

BOARD MEETING AGENDA

November 9, 2016 - 9:30 AM



LOCATION

STATE INVESTMENT BOARD
Large Conference Room, STE 100
2100 Evergreen Park Drive S.W.
Olympia, WA 98502
Phone: 360.586.2320
Fax: 360.586.2329
recep@leoff.wa.gov

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|--|----------|
| 1. Approval of September and October Minutes | 9:35 AM |
| 2. Retiree Annuity Purchase Administrative Factors Adoption | 9:40 AM |
| Lisa Won, OSA | |
| 3. Plan 1/Plan 2 Merger Study | 10:15 AM |
| Steve Nelsen, Executive Director | |
| 4. Public Testimony | 11:00 AM |
| 5. Administrative Update | |
| • Quarterly Budget Update | |
| • SCPP Update | 11:15 AM |
| • Outreach Activities | |
| 6. Agenda Items for Future Meetings | 11:30 AM |
| Steve Nelsen, Executive Director | |

Lunch is served as an integral part of the meeting.

In accordance with RCW 42.30.110, the Board may call an Executive Session for the purpose of deliberating such matters as provided by law. Final actions contemplated by the Board in Executive Session will be taken in open session. The Board may elect to take action on any item appearing on this agenda.



Retiree Annuity Purchase Administrative Factors Adoption

Date Presented:

11/9/2016

Presenter Name and Title:

Lisa Won, OSA

Summary:

SSB 6264 passed in 2016 Session and provides LEOFF 2 retired members with a one-time opportunity to purchase additional annuity.

Strategic Linkage:

This item supports the following Strategic Priority Goals:

Enhance the benefits for the members., Maintain the financial integrity of the plan.

ATTACHMENTS:

Description	Type
▣ POST-RETIREMENT JOINT AND SURVIVOR OPTION FACTORS FOR LEOFF 2 ANNUITY PURCHASE	Correspondence
▣ Administrative Factors Followup	Presentation



Office of the State Actuary

"Supporting financial security for generations."

September 20, 2016

Mr. Steve Nelsen
Executive Director
LEOFF 2 Retirement Board
PO Box 40918
Olympia, Washington 98504-0918

**SUBJECT: POST-RETIREMENT JOINT AND SURVIVOR OPTION FACTORS
FOR LEOFF 2 ANNUITY PURCHASE**

Dear Steve:

We have completed our development of a new set of Joint and Survivor (J&S) Option Factors specifically for Law Enforcement Officers' and Fire Fighters' (LEOFF) Plan 2 retired members. The development of these Post-Retirement J&S factors was requested by the Department of Retirement Systems (DRS), in consultation with our office, to implement the provisions of Senate Bill 6264 which passed during the 2016 Legislative Session. This bill creates a new window, opening January 1, 2017 and closing June 1, 2017, during which LEOFF 2 members who retired before June 1, 2014 may purchase an additional annuity through their respective plan trust fund. This new set of J&S factors will apply only to the purchased annuity of members who elected a J&S benefit upon retirement.

The attached appendices contain supporting information for the LEOFF 2 Post-Retirement J&S factors. **Appendix A** supplies general information about data, assumptions, and methods used to develop the factors. **Appendix B** provides more detailed information about the Post-Retirement J&S factors and about Senate Bill 6264. These appendices should be used together with this cover letter and attached excel spreadsheet to form a complete actuarial communication.

We developed the Post-Retirement J&S factors as a single age-difference table (member age minus beneficiary age) based upon the average age of LEOFF 2 retirees. This differs from the J&S factors sent in our previous communication dated November 10, 2015, which was based upon the average age of retirement of LEOFF 2 members. Both tables of factors are informed by our understanding of how DRS applies them and according to policy decisions made by DRS. The policy decisions were documented in our letter dated May 27, 2009, and have been updated to incorporate mortality improvement trends. We intend this communication to be used by the Board and DRS only. If a party other than the Board or DRS reads this communication, they should address questions to the Board or DRS and seek professional guidance with the content and interpretation of this communication.



In my opinion, all of the data, assumptions, and methods we used in developing the factors are reasonable and appropriate for this project. The use of another set of assumptions and methods, however, could also be reasonable and could produce materially different results.

The economic and demographic assumptions we used for updating the factors were adopted by the Board consistent with RCW 41.26.720. In my opinion, all methods, assumptions, and calculations are reasonable and in conformity with generally accepted actuarial principles and standards of practice as of the date of this letter.

The undersigned, with actuarial credentials, meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. While this letter and supporting attachments are intended to be complete, we are available to offer extra advice and explanations as needed.

Please let me know if you have any questions concerning these administrative factors or the assumptions and methods used to develop them.

Sincerely,

Lisa A. Won, ASA, FCA, MAAA
Deputy State Actuary

cc: Kelly Fox, Chair
LEOFF Plan 2 Retirement Board
Tracy Guerin, Director
Department of Retirement Systems
Jacob White, Legal and Legislative Services Manager
Department of Retirement Systems
Shawn Merchant, Assistant Director, Project Management
Department of Retirement Systems
Seth Miller, Assistant Director, Customer and Policy Services
Department of Retirement Systems
Matt Smith, FCA, EA, MAAA, State Actuary
Office of the State Actuary
Mitch DeCamp, Actuarial Analyst
Office of the State Actuary

Attachments

Appendix A – General Data, Assumptions, and Methods
Appendix B – Post-Retirement Joint and Survivor Option Factors
Excel Spreadsheet – 2016.LEOFF.2.Post-Ret.J&S.OSA.9-20-16.xlsx

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APPENDIX A – GENERAL DATA, ASSUMPTIONS, AND METHODS

Data

We relied on the [2015 Actuarial Valuation Report](#) (AVR) data whenever necessary to develop the Post-Retirement J&S factors. Please see the *Actuarial Certification Letter* in the 2015 AVR for further considerations on the data we used.

Assumptions

We relied on the following key assumptions in the 2015 AVR to develop the Post-Retirement J&S factors.

❖ **Economic Assumptions**

System	Interest	Annual COLA
LEOFF 2	7.50%	3%

- ❖ **Mortality Assumptions:** Consistent with your current policy decision to reflect assumed future mortality improvements in the administrative factors, we used the mortality improvement method developed in our 2007-2012 Demographic Experience Study (DES) to project the RP-2000 table to the year 2017 (RP-2017) for the underlying mortality assumption for the plan. We use 2017 because it's the approximate midpoint between the current and next expected update to administrative factors.

Mortality improvements are projected generationally from the RP-2017 rates consistent with the 2015 AVR (see the DES for more information on generational mortality improvement projections). Generational mortality improvement means mortality rates get smaller every year in the future for every age. See the **Methods** section below for a description of the development of projected mortality assumptions.

- ❖ **Mortality Blending:** We used the retirement and disability rates as disclosed in the 2015 AVR and RP-2017 mortality rates to blend healthy and disabled mortality assumptions (see the **Methods** section below for a description of the process).

Methods

Development of Underlying Mortality Assumptions

Consistent with your previous policy decisions, we blended healthy and disabled mortality assumptions using the following method.

- ❖ We multiplied the RP-2017 healthy mortality rates by the probability that benefit commencement from active status is from a healthy cause. Healthy causes include service retirement and the death of a member from active service. Where retirement rates vary by service, we used active



membership counts by service and age to develop weighted average retirement rates.

- ❖ We multiplied the RP-2017 disabled mortality rates by the probability a member will take a disability benefit when leaving active status. In other words, we multiplied the RP-2017 disabled mortality rates by the probability of a benefit commencing due to a non-healthy cause.
- ❖ We added the weighted rates above to come up with male and female RP-2017 blended mortality assumptions by age for the plan.
- ❖ We projected the blended mortality rates from RP-2017 generationally, incorporating expected mortality improvements using 100 percent of Scale BB, as developed in the DES and applied in the 2015 AVR.



APPENDIX B – POST-RETIREMENT JOINT AND SURVIVOR OPTION FACTORS

Purpose

Members of LEOFF 2 may elect a reduced monthly benefit amount on retirement to provide an ongoing survivor benefit for their designated survivor beneficiary. The department currently offers three J&S choices for these members:

- ❖ Survivor receives 100 percent of the member's benefit (Option 2).
- ❖ Survivor receives 50 percent of the member's benefit (Option 3).
- ❖ Survivor receives 66 2/3 percent of the member's benefit (Option 4).

The current J&S factors are based on member average age at retirement. These factors are not actuarially equivalent for post-retirement annuity purchases. Members buying a J&S annuity in retirement require a larger reduction because the cost of providing a survivor benefit increases with member age. The post-retirement factors presented in this communication can be multiplied by a member's purchased monthly annuity amount to find the additional monthly benefit.

Data

We used the 2015 AVR data as described in **Appendix A**. We also used data from the 2007-2012 DES about service and disability retirees to develop the percent male assumption and average age (see the **Assumptions** section below).

Assumptions

We relied on the following key assumptions:

- ❖ We used the economic and mortality assumptions shown in **Appendix A**.
- ❖ We assumed percent male assumptions specifically for the Post-Retirement J&S factors of 98.23 percent, based on information in the DES. This assumption is consistent with the assumption used to develop the J&S administrative factors currently in place.
- ❖ We used the average LEOFF 2 retiree age to develop the Post-Retirement J&S factors.

LEOFF 2 Average Service and Disabled Retiree Age	
Males	Females
62	62



Methods

Development of J&S Option Factor Tables

J&S option factors reduce members' benefits so that the selection of the option makes the benefits under that option actuarially equivalent to the members' single life benefits.

$$\text{PV (single-life benefits)} = \text{Factor} \times \text{PV (J\&S benefits)}$$

Where "PV" denotes Present Value and includes the annuity factors produced for this project. "Benefits" means the sum of all expected lifetime benefits.

The next table displays additional information we used to develop these factors.

Annuity Factor Details		
	Single-Life Annuity	Joint & Survivor Annuity
Annuity Type	Single Life	Joint Life
Payment Commencement	Immediate	Immediate
Payment Frequency	Monthly	Monthly
Payment Timing	End of Period	End of Period
Certain Period (Years)	None	None
COLA Percent	3%	3%
COLA Increase Frequency	Annual	Annual

We developed the Post-Retirement J&S option factors to include the probability that a survivor will pre-decease the member, and the member's additional monthly benefit will pop up to its pre-reduction level.

Other Information

We formatted the Post-Retirement J&S option factor tables in a way consistent with the current J&S option format in [WAC 415-02-380](#). Please see the tables in the attached spreadsheet for the resulting Post-Retirement J&S option factors.

Administrative Factors

Follow-Up From September

*Lisa Won, ASA, FCA, MAAA
Deputy State Actuary*

*Presentation to:
LEOFF 2 Board*



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

November 9, 2016

Today's Presentation

- Purpose of new factors
- Recommendation
- Next steps



Why Are New Administrative Factors Needed?

- SSB 6264 passed in 2016 Session and provides LEOFF 2 retired members with a one-time opportunity to purchase additional annuity
 - Actuarial Fiscal Note assumes actuarial equivalent administrative factors
- Administrative factors adjust pensions for optional payment forms
 - Optional payments should be cost-neutral to the plan as a whole - "Actuarial Equivalence"
- Two different administrative factors used for annuity purchase
 - Annuity purchase factors are based on age at purchase and payable for the members' lifetime
 - Joint and Survivor (J&S) factors convert the single life annuity so it's payable on the life of both the member and their beneficiary
 - Current factors are not actuarially equivalent since they are based on average age at retirement, not average age of current retirees

Joint & Survivor Option Factors

- J&S factors reduce a member's benefit to provide an ongoing benefit for their survivor
- Three types of survivor benefits available under the plan:
 - J&S 100 percent
 - J&S 50 percent
 - J&S 66 2/3 percent
- New factors needed for retired members
 - Current J&S factors are based on members at retirement
 - Members electing J&S option after retirement need larger reduction since the cost to provide an ongoing survivor benefit increases as the member ages



Joint & Survivor Factor Comparison

- J&S factors vary based on the member's age and the age of their joint annuitant when the benefit commences
- Compares the value of a single life annuity to a joint life annuity
- J&S factors reduce a member's benefit to recognize additional cost of providing a benefit payable on two lives

Percent Change From 2015 'At Retirement' Factors			
	J&S 100%	J&S 50%	J&S 66.67%
MIN	(0.94%)	(0.48%)	(0.64%)
AVG	(4.94%)	(2.84%)	(3.60%)
MAX	(8.49%)	(5.11%)	(6.38%)

Joint & Survivor Factor Example

- Impact on \$2,000 additional monthly retirement benefit purchased by a 65 year old member electing J&S 100 percent (age difference = 3)

	Current	New	Change
J&S Factor	0.855	0.822	(3.93%)
Monthly Benefit	\$1,710	\$1,644	(\$66)

Comparing Purchase At Retirement To Purchase In Retirement

- Member 1 is retiring at age 55 on January 1, 2017, and has \$100,000 of qualified savings to purchase additional annuity through the plan
- Member 2 is retired, currently age 65, and uses \$100,000 of qualified savings to purchase additional annuity under SSB 6264
- Both members will elect J&S 100 percent and have a spouse three years younger

Comparison of Member Annuity Purchases			
	Purchase Factor*	J&S 100% Factor**	Additional Annual Benefit***
Member 1	16.2	0.855	\$5,278
Member 2	13.1	0.822	\$6,275

*Based on age at time of purchase.

**Uses recommended factor for Member 2.

***Increases annually with Cost of Living Adjustment.

Recommendations

- We recommend adopting new J&S administrative factors to apply to current retired members who purchase an additional annuity
 - Best estimate of life expectancies for impacted members
 - Best actuarial equivalence (accuracy) for cost of optional benefits
 - Consistent with assumptions used in the actuarial valuation to determine funding requirements of the plan
 - Consistent with the analysis prepared for SSB 6264

Next Steps

- OSA has provided additional information and tables of new factors
- The Board has authority to adopt factors for LEOFF 2
 - DRS adopts factors for all other plans
- DRS will use new factors during the temporary window, January 1, 2017, through June 1, 2017



Questions?





Plan 1/Plan 2 Merger Study

Report Type:

Comprehensive Report Follow-up

Date Presented:

11/9/2016

Presenter Name and Title:

Steve Nelsen, Executive Director

Summary:

A financial merger of the LEOFF Plan 1 and LEOFF Plan 2 retirement funds raises a number of issues for plan members and retirees, LEOFF employers and the State related to funding policies, governance, and potential budget impacts. These issues should be studied by LEOFF 2 trustees.

ATTACHMENTS:

Description	Type
▣ Merger Study Comprehensive Follow Up Report	Report
▣ Merger Study Comprehensive Follow Up Presentation	Presentation



November 9, 2016

LEOFF 1/LEOFF 2 Merger Study

COMPREHENSIVE REPORT FOLLOW-UP

By Steve Nelsen

Executive Director

360-586-2320

steve.nelsen@leoff.wa.gov

ISSUE STATEMENT

A financial merger of the LEOFF Plan 1 and LEOFF Plan 2 retirement funds raises a number of issues for plan members and retirees, LEOFF employers and the State related to funding policies, governance, and potential budget impacts. These issues should be studied by LEOFF 2 trustees.

OVERVIEW

A merger of the LEOFF 1 and LEOFF 2 retirement funds could affect all current and future member participants and annuitants in LEOFF Plan 1 and LEOFF Plan 2. According to the Preliminary 2015 Actuarial Valuation Report, as of June 30, 2015, LEOFF Plan 2 had 17,019 active participants and 3,710 annuitants; LEOFF Plan 1 had 82 active participants and 7,507 annuitants.

The Law Enforcement Officers' and Fire Fighters' (LEOFF) Retirement System is a cost-sharing multiple-employer retirement system. Membership includes all full-time, fully compensated, commissioned law enforcement officers, and firefighters. There are two tiers in the LEOFF system referred to as LEOFF Plan 1 and LEOFF Plan 2. Both LEOFF Plan 1 and LEOFF Plan 2 provide defined retirement benefits which are financed from a combination of investment earnings, employer and employee contributions, and contributions from the State.

The LEOFF Plan 1 retirement fund and the LEOFF Plan 2 retirement fund are separate trust funds. The assets of each fund may be used solely to pay for the liabilities of the associated retirement plan. The funds are commingled for investment purposes but they are accounted for separately and reported separately in both annual financial reports and annual actuarial valuations.

There have been several legislative proposals since 2010 to merge State public pension plans, including the Law Enforcement Officers' and Fire Fighters' Plan 2 (LEOFF Plan 2), in order to save the State money by reducing State contributions to the new plan. The debate over these proposals has raised questions of whether the proposals are legal under state or federal law; how the merger impacts the State budget; and how the merger affects member benefits, plan governance and plan funding.

The Supplemental Operating Budget passed by the Legislature in 2016 included a proviso (2016 3rd sp.s. c 4 s 106) for the SCPP to work with the LEOFF Plan 2 Board, DRS, and OSA to study the legal, financial and policy issues raised by merging the LEOFF Plan 1 Retirement Fund with either the LEOFF Plan 2 Retirement Fund or the Teachers' Retirement System (TRS) Plan 1 Retirement Fund.

This report will provide an explanation of the issues raised by a merger of the LEOFF Plan 1 and LEOFF Plan 2 retirement funds. The analysis of these issues will not be specific to any past legislative proposal. Rather, the goal of this report is to increase understanding of the general principles that would apply to any merger of these plans.

BACKGROUND & POLICY ISSUES

Benefit Administration and Investment of the Retirement Funds

The Law Enforcement Officers' and Fire Fighters' (LEOFF) Retirement System was created in 1970 by merging a number of separate city and county retirement plans into one state-wide plan. The LEOFF Retirement fund was established to pay for the liabilities of this new retirement system. The administration of the LEOFF Retirement System and the investment of fund assets was initially the responsibility of the Public Employees' Retirement System (PERS) Board.

The responsibility for administering the LEOFF Retirement System benefits was transferred from the PERS Board to the newly-created Department of Retirement Systems (DRS) in 1977. DRS continues to administer LEOFF member benefits to this day. On October 1, 1977, the original LEOFF system (Plan 1) was closed to new members and a new tier of benefits, LEOFF Plan 2, was established for all new LEOFF members. LEOFF Plan 2 currently remains open. The PERS Board continued to invest the LEOFF Retirement Systems fund, which included assets and liabilities of both LEOFF Plan 1 and LEOFF Plan 2, until 1981 when the Board was abolished and investment authority for the fund was transferred to the newly-created Washington State Investment Board (WSIB) where it remains today.

The Pension Funding Act of 1989 (c. 272, laws of 1989) split the assets and liabilities of the LEOFF Retirement System into separate funds for LEOFF Plan 1 and LEOFF Plan 2. Both funds are commingled for investment purposes as part of the Commingled Trust Fund managed by the SIB but assets and liabilities are accounted for separately.

The WSIB has the responsibility for investing all the state administered pension funds, including both the LEOFF Plan 1 retirement fund and the LEOFF Plan 2 retirement fund. The statutory mandate for the WSIB is to maximize return at a prudent level of risk.¹ The retirement funds collectively are called the Commingled Trust Fund (CTF). Established on July 1, 1992, the CTF is a diversified pool of investments including fixed income, public equity, private equity, real estate and tangible assets.

The CTF return was 4.93 % for the 2014-2015 fiscal year. The net assets held in trust for all the pension and benefit funds in the CTF totaled \$80.5 billion as of June 30, 2015. The net assets held in trust for LEOFF Plan 2 was \$9.83 billion or approximately 12% of the total pension and benefit funds in the CTF. The net assets held in trust for LEOFF Plan 1 was \$5.61 billion or approximately 7% of the total pension and benefit funds in the CTF.

LEOFF 1 Contributions

LEOFF Plan 1 is a cost-sharing multiple employer retirement system which has been funded by a combination of contributions from three parties: the employers, the employees, and the state. Initially, the contribution rates for LEOFF Plan 1 were set at 6% of salary for both employees and employers and totaled approximately \$266 million. State contributions were made by ad hoc legislative appropriations unrelated to employee salaries and totaled approximately \$1,801 million. The relative historical share of contributions to the Plan 1 fund from the three parties is: 77% from state appropriations, 11.5% from employer contributions, and 11.5% from employee contributions.

The assets of the LEOFF Plan 1 retirement fund came to exceed the total actuarial liabilities of the system during the late 1990s when there was an extended period of much higher-than-expected

¹ RCW 41.33A.110

investment returns. The state ceased making appropriations to the plan after June 30, 1999. Member and employer contributions were statutorily suspended in June 2000.

The Office of the State Actuary provides an Actuarial Valuation Report to the Pension Funding Council every two years and the Council has the authority adopt any changes to the state contribution rate for LEOFF 1 as may be required. There were approximately 82 active LEOFF Plan 1 members and 7507 annuitants as of June 30, 2015.

LEOFF 2 Contributions

LEOFF Plan 2 is a cost-sharing multiple employer retirement system which is funded by a combination of contributions from three parties pursuant to a statutory cost sharing formula under which the members pay 50% of the total annual required contributions, the employers pay 30%, and the State pays 20%.² These costs are charged to members, employers and the State as a percentage of the member's salary.

The cost of the plan is evaluated annually by the Office of the State Actuary in their annual Actuarial Valuation Report. The contribution rates are adopted periodically by the LEOFF Plan 2 Retirement Board³ based on the current and projected costs of the plan, the current and projected funding status of the plan and three statutory funding goals:

- To fully fund the plan;⁴
- To establish long-term state, employer and member contribution rates which will remain a relatively predictable and stable portion of future state, employer and member budgets;⁵and,
- To fund, to the extent feasible, all benefits for plan 2 members over the working lives of those members so that the cost of those benefits are paid by the taxpayers who receive the benefit of those members' service.⁶

The LEOFF Plan 2 Retirement Board has adopted modifications to the second goal to include the additional objective of rate stability and to reflect the interests of employers and members, not just the State. The original statutory goal was simply, "To establish long-term employer contribution rates which will remain a relatively predictable portion of future state budgets."

Rates are also adjusted periodically by the LEOFF Plan 2 Retirement Board to reflect increased costs as a result of benefit improvements.⁷ The current contribution rates adopted by the LEOFF Plan 2 retirement Board through June 30, 2017 are 8.46 percent member, 5.08 percent employer, and 3.38 percent State. There were approximately 17,019 active LEOFF Plan 2 members and 3,710 annuitants as of June 30, 2015.

Funding Policies

Both LEOFF Plan 1 and LEOFF Plan 2 are valued and funded according to a complex arrangement of actuarial funding methods, long-term economic assumptions, demographic assumptions and actuarial funding policies. Many of these policies are the same for both plans but there are some differences which are important to understand and consider in the context of a financial merger of the plans.

² RCW 41.26.725(1)

³ RCW 41.26.725 and RCW 41.45.0604

⁴ RCW 41.45.010(1)

⁵ RCW 41.45.010(4)

⁶ RCW 41.45.010(5)

⁷ RCW 41.45.070

Actuarial Funding Method

A variation of the Frozen Initial Liability Cost Method is used in LEOFF Plan 1 to determine the normal cost of the plan and the actuarial accrued liability for retirement and other pension benefits. Under this method, the Unfunded Actuarial Accrued Liability (UAAL) is equal to the unfunded actuarial present value of projected benefits less the actuarial present value of future normal costs for all active members and is reset at each valuation date. The present value of future normal costs is based on the aggregate normal cost for LEOFF Plan 2 and the resulting UAAL is amortized by June 30, 2024 as a level percentage of projected system payroll. The projected payroll includes pay from LEOFF Plan 2 as well as projected payroll from future new entrants. There is currently a positive UAAL for LEOFF Plan 1.

There is a statutory funding policy to fully amortize any unfunded liability which may emerge in LEOFF 1 no later than June 30, 2024.⁸ Both the State and LEOFF employers are likely to incur increased costs if LEOFF Plan 1 comes out of fully funded status which would create a need for LEOFF Plan 1 funding policies to be developed and coordinated with LEOFF Plan 2 funding policies established by the Board.

The Aggregate Cost Method is used in LEOFF Plan 2 to determine the normal cost and the actuarial accrued liability. Under this method, the unfunded actuarial present value of fully projected benefits is amortized over the future payroll of the active group. The entire contribution is considered normal cost and no UAAL exists.⁹

The LEOFF Plan 2 Retirement Board has used a variation of the Entry Age Normal Cost Method since 2009 to match contribution rates to the expected long-term cost of the plan.

Long-Term Economic Assumptions

In order to calculate the necessary current contribution rates for a plan, it requires projecting the future costs of paying out plan benefits, projecting the future value of current retirement fund assets and future contributions, and converting these projections into present day values. These calculations require the use of long-term economic assumptions. The long-term economic assumptions for LEOFF Plan 2 are adopted by the LEOFF Plan 2 Retirement Board. The long-term economic assumptions for LEOFF Plan 1 are set in statute.

Assumption	LEOFF 2	LEOFF 1
Investment Rate of Return	7.50%	7.70%
Salary Growth	3.75%	3.75%
Inflation	3.00%	3.00%
Growth in Membership	1.25%	1.25%

Demographic Assumptions

Assumptions about future non-economic events are also an important necessary component of the overall funding policies for both LEOFF 1 and LEOFF 2. Key demographic assumptions include:

- Members' future rates of retirement and disability.
- Their total length of service.
- Their life expectancy after retirement.
- The life expectancies of their surviving spouses and other beneficiaries.

⁸ RCW 41.45.010(2)

⁹ 2009 LEOFF Actuarial Valuation Report, Office of the State Actuary p. 36

The Office of the State Actuary performs an experience study at least once every six years to determine at what rate the above factors have actually occurred in the retirement systems.¹⁰ The experience study compares actual experience to the assumptions and, if necessary, OSA makes adjustments to the rates for future actuarial valuations. For LEOFF Plan 2, any changes recommended by OSA must be adopted by the LEOFF Plan 2 Retirement Board.¹¹

The most recent demographic experience study was published by the Office of the State Actuary in September, 2014. The study covered experience from 2007-2012. The study reported experience in LEOFF 1 separate from LEOFF 2 and developed different assumptions for each plan. One of the recommendations of that study was to modify mortality assumptions to take into account projected future improvements in life expectancy. These recommendations were adopted by the LEOFF 2 Board and incorporated into actuarial assumptions for LEOFF 2. The recommendations were adopted by the Legislature for LEOFF Plan 1.

Actuarial Value of Assets v. Market Value of Assets (“Smoothing”)

For the actuarial valuation report, the Office of the State Actuary calculates the actuarial value of assets using an asset smoothing method adopted by the Legislature in 2003. The asset smoothing method applies to both LEOFF Plan 1 and LEOFF Plan 2. Each year OSA determines the amount the actual investment return deviates from the expected investment return and smooths that year’s gain or loss over a period of up to 8 years according to how much the actual gain or loss differs from the assumed gain.

Asset Value Corridor

Additionally, to ensure the actuarial value of assets maintains a reasonable relationship to the market value of assets, a 30% asset value corridor was statutorily adopted in 2004.¹² This means that the actuarial value of assets may not exceed 130% nor drop below 70% of the market value of assets. The asset value corridor applies to both LEOFF 1 and LEOFF 2. On June 30, 2015, the asset value ratio for LEOFF 2 was 95% and for LEOFF 1 was 96%

The Funded Status of LEOFF 1 and LEOFF 2

The funded status of a plan is calculated by comparing the plan’s assets to the present value of earned pension benefits of the plan’s members. A plan’s funded status can vary significantly depending on the assumptions and methods used to determine the value of the plan’s assets and liabilities. The Office of the State Actuary has historically reported the funding status for both LEOFF 1 and LEOFF 2 by comparing the actuarial value of assets (AVA) to the liabilities of the plan calculated using the Projected Unit Credit (PUC) actuarial cost method and the long-term earnings assumption.

The use of this particular funded status reporting method is helpful for comparing a plan’s funding progress over time, measuring the impact of assumption changes, or serving as a standard for comparing plans that use different funding methods. However, this particular funded status measurement can also be very misleading if taken out of context. The funded ratio may appear either overstated or understated to the extent that the actuarial value of assets deviates substantially from the market value of assets.

¹⁰ RCW 41.45.090

¹¹ RCW 41.26.720

¹² RCW 41.45.035(3)(a)

Governance

LEOFF Plan 2

Effective July 1, 2003, the LEOFF Plan 2 Retirement Board was established by Initiative 790 to provide governance of LEOFF Plan 2. The Board's duties include adopting contribution rates, actuarial assumptions, and actuarial methods. The Board is also responsible for studying pension issues and recommending policy changes to the Legislature for the LEOFF Plan 2 retirement plan.

LEOFF Plan 1

In 2003 the Select Committee on Pension Policy (SCPP) was established by the Legislature to study pension issues, develop pension policies, and make recommendations to the Legislature.¹³ The SCPP is a 20-member committee composed of elected officials, stakeholder representatives, employer representatives, and the Directors of the Department of Retirement Systems and the Office of Financial Management. Prior to 2003, the Joint Committee on Pension Policy (JCPP) performed these duties.

The SCPP meets during the legislative interim. Its specific areas of interest include benefits design, retirement eligibility requirements and pension funding methods. The SCPP receives the results of actuarial audits administered by the Pension Funding Council, and reviews and makes recommendations to the Pension Funding Council regarding changes to retirement assumptions or contributions rates. Under current law, the SCPP may form a public safety subcommittee to study pension issues affecting members of LEOFF, the Public Safety Employees Retirement System (PSERS), and the Washington State Patrol Retirement System (WSPRS).¹⁴

Legislative History

House Bill 2097 in 2011 proposed merging LEOFF Plan 2 with LEOFF Plan 1 and temporarily reducing the State contribution to the merged plan. That bill did not pass the legislature.

Section 105 of the 2011 budget required the Office of the State Actuary to study the issue of merging LEOFF plans 1 and 2 into a single fund. The results of the study were reported to the ways and means committees of the House of Representatives and the Senate in December, 2011.

House Bill 2350/Senate Bill 6563 in 2012 proposed merging LEOFF Plan 1 with LEOFF Plan 2 and reducing the State contribution to the merged plan. That bill was recommended by the LEOFF Plan 2 Retirement Board did not pass the legislature.

Senate Bill 6668 in 2016 proposed merging LEOFF Plan 1 with the Teachers' Retirement System (TRS) Plan 1 and reducing the State contributions to pay the unfunded liability in TRS Plan 1.

The Supplemental Operating Budget passed by the Legislature in 2016 included a proviso (2ESHB 2376, sec. 106) for the SCPP to work with the LEOFF Plan 2 Board, DRS, and OSA to study the legal, financial and policy issues raised by merging the LEOFF Plan 1 Retirement Fund with the LEOFF Plan 2 Retirement Fund and the Teachers' Retirement System (TRS) Plan 1 Retirement Fund.

Senate Bill 6166 in 2001 proposed terminating LEOFF Plan 1 and using some of the assets of the fund for state purposes as well as for the cost to "restate" the plan and pay for a one-time payment to LEOFF Plan 1 beneficiaries. The bill did not pass the legislature.

¹³ RCW 41.04.281

¹⁴ RCW 41.04.278(2)(a)

Legal Framework

Under federal law, the assets of a tax-qualified retirement plan such as LEOFF Plan 1 and LEOFF Plan 2 may be used only for the exclusive benefit of members of the plan.

There is a body of state case law across the country regarding plan mergers which may be illustrative of potential issues in evaluating a merger but there is no similar case law in Washington.

There is a significant body of Washington case law defining members' rights to retirement benefits and to have their retirement plan funded on a sound actuarial basis.

POLICY ISSUES

What is a “merger” of LEOFF Plan 2 with LEOFF Plan 1?

A merger of the LEOFF Plan 2 Retirement System with the LEOFF Plan 1 Retirement System would combine all of the assets and liabilities of each system into one new system. In its simplest terms, a merger is a purely financial transaction.

Why would anyone want to merge LEOFF Plan 2 with LEOFF Plan 1?

Past merger proposals have included a temporary reduction in State contributions to the new plan. If the funding status of the new plan is improved compared to the current status of LEOFF Plan 2, then that would decrease the risk of poor investment experience in the future creating a need to increase contributions to LEOFF Plan 2 members, employers and the State. The member demographics of the plans, and the fact that LEOFF Plan 2 is an open system while LEOFF Plan 1 is a closed system, may also present opportunities for risk mitigation.

But, a merger also can create new risks so it is prudent for LEOFF Plan 2 Retirement Board members to inform themselves of these risks and take steps to mitigate those risks as part of any merger since Board members have a fiduciary duty to the plan.

How much is the surplus in LEOFF Plan 1?

The preliminary results of the 2015 Actuarial Valuation prepared by the Office of the State Actuary indicate that as of June 30, 2015, LEOFF Plan 1 had \$4.307 billion in liabilities and an actuarial value of assets of \$5.404 billion for a surplus of \$1.097 billion. However, any evaluation of the LEOFF Plan 1 surplus in the context of a LEOFF 2/LEOFF 1 merger must consider three important questions:

1. What is the surplus as of today?
2. How does the market value of assets (MVA) differ from the actuarial value of assets (AVA)?
3. How does the calculation of LEOFF 1 liabilities differ from LEOFF 2?

Today's Value: The current Actuarial Valuation Report (AVR) prepared by the Office of the State Actuary (OSA) is based on asset and liability information as of June 30, 2015. The Washington State Investment Board (WSIB) updates the market value of plan assets monthly. There is no monthly projection of liabilities for LEOFF Plan 1. The most recent investment report from the WSIB (July 2016) indicated a market value for LEOFF Plan 1 of \$5.387 billion which is lower than the value of assets in the 2015 AVR.

It is also important to note how investment performance since June 2015 has differed from the projections used to calculate future liabilities in the 2015 AVR. LEOFF Plan 1 is expected to earn 7.7%/year. However, actual investment returns for the 2015/16 fiscal year were just 2.65%.

Market Value/Actuarial Value: The Actuarial Value of Assets (AVA) is calculated by smoothing investment gains and losses over a period of up to 8 years depending on how much the actual investment returns differ from the projected investment returns. The AVA for LEOFF Plan 1 as of June 30, 2015 was \$5.404 billion. The Market Value of Assets (MVA) is the actual value of assets in the fund as of a certain date. The MVA for LEOFF Plan 1 as of June 30, 2015 was \$5.610 billion. So, as of June 2015 there were \$206 million in deferred gains in LEOFF Plan 1.

Using a “smoothing method” is an appropriate and accepted method of reducing the effect of investment return volatility on contribution rates. But, using a “smoothed value” of assets may not be as appropriate for purposes other than rate-setting. For instance, if the legislation merging LEOFF 2 with LEOFF 1 includes “spending” some of the surplus assets in the form of contribution rate reductions, then it would be appropriate to consider the impact on the fund using both the actuarial value and the market value.

Calculating LEOFF 1 liabilities: The long-term economic assumptions used by both LEOFF Plan 2 and LEOFF Plan 1 are identical in most respects and both systems have adopted the expected improvements in life expectancy recommended by the Office of the State Actuary (OSA). However, there is one significant difference related to the expected future return on investments. The LEOFF Plan 2 Retirement Board has adopted the 7.5% earnings assumption recommended by OSA. The investment assumption for LEOFF Plan 1 is 7.7%.

It would be important to know how the financial risks of a LEOFF 2/LEOFF 1 merger would differ using a 7.5% investment return assumption.

Who does the LEOFF Plan 1 surplus belong to?

All the assets in LEOFF Plan 1 are held in trust for the exclusive benefit of the beneficiaries of LEOFF Plan 1. The fact that LEOFF Plan 1 may have a “surplus” or more assets at a point in time than it is projected to need does not affect the legal status of any of the assets in the fund.

The idea that “surplus assets in the fund belong to the plan sponsor” is a concept related to closing or terminating a plan and is discussed later in this report. Neither the existence of a surplus nor a merger allow for fund assets to be distributed or diverted to a plan sponsor.

How does a merger affect LEOFF Plan 2 benefits?

A merger does not require that all members of the new plan receive the same benefits. Typically, the new plan continues the same benefits previously provided to members and beneficiaries as separate tiers of benefits.

State law prohibits a merger from reducing benefits provided to members. Benefits can be increased in the same piece of legislation that merges plans but any benefit increase is separate and distinct from the merger itself.

How would a LEOFF 2/LEOFF 1 merger impact the State budget?

LEOFF Plan 2 receives 20% of the cost of the plan from the State as an appropriation from the General Fund. That appropriation will be approximately \$130 million in the 2015-17 biennium. The required biennial appropriation for 2017-19 has yet to be determined but is likely to increase due to projected

growth in the LEOFF Plan 2 membership and salary base. LEOFF Plan 1 also has received a portion of its funding from the State in the past but no contributions have been required since 2001.

Past LEOFF 2/LEOFF 1 merger proposals have included temporary reductions in state funding to the newly created plan in consideration of the very healthy funding status of LEOFF Plan 1. For example, if the State contributions to pay for LEOFF Plan 2 benefits in the new plan were reduced to 0% for the next two biennia, the State would recognize approximate budget savings of over \$260 million. Any long-term state budget risks or benefits created by a merger should also be evaluated.

What legal issues are raised by a LEOFF 2/LEOFF 1 merger?

A merger of public retirement plans raises questions of both federal and state law.

Public pension plans must be qualified under federal law in order for members and plan sponsors to receive favorable tax treatment for their contributions and earnings. So, when a merger creates a new plan, that new plan must be reviewed by the Internal Revenue Service to determine if it is qualified. The Internal Revenue Service recently issued notice that they will cease doing plan determination letters for existing plans. However, they will continue to issue plan qualification determinations for new plans including a new plan created by a merger. The current estimated turnaround time for a determination is six months.

The State Attorney General's Office is responsible for this evaluation. The firm of Ice Miller has been used as a Special Assistant Attorney General in the past to provide advice related to federal tax to the LEOFF Plan 2 Retirement Board, the Department of Retirement Systems, the State Senate and the Select Committee on Pension Policy.

One of the key requirements for a retirement plan to be qualified is that assets must be held in trust for the exclusive benefit of the plan beneficiaries. Some of the additional criteria used to evaluate a proposed merger include: are the plans open or closed to new members; do the plans have similar employers; are the plans over-funded or under-funded; and, are the plans demographics compatible?

A copy of the advice received from Ice Miller will be included as an appendix when available.

Washington case law on pensions is based on the principle that pension benefits are part of a contract between the employer and employee which cannot be diminished by state law (*Bakenhus*). So, a merger cannot reduce benefits. Similarly, the courts have held that the funding which underlies the benefit promise is also subject to protection (*Weaver*). So, a merger that diminishes current or future plan funding needs to be evaluated according to these protections.

The State Attorney General's Office is responsible for this evaluation. The firm of K&L Gates has been used as a Special Assistant Attorney General to provide advice related to plan mergers to the LEOFF Plan 2 Retirement Board. A copy of the advice received from K&L Gates will be included as an appendix when available.

How would a LEOFF 2/LEOFF 1 merger affect plan governance?

The Pension Funding Council adopts contribution rates for LEOFF Plan 1. The Select Committee on Pension Policy studies policy issues related to LEOFF Plan 1 benefits and recommends any changes to the Legislature. A merger would not require any changes.

The LEOFF Plan 2 Retirement Board adopts contribution rates for LEOFF Plan 2, studies policy issues related to the plan and recommends any changes to the Legislature. A merger would not require any changes.

Any changes to the governance of LEOFF Plan 2 would require careful consideration. For instance, how would a temporary State contribution rate reduction to LEOFF 2 fit with the role of the LEOFF Plan 2 Retirement Board to adopt contribution rates for LEOFF Plan 2?

Some state courts have held that the right of plan members to have their plan governed by an independent board of trustees who owe a fiduciary duty to the plan, such as the LEOFF Plan 2 Retirement Board, is a benefit of the plan subject to the same legal protections as other plan benefits. That question has not been decided by Washington courts.

Mergers in the private sector are typically arm's length transactions between two different plans with separate governing bodies and separate plan sponsors. The trustees of each plan have a fiduciary responsibility to ensure that a proposed merger is in the best interest of their plan's members and negotiate the terms of the merger accordingly. But, there are no governing boards for any of the state-administered public pension plans in Washington other than LEOFF Plan 2. The terms of any merger of LEOFF Plan 2 and LEOFF Plan 1 would be established by the State Legislature in legislation.

How would a LEOFF 2/LEOFF 1 merger affect plan funding?

LEOFF Plan 2 has a current funding ratio of 105%. LEOFF Plan 1 has a current funding ratio of 125%. When the assets and liabilities of LEOFF Plan 2 and LEOFF Plan 1 are merged, the funding ratio of the newly created plan would be approximately 112%.

The fact that the funding ratio of a merged LEOFF 2/LEOFF 1 system would be over 100% means that there would likely be no short-term change in funding policy required for either plan. The funding ratio of a system plays an important part in determining the ongoing funding policies of that system so the impact of a merger or any reductions in future contributions on the projected future funding status of the merged plans becomes an important consideration.

The costs of LEOFF Plan 2 are funded 50% by members, 30% by employers and 20% by the State. The required contributions are adopted as a percentage of member salary by the LEOFF Plan 2 Retirement Board. The rates adopted by the Board are currently 8.41% for member, 5.05% for employers and 3.36% for the State through June 30, 2017. The Board is scheduled to adopt rates for the 2017-19 biennium and the 2019-21 biennium at their July 27, 2016 meeting.

No State, member or employer contributions for LEOFF Plan 1 have been required since 2001 because of the positive funding status of the plan. Contributions to LEOFF Plan 1 could be reinstated if the plan's funding status decreased due to adverse investment or actuarial experience. Any potential future member contributions would not be significant due to the low number of members currently active in the plan so the responsibility for any potential future funding requirements would fall on LEOFF employers and the State.

Any merger proposal must be carefully analyzed to evaluate the risk that insufficient contribution rates, underfunding, or poor economic or demographic experience in LEOFF 1 would impact the rates charged to LEOFF 2 members, employers or the State.

How would a LEOFF 2/LEOFF 1 merger affect investment policy?

The assets of all State-administered pension plans in Washington are currently part of the Commingled Trust Fund (CTF) invested by the Washington State Investment Board (SIB). The CTF uses the same investment policy for all plans regardless of the plan's funded status or beneficiary demographics.

A merger that included keeping the new fund in the CTF would mean no change in investment policy. A merger of two plans within the CTF into a new plan that remains in the CTF would not require any sale of assets that could create transactions costs for the new plan or other plans in the CTF.

Commingled Investment

There has been some consideration in the past as to whether LEOFF 1 assets should remain invested in the commingled trust fund or whether it would be more appropriate to invest these assets in a more conservative fund to minimize the risk of investment volatility since LEOFF 1 has been closed to new members since 1977 and the future benefits payments are more predictable, have a shorter duration and would be easier to immunize. However, there is a cost associated with a lower earning assumption. Since LEOFF 2 is an open and ongoing plan, merging LEOFF 1 with LEOFF 2 would affect analysis of this issue.

What is a plan termination and how does it apply to a plan merger?

One question that often arises when discussing merger is what happens to any remaining assets in a fund when it closes? Federal case law has said that when a private plan is terminated and all the liabilities to beneficiaries have been satisfied, any remaining assets revert to the plan sponsor (*Hughes Aircraft*). It is unclear how that holding would be applied in the context of a public plan termination. Both LEOFF employers and the State contributed to LEOFF Plan 1 so both would have a sponsorship claim to any remaining assets. The State Senate proposed a termination of LEOFF Plan 1 in 2001 which included annuitizing existing LEOFF 1 liabilities and a distribution of surplus assets to the State, LEOFF 1 employers and a payment to LEOFF 1 beneficiaries.

A termination can also occur when the last beneficiary of a plan dies and there are no longer any benefits owed. The office of the State Actuary estimates that there will continue to be some LEOFF 1 beneficiaries for more than 40 years.

The principle that surplus assets in a terminated plan belong to the plan sponsor has sometimes been misapplied to discussions of a plan merger stated as a principle that all surplus assets in a fund belong to the fund sponsor(s). But, that is not accurate for several reasons. First, a plan “termination” is a separate process under federal law from merger and different legal requirements apply. A merger does not allow for fund assets to be distributed to the plan sponsors. Second, as long as a plan has beneficiaries, all assets in the plan are held in trust for the exclusive benefit of the plan’s beneficiaries. The possible disposition of any potential remaining assets if the plan is terminated in the future does not alter the legal status of those assets while the plan is active.

What is the history of plan mergers in Washington?

Plan mergers are more common in the context of private sector Taft-Hartley pension plans but there have been several mergers of public pension plans in the State of Washington. The Law Enforcement Officers’ and Fire Fighters’ (LEOFF) Retirement System was originally created in 1970 by merging the assets and most of the liabilities of the police pension plan of ten first-class cities with the fireman’s pension fund of 42 separate systems throughout the State. In 1972, the Statewide City Employers’ Retirement System was merged into the Public Employers’ Retirement System (PERS).

What would happen if LEOFF 1 has an unfunded liability in the future?

There is a statutory funding policy to fully amortize any unfunded liability which may emerge in LEOFF 1 no later than June 30, 2024.¹⁵ If an unfunded liability emerges in LEOFF 1, this policy requirement could significantly impact funding requirements for LEOFF members, employers and the State in a merged

¹⁵ RCW 41.45.010(2)

plan. There is no funding policy for LEOFF 1 after June 30, 2024 so it is unclear what would be done if an unfunded liability emerges after that date.

LEOFF 1 Supplemental Rate

When an unfunded liability emerged in both PERS Plan 1 and TRS Plan 1, the State adopted a supplemental rate to cover this cost which is charged to employers as a percentage of salary of all PERS or TRS employees, not just those in Plan 1. If an unfunded liability were to emerge in LEOFF Plan 1, the State could adopt a similar supplemental rate to cover that cost. The additional cost to LEOFF employers would likely be shared with LEOFF 2 members indirectly through the bargaining process since less money would be available for salaries, equipment and other expenses.

Financial Efficiencies

There are currently no required contributions to LEOFF Plan 1 from the State, employers or members and haven't been any required contributions for some time. Therefore, any increase in assets, such as from positive investment performance, will not decrease plan costs. Assets in the retirement fund are strictly protected under federal law for pension plans and cannot be withdrawn from the fund and used for any state or employer purpose.

A merger of the LEOFF Plan 1 and LEOFF Plan 2 retirement funds could commingle both the assets and liabilities of each plan. Therefore, any increase in assets due to positive economic or demographic experience could decrease plan costs for LEOFF members, LEOFF employers and the State.

Risk Transfer/Sharing

The assets invested in the LEOFF 1 retirement fund are currently projected to be sufficient to meet the projected liabilities of the plan. Currently, the State (and possibly LEOFF employers) would be responsible for any increased plan costs and required contributions in the future. The two primary risks of increased costs are 1) less-than-expected investment returns; and 2) higher-than-expected inflation. A merger of the LEOFF Plan 1 and LEOFF Plan 2 retirement funds could commingle the liabilities of both plans. So, an increase in LEOFF 1 costs could become the shared responsibility of LEOFF 2 members, LEOFF employers and the State.

LEOFF 2 Board Request for State Actuary Study

The Office of the State Actuary (OSA) has been asked to provide analysis to assist the Board's report to the legislature. There are two clear financial risks associated with a merger. Part of understanding these risks is understanding how these risks are increased if LEOFF 1 assets are used for other purposes such as rate reductions for the state or benefit payments to plan members.

- 1) The risk that LEOFF 1 will dip below 100% funding at some time in the future and require additional contributions; and,
- 2) The risk that LEOFF 1 will go into "pay-go" status.

There is a perception that the demographics of LEOFF 1 (virtually all retirees, no active salary base) increase the sensitivity of the plan to near-term deviations from actuarial assumptions, particularly the investment return assumption which has a high degree of annual volatility. Can OSA perform sensitivity analysis to verify or refute that perception? For instance, a 7.7% earnings assumption may be reasonable in the long-term but may be challenging in the short-term due to low near-term inflation expectations.

What is the likelihood of the LEOFF 1 funding ratio going under 100%?

- A. How does that likelihood change using a 7.5% earnings assumption?
- B. How does that likelihood change using different economic scenarios?

- C. How does that likelihood change if the CTF earns 5% on average for the next 10 years?
- D. How does that likelihood change if LEOFF 1 annuitants receive \$5000 each as an additional benefit?
- E. What are the greatest risks to a LEOFF Plan 1 UAAL reemerging?
- F. What are the consequences of a LEOFF Plan 1 UAAL reemerging? (State payments as a percentage of LEOFF 2 salary base? Employer payments?)

How has the “Pay-Go Risk” analyzed in the 2011 LEOFF Merger Study by OSA changed since the publication of that report? Can you provide an update of the chart from that report that overlays the future risk of going into “pay-go” status and the amount of projected cost?

What is the current annual projected amount of LEOFF 1 benefit payments into the future? This will be helpful to demonstrate how long LEOFF Plan 1 is expected to remain open.

When OSA did the fiscal note for the proposed TRS 1/LEOFF 1 merger during the 2016 legislative session, the actuarial data was updated from the most recent actuarial valuation to the date of the fiscal note. Can OSA do a similar estimate for a LEOFF 1/LEOFF 2 merger? What information would you require?

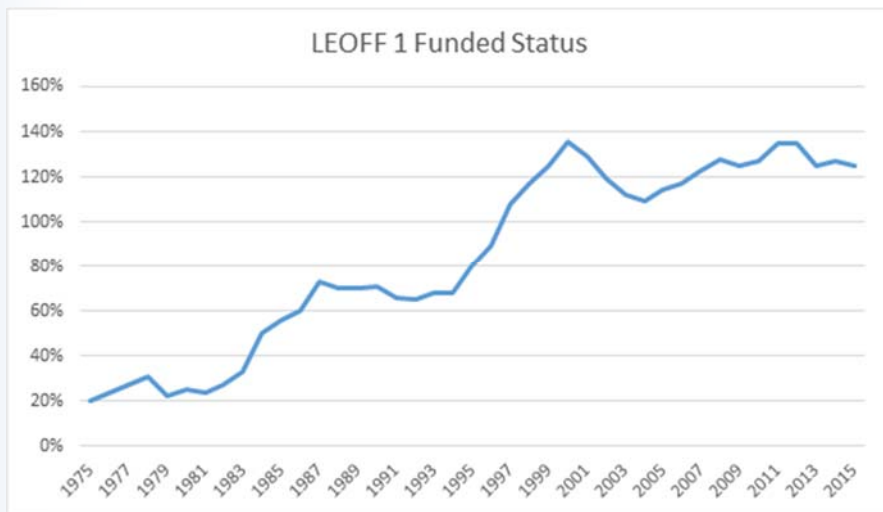
Is there a way to estimate the monthly changes to the LEOFF 1 “surplus” using the most recent monthly fund market value from the State Investment Board and an estimate of how much LEOFF 1 liabilities have changed since the most recent valuation? For instance, can you estimate the projected change in liabilities from June, 2015 to June 2016 and use 1/12 of that number as an approximation for the monthly change?

One other scenario that needs analysis is the impact of a rate holiday. Can you show the impact to funding ratio and contribution rates of a 0% state rate for 4 years on the merged plan? For instance, a merger will result in a new funding ratio for the merged plan. What would the impact on that new funding ratio be if the State contributions were zero for the next two biennia? Would a merger impact the current rates charged to LEOFF 2 members or employers? What impact would a 0% state rate have on the likelihood of future rate increases becoming necessary?

A copy of the analysis received from OSA will be included as an appendix when it becomes available.

How has the LEOFF Plan 1 funding ratio changed over time?

The chart below demonstrates the reported funding ratio of LEOFF Plan 1 since the plan’s inception.



The rapid increase in the plan's funding ratio from 1995 to 2001 is attributed primarily to extraordinarily positive investment return experience. State contributions at the time were calculated on an expected return of 7.75% per year and experience averaged over 20% per year during this period. The inflation assumption used at the time was 4.5% which also overstated the required contributions from the State. Member and employer contributions were fixed at 6% of pay per year.

What is the proportionate share of LEOFF 1 contributions from members, employers and the State?

The total contributions paid into LEOFF Plan 1 from its inception are:

- State- \$1,801 million
- Employer- \$266 million
- Employee- \$266 million

The ratio of contributions would be 77.2% State, 11.4% employers, and 11.4% members. Applying this ratio to the projected surplus of \$1.097 billion for LEOFF Plan 1 in the most recent actuarial valuation report would result in \$847 million for the State, and \$125 million for both employers and employees. Dividing the member share by the number of plan annuitants as of the date of the last valuation would be approximately \$16,700/annuitant.

In addition to contributions, the State paid approximately \$13.3 million in benefit payments to LEOFF Plan 1 retirees immediately following the inception of the plan. "For the first two years of the system, LEOFF is funded on a pay-as-you-go basis. The State of Washington has assumed the obligation to fund the present unfunded liability (estimated to be \$400 million) over a period of not more than 40 years, and current costs which are not covered by the 12% contribution paid by employees and employer." ¹⁶

Can "excess assets" in LEOFF 1 be used to pay for retiree health care?

Internal Revenue Code Section 420(b) allows defined benefit pension plans that would remain funded above 125% to use assets for retiree medical costs or life insurance through 2025. LEOFF Plan 1 had a

¹⁶ Comparison of Public Employee Retirement Systems in the State of Washington, Institute of Governmental Research in cooperation with public pension commission, December 1970.

funding ratio of 125.47% as of June 30, 2015 according to the most recent actuarial valuation. The excess of 0.47% when applied to the fund value would be just over \$25 million.

SUPPORTING INFORMATION

Merger Study Budget Proviso (2016 3rd sp.s. c 4 s 106)

During the 2016 legislative interim, the select committee on pension policy shall study Senate Bill No. 6668 (LEOFF 1 & TRS 1 merger) and report on the tax, legal, fiscal, policy, and administrative implications. In conducting the study, the select committee on pension policy shall also update its 2011 study of law enforcement officers' and firefighters' retirement system plans 1 and 2. In preparing this study, the department of retirement systems, the attorney general's office, the law enforcement officers' and firefighters' retirement system plan 2 board, and the office of the state actuary shall provide the select committee on pension policy with any information or assistance the committee requests. The committee shall also receive stakeholder input on the bill as part of its deliberation. The select committee on pension policy shall submit this report to the legislature by January 9, 2017.



LEOFF 1/LEOFF 2 Merger Study

COMPREHENSIVE REPORT FOLLOW-UP

November 9, 2016

PRESENTATION GOALS

► Specific Principles of Plan Mergers

- **Applied to LEOFF 1/LEOFF 2**
 - **Background & history**
- **Frequently Asked Questions**
- **Question & answer format**
- **Conversational style**

WHAT IS A “MERGER”

- ▶ One of two ways a plan can end
 - Financial transaction with legal consequences
 - Plan assets are combined
 - Plan liabilities are combined
 - Plan benefits are unchanged
 - Analogous to a “marriage” of plans
 - “Termination” - Winding up of obligations
 - Any remaining liabilities are annuitized
 - Any remaining assets revert to the plan sponsor
 - Analogous to a “death” of a plan

WHAT IS THE PURPOSE OF A MERGER?

▶ “Win-Win”

- Investment opportunities
- Risk mitigation
- Funding improvements/savings

HOW WOULD A MERGER AFFECT THE STATE BUDGET?

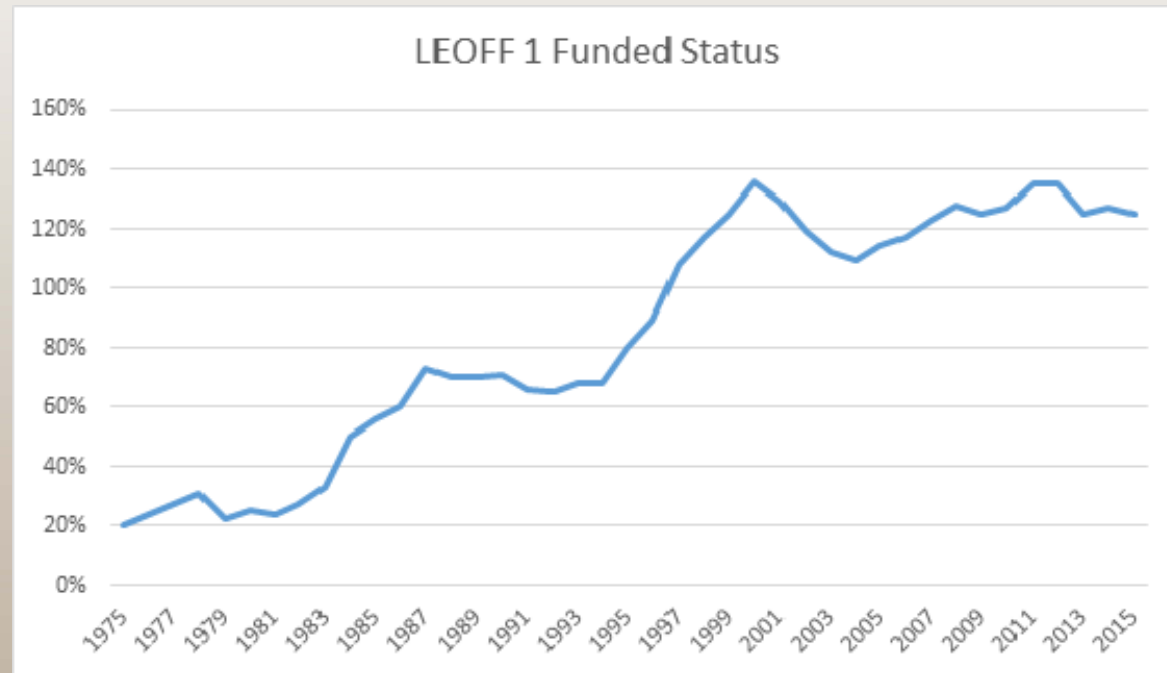
- ▶ A plan merger can reduce required State contributions to the new plan
 - Base contributions
 - Supplemental contributions to reduce a plan's unfunded liability
 - State contributions to LEOFF 2 are approximately \$130 million/biennium

WHO OWNS THE LEOFF 1 SURPLUS?

- ▶ All assets in the LEOFF 1 fund are held in trust for the exclusive benefit of LEOFF 1 beneficiaries - “Exclusive Benefit Rule”

This does not mean a merger is impossible

HOW DID THE LEOFF 1 SURPLUS HAPPEN?



Investment returns from 1995 – 2000 far exceeded expectations

HOW DID THE LEOFF 1 SURPLUS HAPPEN?

- ▶ What is the proportionate share of member, employer and state contributions to LEOFF 1?
 - State 77%
 - Members 11.5%
 - Employers 11.5%

CAN SURPLUS ASSETS BE USED TO PAY RETIREE MEDICAL COSTS?



► Yes, with limits

- **Only assets in excess of 125% of funding can be used**
- **Temporary federal provision expires in 2025 and has several requirements**

HOW MUCH IS THE LEOFF 1 SURPLUS?

- ▶ The preliminary 2015 actuarial valuation report identifies the LEOFF 1 surplus at \$1.097 billion

But, 3 important variables:

- What is the current data?
- Market value or “smoothed” value?
- What assumptions are used?

HOW DOES A MERGER AFFECT BENEFITS?

- ▶ **A plan merger does not affect benefits**
 - **New plan would have 2 tiers - LEOFF 1 and LEOFF 2 - with same benefits as now**
 - **State law prevents reduction in benefits**
 - **The merger legislation may have additional sections that affect benefits**

IS A MERGER LEGAL?

State Law Issues

- ▶ **Benefits are protected**
 - **Benefit reduction protections – Bakenhus**
 - **Plan funding protections – Weaver**
- ▶ **A legal merger is possible**

IS A MERGER LEGAL?

State Law Issues

- ▶ What types of issues may be important?
 - Funding status
 - Employer type
 - Open or closed plan/demographics
 - Liability shift
 - LEOFF 2 governance

IS A MERGER LEGAL?

State Law Issues

Advice sought from State Attorney General

- ▶ What are the Washington Constitution Contracts Clause issues when two public pension plans are merged?
 - Does the funded status of the plans, both before and after merger, impact these issues?
 - Does the open or closed status of the plans, both before and after merger, impact these issues?
 - Does a reduction in the aggregate amount of employer contributions after merger impact these issues?
 - Does a change in employer sponsors for the merging plans impact these issues?
 - Does a change in plan governance for the merging plans impact these issues?
- ▶ Are there Washington state law fiduciary issues when the Legislature approves the merger of two public pension plans?
- ▶ Does a merger affect the possibility of the LEOFF Plan 1 COLA being reduced or repealed?

IS A MERGER LEGAL?



Federal Law Issues

- ▶ Public plans must be “qualified” in order to receive favorable tax treatment
 - Qualification requires IRS review and approval
 - Qualification provides tax benefits and bankruptcy protection
 - A merger would require the new plan to seek qualification

IS A MERGER LEGAL?



Federal Law Issues

- ▶ **Advice sought from State Attorney General**
- ▶ **Ice Miller responding to a number of questions regarding the merging of LEOFF 1 with TRS 1 or LEOFF 2**

WHAT ARE THE ACTUARIAL RISKS FROM A LEOFF 1/LEOFF 2 MERGER?

- ▶ Re-emergence of LEOFF 1 unfunded liability
 - Decrease in future funding to LEOFF 2 increases risk that funding ratio could dip below 100%
 - Required contributions may change
- ▶ Risk transfer to LEOFF 2 members?
 - Can mitigate this risk in legislation
- ▶ OSA is currently performing actuarial risk analysis for LEOFF 2 Board

WHAT ARE THE ACTUARIAL RISKS FROM A LEOFF 1/LEOFF 2 MERGER?

Analysis requested from Office of the State Actuary

There are two clear financial risks associated with a merger. Part of understanding these risks is understanding how these risks are increased if LEOFF 1 assets are used for other purposes such as rate reductions for the state or benefit payments to plan members.

- ▶ The risk that LEOFF 1 will dip below 100% funding at some time in the future and require additional contributions
- ▶ The risk that LEOFF 1 will go into “pay-go” status.

WHAT ARE THE ACTUARIAL RISKS FROM A LEOFF 1/LEOFF 2 MERGER?

There is a concern that the demographics of LEOFF 1 (virtually all retirees, no active salary base) increases the sensitivity of the plan to near-term deviations from actuarial assumptions, particularly the investment return assumption which has a high degree of annual volatility. Can OSA perform sensitivity analysis to verify or refute that perception? For instance, a 7.7% earnings assumption may be reasonable in the long-term but may be challenging in the short-term due to low near-term inflation expectations.

- ▶ What is the likelihood of LEOFF 1 going under 100% funding ratio?
- ▶ How does that likelihood change using a 7.5% earnings assumption?
- ▶ How does that likelihood change using different economic scenarios? (Similar to modeling for HERP)
- ▶ How does that likelihood change if the CTF earns 5% on average for the next 10 years?
- ▶ How does that likelihood change if LEOFF 1 annuitants receive \$5,000 each as an additional benefit?
- ▶ What are the greatest risks to a LEOFF Plan 1 UAAL reemerging?
- ▶ What are the consequences of a LEOFF Plan 1 UAAL reemerging? (State payments as a percentage of LEOFF 2 salary base? Employer payments?)

WHAT ARE THE ACTUARIAL RISKS FROM A LEOFF 1/LEOFF 2 MERGER?

- ▶ How has the “Pay-Go Risk” analyzed in the 2011 LEOFF Merger Study by OSA changed since the publication of that report? Can you provide an update of the chart from that report that overlays the future risk of going into “pay-go” status and the amount of projected cost?
- ▶ Have the life expectancy recommendations of OSA been fully incorporated into the liabilities of LEOFF Plan 1?
- ▶ What is the current annual projected amount of LEOFF 1 benefit payments into the future? I believe that this is an exhibit already in the valuation report. It will be helpful to demonstrate how long LEOFF Plan 1 is expected to remain open.
- ▶ When OSA did the fiscal note for the proposed TRS 1/LEOFF 1 merger during the 2016 legislative session, the actuarial data was updated from the most recent actuarial valuation to the date of the fiscal note. Can you do a similar estimate for a LEOFF 1/LEOFF 2 merger?
- ▶ Is there a way to estimate the monthly changes to the LEOFF 1 “surplus” using the most recent monthly fund market value from WSIB and an estimate of how much LEOFF 1 liabilities have changed since the most recent valuation? For instance, can you estimate the projected change in liabilities from June 2015 to June 2016 and use $\frac{1}{12}^{\text{th}}$ of that number as an approximation for the monthly change?

WHAT ARE THE ACTUARIAL RISKS FROM A LEOFF 1/LEOFF 2 MERGER?

A merger will result in a new funding ratio for the merged plan.

- ▶ **What would the impact on that new funding ratio be if the State contributions were zero for the next two biennia?**
- ▶ **Would a merger impact the current rates charged to LEOFF 2 members or employers?**
- ▶ **What impact would a 0% state rate for two biennia have on the likelihood of future rate increases becoming necessary?**

DOES A LEOFF 1/LEOFF 2 MERGER AFFECT PLAN GOVERNANCE?

- ▶ **A merger does not need to affect current pension plan governance**
 - **LEOFF 2: LEOFF 2 Board**
 - **LEOFF 1: SCPP and PFC**
- ▶ **LEOFF 1 Disability Boards are unchanged by a merger of LEOFF pension plans**

HOW DOES A MERGER AFFECT INVESTMENT POLICY?

- ▶ **A LEOFF 1/LEOFF 2 merger would not affect investment policy**
 - **Both plans are administered by the Washington State Investment Board**
 - Both plans are currently invested in the Commingled Trust Fund
 - **Merger of LEOFF 1 with open plan might address some LEOFF 1 risks**

NEXT STEPS



- ▶ **The next presentation is scheduled for December 7, 2016**
 - **Analysis from Attorney General and State Actuary will be presented**

QUESTIONS

Steve Nelsen

Executive Director

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LEOFF Plan 2 Retirement Board Agency Summary BITD as of September 2016

Category	BI Allotment	BITD Allotment	BITD Expenditures	BITD Variance	BI Variance
Salaries and Wages	1,202,824	750,574	750,050	524	452,774
Employee Benefits	383,484	237,207	203,413	33,794	180,071
Goods and Other Services	606,442	389,920	384,077	5,843	222,365
Professional Service Contracts	71,394	25,000	18,204	6,796	53,190
Travel	96,252	68,055	62,700	5,355	33,552
Capital Outlays	5,604	5,379	708	4,671	4,896
Interagency Reimbursements	0	0	0	(0)	(0)
Sum:	2,366,000	1,476,135	1,419,152	56,983	946,848

Category	FM Allotment	FM Expenditure	FM Variance	BITD Allotment	BITD Expenditures	BITD Variance
Salaries and Wages	50,250	50,762	(512)	750,574	750,050	524
AA State Classified	34,324	34,325	(1)	507,576	507,518	58
AC State Exempt	15,926	16,437	(511)	242,998	241,067	1,931
AS Sick Leave Buy-Out	0	0	0	0	1,465	(1,465)
Employee Benefits	16,253	16,034	219	237,207	203,413	33,794
BA Old Age and Survivors Insurance	3,116	3,072	44	46,197	44,835	1,362
BB Retirement and Pensions	5,618	5,675	(57)	84,318	83,699	619
BC Medical Aid & Industrial Insurance	532	278	254	5,042	4,190	852
BD Health, Life & Disability Insurance	6,258	6,216	42	90,711	89,296	1,415
BE Allowances	0	74	(74)	0	472	(472)
BH Hospital Insurance (Medicare)	729	719	11	10,939	10,615	324
BT Shared Leave Provided Sick Leave	0	1,989	(1,989)	0	4,781	(4,781)
BU Shared Leave Provided Per Holiday	0	0	0	0	1,426	(1,426)
BV Shared Leave Provided Annual Leave	0	0	0	0	5,189	(5,189)
BW Shared Leave Received	0	(1,989)	1,989	0	(41,115)	41,115
BZ Other Employee Benefits	0	0	0	0	25	(25)
Professional Service Contracts	0	6,000	(6,000)	25,000	18,204	6,796
CA Management and Organizational Services	0	0	0	2,000	0	2,000
CB Legal/Expert Witness Services	0	0	0	5,000	574	4,426
CC Financial Services	0	6,000	(6,000)	13,000	17,630	(4,630)
CD Computer/Information Services	0	0	0	5,000	0	5,000
Goods and Other Services	26,258	22,322	3,936	389,920	384,077	5,843
EA Supplies and Materials	300	(199)	499	4,500	(901)	5,401
EB Communications/Telecommunications	1,048	1,256	(208)	15,720	19,320	(3,600)
EC Utilities	466	637	(171)	6,990	7,745	(755)
ED Rentals and Leases - Land & Buildings	3,830	3,830	0	57,450	57,443	7
EE Repairs, Alterations & Maintenance	0	0	0	0	780	(780)
EF Printing and Reproduction	1,559	(2,350)	3,909	23,385	29,251	(5,866)
EG Employee Prof Dev & Training	2,500	1,950	550	45,500	38,770	6,730
EH Rental & Leases - Furn & Equipment	523	304	219	7,845	5,395	2,450
EJ Subscriptions	259	27	232	3,885	1,787	2,098
EK Facilities and Services	352	383	(31)	5,280	5,501	(221)
EL Data Processing Services (Interagency)	0	334	(334)	8,000	10,593	(2,593)
EM Attorney General Services	1,833	3,644	(1,811)	27,495	24,706	2,789
EN Personnel Services	223	29	194	3,345	1,614	1,731
EP Insurance	0	0	0	50	115	(65)
ER Other Contractual Services	13,290	11,630	1,660	179,350	174,562	4,788
EW Archives & Records Management Svcs	6	0	6	90	185	(95)
EY Software Licenses and Maintenance	31	847	(816)	465	6,512	(6,047)
EZ Other Goods and Services	38	0	38	570	700	(130)
Travel	3,133	2,114	1,019	68,055	62,700	5,355
GA In-State Subsistence & Lodging	500	0	500	16,560	11,740	4,820
GB In-State Air Transportation	186	90	96	2,790	1,562	1,228
GC Private Automobile Mileage	789	0	789	11,835	11,314	521
GD Other Travel Expenses	358	449	(91)	5,370	5,582	(212)
GF Out-Of-State Subsistence & Lodging	500	1,575	(1,075)	19,500	23,118	(3,618)
GG Out-Of-State Air Transportation	800	0	800	12,000	9,384	2,616
Capital Outlays	25	708	(683)	5,379	708	4,671
JA Noncapitalized Assets	0	708	(708)	5,004	708	4,296
JB Noncapitalized Software	25	0	25	375	0	375
Interagency Reimbursements	0	0	0	0	0	0
SA Salaries and Wages	0	0	0	0	0	0
SB Employee Benefits	0	0	0	0	0	0
Total Dollars	95,919	97,939	(2,020)	1,476,135	1,419,152	56,983



SCPP Update

ATTACHMENTS:

Description	Type
▫ SCPP Agenda Oct 18	Report

Select Committee on Pension Policy

P.O. Box 40914
Olympia, WA 98504-0914
state.actuary@leg.wa.gov

Regular Committee Meeting

October 18, 2016
10:00 a.m. – 1:00 p.m.*
House Hearing Room B
Olympia

AGENDA

- 10:00 a.m. **1. Approval of Minutes**
- 10:05 a.m. **2. WSIB Update** – Theresa Whitmarsh, Director,
Washington State Investment Board
- 10:25 a.m. **3. Merger Study**
3a. AAG Update – Anne Hall, Assistant
Attorney General, Attorney General's Office
3b. DRS Update – Jacob White, Legal and
Legislative Services Manager, Department of
Retirement Systems
3c. Actuarial Update – Matt Smith, State Actuary
3d. Policy Update – Aaron Gutierrez, Senior
Policy Analyst
- 11:55 a.m. **4. Break**
- 12:00 p.m. **5. Preliminary 2017 Meeting Dates** – Aaron
Gutierrez
- 12:05 p.m. **6. WSPRS Study** – Darren Painter, Information
Services Manager
- 12:25 p.m. **7. Plans 1 COLA: Initial Briefing** – Jacob White

Work Session with Possible Public Hearing

- 12:40 p.m. **8. Plan Membership Default** – Aaron Gutierrez
- 1:00 p.m. **9. Adjourn**

**These times are estimates and are subject to change depending on the needs of the Committee.*

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Senator Barbara Bailey

John Boesenberg
PERS/Higher Ed Employers

***Representative Bruce
Chandler, Vice Chair**

***Senator Steve Conway,
Chair**

Annette Creekpaum
PERS Employers

***Randy Davis**
TRS Actives

***Beverly Freeman**
PERS Employers

***Tracy Guerin, Director**
Department of Retirement Systems

***Bev Hermanson**
PERS Retirees

Senator Steve Hobbs

Robert Keller
PERS Actives

**Representative Matt
Manweller**

Byron Olson
PERS Employers

Representative Timm Ormsby

Senator Mark Schoesler

David Schumacher, Director
Office of Financial Management

Representative Derek Stanford

J. Pat Thompson
PERS Actives

Robert Thurston
WSPRS Retirees

David Westberg
SERS Actives

**Executive Committee*

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leg.wa.gov/SCPP.htm



Agenda Items for Future Meetings

Date Presented:

11/9/2016

Presenter Name and Title:

Steve Nelsen, Executive Director

Summary:

A review of upcoming agenda items for December.

ATTACHMENTS:

Description	Type
▢ 2016 Agenda Items Calendar	Report

MEETING DATE	AGENDA ITEMS
January 27	2016 Legislative Update
February 24	2016 Legislative Update
March 23	2016 Legislative Update
April 27	Legislative Update 2016 Interim Planning Retiree Return to Work, Educational Briefing Quarterly Budget Update
May 25	Contribution Rate Adoption Process– Lisa Won, OSA Draft Merger Study Work Plan Draft Interim Work Plan Workforce Retirement Trends and Statistics, Educational Briefing Non-LEOFF Fire Fighters, Educational Briefing
June 22	Valuation Audit Preview – Mark Olleman & Daniel Wade, Milliman LEOFF 2 Preliminary Actuarial Valuation Results – Lisa Won, OSA Contribution Rate Preview Public Pension Administration Benchmarking Analysis – Mike Heale, CEM & Mark Feldhausen, DRS Volunteer Fire Fighters and Reserve Officers Briefing – Brigitte Smith, BVFF Plan 1/Plan 2 Merger Study – Educational Briefing Draft Merger Study Work Plan Retiree Return to Work, Initial Consideration Draft Interim Work Plan Public Testimony
July 27	Valuation Audit Results – Nick Collier, Milliman Contribution Rate Adoption DRS Annual Update – Marcie Frost, DRS Plan 1/Plan 2 Merger Study – Initial Consideration Public Testimony
August 24	<i>CANCELLED</i>
September 21	WSIB Annual Update – Theresa Whitmarsh, WSIB Financial Audit Results – Davis Accounting Retiree Annuity Purchase Administrative Factors – Lisa Won, OSA Presumptive Medical – Initial Consideration Individual Health Savings Account – Initial Consideration LEOFF Plan Comparison – Educational Briefing Board Member Annual Training – Tor Jernudd, AGO Standby Pay – Initial Consideration Final Month Payment – Initial Consideration Plan 1/Plan 2 Merger Study – Comprehensive Report Public Testimony
October 18	<i>Offsite meeting, Strategic Planning Proposed 2017 Meeting Calendar</i>
November 9	Plan 1/Plan 2 Merger Study – Comprehensive Report Follow-Up Retiree Annuity Purchase Administrative Factors Adoption – Lisa Won, OSA Public Testimony
December 7	2017 Meeting Calendar Adoption Risk Assessment Study – OSA Plan 1/Plan 2 Merger Study – Final Proposal Public Testimony