Pension Funding Part I – Follow-up

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Presentation to: LEOFF 2 Retirement Board

Office of the State Actuary
"Supporting financial security for generations."

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Today's Presentation

- Background on pension funding
- Review of actuarial cost methods
- Benefits of each cost method
- How cost methods compare under the *2017 Actuarial Valuation Report*
- Possible Board action today

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Background On Pension Funding

- Defines how to accumulate assets to pay for the plan benefits
- Two key components
  - Actuarial cost method (Part I)
    - Allocates pension costs to different time periods
    - Different cost methods vary in how quickly they fund the plan
    - Produce rates that fully fund the plan
  - Board funding policy (Part II)
    - Helps Board achieve specific funding goals

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Every Cost Method Includes Past And Future Costs

- Past costs
  - The cost of any past experience that is different than expected
    - Actuarial gains and losses
  - Changes to plan provisions or assumptions
- Future costs
  - The cost of next year's benefits all active members are expected to earn

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Common Cost Methods Used In Public Pensions

- Entry Age Normal (EAN) Cost Method
  - Calculates two separate contribution rates
    - Past costs = UAAL
      - Requires an amortization policy
    - Future costs = Entry Age Normal Cost
- Aggregate Cost Method
  - Rolls both the past and future costs into one contribution rate = Aggregate Normal Cost

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Why Might The Board Choose The Aggregate Or Entry Age Normal Cost Method?

- Aggregate Cost Method
  - Used for all other Washington State retirement plans (RCW 41.45.060)
  - One contribution rate that rolls all plan costs together
  - No UAAL (or surplus) amount separately identified and requiring an amortization policy
  - Has provided a solid foundation for LEOFF 2 historical funding
- Entry Age Normal Cost Method
  - Potential for increased consistency with policies and other pension plans
    - One component of cost method is used in the Board's minimum rate funding policy
    - Used by majority of public pension plans nationally
  - Results under this method used in financial reporting, as required by GASB

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How Do These Two Cost Methods Compare?

- Using results from the *2017 Actuarial Valuation Report*

Member Contribution Rate			
Aggregate		Entry Age Normal	
		(A) Normal Cost	8.59%
		(B) UAAL*	(2.57%)
Aggregate Rate	6.44%	EAN Rate (A+B)	6.02%

**UAAL amortized over a 15-year period.*

- LEOFF 2 has assets in excess of accrued (earned) benefits
  - Past experience has been better than expected = actuarial gains
  - Results in negative UAAL rate
  - The UAAL rate is amortizing past costs/(savings) over 15-year period

EAN Cost Method – UAAL Amortization Period

EAN Cost Method - Member Contribution Rate			
	UAAL Amortization Period		
	10-Year	15-Year	20-Year
Normal Cost	8.59%	8.59%	8.59%
UAAL	(3.21%)	(2.57%)	(2.31%)
Total EAN Rate	5.38%	6.02%	6.28%

- Selecting amortization period is important component of EAN cost method
  - Determines how quickly or slowly the UAAL is recognized
- Longer amortization period reduces UAAL rate
  - Longer time period to draw down past costs

How Could A Minimum Rate Policy Impact Results?

Member Contribution Rate			
Aggregate		Entry Age Normal	
		(A) Normal Cost	8.59%
		(B) UAAL	(2.57%)
Aggregate Rate	6.44%	EAN Rate (A+B)	6.02%
Minimum Rate	8.59%	Minimum Rate	8.59%

- Minimum rate is equal to Normal Cost (future costs) of Entry Age Normal cost method
  - Based on the 2017 valuation, Minimum rate is greater than rate under Aggregate or Entry Age Normal cost methods
  - The Board adopted the minimum rate for the 2019-21 and 2021-23 Biennia

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How Do Rates Compare If Funded Status Falls Below 100%?

Member Contribution Rate With Lower Assets			
Aggregate		Entry Age Normal	
		(A) Normal Cost	8.59%
		(B) UAAL*	1.09%
Aggregate Rate	9.42%	EAN Rate (A+B)	9.68%

**UAAL amortized over a 15-year period.*

- In this example we reduced the asset value by $1.25 billion
  - This reduces funded status to about 96%
- If funded status falls below 100%, Aggregate and Entry Age Normal Cost methods produce rates above minimum rates
  - Both cost methods will automatically adjust to rates required to get the plan back on track for full funding

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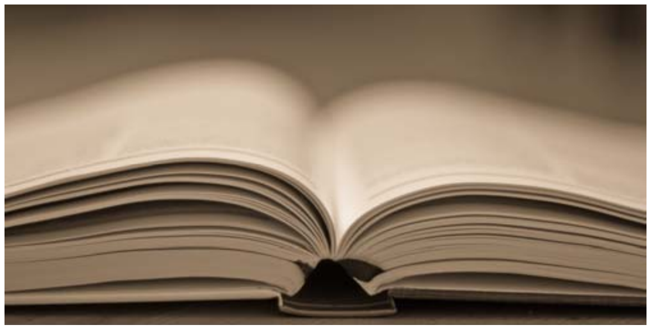
Summary And Next Steps

- Each cost method, along with appropriate funding policies, provides a reasonable approach to plan funding
- Either cost method, along with funding policies, can achieve the Board's goals
- Board has opportunity to affirm the current cost method or adopt new actuarial cost method
  - Today or at a future Board meeting
- Funding policy discussion at the October Board meeting
- OSA available to answer questions or provide additional analysis

Questions?

Appendix

- Aggregate Cost Method
- Entry Age Normal Cost Method



Aggregate Cost Method

Member Rate =	
Present Value of Future Benefit – Assets / Present Value of Salaries	= 6.39% + 0.05%* = 6.44%

Laws of 2017 Supplemental Rate.

Entry Age Normal Cost Method

Member Normal Cost Rate =	
Present Value of Benefits at Entry Age / Present Value of Salary at Entry Age	= 8.54% + 0.05%* = 8.59%

Laws of 2017 Supplemental Rate.

Member UAAL Rate =	
Earned Benefits – Assets / Present Value of 15 Years of Salary	= (2.57%)

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