3. Merger Study

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MEMORANDUM

DATE: November 9, 2016

TO: The Select Committee on Pension Policy
c/o Office of the State Actuary

FROM: Anne Hall, Senior Counsel
Staff Counsel to the SCPP

SUBJECT: **Draft Report on State Law Analysis of the Merger of LEOFF 1 and TRS 1 pursuant to the provisions of SB 6668**

The 2006 Legislature directed the Select Committee on Pension Policy (SCPP) to study Senate Bill 6668 (2016) and to report to the Legislature on the tax, legal, fiscal, policy, and administrative implications of that bill by January 9, 2017. Senate Bill 6668 merges the assets and liabilities of LEOFF 1 and TRS 1, and makes a number of other changes and additions to the statutes governing LEOFF 1 and to statutes governing the actuarial funding of the state pension systems.

The SCPP asked me, as staff counsel to the Committee, to analyze SB 6668 and provide a report to the Committee on the legal implications of that bill. Pursuant to the SCPP's request, this report, in draft form, is provided to the Committee for discussion at the Committee's meeting on November 15, 2016. This report discusses the *state law* implications of Senate Bill 6668 and makes recommendations to the Committee regarding modifications to the bill. In a separate report, the State Actuary's Special Assistant Attorney General, the Ice Miller law firm, analyzes the *federal tax law* implications of Senate Bill 6668.

This state law report is presented in three parts. The first part is a short summary of my analysis of the state law implications of Senate Bill 6668. The second part provides an explanation of the short summary in Part 1. The third part, which will be provided in the final report to the Committee in December, provides a detailed legal analysis that may be of some assistance to the Committee when providing its final report to the Legislature.

This report is intended to assist the SCPP in responding to the Legislature's directive and is my considered legal judgment as the Committee's assigned counsel. This report is not intended to be a formal opinion by the Attorney General. I understand that the SCPP waives the attorney client privilege solely as to the contents of this report, and does not waive that privilege as to any underlying research or analysis generated to prepare this report.

Part 1 – Short Summary of State Law Analysis

- Members[1] of LEOFF Plan 1 and TRS Plan 1 have certain pension rights that are contractual in nature. Those rights can be found in Washington statutes and rules, and in Washington case law that interprets those statutes and rules.

- LEOFF Plan 1 and TRS Plan 1 members have a vested contractual right to a monthly service or disability retirement allowance that was guaranteed to them at the beginning of their service. This retirement benefit cannot be modified except under certain circumstances and to the advantage of the member.

- LEOFF Plan 1 and TRS Plan 1 members' monthly service or disability retirement allowance will not be reduced after a LEOFF Plan 1 and TRS Plan 1 merger under Senate Bill 6668. Therefore, Senate Bill 6668 does not deny LEOFF Plan 1 and TRS Plan 1 members' their vested contractual right to a monthly retirement allowance granted to them at the beginning of their service.

- In the absence of an actuarial opinion that the merger will create an actuarially unsound pension plan, LEOFF Plan 1 and TRS Plan 1 members' vested contractual right to the systematic funding of their retirement plan to maintain its actuarial soundness is not violated by the merger.

- Under state law, TRS Plan 1 employers cannot pay for LEOFF Plan 1 benefits from monies provided to educational institutions by the Legislature for basic education. However, until there is a viable scenario under which TRS Plan 1 employers could be required to pay for LEOFF Plan 1 benefits out of funds designated for education, the merger cannot be deemed to violate state law.

- There is no provision in state statute that requires a LEOFF Plan 1 surplus to be paid to LEOFF Plan 1 members, retirees, and beneficiaries. The issue of distribution of a surplus is governed by federal law.

- It appears unlikely that counties and cities will need to book any unfunded liability resulting from the LEOFF Plan 1/TRS Plan 1 merger in their financial reporting under GASB. In addition, it does not appear that counties and cities have a legal cause of action against the state because of the merger's impact on counties' and cities' financial requirements under GASB.

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[1] The term "members" is used to refer to both public pension members and retirees unless a distinction needs to be made between the two terms in the text.

- The payment of a lump sum amount to LEOFF Plan 1 retirees, and to future LEOFF Plan 1 members when they retire, is not contrary to state law.

- It is unlikely that Washington courts will find the Alaska case of Municipality of Anchorage v. Gallion, 944 P.2d 436 (1997) to be persuasive.

Part 2 – Explanation of the State Law Analysis

1. LEOFF Plan 1 and TRS Plan 1 members and retirees have certain vested contractual rights to provisions in the public pension plans.

Members of LEOFF Plan 1 and TRS Plan 1 have a contractual right to a pension that is guaranteed at the time the member begins public service. That pension right may be modified but only for limited purposes. *Lenander v. Dep't of Ret. Sys.,* 337 P.3d 199 (2016). The rights of these members to a pension is defined by the Washington laws that create these rights. *Wash. Educ. Ass'n v. Dep't of Ret. Sys.*, 181 Wn.2d 233, 244-45, 332 P.3d 439 (2014).

Washington courts have held that members of a public pension system have a vested contractual right to a pension consistent with what was promised by the employer at the time of employment, the right to a mandatory retirement age that is not reduced during the course of employment, the right to include leave cashouts at the end of employment in the calculation of retirement benefits, the right to a refund of retirement contributions, and the right to systematic funding of a pension plan to maintain its actuarial soundness. *RPEC v. Charles,* 148 Wn.2d 602, 624-25, 62 P.3d 470 (2003).

Of these rights listed immediately above, members of LEOFF Plan 1 and TRS Plan 1 have two vested contractual rights that are relevant to the provisions of Senate Bill 6668. The first is the right to a monthly retirement allowance granted to the members when they first began service. This is the right guaranteed by *Bakenhus v. City of Seattle*, 48 Wn.2d 695, 296 P.2d 536 (1956). The second is the right to the systematic funding of the members' retirement plan to maintain the plan's actuarial soundness. *RPEC v. Charles,* 148 Wn.2d at 625.[2]

a) Members and retirees have the right to a monthly retirement allowance. That right not only is not impaired by Senate Bill 6668, but it is guaranteed by Senate Bill 6668.

[2] The other vested contractual rights listed in the *Charles* case do not appear to be addressed by Senate Bill 6668.

The *Bakenhus* court held that the monthly retirement benefit promised to a public pension member when the member began employment is a contractual right. The question here is whether, as a result of the merger, members of LEOFF Plan 1 and TRS Plan 1 will lose the monthly retirement benefit promised to them as a result of the merger, or whether their benefit will be reduced as a result of the merger. The answer is no.

Both LEOFF Plan 1 and TRS Plan 1 are designed to provide an actuarial reserve system for the payment of death, disability, and retirement benefits to LEOFF Plan 1 and TRS Plan 1 retirees. RCW 41.26.020, RCW 41.32. Members have a vested contractual right to a monthly retirement benefit under *Bakenhus.* Senate Bill 6668 recognizes this right and prohibits a modification of members' retirement benefits if that modification is to the member's detriment. Senate Bill 6668 specifically provides that the merger "may not impact benefits for members of these plans." Further, the bill instructs the Department of Retirement Systems to administer the merged plans "in a way that neither reduces, nor grants additional benefits, for members of those plans." Section 3, Senate Bill 6668. *See also* Section 1. Because the merger legislation specifically provides that the benefits the members receive after the merger must be equal to the benefits the member was entitled to before the merger, the members' *Bakenhus* contractual right to the monthly retirement benefit provided for at the time they were employed is protected.

b) Members have the right to the systematic funding of their pension plans to maintain the plans' actuarial soundness. That right is not impaired by Senate Bill 6668.

Members have a right to the systematic funding of their pension fund to maintain the fund's actuarial soundness. *Weaver v. Evans*, 80 Wn.2d 461, 495 P.2d 639 (1972), *RPEC v. Charles*, 148 Wn.2d 602, 62 P.3d 470 (2003). The question is whether the merger described in Senate Bill 6668 negatively impacts the systematic funding of either TRS Plan 1 or LEOFF Plan 1. The answer is no.

In *RPEC v. Charles*, the Washington Supreme Court held that in the absence of proof that a statute or an action of the Legislature impaired the actuarial soundness of a pension plan, members' right to the systematic funding of an actuarially sound system was not violated. Here, there appears to be no evidence upon which a court could find that merging the TRS Plan 1 and LEOFF Plan 1 pension funds under Senate Bill 6668 will render the funds actuarially unsound. The court in *RPEC v Charles* required proof that something more than the possibility of future harm will occur before finding that legislative action has caused a pension fund to become actuarially unsound. In the absence of that proof, Senate Bill 6668 cannot be said to create an actuarially unsound TRS Plan 1 and LEOFF Plan 1 combined pension plan.

2. State law does not prohibit two different pension plans from being merged.

Senate Bill 6668 merges the assets and liabilities of a closed law enforcement officers' and firefighters' pension plan with a closed teachers' retirement plan. There is little precedence in Washington public pension history for the type of merger described in Senate Bill 6668.

In 1969, law enforcement officers and firefighters were transferred into LEOFF Plan 1 from their membership in retirement plans that were administered by local governments. *See* RCW 41.16, 41.18, and 41.20 (called the Prior Acts). However, unlike Senate Bill 6668, the transfer of Prior Act employees into LEOFF did not require that the provisions of the Prior Acts become tiers of LEOFF Plan 1, and the transfers of members to LEOFF Plan 1 did not require the merger of the assets and liabilities of the Prior Acts with LEOFF Plan 1. Therefore, the creation of LEOFF Plan 1 does not provide guidance for the merger anticipated in Senate Bill 6668.

As mentioned above, the terms of members' public pension rights are defined by the language of the statutes creating those rights. After review of the TRS Plan 1 and the LEOFF Plan 1 statutes and other provisions governing public pension plans, there appears to be no state statute that addresses whether either plan may merge with another plan. Given (i) the statutory silence on merger, and (ii) the Legislature's plenary power to design the public pension plans, I see no prohibition under state law against the merger of these two different pension plans.

3. It does not appears that TRS Plan 1 employers will be required to pay for LEOFF Plan 1 benefits.

Questions have arisen regarding whether it is legal under state law for TRS Plan 1 employers to use money generated solely for the purpose of paying education costs to pay for LEOFF Plan 1 benefits, or to shore up an unfunded liability in LEOFF Plan 1. It is difficult to answer this question because there appears to be no scenario under which a TRS Plan 1 employer will be required to pay for benefits of LEOFF Plan 1 members, or paying down an unfunded liability in LEOFF Plan 1, using money designated solely for education. I reach this conclusion because, first, actuarial analysis indicates that there are sufficient funds to pay for all future LEOFF Plan 1 benefits, and second, under a merger, TRS Plan 1 and LEOFF Plan 1 assets and liabilities will be accounted for as a combined fund. It will be impossible under the merged plans to determine what amount each plan may be underfunded once it becomes a combined plan. Because contribution rates will be paid to the combined fund to reach funded status without designating which contributions go to which plan, there is no scenario under which TRS Plan 1 employers will pay specifically for LEOFF Plan 1 liabilities.

Nevertheless, basic education funds provided under RCW 28A.150, *et. seq.*, must be used solely for the funding of public school education. If there is any scenario which requires the use of basic education funds to pay for LEOFF Plan 1 benefits that use is probably contrary to law. I note that the state has had a history of contributing to LEOFF Plan 1. In fact, over the history of LEOFF Plan 1, the state has paid approximately 87% of the contributions paid to LEOFF Plan 1. *See* the *2016 Participating Employer Financial Information (PEFI)* at page 114 (http://www.drs.wa.gov/administration/annual-report/pefi/PEFI-2016.pdf). There is nothing in state law that prevents the Legislature from contributing again to the merged TRS Plan 1 and LEOFF Plan 1.

4. The distribution of the surplus of LEOFF Plan 1 is controlled by federal law.

The LEOFF Plan 1 pension fund currently has a surplus. In other words, as the State Actuary notes, if all assumptions are realized in the future, LEOFF Plan 1 will have assets remaining after all benefits have been paid. October 11, 2016 Fiscal Note by OSA for Senate Bill 6668. My understanding of Senate Bill 6668 is that the surplus will be used to improve the actuarial soundness of TRS Plan 1 after the merger. *See* Section 1, Senate Bill 6668. After a review of state law, both of the LEOFF Plan 1 statutes as well as the general funding statutes for the public pension plans, I find there is no provision in statute governing the disposal of a public pension funds' surplus assets. The answer to the distribution of the surplus lies in federal law.

LEOFF Plan 1 has been determined to be a tax qualified plan under the federal Internal Revenue Code. Because it is a tax qualified plan under federal law, LEOFF Plan 1 must be administered consistent with federal law requirements. Washington rule (WAC 415-02-750) describes how benefits paid from pension plans administered by the Department of Retirement Systems must comply with IRS distribution rules. IRS distribution rules provide for the distribution of surplus assets to the employers and sponsors of the plan. I defer to Ice Miller's analysis regarding the federal rules on distribution of the LEOFF Plan 1 surplus.

5. LEOFF Plan 1 and TRS Plan 1 members are statutorily entitled to a refund of their contribution rates.

A question has been raised regarding whether members own the contributions they paid into their pension fund over the course of their employment. While the LEOFF Plan 1 and TRS Plan 1 statutes do not describe "ownership" of contributions, each plan provides for the refund of employee contributions to a member if the member leaves LEOFF Plan 1-covered membership or TRS Plan 1-covered membership. These contributions are paid only if the member has not retired for service or disability and only upon the application of the member. If a member applies to receive the member's contribution, in most instances the member will no longer be eligible for retirement benefit. *See* RCW 41.26.170 and RCW 41.32.510. I note, however, that the provisions for payment of accumulated contributions poses a different question than who is entitled to, or "owns," a pension fund's surplus assets.

6. Counties and cities have no apparent legal challenge to the merger that is provided for in Senate Bill 6668 based on GASB requirements and the consequence of no longer accounting for the counties' and cities' proportionate share of the LEOFF Plan 1 assets.

In June 2012, the Governmental Accounting Standards Board (GASB) issued new standards for pension accounting and reporting. The new GASB standards require employers to recognize the employers' proportionate share of any unfunded pension liability in their financial statements as well as their proportionate share of any surplus. These standards went into effect for fiscal years beginning after June 15, 2014. Public employers who employ or employed LEOFF Plan 1 members have been able to account for, or "book," their proportionate share of the surplus in LEOFF Plan 1. Senate Bill 6668 indicates that the Legislature intends to improve the actuarial soundness of TRS Plan 1 through the merger. My understanding is that as a result of this merger there will no longer be a surplus for which LEOFF Plan 1 employers may book their proportionate share of the assets. On the other hand my understanding is that TRS Plan 1 employers will book a lower amount in liability. I further understand that the reporting by employers under GASB has no direct, and perhaps no indirect, impact on public employers. I do not see anything in state statute that indicates that counties and cities have a legal right to the continued booking of their share of the LEOFF Plan 1 assets, nor do I see any evidence upon which the counties and cities may claim damages as a result of the merger. Therefore, my conclusion is that cities and counties have no apparent claim against the state should Senate Bill 6668 be enacted in its present form.

7. It is permissible under state law to distribute a lump sum payment to LEOFF Plan 1 members and retirees and survivors that is taken from the LEOFF Plan 1 pension fund.

Section 6 of Senate Bill 6668 authorizes a one-time payment of $5000 to each LEOFF Plan 1 "active member, term-vested member, retiree, and survivors" eligible for benefits under LEOFF 1, to be paid out of LEOFF Plan 1 assets. The question has arisen whether or not it is permissible to distribute a lump sum payment from the pension fund. Article II, section 25 of the Washington Constitution prohibits what is termed a gift of public funds. However this provision does not "prevent increases in pensions after such pensions shall have been granted." Based on this constitutional provision, and case law in support of this provision, I see no prohibition in the distribution of the $5000 lump-sum payment to LEOFF Plan 1 members, retirees, and their survivors.

8. It is unlikely that a Washington court will find the Alaska case of *Municipality of Anchorage v. Gallion*, 944 P.2d 436 (Alaska 1997), to be persuasive.

The SCPP asked whether the case of *Municipality of Anchorage v. Gallion*, 944 P.2d 436 (Alaska 1997) affects how to analyze the issues related to the LEOFF Plan 1/TRS Plan 1 merger. *Gallion* involved an Anchorage police and firefighter retirement system that consisted of three tiers of membership (Plan I, II, and III). The case did not involve a plan merger. The three tiers had different contribution rates and benefits but the tiers' assets were merged for investment purposes.

Anchorage suspended employer and employee contributions to all three tiers because two out of the three funds were overfunded and assets for the three tiers were sufficient to cover all liabilities. The *Gallion* court held that the suspension of the contributions reduced the funding status of the plans, which impaired "the inherent integrity" of the two overfunded plans, and that members had a constitutionally protected contractual right to have their plans evaluated separately for actuarial soundness.

There are four reasons a Washington court would not find *Gallion* persuasive on issues relating to the LEOFF Plan 1/TRS Plan 1 merger. First, *Gallion* rests on the conclusion that pension members have a right to future contingencies or possibilities regarding their pension systems, where those contingencies or possibilities have not yet occurred and where there is no proof those contingencies or possibilities will occur. This conclusion appears to be contrary to the analysis found in *RPEC v. Charles*, 148 Wn.2d 602, 62 P.3d 470 (2003) and, to some extent, in *Weaver v. Evans*, 80 Wn.2d 461, 495 P.2d 639 (1972). Second, the *Gallion* court found that public pension members have a constitutional right to have the actuarial soundness of their plans evaluated and maintained separately. No Washington court has so held. Third, the *Gallion* court used a legal analysis regarding contractually protected pension rights that has not been recognized or used by Washington courts. For example, the *Gallion* court relied on an Alaska case that was recently considered, and rejected, by our Supreme Court in *Lenander v. Dep't of Ret. Sys.,* 337 P.3d 199 (2016), as incompatible with recent Washington public pension analysis adopted by our Supreme Court. Finally, Washington courts, which have a rich and robust body of public pension case law, generally seem to prefer to rely on Washington courts' own case law rather than the case law from other states.

Part 3 – Detailed Legal Analysis of the State Law Implications of Senate Bill 6668

This analysis will be provided to the Committee in December 2016 in the final version of the report on state law analysis of Senate Bill 6668. This detailed legal analysis will further explain the conclusions listed above.

RECOMMENDATIONS

Recommendation #1: Senate Bill 6668 amends the LEOFF Plan 1 statutory provisions to provide for the merger. My recommendation is that the legislation amend the TRS Plan 1 statutory provisions to also reflect the merger. I believe this is required under federal tax law.

Recommendation #2: Senate Bill 6668 is unclear regarding the Legislature's intent that the benefits provided under each merged plan do not become the benefits of the other plan. In other words, it appears that the Legislature intends, under Senate Bill 6668, that TRS Plan 1 benefits continue to be governed by the provisions of TRS under RCW 41.32, and that LEOFF Plan 1 benefits continue to be governed by the provisions of LEOFF under RCW 41.26. I recommend that this legislative intent be made clearer.

COMPREHENSIVE REPORT FOLLOW-UP

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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 Board[3] 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;[5]and,
- 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.

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[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.

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[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.

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[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 contest 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 1merger 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?

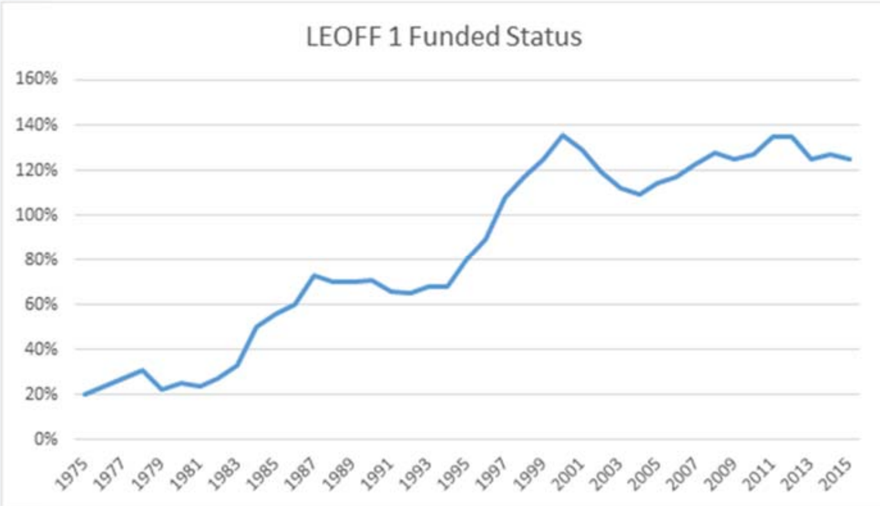
Is there a way to estimate the monthly changes to the LEOFF 1 "surplus" using the most recent monthly fund market value from the State Investment Board and an estimate of how much LEOFF 1 liabilities have changed since the most recent valuation? For instance, can you estimate the projected change in 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.

November 15, 2016

Senator Steve Conway, Chair
Representative Bruce Chandler, Vice Chair
Select Committee on Pension Policy
PO Box 40914
Olympia, Washington 98504

SUBJECT: TRANSMITTAL LETTER FOR ACTUARIAL SECTION OF MERGER STUDY

Pursuant to Section 106 of Chapter 36, Laws of 2016, we transmit the actuarial analysis we prepared in support of the Select Committee on Pension Policy's (SCPP) study of the merger proposed under Senate Bill (SB) 6668. We enclose the following materials for inclusion in the SCPP's report to the Legislature.

- ❖ An updated draft actuarial fiscal note for SB 6668.
- ❖ The materials the Office of the State Actuary presented to the SCPP during the 2016 Interim concerning actuarial analysis on the merger.
- ❖ Responses to actuarial questions the SCPP received from stakeholders during the survey on the merger.

We appreciated the opportunity to assist the SCPP with this study. Please let us know if you have any questions or need further assistance.

Sincerely,

Matthew M. Smith, FCA, EA, MAAA
State Actuary

cc: Select Committee on Pension Policy Members

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

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Responses to Actuarial Questions from Stakeholders

Actuarial Questions and Answers

Historical

1. *How did gainsharing impact the Teachers' Retirement System (TRS) Plan 1?*

   Answer: When gainsharing was in effect for TRS 1, it provided increases to the former Plan 1 Uniform Cost of Living Adjustment (COLA). From a funding and actuarial perspective, those past increases lowered the plan's funded status and increased the TRS 1 Unfunded Actuarial Accrued Liability (UAAL).

   a. *Is that partly why the Law Enforcement Officers' and Fire Fighters' (LEOFF) Plan 1 is in such good shape and TRS 1 is not?*

      Answer: No. LEOFF 1's funded status benefitted from below expected inflation. With the benefit of hindsight, we now know this experience gain resulted in LEOFF 1 collecting more in contributions than what was necessary. Those extra contributions also grew with additional investment earnings. No other plan benefitted from this experience to the same degree as LEOFF 1 because LEOFF 1 is the only plan in our state with a fully indexed (Consumer Price Index) post-retirement COLA.

2. *What is the funding history for each plan?*

   Answer: Please find historical funded status for both LEOFF 1 and TRS 1 in the tables below.

Historical Funded Status			
Year	LEOFF 1	Year	LEOFF 1
2015	**125%**	2000	136%
2014	127%	1999	125%
2013	125%	1998	117%
2012	135%	1997	108%
2011	135%	1996	89%
2010	127%	1995	80%
2009	125%	1994	68%
2008	128%	1993	68%
2007	123%	1992	65%
2006	117%	1991	66%
2005	114%	1990	65%
2004	109%	1989	65%
2003	112%	1988	66%
2002	119%	1987	69%
2001	129%	1986	57%

Note: EAN Cost Method used starting in 2014 (PUC previously).

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Historical Funded Status			
Year	TRS 1	Year	TRS 1
2015	**64%**	2000	100%
2014	69%	1999	93%
2013	71%	1998	86%
2012	79%	1997	82%
2011	81%	1996	70%
2010	84%	1995	65%
2009	75%	1994	65%
2008	77%	1993	62%
2007	76%	1992	59%
2006	80%	1991	59%
2005	80%	1990	60%
2004	88%	1989	58%
2003	89%	1988	59%
2002	98%	1987	58%
2001	100%	1986	50%

Note: EAN Cost Method used starting in 2014 (PUC previously).

a. *Who paid what?*

Answer: Please find historical contribution rates on this website: www.drs.wa.gov/employer/EmployerHandbook/chpt6/tables/default.htm

3. *Is LEOFF 1 cost sharing the same as other plans?*

Answer: No. Generally speaking, member contribution rates in the Plans 1 were fixed at 6 percent. Plan 1 employers in Public Employees' Retierement System (PERS) and TRS contribute to the Plan 1 UAAL in addition to the normal cost. When LEOFF 1 had a UAAL, contributions to amortize the UAAL were made exclusively by the state through the General Fund-State budget.

Member contributions in LEOFF 1 ceased. Member contributions in PERS 1 and TRS 1 continue.

Plan 2 members share equally with their employers in the cost of their defined benefits. Plan 3 members do not share in the cost of their defined benefits, but generally receive half the defined benefit of a similarily situated Plan 2 member. The remaining Plan 3 retirement benefit is derived from member contributions (and assoicated investment earnings) to a defined contribution account.

a. *I.e., did the state only put in 20 percent of contributions?*

Answer: No. The state contributes 20 percent of the cost of **LEOFF 2** benefits. When the state made contributions to LEOFF 1, the state was exclusively responsible for amortizing the LEOFF 1 UAAL. Please see the table on the next page for a history of LEOFF 1 contributions by source.

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Total Employee, Employer, and State Contributions to LEOFF 1			
	Employer	Employee	State
(Dollars in Millions)			
1971	$4.3	$4.3	$0.0
1972	$4.9	$4.9	$0.0
1973	$5.4	$5.4	$0.0
1974	$5.9	$5.9	$0.0
1975	$6.5	$6.5	$0.0
1976	$7.1	$7.1	$39.8
1977	$7.8	$7.8	$39.7
1978	$8.6	$7.4	$63.7
1979	$8.8	$8.7	$62.5
1980	$9.3	$9.2	$81.7
1981	$9.6	$9.6	$81.2
1982	$10.4	$10.4	$56.7
1983	$10.5	$10.6	$178.1
1984	$10.7	$10.8	$128.7
1985	$10.9	$10.9	$93.1
1986	$10.9	$11.0	$139.1
1987	$11.4	$11.4	$138.4
1988	$11.7	$11.7	$52.5
1989	$12.0	$12.0	$46.2
1990	$10.6	$10.7	$56.8
1991	$10.8	$10.9	$54.4
1992	$10.4	$10.4	$70.3
1993	$10.4	$10.5	$54.7
1994	$9.8	$9.8	$61.3
1995	$9.5	$9.5	$65.5
1996	$8.9	$8.9	$70.9
1997	$8.2	$8.2	$66.7
1998	$7.6	$8.3	$50.4
1999	$7.2	$7.2	$48.8
2000	$6.3	$6.3	$0.0
Total	**$266.4**	**$266.3**	**$1,801.2**

After 2000, contributions are not required while the plan remains fully funded.

4. *What would have happened if there had been no general fund contributions to LEOFF 1?*
   a. *Or the Prior Act systems (e.g., City of Seattle)?*

   Answer: LEOFF 1 would have a significant unfunded liability today without those contributions. However, as noted in the table above, the state contributions to the LEOFF 1 UAAL comprise the majority of past LEOFF contributions.

5. *What is the year-by-year funded status and UAALs rate for TRS 1 since 2000?*

   Answer: Please see the table above for historical funded status.

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6. *What other bills (proposed or enacted) have "utilized the device of pension premium reduction at reduced or would have reduced the obligation of the state to make pension contributions"?*

   Answer: This question is not actuarial in nature.

Related to a Merger

7. *What is the financial situation before and after?*

   Answer: Please see the draft actuarial fiscal note in this study.

   a. *What does the "surplus" represent?*

      i. *Is it the excess of funds needed to pay benefits this month? This year?*

   b. *Is the surplus "real" or just projected?*

      i. *How reasonable is the investment return assumption?*

      ii. *What would it look like under alternate scenarios (e.g., 7 percent or 6 percent)?*

      Answer: These questions were answered during presentations from the Office of the State Actuary (OSA) to the Select Committee on Policy (SCPP) during the 2016 Interim. We have included those materials in the actuarial section of this report.

   c. *If the surplus disappears, would it be too late to insure the LEOFF 1 benefits?*

      i. *E.g., ensuring payment under a pay-go scenario versus insuring through plan immunization.*

      Answer: As of June 30, 2015, LEOFF 1 lacks sufficient assets to completely "immunize" or "settle" plan obligations. The decision to immunize or settle plan obligations is complex and would require analysis outside the scope of this study.

   d. *Would a merger be revenue neutral?*

   Answer: As noted in the draft actuarial fiscal note, the merger proposed under SB 6668 is expected to result in a savings to the state, but could result in a cost under very pessimistic future economic outlooks. Please see the actuarial fiscal note in this report for supporting information.

8. *How might the funds be used?*

   a. *Clarify: Usable across the merged plan vs. usable outside either of the retirement plans (other obligations).*

   b. *Should it be treated like a reserve for LEOFF 1 only?*

   c. *Can money be "skimmed out" of the fund during transfer from LEOFF 1 to TRS 1?*

   Answer: These questions are not actuarial in nature. Some are addressed in the legal and policy sections of this study.

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9. *What happens in the event of a deficit?*
   a. *If the funded status were 87 percent, would that mean I only get 87 percent of my current check amount?*
   b. *Before merger?*
   c. *After?*
   d. *Who pays what?*
   e. *Who will be paid first? (Overlap with legal/admin analysis)*
   f. *Could the state default on the pensions?*

   Answer: These questions are not actuarial in nature. Some are addressed in the legal and policy sections of this study.

10. *Would there be other costs (e.g., admin)?*

    Answer: Yes. Please see the Department of Retirement Systems' (DRS) section on administrative impacts in this report.

11. *How would a merger impact accounting and reporting?*
    a. *How would a merger impact financial reporting (GASB) for state and local governments?*

    Answer: As of this writing, DRS, in consultation with the Office of Financial Management and OSA, is reviewing this question.

12. *Who is constitutionally liable for future benefit payments?*

    Answer: This question is not actuarial in nature.

13. *Are there other options to address TRS 1 underfunding?*

    Answer: Yes.

    a. *What would the impact be if the TRS 1 UAAL rate was reduced without a merger?*

    Answer: If funding to the TRS 1 UAAL is reduced below the level actuarially required to eliminate the UAAL under state funding policy, we would expect the TRS 1 UAAL to persist, potentially increase, and lead to even higher future contribution requirements.

14. *Can the legislature raise taxes to meet pension obligations (pension or general)?*

    Answer: This question is not actuarial in nature.

15. *What is the position of professional actuarial associations about moving a retirement plan from surplus to unfunded?*

    Answer: OSA cannot and does not speak on behalf of professional actuarial associations.

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Select Committee on Pension Policy

Merger Study
Final Survey Results and LEOFF 1 Funding Information

Aaron Gutierrez, MPA, JD
Senior Policy Analyst

Matt Smith, FCA, EA, MAAA
State Actuary

September 20, 2016

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

Today's Presentation

- SCPP asked staff to bring back final survey results
  - Full list in your materials
  - About 40 new additions (depending on how they're counted)
  - Highlights in presentation
- Matt will address LEOFF 1 expected surplus
  - One of the most common questions we've received

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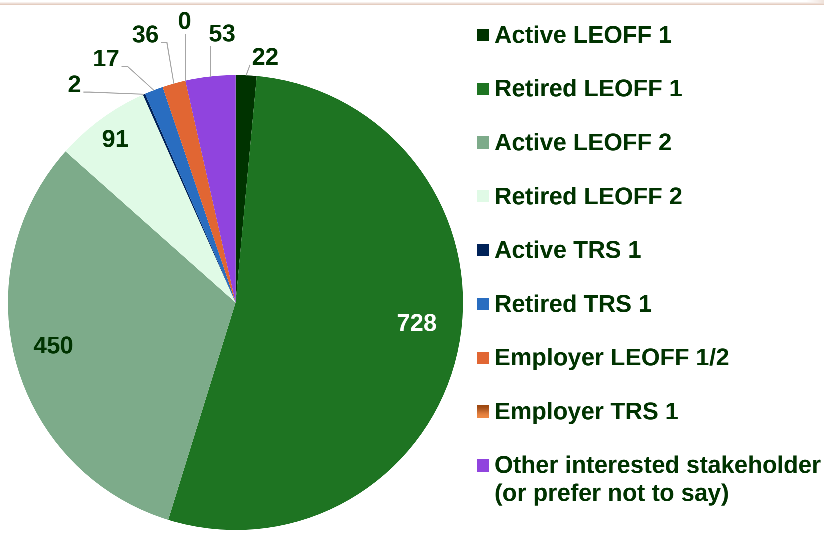
Survey Information

- Survey was intended to focus on LEOFF 1/TRS 1 merger
  - Did not remove LEOFF 1/LEOFF 2 merger comments
- At stakeholders' request, all responses will be posted on the web
- Received over 1,400 web survey responses, plus email, letters, and phone calls
- Compiled list sent to AGO, DRS, and LEOFF 2 Board

Select Committee on Pension Policy

Question 1: Plan Membership and Status (as of August 31, 2016)



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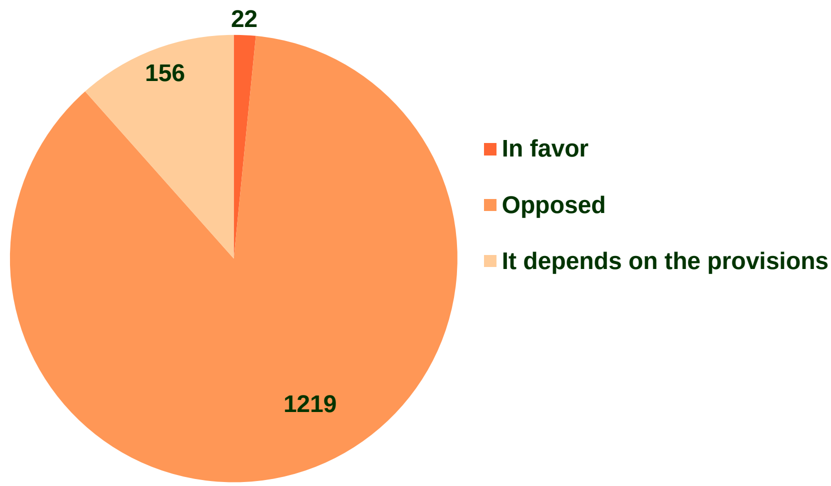
Question 2: For or Against a Merger? (as of August 31, 2016)



New Questions/Concerns: Highlights

- Most questions/concerns expand on prior questions
- How would a merger impact accounting and reporting?
- Are there other options for addressing TRS 1 underfunding?
- How does McCleary impact the merger analysis?
  - How could a merger impact local levies if a future unfunded liability arises?
- Added section for "Questions for Bill Sponsors"
  - Questions that staff can't address, such as why the sponsor chose to include the $5,000 lump sum in SB 6668

What Constitutes the LEOFF 1 Surplus?

- A comparison, at a single point in time, of the *Actuarial Value of Assets* to the *Present Value of Future Benefits*
- At June 30, 2015, the LEOFF 1 surplus was $1,090 million ($1.09 billion)
- Let's dig a little deeper

What Constitutes the LEOFF 1 Surplus?

(Dollars in Millions)	
Actuarial Value of Assets (AVA)	**$5,404**
Present Value of Future Benefits (PVB)	**$4,313**
Surplus/(Deficit) [AVA-PVB]	**$1,090**

At June 30, 2015. Totals don't agree due to rounding.

What Constitutes the LEOFF 1 Surplus?

Select Committee on Pension Policy

(Dollars in Millions)	
Actuarial Value of Assets (AVA) [a-b]	**$5,404**
Market Value of Assets [a]	$5,610
Deferred Investment Gains/(Losses) [b]	$207
Present Value of Future Benefits (PVB)	**$4,313**
Surplus/(Deficit) [AVA-PVB]	**$1,090**

At June 30, 2015. Totals don't agree due to rounding.

What Constitutes the LEOFF 1 Surplus?

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(Dollars in Millions)	
Actuarial Value of Assets (AVA) [a-b]	**$5,404**
Market Value of Assets [a]	$5,610
Deferred Investment Gains/(Losses) [b]	$207
Present Value of Future Benefits (PVB) [c-d]	**$4,313**
PVB Assuming Zero Real Rate of Return [c]	$7,029
Additional Interest Discount for Assumed Real Rate of Return [d]	$2,716
Surplus/(Deficit) [AVA-PVB]	**$1,090**

At June 30, 2015. Totals don't agree due to rounding. 7.7% nominal rate of return equals 3% for assumed inflation plus 4.7% for the assumed real rate of return.

What Constitutes the LEOFF 1 Surplus?

- At June 30, 2015, the LEOFF 1 surplus was $1,090 million
  - Meaning the actuarial value of assets exceeds the present value of future benefits by $1,090 million
- The entire LEOFF 1 surplus is comprised of assumed future investment income above inflation
- *See 2015 Actuarial Valuation Report* for further details and supporting information

Select Committee on Pension Policy

Next Steps

- October
  - Progress updates and/or drafts from AGO, DRS, OSA, LEOFF 2 Board
- November
  - SCPP receives draft report
- December
  - Final action on report
- Report due January 9, 2017

Select Committee on Pension Policy

Appendix: Survey Questions

- Plan membership and status (active, retired, employer)
- If the Legislature proposed a merger of LEOFF 1 and TRS 1, then you would be…
  - In favor, opposed, or it depends on the provisions of the merger
- If the Legislature proposed a plan merger
  - What QUESTIONS would you like answered?
  - What CONCERNS would you like to see addressed?
  - What GENERAL COMMENTS would you have?

Merger Study – Actuarial Update

Matt Smith, FCA, EA, MAAA
State Actuary

Presentation to Select Committee on Pension Policy

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

October 18, 2016

Today's Update

- Share preliminary results we have thus far
- Response to SCPP member questions from September meeting
- Discuss next steps on actuarial analysis

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Preliminary Results

- Updated fiscal analysis on SB 6668
- Reflects most recent participant data and 2015 AVR
- Asset returns through June 30, 2016
- Assumes following key updates to SB 6668
  - Payment of $5,000 bonus one year later
  - 4.24 percent contribution rate (based on 2014 AVR) replaced with 5.05 percent (based on 2015 AVR)
  - Referred to as SB 6668 (2017) in this presentation
- All other data, assumptions, and methods consistent with actuarial fiscal note from last session (in materials)
- Please see actuarial fiscal note for supporting information and considerations on the use of the analysis

Comparison Of Budget Impacts

- LEOFF 1 surplus decreased from June 30, 2014, to June 30, 2015, measurement
- Lower surplus leads to lower expected long-term savings from the merger

	Budget Impact	
(Dollars in Millions)	**SB 6668 (2017)**	**SB 6668 (2016)**
2017-2019		
General Fund-State	($171)	($244)
Local Government	($70)	($100)
Total Employer	($241)	($343)
2019-2021		
General Fund-State	($167)	($212)
Local Government	($68)	($86)
Total Employer	($235)	($298)
25-Year		
General Fund-State	($1,372)	($1,477)
Local Government	($560)	($603)
Total Employer	($1,932)	($2,080)

Note: We use long-term assumptions to produce our short-term budget impacts. Therefore, our short-term budget impacts will likely vary from estimates produced from other short-term budget models.

Response To SCPP Member Questions From September Meeting

- Historical LEOFF 1 funded status
- Impact of different assumed rates of return on LEOFF 1 surplus
- Budget impact of merger under different assumed funding policies
- Response to other questions included in forthcoming draft report or November presentation

Historical LEOFF 1 Funded Status

Funded Status On An Actuarial Value Basis	
Year	Funded Status
2015	**125%**
2013	125%
2011	135%
2009	125%
2007	123%
2005	114%
2003	112%
2001	129%
1999	125%
1997	108%
1996	89%
1994	68%
1992	65%
1990	65%
1988	66%
1986	57%

Note: EAN Cost Method used starting in 2014 (PUC previously).
Please see Appendix for full history.

LEOFF 1 Surplus At Different Assumed Rates Of Return

Funded Status On An Actuarial Value Basis (Dollars in Millions)			
Assumed RoR*	**5.0%**	**7.5%**	**7.7%**
Accrued Liability	$5,585	$4,384	$4,307
Valuation Assets	$5,404	$5,404	$5,404
Unfunded Liability	$182	($1,020)	($1,097)
Funded Ratio			
June 30, 2015	**97%**	**123%**	**125%**

**RoR = Rate of Return.*
Note: Totals may not agree due to rounding.

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Budget Impact Of Merger Under Different Assumed Funding Policies

- Budget impact of any merger will depend on the assumed funding policy
- Funding policy determines who pays/saves, when, and how much
- Funding policy can range from a minimum to maximum use of the LEOFF 1 surplus
  - Minimum use would not reduce TRS 1 UAAL rates until UAAL is eliminated
  - Maximum use would eliminate near-term TRS 1 UAAL contributions until surplus was depleted

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Description Of Assumed Funding Policies

	Minimum Use	SB 6668 (2017)	Maximum Use
Employee Rates	6% TRS 1 0% LEOFF 1	6% TRS 1 0% LEOFF 1	6% TRS 1 0% LEOFF 1
Employer UAAL Rates	Same as current law until UAAL=0	5.05% FY 18-21 Variable FY 22+ 5.05% Min FY 22+	0% FY 18-20 Variable FY 21+ 5.75% Min FY 21+
UAAL Payoff Year	2023	2025	2028

- Employer rates under the merger apply to TRS employers only
- Expected UAAL payoff year if all assumptions are realized

Budget Impact Of Merger Under Different Assumed Funding Policies

Budget Impact			
(Dollars in Millions)	**Minimum Use**	**SB 6668 (2017)**	**Maximum Use**
2017-2019			
General Fund-State	$0	($171)	($575)
Local Government	$0	($70)	($235)
Total Employer	$0	($241)	($810)
2019-2021			
General Fund-State	$0	($167)	($353)
Local Government	$0	($68)	($144)
Total Employer	$0	($235)	($498)
25-Year			
General Fund-State	($1,536)	($1,372)	($940)
Local Government	($627)	($560)	($384)
Total Employer	($2,163)	($1,932)	($1,324)

Note: We use long-term assumptions to produce our short-term budget impacts. Therefore, our short-term budget impacts will likely vary from estimates produced from other short-term budget models.

How The Results Of The Merger Change Under Different Future Return Scenarios

25-Year Budget Impact By Return Scenario (Dollars in Millions) TRS - Total Employer			
Future Return Scenario	**Minimum Use**	**SB 6668 (2017)**	**Maximum Use**
5.0% RoR*	$359	$1,368	$2,104
6.0% RoR	($1,395)	($156)	$710
7.7% RoR	($2,163)	($1,932)	($1,324)

**RoR = Rate of Return. 7.7% expected.*

- Merger could have a cost when return scenario is lower than expected
- The cost of below expected returns increases
  - As the assumed funding policy approaches the maximum use policy
  - When there are fixed contribution rates under assumed policy

Next Steps On Actuarial Analysis

- Finalize preliminary analysis presented today
- Present further risk analysis in November
- Present actuarial analysis on LEOFF 1 risks requested by the LEOFF 2 Board
- Complete actuarial section of draft report

Questions?

Appendix – Full History Of LEOFF 1 Funded Status

Historical Funded Status			
Year	Funded Status	Year	Funded Status
2015	**125%**	2000	136%
2014	127%	1999	125%
2013	125%	1998	117%
2012	135%	1997	108%
2011	135%	1996	89%
2010	127%	1995	80%
2009	125%	1994	68%
2008	128%	1993	68%
2007	123%	1992	65%
2006	117%	1991	66%
2005	114%	1990	65%
2004	109%	1989	65%
2003	112%	1988	66%
2002	119%	1987	69%
2001	129%	1986	57%

Note: EAN Cost Method used starting in 2014 (PUC previously).

Appendix – Data, Assumptions, And Methods Used In Analysis

- Participant and financial data as of June 30, 2015
- In addition, we recognized investment returns of 2.65 percent through June 30, 2016, when estimating projected asset values
- We estimated that approximately 7,300 LEOFF 1 members would be eligible for the $5,000 bonus as of January 1, 2018
- Unless noted otherwise in this presentation, we used the same data, assumptions, and methods as disclosed in our actuarial fiscal note for SB 6668

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Appendix – Expected Contribution Rates

TRS 1 / LEOFF 1 Contribution Rates
(If All Assumptions Are Realized)

Fiscal Year	Current Law LEOFF 1	Current Law TRS 1	TRS 1 / LEOFF 1 Merged* Minimum Use	TRS 1 / LEOFF 1 Merged* SB 6668 (2017)	TRS 1 / LEOFF 1 Merged* Maximum Use
2017	0.00%	6.23%	6.23%	6.23%	6.23%
2018	0.00%	7.19%	7.19%	5.05%	0.00%
2019	0.00%	7.19%	7.19%	5.05%	0.00%
2020	0.00%	6.94%	6.94%	5.05%	0.00%
2021	0.00%	6.94%	6.94%	5.05%	5.75%
2022	0.00%	5.75%	5.75%	5.05%	5.75%
2023	0.00%	5.75%	5.42%	5.05%	5.75%
2024	0.00%	5.75%	0.00%	5.05%	5.75%
2025	0.00%	5.75%	0.00%	5.05%	5.75%
2026	0.00%	5.75%	0.00%	0.10%	5.75%
2027	0.00%	5.75%	0.00%	0.00%	5.75%
2028	0.00%	3.16%	0.00%	0.00%	2.98%
2029	0.00%	0.00%	0.00%	0.00%	0.00%

Collected over TRS salaries only.

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Appendix – Expected UAAL

Projected UAAL *(Dollars in Millions)* (If All Assumptions Are Realized)					
	Current Law		TRS 1 / LEOFF 1 Merged		
Fiscal Year	LEOFF 1	TRS 1	Minimum Use	SB 6668 (2017)	Maximum Use
2015	($1,090)	$3,187	$2,097	$2,097	$2,097
2016	N/A	$3,364	$1,922	$1,922	$1,922
2017	N/A	$3,210	$1,773	$1,773	$1,773
2018	N/A	$3,029	$1,629	$1,752	$2,041
2019	N/A	$2,803	$1,352	$1,612	$2,227
2020	N/A	$2,556	$1,046	$1,446	$2,426
2021	N/A	$2,270	$694	$1,250	$2,260
2022	N/A	$2,061	$364	$1,012	$2,050
2023	N/A	$1,798	N/A	$720	$1,786
2024	N/A	$1,492	N/A	$385	$1,480
2025	N/A	$1,139	N/A	N/A	$1,126
2026	N/A	$734	N/A	N/A	$720
2027	N/A	$273	N/A	N/A	$258
2028	N/A	N/A	N/A	N/A	N/A

Note: We show N/A upon paying off the unfunded liability.

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SUMMARY OF RESULTS

BRIEF SUMMARY OF PROPOSAL: This proposal merges the assets and liabilities of TRS Plan 1 and LEOFF Plan 1, and makes other statutory changes to meet this goal. This proposal also provides a one-time, lump-sum bonus of $5,000 per eligible LEOFF 1 member.

COST SUMMARY

Impact on Contribution Rates (Effective 09/01/2017 - 08/31/2019)		
Fiscal Year 2018 State Budget	**TRS**	**LEOFF 1**
Employee (Plan 1)	0.00%	0.00%
Total Employer	(2.14%)	0.00%

Budget Impacts			
(Dollars in Millions)	**2017-2019**	**2019-2021**	**25-Year**
General Fund-State	($171.1)	($167.2)	($1,371.9)
Local Government	($69.9)	($68.3)	($560.4)
Total Employer	($241.0)	($235.5)	($1,932.2)

Note: We use long-term assumptions to produce our short-term budget impacts. Therefore, our short-term budget impacts will likely vary from estimates produced from other short-term budget models.

HIGHLIGHTS OF ACTUARIAL ANALYSIS

- LEOFF 1 is currently expected to have a surplus at the end of the plan's life. In other words, if all assumptions are realized in the future, LEOFF 1 will have assets remaining after all benefits for plan members and beneficiaries have been paid.
- The funding policy for the merged plan will apply the expected LEOFF 1 surplus to the future contribution requirements of the merged plan. This results in an expected long-term total employer savings of about $1.9 billion through reduced contribution requirements over the next 25 years.
- The fiscal impact of the merger, however, depends heavily on future economic outlooks. For example, under a very pessimistic outlook, where the merged plan would have insufficient assets in the future to cover all projected benefits, the merger results in a cost to employers of $3.2 billion over the next 27 years. A very pessimistic or worse outlook occurs in 5 percent of our simulations of future economic outlooks.
- We observed that the proposed merger increases certain risks to the affected systems. See the **How The Risk Measures Changed** section of this draft fiscal note for further information.

See the remainder of this draft fiscal note for additional details on the summary and highlights presented here.

WHAT IS THE PROPOSED CHANGE?

Summary Of Change

This proposal impacts the following systems:

- Teachers' Retirement System Plan 1 (TRS 1).
- Law Enforcement Officers' and Fire Fighters' Retirement System Plan 1 (LEOFF 1).

This proposal merges the assets and liabilities of TRS 1 and LEOFF 1 and makes other statutory changes to meet this goal. LEOFF 1 will be administered as a separate tier of the TRS 1 plan.

The Department of Retirement Systems (DRS) must request a determination letter from the Internal Revenue Service. The merger is null and void if a determination letter indicates the merger is in conflict with Internal Revenue Code, and the conflict cannot be remedied. The results of a determination letter do not impact the changes to Unfunded Actuarial Accrued Liability (UAAL) rates.

This section of the draft actuarial fiscal note only addresses the changes that impact the pricing of the proposal.

Benefits

Pension benefits are not changed. However, eligible members of LEOFF 1 are provided with a one-time, lump-sum bonus of $5,000. This lump-sum bonus is payable on January 3, 2018, for all retired members. For active and terminated-vested members of LEOFF 1 who have not yet retired, this lump-sum bonus is payable with interest at retirement.

Funding Policy

LEOFF 1

No contributions are required for LEOFF 1 members and employers, except for the administrative rate charged by DRS to employers of active members.

TRS 1

The TRS 1 funding policy is largely unchanged (see below for current funding policy), except for the following:

- The assets and liabilities of LEOFF 1 are merged into TRS 1.
- UAAL rates for TRS 1 employers are set at 5.05 percent starting September 1, 2017, and continuing through August 31, 2021.
- A new minimum UAAL rate is set at 5.05 percent beginning September 1, 2021, and continuing until the actuarial value of assets in the merged plan equals 100 percent of the actuarial accrued liability.

Assumed Effective Date: September 1, 2017.

HOW THIS PROPOSAL DIFFERS FROM SB 6668

This proposal is intended to reflect the provisions of SB 6668 (from the 2016 Legislative Session) rolled forward one year. Only the effective dates, and contribution rates (see **Funding Policy** above) are changed from that bill. If a new merger bill is introduced next legislative session, it may not match this proposal precisely. If so, the Office of the State Actuary (OSA) will produce new analysis accordingly. We urge readers to ensure the details of this and any future proposals align before using or relying on this analysis.

What Is The Current Situation?

Both TRS 1 and LEOFF 1 were closed to new members in 1977. The following summary describes only the aspects of current plan provisions necessary to illustrate the impact of the changes described above. Please see the *DRS Handbook* for a full list of plan provisions.

TRS 1

There are two types of contributions to TRS 1: (1) The normal cost, or contributions for the ongoing costs of the plan, and (2) The UAAL, or contributions for past costs.

(1) Members and employers make contributions toward the ongoing cost of the plan. Contribution rates for Plan 1 members are set in statute at 6 percent. Employer contributions are set by the Pension Funding Council (PFC), subject to revision by the Legislature.

(2) A separate UAAL rate is charged to employers in addition to the ongoing contribution rate. The UAAL rate is calculated on a rolling ten-year amortization, as a level percentage of projected system payroll. Beginning September 1, 2015, a minimum 5.75 percent UAAL rate was established, and remains in effect until the actuarial value of assets in TRS 1 equals 100 percent of the actuarial accrued liability.

LEOFF 1

The Legislature has stated its intent to fully amortize the costs of LEOFF 1 by June 30, 2024, and the PFC is directed to adopt biennial "basic rates" for LEOFF 1 that are sufficient to achieve this goal.

Currently, RCW 41.26.080 provides that no member or employer contribution is required for LEOFF 1 unless the most recent actuarial valuation report shows the plan has unfunded liabilities. As of June 30, 2015, the measurement date for the latest actuarial valuation, LEOFF 1 has a surplus of $1.1 billion and a funded status of 125 percent on an actuarial-value basis (i.e., using the actuarial value of assets and the current long-term expected rate of return on investments of

7.7 percent per year to determine the present value of earned pension obligations).

For purposes of this draft fiscal note, we assume the prior funding policy would resume if LEOFF 1 were to come out of its fully-funded state before the year 2024. That is, when the LEOFF 1 UAAL resurfaces under pessimistic outlooks in our analysis, we assume remaining LEOFF 1 members and their local employers would each contribute 6 percent of LEOFF 1 salaries, and the remaining required contributions would be allocated through the state's general fund.

After the year 2024, a LEOFF 1 UAAL can still emerge under some pessimistic outlooks. When this occurs, we assume the UAAL will be amortized, through contributions from the General Fund-State (GF-S) exclusively, over a ten-year rolling period of total LEOFF system salary (LEOFF 1 and LEOFF 2 combined). This assumed funding method is similar to the current funding method for PERS 1 and TRS 1 except we do not assume a minimum contribution rate for LEOFF 1.

Who Is Impacted And How?

This proposal does not change benefits for any members of LEOFF 1 or TRS 1, except for the $5,000 lump-sum bonus for LEOFF 1 members.

Additionally, this proposal does not impact any TRS 1 members through increased or decreased contribution rates because TRS 1 member contribution rates are set in statute at 6 percent of salary. This proposal also stipulates that LEOFF 1 members and employers will not contribute to the merged plan. This provision eliminates the possibility of future LEOFF 1 member or employer contributions.

TRS 1 employers are expected to pay lower UAAL contribution rates over a shorter period of time. However, under pessimistic economic conditions, TRS 1 employers may ultimately pay higher UAAL contribution rates over a longer period of time (compared to current law).

WHY THIS PROPOSAL HAS AN EXPECTED SAVINGS AND WHO RECEIVES IT

Why This Proposal Has An Expected Savings

This proposal has an expected savings because it merges a plan currently in surplus (LEOFF 1) with a plan that is not in surplus (TRS 1). When we apply the existing TRS 1 funding policy to a smaller (combined) unfunded liability, the result is smaller expected contribution requirements.

To help illustrate the impact from the proposal, we begin by displaying the projected UAAL under current law, and then show the impact of the proposed merger. We display an "N/A" once the plan is expected to remain fully funded under each of the scenarios we present as defined below.

In addition to our "Expected" case, we show how the projected UAAL could vary under different economic environments. We used 2,000 simulated economic environments before and after the merger to illustrate a range of possible outcomes. Each simulated economic environment is equally likely to occur under our model.

We categorize these outcomes into four additional scenarios, from "Very Optimistic" to "Very Pessimistic". The likelihood of these scenarios is defined as follows. We observe 5 percent of our simulated outcomes are at the very optimistic level or better. Similarly, we observe 25 percent of our simulated outcomes are at the optimistic level or better. Comparatively, 5 and 25 percent of our simulated outcomes are at the very pessimistic and pessimistic levels or worse, respectively.

Before The Merger (Current Law)

The following table shows that the LEOFF 1 surplus (or negative unfunded liability) is expected to remain under most outcomes. Under current LEOFF 1 funding policy, no contributions are collected when the plan is in surplus and the surplus remains in the fund until the last benefit is paid.

LEOFF 1 UAAL, Before Merger					
(Dollars in Millions)					
Year	Very Optimistic	Optimistic	Expected	Pessimistic	Very Pessimistic
2015	($1,090)	($1,090)	($1,090)	($1,090)	($1,090)
2018	N/A	N/A	N/A	N/A	($438)
2021	N/A	N/A	N/A	N/A	$286
2024	N/A	N/A	N/A	N/A	$434
2027	N/A	N/A	N/A	N/A	$1,113
2030	N/A	N/A	N/A	N/A	$1,141
2033	N/A	N/A	N/A	N/A	$1,411
2036	N/A	N/A	N/A	N/A	$1,229
2039	N/A	N/A	N/A	N/A	$1,238
2042	N/A	N/A	N/A	N/A	$815
2045	N/A	N/A	N/A	N/A	$671
2048	N/A	N/A	N/A	N/A	$381
2051	N/A	N/A	N/A	N/A	$265

The next table shows that under its current funding policy, if all assumptions are realized ("Expected" column), TRS 1 is expected to be fully amortized at 2028 through future employer contributions and investment returns.

TRS 1 UAAL, Before Merger					
(Dollars in Millions)					
Year	Very Optimistic	Optimistic	Expected	Pessimistic	Very Pessimistic
2015	$3,187	$3,187	$3,187	$3,187	$3,187
2018	$2,674	$2,861	$3,029	$3,159	$3,338
2021	$834	$1,659	$2,270	$2,732	$3,617
2024	N/A	$268	$1,492	$2,428	$3,900
2027	N/A	N/A	$273	$1,733	$3,612
2030	N/A	N/A	N/A	$671	$2,879
2033	N/A	N/A	N/A	$6	$1,801
2036	N/A	N/A	N/A	N/A	$336
2039	N/A	N/A	N/A	N/A	$97
2042	N/A	N/A	N/A	N/A	N/A
2045	N/A	N/A	N/A	N/A	N/A
2048	N/A	N/A	N/A	N/A	N/A
2051	N/A	N/A	N/A	N/A	N/A

After The Merger

The table below shows that under the merged plan with new funding requirements, the merged plan is expected to be fully funded in 2026.

LEOFF 1 / TRS 1 UAAL, After Merger					
(Dollars in Millions)					
Year	Very Optimistic	Optimistic	Expected	Pessimistic	Very Pessimistic
2015	$2,097	$2,097	$2,097	$2,097	$2,097
2018	$1,051	$1,420	$1,752	$2,009	$2,384
2021	N/A	$20	$1,250	$2,184	$3,964
2024	N/A	N/A	$385	$2,315	$5,293
2027	N/A	N/A	N/A	$2,091	$5,458
2030	N/A	N/A	N/A	$1,586	$4,983
2033	N/A	N/A	N/A	$814	$4,273
2036	N/A	N/A	N/A	$36	$3,289
2039	N/A	N/A	N/A	N/A	$1,958
2042	N/A	N/A	N/A	N/A	$147
2045	N/A	N/A	N/A	N/A	N/A
2048	N/A	N/A	N/A	N/A	N/A
2051	N/A	N/A	N/A	N/A	N/A

The funding policy of the merged plan will apply the expected LEOFF 1 surplus to the TRS 1 UAAL. This serves to reduce the expected TRS 1 UAAL and lower the associated future contribution requirements of the merged plan if all assumptions are realized.

The fiscal impact of the merger, however, depends heavily on future economic outlooks. Please see the **How The Results Change When The Assumptions Change** section of this draft fiscal note for further information on how the expected costs of this bill can vary from our best-estimate assumptions.

Who Will Receive These Savings?

Based on the funding policy for the merged plan, the expected savings of the merged plan will be realized by TRS employers and state budgets through decreases in the Plan 1 UAAL contribution rates.

As noted above, TRS 1 member rates are set in statute and do not change under this proposal. Under pessimistic outcomes (where the LEOFF 1 UAAL could resurface in the future) LEOFF 1 members and their employers do not make contributions to the merged plan under this proposal.

HOW WE VALUED THESE COSTS

Assumptions We Made

In all areas other than the risk analysis section, we performed what we call “current law” scenario analysis in this draft fiscal note. Under current law scenarios, we assume no future funding shortfalls and no future benefit improvements.

In the **Actuarial Results** section for liability, salary, contribution rate, and budget changes, we applied current law scenarios and made no assumption changes.

For the projections before the merger, we assumed that the state, through GF-S contributions, would fully amortize any future LEOFF 1 unfunded liability not covered by LEOFF 1 members and employers, by 2024.

After the year 2024, a LEOFF 1 UAAL can still emerge under some pessimistic outlooks. When this occurs, we assume the UAAL will be amortized, through contributions from the GF-S exclusively, over a ten-year rolling period of total LEOFF system salary (LEOFF 1 and LEOFF 2 combined). This assumed funding method is similar to the current funding method for PERS 1 and TRS 1 except we do not assume a minimum contribution rate for LEOFF 1.

Based upon historical LEOFF 1 headcounts as shown in the table, we expect approximately 7,300 members and beneficiaries will be eligible for the bonus as of the effective date of the proposal.

LEOFF 1	2015	2014	2013	2012	2011	2010	2009
Counts	7,589	7,727	7,873	8,031	8,183	8,310	8,445

Otherwise, we developed these savings using the same assumptions as disclosed in the *June 30, 2015, Actuarial Valuation Report* (AVR) and as described on the Projections Disclosures webpage of the OSA website.

How We Applied These Assumptions

Using our projection system, we calculated expected liabilities, assets, and benefit payments in LEOFF 1 and TRS 1 using current assumptions and methods. We recorded the expected contributions in each year of the projection. This established the expected contribution requirements before the merger.

Next, we combined projected assets and liabilities for LEOFF 1 and TRS 1. Then we applied the funding policy specified in the proposal to the new assets and liabilities. We recorded the expected contributions in each year of the projection. This established the expected contributions in the merged plan. We then compared the contributions before and after the merger to determine the expected savings under this proposal.

We modeled the LEOFF 1 member bonus as a one-time benefit payment during 2018 in our projection system. This provision, by itself, lowers the assets and increases future UAAL contribution rates under the merger. We ignored any interest adjustment on deferred payments for the few remaining active members because the impact is immaterial to this pricing.

Special Data Needed

We developed these savings using the same assets and data as disclosed in the AVR. In addition, we recognized investment returns of 2.65 percent through June 30, 2016, when estimating projected asset values.

ACTUARIAL RESULTS

How The Liabilities Changed

The proposal does not change benefits for LEOFF 1 or TRS 1, except for the one-time $5,000 lump-sum bonus for LEOFF 1 members. Multiplying the $5,000 lump-sum by 7,300 (expected eligible members) amounts to an assumed total distribution of about $36.5 million, payable on January 3, 2018. Otherwise, this proposal is not expected to impact the present value of future benefits payable under either plan.

How The Present Value of Future Salaries (PVFS) Changed

This proposal will impact the actuarial funding of the affected plans by decreasing the PVFS of the members of LEOFF 1 as shown below. We assume that current law requires any LEOFF 1 UAAL that may emerge to be funded by the state as a contribution rate collected over all LEOFF salaries. The decrease in PVFS resulting from the proposal represents the change in funding policy under the merged plan, where all UAAL contributions will be collected over TRS salaries only.

UAAL Present Value of Future Salaries			
(The Value of the Future Salaries Used to Fund the UAAL)			
(Dollars in Millions)	**Current**	**Increase**	**Total**
TRS	$42,703	$0	$42,703
LEOFF	$11,025	($11,025)	$0
TRS 1 / LEOFF 1 Merged*			**$42,703**

Note: Totals may not agree due to rounding.
**TRS 1 / LEOFF 1 merged plan contribution rates collected over TRS salaries only.*

How Contribution Rates Changed

We show the expected contribution rate differences by year in the table below. Please see **Appendix A** for further details on how the projected contribution rates change under different economic environments.

TRS 1 / LEOFF 1 Contribution Rates *(If All Assumptions Are Realized)*				
	LEOFF 1	**TRS 1**	**TRS 1 / LEOFF 1 Merged***	**Difference**
Fiscal Year	**Current Law**	**Current Law**	**After Merger**	
2018	0.00%	7.19%	5.05%	(2.14%)
2019	0.00%	7.19%	5.05%	(2.14%)
2020	0.00%	6.94%	5.05%	(1.89%)
2021	0.00%	6.94%	5.05%	(1.89%)
2022	0.00%	5.75%	5.05%	(0.70%)
2023	0.00%	5.75%	5.05%	(0.70%)
2024	0.00%	5.75%	5.05%	(0.70%)
2025	0.00%	5.75%	5.05%	(0.70%)
2026	0.00%	5.75%	0.10%	(5.65%)
2027	0.00%	5.75%	0.00%	(5.75%)
2028	0.00%	3.16%	0.00%	(3.16%)
2029	0.00%	0.00%	0.00%	0.00%
2030	0.00%	0.00%	0.00%	0.00%

**Collected over TRS salaries only.*

How This Impacts Budgets And Employees

We show the expected savings under this proposal in the table below. Please see the **How The Results Change When The Assumptions Change** section of this draft fiscal note for further details on how the projected budget impacts change under different economic environments.

Budget Impacts *(If all Assumptions are Realized)*			
(Dollars in Millions)	**TRS**	**LEOFF**	**Total**
2017-2019			
General Fund	($171.1)	$0.0	($171.1)
Non-General Fund	$0.0	0.0	$0.0
Total State	**($171.1)**	**$0.0**	**($171.1)**
Local Government	($69.9)	0.0	($69.9)
Total Employer	**($241.0)**	**$0.0**	**($241.0)**
Total Employee	**$0.0**	**$0.0**	**$0.0**
2019-2021			
General Fund	($167.2)	$0.0	($167.2)
Non-General Fund	$0.0	0.0	$0.0
Total State	**($167.2)**	**$0.0**	**($167.2)**
Local Government	($68.3)	0.0	($68.3)
Total Employer	**($235.5)**	**$0.0**	**($235.5)**
Total Employee	**$0.0**	**$0.0**	**$0.0**
2017-2042			
General Fund	($1,371.9)	$0.0	($1,371.9)
Non-General Fund	$0.0	0.0	$0.0
Total State	**($1,371.9)**	**$0.0**	**($1,371.9)**
Local Government	($560.4)	0.0	($560.4)
Total Employer	**($1,932.2)**	**$0.0**	**($1,932.2)**
Total Employee	**$0.0**	**$0.0**	**$0.0**

Note: Totals may not agree due to rounding. We use long-term assumptions to produce our short-term budget impacts. Therefore, our short-term budget impacts will likely vary from estimates produced from other short-term budget models.

The analysis of this proposal does not consider any other proposed changes to the systems. The combined effect of several changes to the systems could exceed the sum of each proposed change considered individually.

As with the costs developed in the actuarial valuation, the emerging costs of the systems will vary from those presented in the AVR or this draft fiscal note to the extent that actual experience differs from the actuarial assumptions.

How the Risk Measures Changed

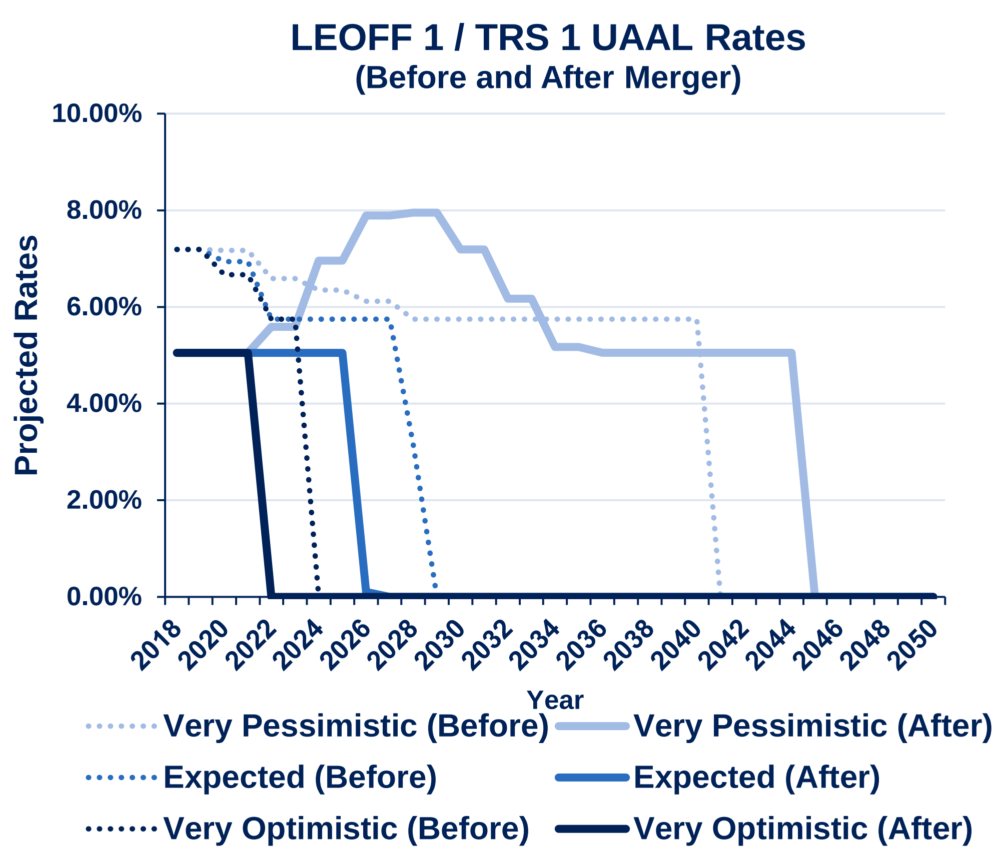
This proposal will affect the risk of the impacted systems. Because the proposal merges two plans and impacts two closed plans only, we needed to develop custom risk measures.

In terms of actuarial funding, we believe the largest risk with the proposed merger is reducing funding to the merged plan based on an expected surplus that may not remain if future experience, primarily inflation and investment returns, does not match expectations. Our risk model allows us to review the likelihood of these outcomes using data, assumptions, and methods specific to the risk assessment.

If the risks noted above were to surface under the proposed merger, you would see increases in future contribution rates and potentially increases in pay-go funding situations. The graphs below demonstrate under what scenarios this risk emerges, when, and for how long.

Projected TRS 1 UAAL Rates

Starting in 2024 and through 2034, we observed increased UAAL contribution rates after the merger under the Very Pessimistic scenario. Under this same scenario, we also observed an extension of UAAL rates from 2041 to 2045 after the merger. These very pessimistic or worse outcomes occur in 5 percent of the simulations in our model.

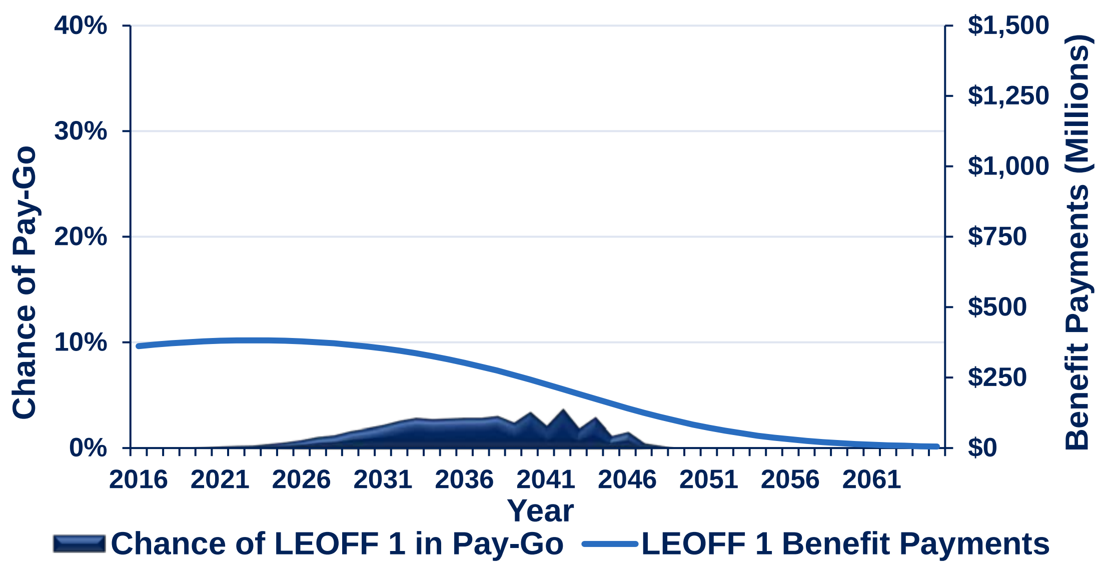


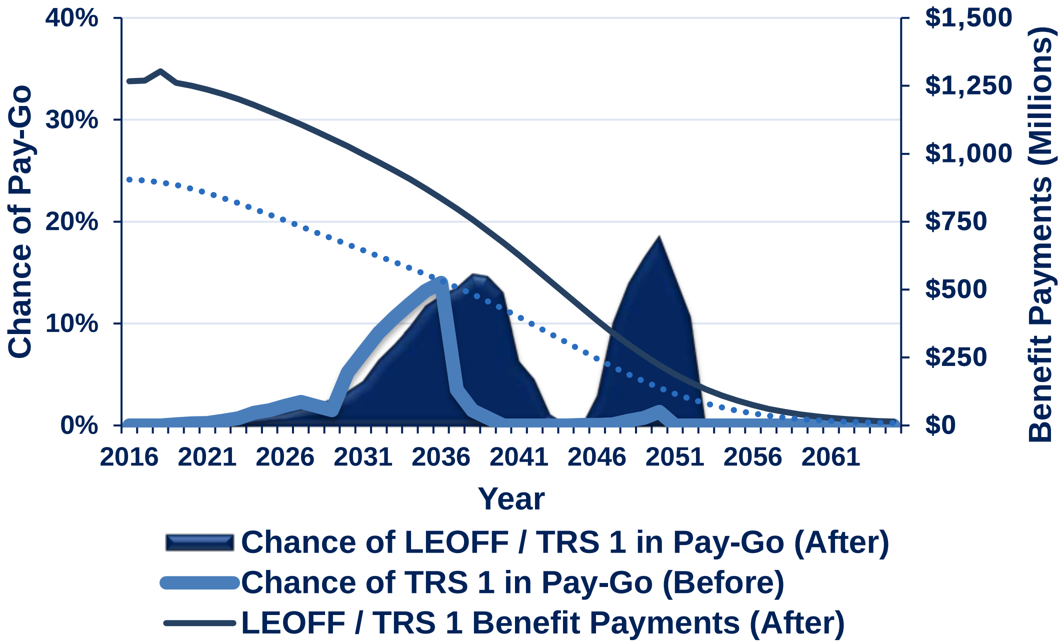
Increased UAAL contribution rates can occur after the merger because the merged plan has higher assets and obligations than TRS 1 before merger. With this larger base of assets and obligations, pessimistic outcomes become more pessimistic than before the merger. Optimistic outcomes become more optimistic after the merger for the same reasons.

Note that these contribution rate graphs are based upon "current law" scenario analysis, which match the tables shown in **Appendix A**.

Pay-Go Risk

When we assume on-going funding to LEOFF 1 after 2024 similar to the funding method for PERS 1 and TRS 1, we observe LEOFF 1 pay-go risk from about 2024 through 2047 with a maximum chance of about 4 percent in the year 2042. At that time, the annual benefit payments for LEOFF 1 are about $210 million under our risk model assuming past practices continue in the areas of funding and benefit enhancements.





After the merger, the maximum chance of pay-go in the late 2030's increases by approximately 1 percent and occurs two years later. This delay or shift is a function of the LEOFF 1 surplus insulating the merged plan for a few more years from very pessimistic economic environments.

The spike in pay-go chance around the year 2050 occurs because assumed funding shortfalls on the larger base of assets and obligations put the merged plan in a weaker position to weather very pessimistic economic environments later in the projection.

Who Would Be Impacted If These Risks Materialize

The risks identified above can surface under current law or under the proposed merger. If the risks materialize under the proposed merger, we anticipate the following impacts from a funding policy perspective:

- **LEOFF 1 Active Members** – These members don't contribute to LEOFF 1 under current law when the plan is fully funded and would not contribute to the merged plan under this proposal.
- **TRS 1 Active Members** – These members contribute 6 percent of pay under current law and under this proposed merger.
- **LEOFF 1 Employers** – Past LEOFF 1 employer funding has come from two sources: (1) local government and (2) the state's general fund. Under current law, however, given the relatively small number of LEOFF 1 active members remaining in the plan, the state's general fund would assume nearly all the responsibility if unfunded LEOFF 1 costs re-emerge and past funding policy were reinstated. Under this proposed merger, local

government would no longer be responsible for funding LEOFF 1 retirement benefits.

- **TRS Employers** – TRS employer funding comes from two sources: (1) local government and (2) state/federal. Under this proposed merger, TRS employers and these funding sources would assume all costs under the merger. As a result, any unfunded LEOFF 1 costs that re-emerge under the merger, if identifiable, could potentially be shared with local government in TRS (school districts).

Risk Management Considerations

If the Legislature decides to pursue this proposal, the following changes to the proposal could reduce some of the risks noted above:

- **Fixed UAAL Rates** – Eliminate or shorten the period of fixed rates under the proposal. This would allow for more responsive and adequate funding should the need arise.

- **Minimum UAAL Rates** – Increase the minimum UAAL rates under the proposal. The current minimum UAAL rate for TRS 1 is 5.75 percent. The proposed minimum UAAL rate for the merged plan is 5.05 percent. Because the merged plan has larger combined benefit payments than TRS 1, the merged plan may require higher minimum rates to accommodate the higher risk associated with the added benefit payments.

As part of this analysis, we changed our standard risk model to accommodate the risk analysis of a merged plan. Specifically, we made the following modifications:

- We applied a $50 million annual pay-go threshold (today's dollars) to the merged plan (we did not combine the threshold we would apply to each plan before the merger).

- We assumed the same Percent of Contributions Made and Benefit Improvements assumptions for the merged plan as we do for TRS 1 before the merger.

- In our standard risk modeling, we assume maximum contribution rates by system. For this analysis, we adjusted this maximum for the merged plan so the merged plan receives contributions from the state-general fund that are no less than what LEOFF 1 and TRS 1 would receive from the state-general fund on a combined basis before a merger.

Otherwise, we developed this risk analysis using the same assumptions, methods, and data as disclosed in the *2016 Risk Assessment Assumptions Study*.

HOW THE RESULTS CHANGE WHEN THE ASSUMPTIONS CHANGE

As mentioned previously, the fiscal impact of the merger depends heavily on future economic outlooks. To determine the sensitivity of the actuarial results to the best-estimate assumptions or methods selected for this pricing, we calculated the budget impact of this proposal under outcomes ranging from Very Optimistic to Very Pessimistic using stochastic analysis.

The table below shows fiscal cost impacts for those outcomes, along with our best-estimate ("Expected") fiscal impact, when we use the methods and assumptions described in the body of this draft fiscal note.

Budget Impacts - Varying Economic Scenarios					
(Dollars in Millions)	**Very Optimistic**	**Optimistic**	**Expected**	**Pessimistic**	**Very Pessimistic**
2017-2019					
General Fund	($171)	($171)	($171)	($171)	($171)
Non-General Fund	$0	$0	$0	$0	$0
Total State	**($171)**	**($171)**	**($171)**	**($171)**	**($171)**
Local Government	($70)	($70)	($70)	($70)	($70)
Total Employer	**($241)**	**($241)**	**($241)**	**($241)**	**($241)**
Total Employee	**$0**	**$0**	**$0**	**$0**	**$0**
2019-2021					
General Fund	($143)	($157)	($167)	($176)	($188)
Non-General Fund	$0	$0	$0	$0	$0
Total State	**($143)**	**($157)**	**($167)**	**($176)**	**($188)**
Local Government	($59)	($64)	($68)	($72)	($77)
Total Employer	**($202)**	**($222)**	**($235)**	**($248)**	**($264)**
Total Employee	**$0**	**$0**	**$0**	**$0**	**$0**
2017-2042					
General Fund	($878)	($1,275)	($1,372)	($36)	$805
Non-General Fund	$0	$0	$0	$0	$0
Total State	**($878)**	**($1,275)**	**($1,372)**	**($36)**	**$805**
Local Government	($358)	($521)	($560)	($15)	$457
Total Employer	**($1,236)**	**($1,796)**	**($1,932)**	**($50)**	**$1,261**
Total Employee	**$0**	**$0**	**$0**	**$0**	**$0**
2017-2044					
General Fund	($878)	($1,275)	($1,372)	($36)	$2,155
Non-General Fund	$0	$0	$0	$0	$0
Total State	**($878)**	**($1,275)**	**($1,372)**	**($36)**	**$2,155**
Local Government	($358)	($521)	($560)	($15)	$1,008
Total Employer	**($1,236)**	**($1,796)**	**($1,932)**	**($50)**	**$3,163**
Total Employee	**$0**	**$0**	**$0**	**$0**	**$0**

Note: Assumes Plan(s) will be funded at the actuarially required level and that no benefit improvements will occur in the future.

The savings in the 2017-19 Biennium does not change under varying economic conditions because the contribution rates adopted under current law and this proposal are fixed during that period. The savings in the 2019-21 Biennium, however, increase as economic conditions worsen because current law contribution rates (before the merger) will increase while they remain fixed at 5.05 percent under this proposal (after the merger) through August 31, 2021.

When economic conditions improve over expected conditions, we see that the merger results in a smaller fiscal savings in the long-term. This occurs because the number of years earlier that the TRS 1 UAAL is paid off under the merger declines in comparison to current law funding under these economic conditions.

When economic conditions worsen, we see the savings of the merger decline, ultimately resulting in a long-term cost to the system. This happens in the pessimistic scenarios because under the funding policy stated in the proposal, contribution requirements are lowered on the expectation of a long-term LEOFF 1 surplus and the current surplus becomes an unfunded liability over time. Under this outcome, the merged plan will have to make up the lost contributions plus lost assumed investment earnings.

WHAT THE READER SHOULD KNOW

The Office of the State Actuary ("we") prepared this draft fiscal note based on our understanding of the proposal as of the date shown in the footer. We prepared this draft actuarial fiscal note for the Select Committee on Pension Policy for inclusion in their report to the Legislature on the study of SB 6668. Please do not use this draft fiscal note for other purposes and please replace this draft actuarial fiscal note when an updated version becomes available.

We advise readers of this draft fiscal note to seek professional guidance as to its content and interpretation, and not to rely upon this communication without such guidance. Please read the analysis shown in this draft fiscal note as a whole. Distribution of, or reliance on, only parts of this draft fiscal note could result in its misuse, and may mislead others.

ACTUARY'S CERTIFICATION

The undersigned hereby certifies that:

1. The actuarial cost methods are appropriate for the purposes of this pricing exercise.
2. The actuarial assumptions used are appropriate for the purposes of this pricing exercise.
3. The data on which this draft fiscal note is based are sufficient and reliable for the purposes of this pricing exercise.
4. Use of another set of methods, assumptions, and data may also be reasonable, and might produce different results.
5. The risk analysis summarized in this draft fiscal note involves the interpretation of many factors and the application of professional judgment. We believe that the data, assumptions, and methods used in our risk assessment model are reasonable and appropriate for the purposes of this pricing exercise. The use of another set of data, assumptions, and methods, however, could also be reasonable and could produce materially different results.
6. We prepared this draft fiscal note and provided opinions in accordance with Washington State law and accepted actuarial standards of practice as of the date shown in the footer of this draft fiscal note.

The undersigned, with actuarial credentials, meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

While this draft fiscal note is meant to be complete, the undersigned is available to provide extra advice and explanations as needed.

Matthew M. Smith, FCA, EA, MAAA
State Actuary

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APPENDIX A – HOW THE CONTRIBUTION RATES CHANGED

State Contribution Rates, Before Merger - LEOFF 1					
Fiscal Year	Very Optimistic	Optimistic	Expected	Pessimistic	Very Pessimistic
2018	0.00%	0.00%	0.00%	0.00%	0.00%
2019	0.00%	0.00%	0.00%	0.00%	0.00%
2020	0.00%	0.00%	0.00%	0.00%	0.00%
2021	0.00%	0.00%	0.00%	0.00%	0.00%
2022	0.00%	0.00%	0.00%	0.00%	0.00%
2023	0.00%	0.00%	0.00%	0.00%	0.00%
2024	0.00%	0.00%	0.00%	0.00%	12.42%
2025	0.00%	0.00%	0.00%	0.00%	0.00%

Employer Contribution Rates, Before Merger - TRS 1					
Fiscal Year	Very Optimistic	Optimistic	Expected	Pessimistic	Very Pessimistic
2018	7.19%	7.19%	7.19%	7.19%	7.19%
2019	7.19%	7.19%	7.19%	7.19%	7.19%
2020	6.67%	6.83%	6.94%	7.04%	7.17%
2021	6.67%	6.83%	6.94%	7.04%	7.17%
2022	5.75%	5.75%	5.75%	5.82%	6.59%
2023	5.75%	5.75%	5.75%	5.82%	6.59%
2024	0.00%	5.75%	5.75%	5.75%	6.35%
2025	0.00%	5.75%	5.75%	5.75%	6.35%
2026	0.00%	0.00%	5.75%	5.75%	6.12%
2027	0.00%	0.00%	5.75%	5.75%	6.12%
2028	0.00%	0.00%	3.16%	5.75%	5.75%
2029	0.00%	0.00%	0.00%	5.75%	5.75%
2030	0.00%	0.00%	0.00%	5.75%	5.75%
2031	0.00%	0.00%	0.00%	5.75%	5.75%
2032	0.00%	0.00%	0.00%	5.75%	5.75%
2033	0.00%	0.00%	0.00%	5.75%	5.75%
2034	0.00%	0.00%	0.00%	5.75%	5.75%
2035	0.00%	0.00%	0.00%	0.00%	5.75%
2036	0.00%	0.00%	0.00%	0.00%	5.75%
2037	0.00%	0.00%	0.00%	0.00%	5.75%
2038	0.00%	0.00%	0.00%	0.00%	5.75%
2039	0.00%	0.00%	0.00%	0.00%	5.75%
2040	0.00%	0.00%	0.00%	0.00%	5.75%
2041	0.00%	0.00%	0.00%	0.00%	0.00%
2042	0.00%	0.00%	0.00%	0.00%	0.00%

Note: With the exception of the Expected case, we collect the minimum UAAL rate for a full year in any year a UAAL exists.

Employer Contribution Rates, After Merger - LEOFF 1 / TRS 1					
Fiscal Year	Very Optimistic	Optimistic	Expected	Pessimistic	Very Pessimistic
2018	5.05%	5.05%	5.05%	5.05%	5.05%
2019	5.05%	5.05%	5.05%	5.05%	5.05%
2020	5.05%	5.05%	5.05%	5.05%	5.05%
2021	5.05%	5.05%	5.05%	5.05%	5.05%
2022	0.00%	5.05%	5.05%	5.05%	5.59%
2023	0.00%	0.00%	5.05%	5.05%	5.59%
2024	0.00%	0.00%	5.05%	5.05%	6.96%
2025	0.00%	0.00%	5.05%	5.05%	6.96%
2026	0.00%	0.00%	0.10%	5.05%	7.89%
2027	0.00%	0.00%	0.00%	5.05%	7.89%
2028	0.00%	0.00%	0.00%	5.05%	7.95%
2029	0.00%	0.00%	0.00%	5.05%	7.95%
2030	0.00%	0.00%	0.00%	5.05%	7.19%
2031	0.00%	0.00%	0.00%	5.05%	7.19%
2032	0.00%	0.00%	0.00%	5.05%	6.17%
2033	0.00%	0.00%	0.00%	5.05%	6.17%
2034	0.00%	0.00%	0.00%	5.05%	5.17%
2035	0.00%	0.00%	0.00%	5.05%	5.17%
2036	0.00%	0.00%	0.00%	5.05%	5.05%
2037	0.00%	0.00%	0.00%	0.00%	5.05%
2038	0.00%	0.00%	0.00%	0.00%	5.05%
2039	0.00%	0.00%	0.00%	0.00%	5.05%
2040	0.00%	0.00%	0.00%	0.00%	5.05%
2041	0.00%	0.00%	0.00%	0.00%	5.05%
2042	0.00%	0.00%	0.00%	0.00%	5.05%
2043	0.00%	0.00%	0.00%	0.00%	5.05%
2044	0.00%	0.00%	0.00%	0.00%	5.05%
2045	0.00%	0.00%	0.00%	0.00%	0.00%
2046	0.00%	0.00%	0.00%	0.00%	0.00%

Note that under a Very Optimistic scenario, the fixed 5.05 percent contribution rate may not be required for all four years as provided under the proposal.

The pattern of contribution rate changes on the next page under the Very Pessimistic scenario can be explained as follows. Initially, contribution rate requirements are fixed and lower than required under current law (years 2018-21). The combination of smaller contributions earlier in the projection and poor economic environments under this scenario lead to higher contribution rate requirements than under current law (years 2024-32).

The contribution rates then gradually decline under the merger back down to the 5.05 percent rate floor, below the 5.75 percent rate floor under current law (years 2033-40). The merged plan UAAL rate floor must then be collected two years longer than our standard 25-year budget impact table (years 2043-44) due to the poor investment returns under this scenario.

Impact on TRS UAAL Rates					
Fiscal Year	**Very Optimistic**	**Optimistic**	**Expected**	**Pessimistic**	**Very Pessimistic**
2018	(2.14%)	(2.14%)	(2.14%)	(2.14%)	(2.14%)
2019	(2.14%)	(2.14%)	(2.14%)	(2.14%)	(2.14%)
2020	(1.62%)	(1.78%)	(1.89%)	(1.99%)	(2.12%)
2021	(1.62%)	(1.78%)	(1.89%)	(1.99%)	(2.12%)
2022	(5.75%)	(0.70%)	(0.70%)	(0.77%)	(1.00%)
2023	(5.75%)	(5.75%)	(0.70%)	(0.77%)	(1.00%)
2024	0.00%	(5.75%)	(0.70%)	(0.70%)	0.61%
2025	0.00%	(5.75%)	(0.70%)	(0.70%)	0.61%
2026	0.00%	0.00%	(5.65%)	(0.70%)	1.77%
2027	0.00%	0.00%	(5.75%)	(0.70%)	1.77%
2028	0.00%	0.00%	(3.16%)	(0.70%)	2.20%
2029	0.00%	0.00%	0.00%	(0.70%)	2.20%
2030	0.00%	0.00%	0.00%	(0.70%)	1.44%
2031	0.00%	0.00%	0.00%	(0.70%)	1.44%
2032	0.00%	0.00%	0.00%	(0.70%)	0.42%
2033	0.00%	0.00%	0.00%	(0.70%)	0.42%
2034	0.00%	0.00%	0.00%	(0.70%)	(0.58%)
2035	0.00%	0.00%	0.00%	5.05%	(0.58%)
2036	0.00%	0.00%	0.00%	5.05%	(0.70%)
2037	0.00%	0.00%	0.00%	0.00%	(0.70%)
2038	0.00%	0.00%	0.00%	0.00%	(0.70%)
2039	0.00%	0.00%	0.00%	0.00%	(0.70%)
2040	0.00%	0.00%	0.00%	0.00%	(0.70%)
2041	0.00%	0.00%	0.00%	0.00%	5.05%
2042	0.00%	0.00%	0.00%	0.00%	5.05%
2043	0.00%	0.00%	0.00%	0.00%	5.05%
2044	0.00%	0.00%	0.00%	0.00%	5.05%
2045	0.00%	0.00%	0.00%	0.00%	0.00%
2046	0.00%	0.00%	0.00%	0.00%	0.00%

GLOSSARY OF ACTUARIAL TERMS

Actuarial Accrued Liability: Computed differently under different funding methods, the actuarial accrued liability generally represents the portion of the present value of fully projected benefits attributable to service credit that has been earned (or accrued) as of the valuation date.

Actuarial Present Value: The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of actuarial assumptions (i.e. interest rate, rate of salary increases, mortality, etc.).

Aggregate Funding Method: The Aggregate Funding Method is a standard actuarial funding method. The annual cost of benefits under the Aggregate Method is equal to the normal cost. Under this method, all plan costs (for past and future service credit) are included under the normal cost. Therefore, the method does not produce an unfunded actuarial accrued liability outside the normal cost. It's most common for the normal cost to be determined for the entire group rather than on an individual basis for this method.

Entry Age Normal Cost Method (EANC): The EANC method is a standard actuarial funding method. The annual cost of benefits under EANC is comprised of two components:

- Normal cost.
- Amortization of the unfunded actuarial accrued liability.

The normal cost is most commonly determined on an individual basis, from a member's age at plan entry, and is designed to be a level percentage of pay throughout a member's career.

Normal Cost: Computed differently under different funding methods, the normal cost generally represents the portion of the cost of projected benefits allocated to the current plan year.

Projected Benefits: Pension benefit amounts that are expected to be paid in the future taking into account such items as the effect of advancement in age as well as past and anticipated future compensation and service credits.

Unfunded Actuarial Accrued Liability (UAAL): The excess, if any, of the actuarial accrued liability over the actuarial value of assets. In other words, the present value of benefits earned to date that are not covered by plan assets.

Unfunded EAN Liability: The excess, if any, of the Present Value of Benefits calculated under the EAN cost method over the Valuation Assets. This is the portion of all benefits earned to date that are not covered by plan assets.

GLOSSARY OF RISK TERMS

Affordability: Measures the affordability of the pension systems. Affordability risk measures the chance that pension contributions will cross certain thresholds with regards to the General-Fund and contribution rates.

"Current Law": Scenarios in which assumptions about Legislative behavior are excluded. These scenarios show projections regarding the current state of Washington statutes.

Optimistic: A measurement of the pension system under favorable conditions (above expected investment returns, for example). Optimistic refers to the 75th percentile, where there is a 25 percent chance of the measurement being better and 75 percent chance of the measurement being worse. Very optimistic refers to the 95th percentile.

"Past Practices": Scenarios in which assumptions regarding Legislative behavior are introduced. These assumptions include actual contributions below what are actuarially required and improving benefits over time. These scenarios are meant to project past behavior into the future.

Pay-Go: The trust fund runs out of assets, and payments from the General-Fund must be made to meet contractual obligations.

Pessimistic: A measurement of the pension system under unfavorable conditions (below expected investment returns, for example). Pessimistic refers to the 25th percentile, where there is a 75 percent chance of the measurement being better and 25 percent chance of the measurement being worse. Very pessimistic refers to the 5th percentile.

Premature Pay-Go: Pay-go payments, measured in today's value, which might be considered "significant" in terms of the potential impact on the General-Fund.

Risk: Measures the risk metrics of the pension systems, including the chance that the pension systems will prematurely run out of assets, the amount of potential pay-go contributions, and the chance that the funded status will cross a certain threshold.

Risk Tolerance: The amount of risk an individual or group is willing to accept with regards to the likelihood and severity of unfavorable outcomes.