in the bank
- Example:
  - Accrued Liability: $50,000
  - Assets: $40,000
  - Unfunded Accrued Liability: $10,000
- Flip flopped situation “surplus”

- **Funded ratio** = Assets/Liability = 40000/50000 = 80%
How did we end up with an unfunded liability?

• Improving Benefit Provisions
  – Ad Hoc COLAs without funding to cover the up front increase in liabilities
• Contributed less than actuarially determined amount
• Asset losses
  – Don’t earn as much as assumption
• Demographic losses
  – Mortality – members live longer than expected
  – Less terminations than expected
  – Members retire sooner than expected
How did we end up with an unfunded liability?

• Other reasons:
  – Assumption changes
    o Asset allocation change dictated change in investment return assumption
    o Increased liabilities

• Can have flip side gains and end up with a surplus
Providing for Unfunded Benefit Payments

• New funding policy does not focus on amortization

• In plans with unfunded liabilities, focus on spreading assets available over remaining payments
  – Use portion of assets to pay current benefits
    ⊗ Portion based on funded status
  – Use minimum contribution to fund the rest

• Focus on level funding where possible
  – Margin will help reduce contribution volatility in the future
Why did my Required Contribution change?

- Benefit modification
- Assumption change
  - Discount rate reduction
- Administrative expense
  - Floating assumption
- Investment experience
  - Poor investment performance in 2018 created overall losses during the two year period
Why did my Required Contribution change?

• Salary/rank experience
• Contributions more/less than expected
• Mortality and Other
This concludes the Reading Old Hire Actuarial Reports Presentation.

If you wish further information or have questions please call

FPPA
Fire and Police Pension Association

(303) 770-3772 in the Denver Metro area or (800) 332-3772 toll free Statewide.