May 23, 2018

Funding Method

INITIAL CONSIDERATION

By Ryan Frost
Research & Policy Manager
360-586-2325
ryan.frost@leoff.wa.gov

ISSUE STATEMENT

There are a variety of funding methods used to estimate the cost of future benefits, therefore it is up to the Board to decide which method aligns best with their funding goals.

OVERVIEW

Funding Policy

A funding policy is very important to the success of a pension plan, because these policies help the address the plan's affordability, the risk of the plan, rate stability, and rate adequacy. While the funding method is the underlying rate calculation, any funding policies the Board adopts is layered on top of that. LEOFF Plan 2 has stated the following as goals in the funding policy:

- Stable short-term contribution rates
- Full funding on an ongoing basis
- Smoothing investment returns
- Asset value corridor
- Minimum contribution rates
- Multi-year rate plans

Funding Method

The choice of a funding method is a core issue for a pension plan because the funding method determines the way the cost of the plan will be financed over time in much the same way that the choice of a style of mortgage determines the way in which the cost of a house is financed over time. All standard funding methods will accomplish the same goal of completely funding the cost of the plan just like either a fixed-rate mortgage or an adjustable-rate mortgage can be used to pay for a house. This report will examine two of the standard pension funding methods used by LEOFF Plan 2 since its inception, the aggregate funding method and the entry age normal cost method (EANC), as well as examine the variation of those funding methods that the LEOFF 2 Board has chosen to use when setting contribution rates.

FUNDING GOALS

Stable Contribution Rates

Stable contribution rates result in more predictable budget obligations for plan members, local government employers and the State which helps them prepare to meet their future funding obligations. The LEOFF Plan 2 Retirement Board has adopted contribution rate stability as one of the key elements of the Board's strategic plan for LEOFF Plan 2.

There are a number of policies which have been adopted by the LEOFF Plan 2 Retirement Board in order to moderate short-term swings in contribution rates.

1. Smoothing investment gains or losses over a period of time
2. Asset value corridor
3. Minimum contribution rates
4. Multi-year rate plans

Full Funding on an Ongoing Basis

In addition to short-term contribution rate stability, the Legislature adopted a goal of long-term contribution rate stability when LEOFF Plan 2 was first created. The term used to describe this goal in statute is "intergenerational equity" or the concept that each generation of members, employers and taxpayers pays for the benefits that they receive. Costs for current member benefits are not passed on to future generations.

There are two common causes of long-term contribution rate volatility; underfunding and benefit improvements. The Aggregate Funding Method used in LEOFF Plan 2 supports the goal of long-term contribution rate stability because this funding method eliminates the risk of plan underfunding (or overfunding). Benefit improvements also increase the cost of the plan. Benefit improvements that apply to retired members or to past service credit for current members may raise a concern that the current generation of members is paying for past benefits so this issue has been considered carefully by the LEOFF Plan 2 Board any time that the Board has recommended a benefit improvement to the Legislature.

Smoothing Investment Returns

The current assumption is that assets invested in the LEOFF Plan 2 Retirement Fund will earn 7.4% per year over the long-term. However, on a year-by-year basis, the investment return is almost certain to be higher or lower than 7.4% which results in a "gain" or "loss" when compared to the 7.4% earnings expectation. Public pension funds commonly "smooth" or phase in the recognition of these annual investment gains or losses over a period of time in order to soften the effect of short-term financial market volatility on contribution rates because averaging investment returns over a period of time will result in greater contribution rate stability over that same period of time. The current smoothing method for LEOFF Plan 2 recognizes investment gains or losses over a period of as much as eight years.

Asset Value Corridor

Smoothing investment returns results in a variance between the true market value of the assets in a retirement fund and the assumed value which is used to determine the contribution rates for the plan. An asset value corridor ensures that the variance stays within a set amount which increases contribution rate stability during periods of unusual investment gains or losses. LEOFF Plan 2 uses a 30% market value corridor which means that the actual market value of assets may not drop below 70% of the assumed value of assets or rise above 130% of the assumed value of assets.

Minimum Contribution Rates

Minimum contribution rates are often referred to as a “rate floor” and are used to ensure that short-term contribution rates do not drop below the expected long-term cost of the plan by more than a set amount. A rate floor is particularly useful for stabilizing contribution rates during periods of better than expected investment returns and when there are short-term variances in plan funding levels resulting from changes to assumptions or the plan funding method. The LEOFF Plan 2 Retirement Board adopted 90% of the expected long term cost of the plan as the contribution rate floor for LEOFF Plan 2.

Multi-year Rate Plans

Adopting a multi-year contribution rate plan is another useful method for improving the short-term predictability of contribution rates. The contribution rate may vary during the period of the plan or remain level depending on plan funding needs. The LEOFF Plan 2 Retirement Board adopted a four-year schedule for contribution rates in 2008 which set rates for the entire period exactly equal to the expected long-term cost of the plan.

FUNDING METHOD

The Aggregate Funding Method

The aggregate funding method has only one component, the normal cost. The normal cost takes the cost of all future benefits and spreads that over the future payroll of all current members. When LEOFF Plan 2 was created in 1977, the aggregate method was chosen by the Legislature as the plan’s funding method because it was particularly well suited to accomplish two pension funding policy goals which were considered important at that time; long-term stability in contribution rates and full funding of the plan on an ongoing basis. The Law Enforcement Officers' and Fire Fighters' Plan 2 Retirement Board adopted the policy goals of contribution rate stability and full funding of LEOFF Plan 2 as part of the Board's Strategic Plan in 2004 and has reaffirmed use of the Aggregate Funding Method to accomplish these goals.

The aggregate funding method promotes long-term stability in contribution rates because it is designed to fund the cost of the plan as a level percentage of pay over a member's working career. The contribution rates paid by the plan members and their employers would theoretically remain unchanged for the member's entire career if the plan's long-term economic assumptions and assumptions regarding member behavior were 100% accurate. To the extent that those assumptions prove inaccurate, any difference between what is expected and what is experienced, such as lower than expected investment returns, is reflected in the plan's cost each time the plan is reviewed and a new long-term rate is calculated. Therefore, short term contribution rates can and do experience ample volatility. A plan using the Aggregate Funding Method will always be 100% funded if the required contributions are paid; it will never have a surplus or an unfunded liability.

The Entry Age Normal Cost Method

The EANC method has two components; the normal cost, and an unfunded actuarial accrued liability (UAAL). The UAAL refers to the difference between the actuarial values of assets owned by the plan and the total benefits due to be paid. Unfunded liabilities are created when the actual plan investment returns are less or more than the assumed returns, and when other plan assumptions are realized, resulting in actual costs exceeding or below predicted costs. Both of these components are necessary in this funding method to achieve the goal of fully funding the benefits when they are due. The normal cost is more stable under the EANC because it doesn't include any of the experience that differs from assumptions, that is what the UAAL component is for. The normal cost only changes when plan assumptions are changed[1].

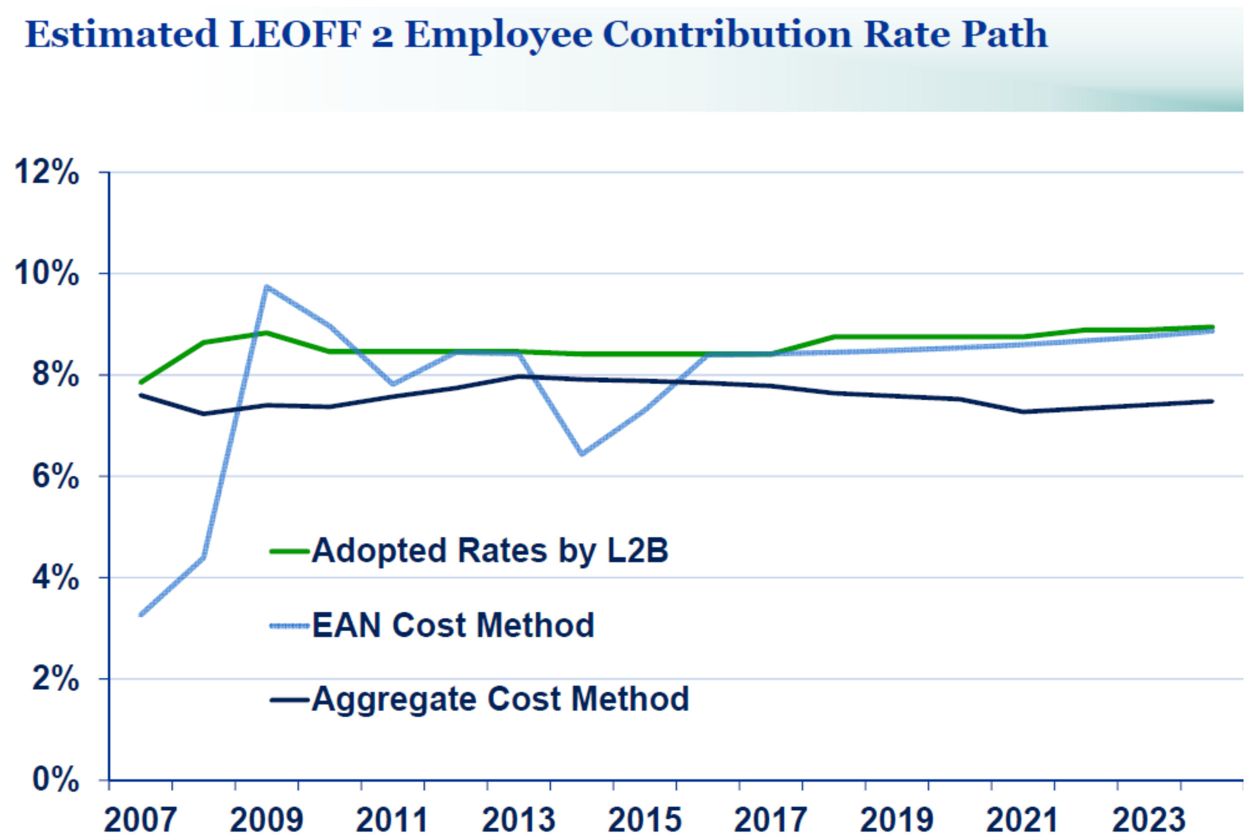
LEOFF 2 Board Funding Method

The Board has two policies in place when it comes to the funding method:

- Long term: Aggregate, with rate floor of 90% EANC
- Short term: Aggregate, with rate floor of 100% EANC

[1] For example, lowering the investment return assumption from 7.5% to 7.4%

With those two policies in place, the LEOFF 2 Board staff has come to call the plan's method the fixed normal cost method, which is simply a variation of EANC. As stated previously, under the EANC method, there are two components: the normal cost, and the UAAL (surplus or deficit) which is amortized over time. Under the fixed normal cost (FNC) method, the amortization of the unfunded liability is eliminated. Instead, rates are tied to the normal cost and the UAAL will fluctuate up and down (within the corridor) depending on investment performance. This method provides more stable rates than the EANC.



O:\LEOFF 2 Board\2017\10-18-17\Actuarial.Funding.Discussion.pptx

CONCLUSION

The current framework for funding LEOFF Plan 2 is a result of several decisions such as choosing the aggregate funding method, adopting long-term economic assumptions, setting member behavior assumptions, and modifying the funding method to provide contribution rate stability. Each of these policy areas plays an important role in plan funding and every current policy used in LEOFF Plan 2 has been carefully considered by the LEOFF Plan 2 Board as to how that policy supports the Board's strategic goals to fully fund the plan and keep contribution rates stable.

LEOFF
Plan 2 Retirement Board

Funding Method

Initial Consideration – May 23, 2018

Issue Statement

There are a variety of funding methods used to estimate the cost of future benefits, therefore it is up to the Board to decide which method aligns best with their funding goals.

Funding Policy Overview

- Stable contribution rates
- Full funding on an ongoing basis
- Smoothing investment returns
- Asset value corridor
- Minimum contribution rates
- Multi-year rate plans

Funding Method Overview

- All methods accomplish the same goal of completely funding the cost of the plan
  - Fixed rate vs. adjustable rate mortgage
- Aggregate method
- Entry age normal cost method
- LEOFF 2 Board funding method

Stable Contribution Rates

- Predictable budgets for stakeholders
- Policies to moderate short term swings:
  - Investment smoothing
  - Asset value corridor
  - Minimum contribution rates
  - Multi year rate plans

Smoothing Investment Returns

- 7.4% return assumption
- Earnings will almost always be higher or lower than 7.4%
- Returns smoothed over a period of up to 8 years

Asset Value Corridor

- Smoothing results in a variance between market value and actuarial value of assets
- AVC ensures that the variance stays within a set amount to increase rate stability
- LEOFF 2 uses a 30% corridor
  - Market value may not drop below 70% or above 130% of actuarial value of assets

Minimum Contribution Rates

- Often referred to as a “rate floor”
- Used to ensure that short-term rates do not drop below the expected long term cost of the plan by more than a set amount.
- LEOFF 2 has historically adopted a 90% or 100% rate floor

Multi-year Rate Plans

- Another method to improve predictability of rates
- LEOFF 2 uses a 4-year schedule for adopting rates

Aggregate Funding Method

- Has only one component, the normal cost
- Normal cost takes cost of all future benefits and spreads that over current members
- Funding method in statute since plan inception in 1977
  - Long term rate stability
  - Fully funds plan
- Any difference between experience and assumptions leads to rate volatility
  - Aggregate wants the plan to always be 100% funded, ASAP
  - No UAAL, plan will always be 100% funded if required contributions are made

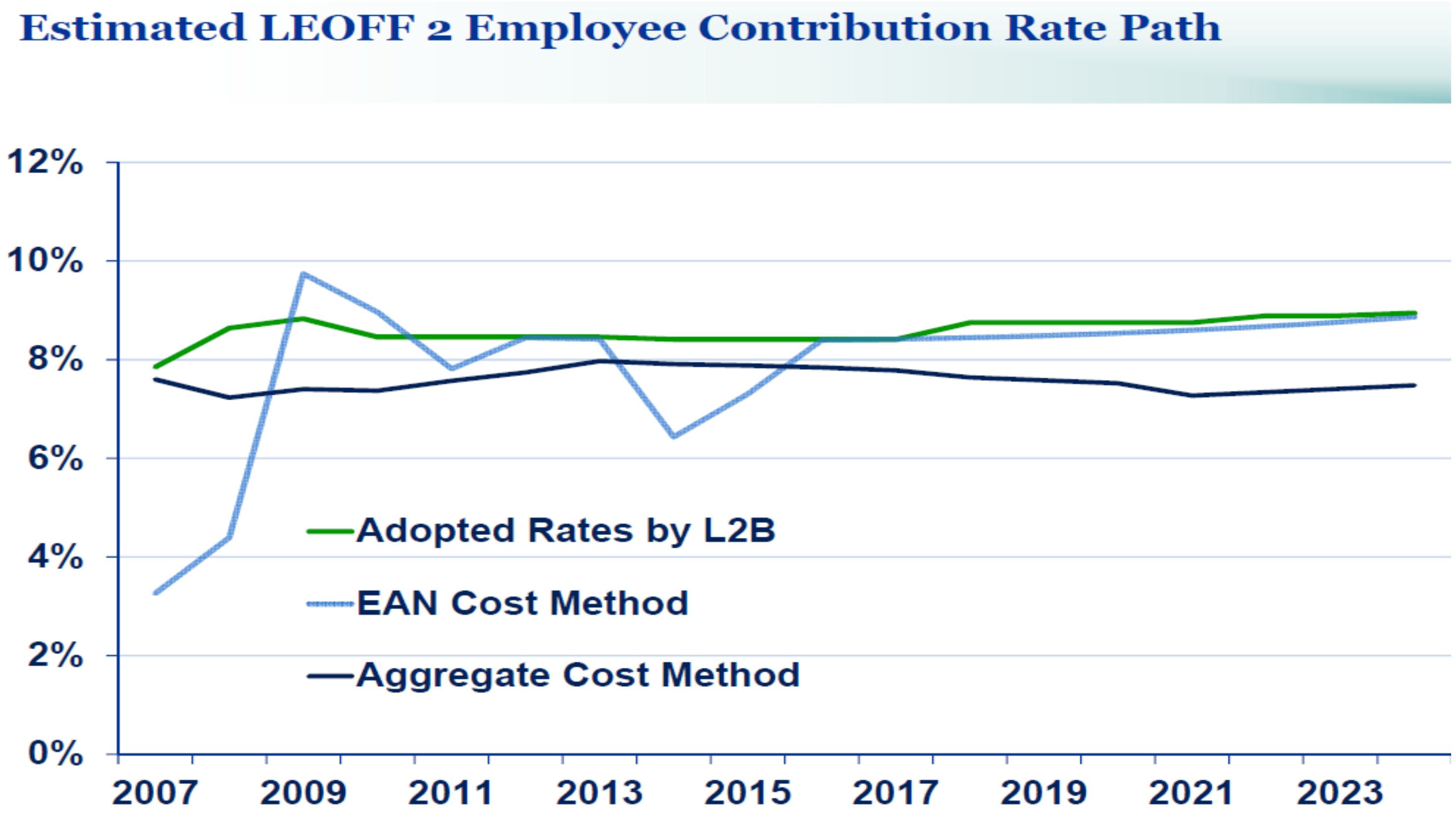
Entry Age Normal Cost Method

- Two components
  - Normal cost
  - UAAL
- UAAL may be positive or negative
  - Amortized over time
- Normal cost is more stable under EANC
- Normal cost only changes when plan assumptions change

LEOFF 2 Board Funding Method

- Two policies for funding method:
  - Long term: Aggregate, rate floor of 90% EANC
  - Short term: Aggregate, rate floor of 100% EANC
- Fixed normal cost method
  - Variation of EANC
  - Amortization of UAAL is eliminated
  - Rates tied to normal cost, UAAL fluctuates based on investment returns
  - Provides the most stable rates out of the 3 methods

Estimated Rates



O:\LEOFF 2 Board\2017\10-18-17\Actuarial.Funding.Discussion.pptx

Thank You

Ryan Frost
Research & Policy Manager
ryan.frost@leoff.wa.gov
(360) 586-2325